



PROJECT COLLABORATION TOOLKIT

Enhancing project performance
through collaboration

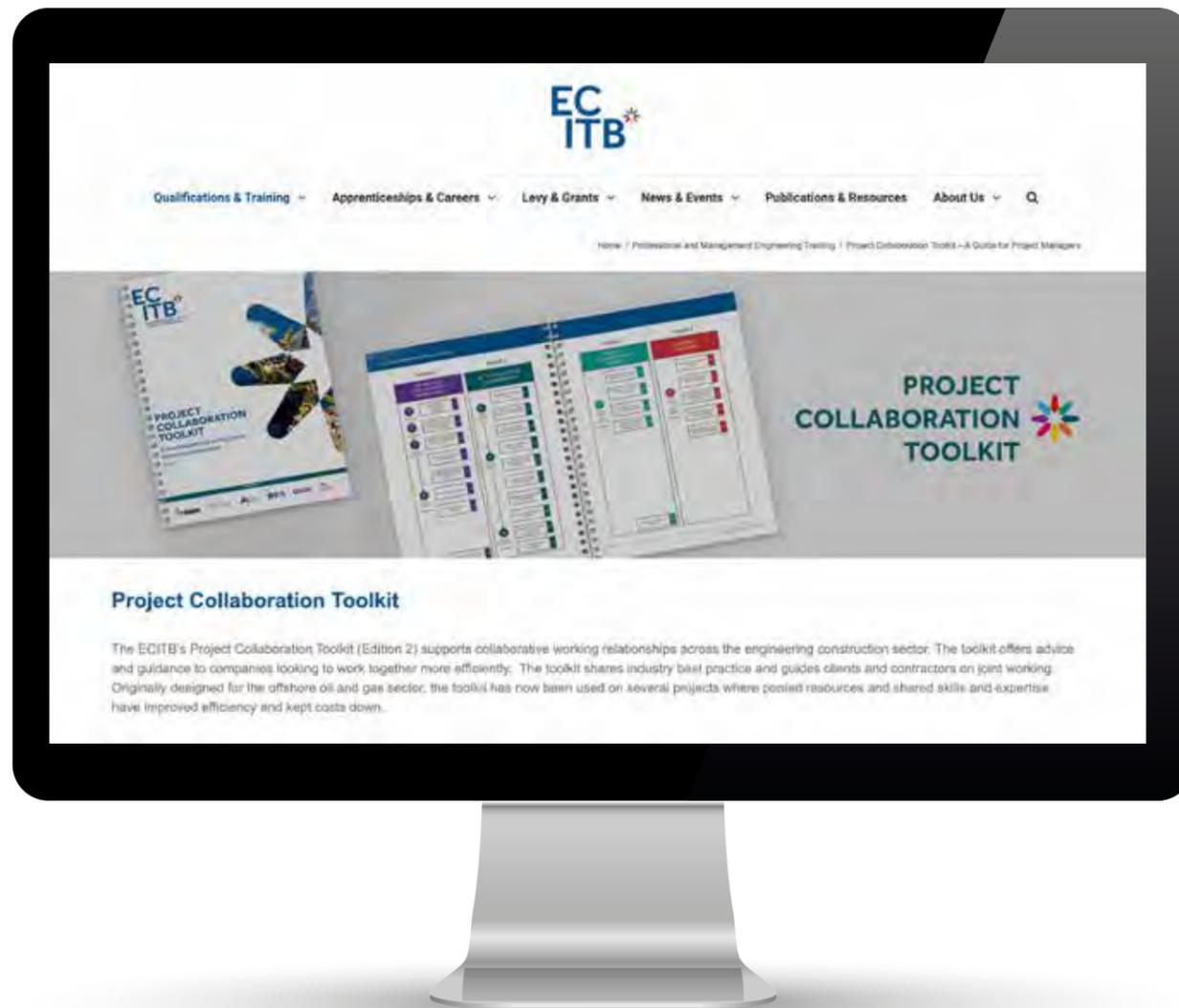
Edition 2

ENDORSED BY



Project Collaboration Toolkit

Enhancing project performance through collaboration



Available online and free to download:
www.ecitb.org.uk/professional-management-training/project-collaboration/

Introduction	5
The case for collaboration	8
The collaborative toolkit model	10
<hr/>	
Phase 1: Establish a collaborative environment	14
1.1 Appoint Collaboration Champion	16
1.2 Undertake Collaborative Assessment and Establish Enabling Climate	17
1.3 Stakeholder Management Conference and Periodic Reviews	18
1.4 Establish Foundations for Stakeholder Trust	19
1.5 Establish Collaboration Plan and Behavioural Charter	21
1.6 Partner Selection Process	22
1.7 Establish Contracting Principles	23
Phase 1 Review Checklist	24
<hr/>	
Phase 2: Set up Project for Collaboration	30
2.1 Project Team Selection Process	32
2.2 Establish Common Project Delivery Objectives & Align	33
2.3 Create Collaborative Project Team Environment	34
2.4 Document and Agree Project Code	35
2.5 Scope Management & Change Management Protocol	36
2.6 Processes for Managing Risk & Uncertainty	37
2.7 Engagement of Functional Stakeholders	38
2.8 Agree Project Reporting Format	39
2.9 Agree Project Processes Standards and Specifications	40
Phase 2 Review Checklist	41
<hr/>	
Phase 3: Execute collaborative project	46
3.1 Collaborative Schedule and Cost Control Processes	48
3.2 Stakeholder Risk & Reward - KPI Measurement	49
3.3 Single Team' Quality Monitoring & Assurance	50
3.4 'Single Team' Safety Health & Environmental Management	51
Phase 3 Review Checklist	52
<hr/>	
Phase 4: Close out and Learn	56
4.1 Evaluate Project Lessons Learned	58
4.2 Collaborative Lessons Learned	59
4.3 Close Out Collaborative (Risk & Reward) Project Agreements	60
4.4 Review Agree & Record Project Outcomes	61
4.5 Establish Basis for Future Project Collaboration	62
<hr/>	
Appendices	
Appendix A	64
Appendix B	65
Appendix C	66
Appendix D	67

Welcome to the ECITB Project Collaboration Toolkit, a resource to support collaboration and smarter ways of working across the engineering construction industry.

As the leading skills body for the industry, the ECITB is at the forefront of driving change that helps our sectors remain competitive globally.

Developed in conjunction with the Oil & Gas Project Management Steering Group, and backed by OGUK and the Oil & Gas Authority (OGA), the toolkit sets out best practice for companies working in collaboration in a 'go to' guide.

Moving on from Sir Ian Wood's 2014 report on the UK Continental Shelf (UKCS), which promoted the notion of collaboration in the oil and gas sector, we are seeing the successful implementation of the toolkit's collaborative principles on major projects. Results from early adopters, such as Callater Field and Brent Bravo, have already demonstrated that collaboration boosts productivity and leads to significant cost savings.

While the UK oil and gas sector has showed signs of recovery recently, margins remain tight and it is an opportune time to help project managers deliver greater value. This revised and updated version builds on the successful application of this framework, which has already proven its worth in enhancing project delivery.

Having seen the Project Collaboration Toolkit work successfully in oil and gas, the ECITB is now keen to share the benefits of collaboration in project delivery by encouraging its adoption on capital projects throughout all other UK industry sectors.

I am confident we will now see the Project Collaboration Toolkit go from strength to strength on the back of this evidence of improved project value and help the industry remain competitive in what remains a challenging operating climate.



Chris Claydon
CEO, ECITB



"THE RESULTS FROM EARLY ADOPTERS DEMONSTRATE THAT COLLABORATION BOOSTS PRODUCTIVITY AND LEADS TO SIGNIFICANT COST SAVINGS."

"THE UK OIL AND GAS INDUSTRY IS MAKING GOOD USE OF THE ECITB'S PROJECT COLLABORATION TOOLKIT TO IMPROVE ITS EFFICIENCY AND COMPETITIVENESS THROUGHOUT THE NORTH SEA LIFECYCLE. THIS NEW EDITION ALONG WITH OGUK'S RECENTLY PUBLISHED PROJECT DELIVERY GUIDELINES WILL HELP SUPPORT OUR COLLECTIVE AIM TO DELIVER A SAFE AND SUSTAINABLE INDUSTRY WHILE CONTINUING TO BE A KEY CONTRIBUTOR TO TOMORROW'S DIVERSE ENERGY MIX."

DEIRDRE MICHIE,
CHIEF EXECUTIVE, OGUK



"SINCE THE OGA ISSUED ITS UKCS PROJECT LESSONS LEARNT REPORT IN EARLY 2017 WE HAVE SEEN INCREASED COLLABORATION WITHIN THE INDUSTRY TO DELIVER IMPROVED PROJECT VALUE. IT IS HIGHLY ENCOURAGING TO SEE THE ECITB PROJECT COLLABORATION TOOLKIT BEING USED TO SUCH GOOD EFFECT AND THE OGA IS DELIGHTED TO SEE CONTINUED COMMITMENT TO THE ECITB TOOLKIT VIA THIS EDITION 2 UPDATE. THE OGA WILL ALSO BE ENSURING THAT THE OGA'S RECENTLY UPDATED ROBUST PROJECT DELIVERY STEWARDSHIP EXPECTATION IS IMPLEMENTED BY INDUSTRY, COUPLED WITH IMPROVED COLLABORATION WITH THE SUPPLY CHAIN THROUGH SUPPLY CHAIN ACTION PLANS."

SCOTT ROBERTSON,
DIRECTOR OF OPERATIONS AT THE OIL AND GAS AUTHORITY



The ECITB Project Collaboration Toolkit is intended as a practical guide for the UK engineering construction project management community. It has been developed in response to feedback received from participants in the ECITB Project Management Conference, staged in Aberdeen in November 2015. It originally sought to address the project delivery challenges that the UK Oil & Gas sector faced to enhance project performance in the UKCS; namely a 'lower for longer' oil price, the maturity of the UKCS basin and the need to continue to compete with other global regions for investment.

However, many of the circumstances that have inhibited collaboration in the delivery of engineering construction projects in Oil & Gas are common to most other UK industry sectors. In publishing the ECITB Project Collaboration Toolkit – Edition 2, our aim is to make the Toolkit available to support the effective and successful delivery of engineering construction projects across all UK industry sectors

UKCS OIL & GAS – CONTEXT FOR THE CREATION OF THE PROJECT COLLABORATION TOOLKIT

During 2014 the UK Government commissioned Sir Ian Wood to assess the condition of the UK Oil & Gas sector. In the resultant report entitled "Maximising Economic Recovery" one of the key recommendations was that the industry must collaborate to ensure that it becomes more competitive, attracts finance and accesses all of the remaining reserves in the UKCS for decades to come. This recommendation preceded the fall in the price of oil that occurred in the final quarter of 2014 and which has created a further significant dimension to the competitiveness challenge ever since. Although the sector has worked

extremely hard to overcome its many challenges, competing for the investment it needs is a continuous challenge. The initial sector response to oil price reduction involved cutting workforce numbers as part of the cost reduction programme but worryingly, the investment in training and development of those who remained in the sector also showed a declining trend.

The culture of the UK Oil & Gas sector has revolved around a high degree of control and competition in the way that business in general and projects in particular are undertaken. Many of the large sector businesses are driven by growth and share price and this can be misaligned to UKCS basin objectives and the need for both creativity and collaboration. Just to say "let's collaborate" will not work – there has to be a clear objective, clear expectations and an effective process to understand and establish the behaviours necessary to make it work.

Within the sector culture that has evolved, project performance, influenced by the need for control and competition, is generally poor with a high incidence of schedule and cost over-runs and resultant poor outcome predictability for investors. However, these characteristics and project performance challenges are not unique to the UK Oil and Gas Sector. Many of the business drivers and cultural characteristics that have led to the lack of project collaboration (and resultant poor delivery performance) are common to the majority of other engineering construction and UK industry sectors.

The ECITB Project Collaboration Toolkit – Edition 2 is aimed at enhancing collaboration for improved project delivery performance across all UK engineering construction and industry sector communities.



PROJECT COLLABORATION TOOLKIT – SUPPORT FOR PROJECTS ACROSS UK INDUSTRIES

There are many examples of collaborative approaches to project delivery, from projects over many years, that have been instrumental in better performance and project outcomes. However, such case studies and evidence have been unable to drive a permanent change in approach and UK engineering construction projects seem to inevitably revert back to non-collaborative delivery models. When UK industry is under economic pressure, the reaction is to revert to adversarial behaviours such as squeezing the project supply chain.

In consideration of the foregoing, adopting a collaborative approach to project delivery will not be an easy option. It will require a change in culture across the industry and a move away from the delivery and contracting models that have predominated. Collaboration is not being promoted as a complete replacement for business and project competition – not something that will bring the entire sector together for all of the time and without a clear vision and end game in sight. Project Collaboration is rather about bringing specific organisations and people together for specific tasks, to achieve specific objectives and for a specific duration to achieve the desired result.

The ECITB Project Collaboration Toolkit - Edition 2 is aimed at project managers and project management personnel within organisations that:-

- Have a clear vision and understanding of the challenges that a collaborative project strategy will present.
- Have full commitment to a collaborative strategy from their boards / leadership teams.
- Are prepared to provide organisational development effort and commit to coaching support in order to deal with the stresses of change, conflict and other people issues that might arise.
- Select the right combination of other organisations and people that can work together in a collaborative and complimentary manner to achieve specific project delivery objectives.



The ECITB Project Collaboration Toolkit – What it is and how to use it

The Toolkit is intended to serve as a 'go to' guide for executive managers, project sponsors, project managers and project teams with responsibilities for specific project activities. The Toolkit has been prepared in the form of a workflow with four distinct phases that generally map to a typical project lifecycle and support performance benefit through collaboration. Although the phase activities are generally arranged in sequential order, alternative activity sequencing may be possible and desirable to suit the circumstances of each particular project. This is particularly the case for Phase 1 – Establish a Collaborative Environment.

The entire Toolkit can be used to support project collaboration from inception to completion but individual phase steps and activities can be applied by project managers to projects which have not been established on a collaborative strategy.

The ECITB Project Collaboration Toolkit principally provides guidance on "what" should be done to achieve or improve collaboration to the benefit of projects. It assumes that some of the fundamental requirements of organisational leadership and support for a collaborative project strategy are in place and that continuous organisational development and support for the people involved will be provided throughout. Although the Toolkit inevitably

provides some description of "how" certain activities should be approached, it should not be viewed as additional project management process. Many UK industry sectors deploy too much prescriptive process and the Toolkit is not intended to add to the work process inventory. The ECITB Project Collaboration Toolkit attempts to focus on the behavioural aspects of project management that need to be carefully addressed for effective collaboration. As stated earlier, ISO44001: Collaborative Business Relationships Standard provides a process for collaboration that is partly adaptable to projects, the ECITB Project Collaboration Toolkit provides supplementary guidance around project related specifics.

Not all projects will lend themselves to a collaborative approach but the Toolkit assumes that a principal decision has been reached within the Project Lead Entity organisation to adopt a collaborative strategy. The term "Project Lead Entity" is referred to in the Toolkit content as the organisation that takes the lead responsibility for the project collaboration strategy. For example, in conventional oil & gas projects the Project Lead Entity will usually be an operator / client, but in future it is anticipated that more energy sector projects will be supply chain led. Whoever should take the role of Project Lead Entity, a fundamental and wholehearted commitment is required in order for the collaboration to succeed. If this is not demonstrated by the Project Lead Entity and the project personnel that represent it, then the collaboration of other parties will be impossible to achieve.



There has been ongoing discussion and debate in UK industry for some time around the most effective contracting relationships. There is particular focus in Oil & Gas now that there is a crisis in confidence due to the ongoing low oil price. There is a need for change in the industry: to become more resilient by reducing costs in a sustainable way through collaboration.

The Project Management community recognises this and there is a thirst for **greater collaborative working** throughout the industry.

The decision on the level of collaboration to be embraced for a particular contract should in some sense be related to the risk profile of the work, and the way that the customer chooses to execute it. Frame services contracts are by their nature quite collaborative as they relate to supporting the ongoing production and integrity for the assets involved. The individual work packages could be quite "commodity" based and simply executed swiftly and efficiently, subject to a sensible agreed scope. Larger project scopes promote the need for greater collaboration, as they are usually more strategic, with wider benefits being realised by the Operator and Contractor working together, with clearly



defined roles. Risk therefore plays a part in determining the extent of collaboration.

There is perhaps a rightful fear in the Operator community that "collaboration" is some kind of code for Service providers having an easy contract with higher margin. This is not the intent.

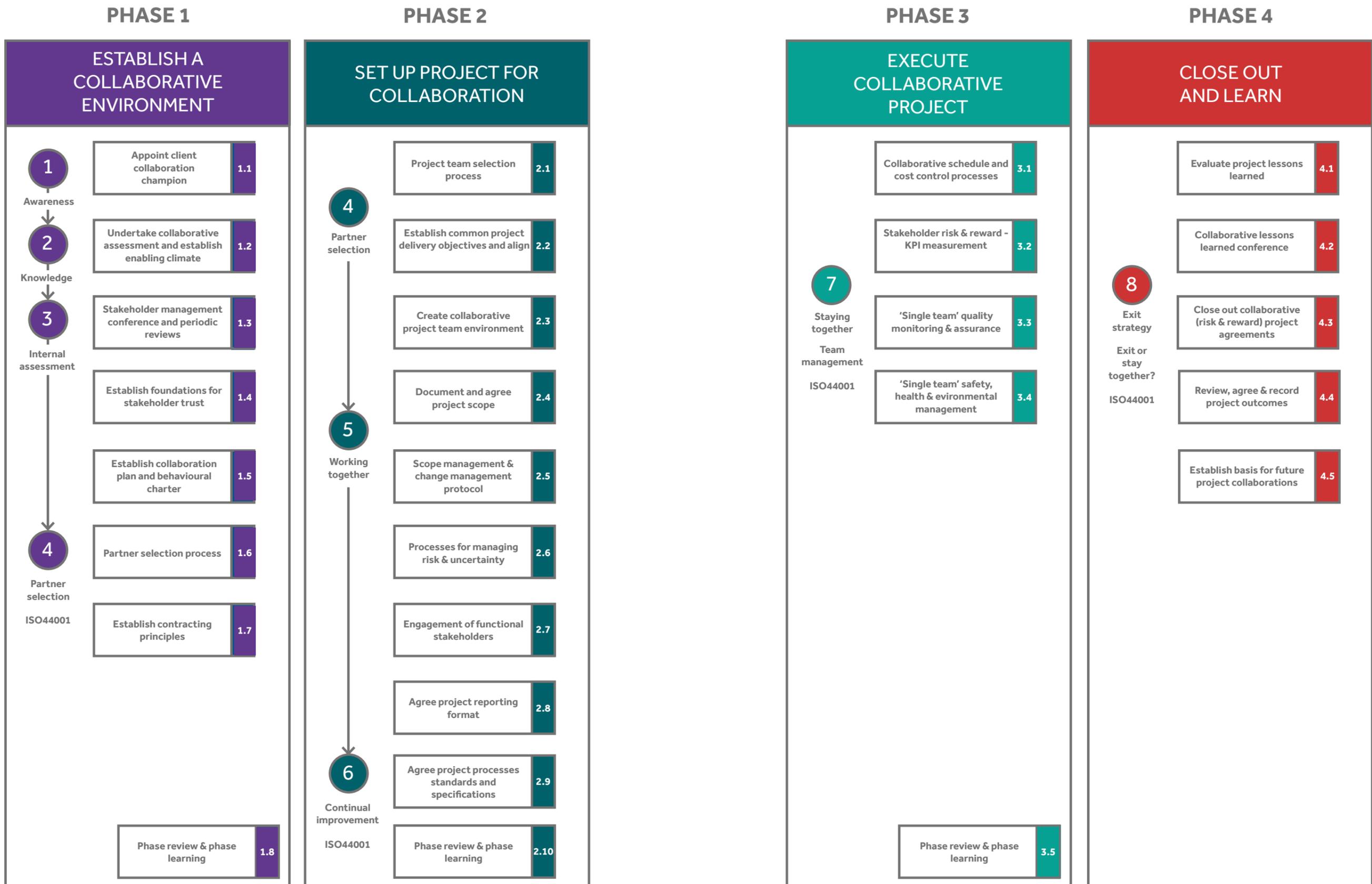
A collaborative environment should be about the best people delivering the right work in an open and communicative environment, where risk and reward is shared appropriately. It is as much about attitudes and behaviours with all personnel having the aligned view of what project success means. A collaborative project contract will have personnel working together to solve issues and to reduce cost, seeking to deliver the end outcome in the minimum time possible. If the project goes well then all parties should benefit, and the reverse should also be the case. For greater collaboration to work then

contracts will need to be established with this in mind, while making sure the appropriate instruments are in place for recourse for poor performance.

Having been launched in late 2016, the ECITB Project Collaboration Toolkit has been piloted against a number of real projects. Being projects of different scope, size and complexity, the pilot projects have delivered a range of different experiences and benefits through their adoption of a collaborative delivery strategy. The outcomes and experiences of these projects have been captured in case studies. These can be accessed from the ECITB website at:

<https://www.ecitb.org.uk/professional-management-training/project-collaboration-toolkit/>

The case studies represent real evidence of the 'Case for Collaboration'.





PHASE 1:
ESTABLISH A COLLABORATIVE
ENVIRONMENT

PHASE 1: ESTABLISH A COLLABORATIVE ENVIRONMENT

OBJECTIVE

To establish the environment in which the project can be delivered through effective collaboration between all project delivery stakeholders.

	Activities / Deliverables	Outline Description
1.1	Appoint Collaboration Champion	In leading toward effective collaboration, the lead project entity should appoint a Collaboration Champion. This role may be fulfilled by either the Lead Entity Project Sponsor or Project Manager but it could also be undertaken by another project executive who has the skills to manage both internal (lead entity organisation) and external (project delivery and other stakeholder) relationships.
1.2	Undertake Collaborative Assessment and Establish Enabling Climate	Before full commitment to a collaborative project approach, a collaborative assessment should be conducted against the project and its objectives. Not all projects may be suited to a collaborative approach. Should the Case for Collaboration be established for the project, commitment to a collaborative project strategy will require effective leadership and demonstrable personal commitment to integrated project delivery teamwork. Key leadership role appointees should be identifiable as persons who can be trusted and that other stakeholders will wish to follow.
1.3	Stakeholder Management Conference and Periodic Project Reviews	The staging of a Stakeholder Management Conference represents a critical first step toward project goal alignment between all potential delivery parties. The conference should be founded on presentation of the Project Brief (what needs to be delivered to achieve the project vision and satisfy the project business case) with each potential stakeholder party being given the opportunity to state how it might contribute to the achievement of a successful project outcome. During the Stakeholder Management Conference agreement should be reached on the frequency and format of periodic Project Collaboration Reviews. Such reviews, as distinct from Project Reviews for checking-in on project status and process, should be designed to provide assurance that the collaborative ethos, values, attitudes and behaviours of all parties are aligned to the achievement of project success throughout the project lifecycle to completion.
1.4	Establish Foundations for Stakeholder Trust	Project collaborative approaches can only be effective if a climate of mutual trust between all project delivery stakeholders can be established. Trust and trustworthiness are a function of credibility, integrity and reliability being expressed and demonstrated by each project stakeholder and its representatives. All project stakeholders and individual stakeholder representatives should continuously demonstrate their commitment to the project and its goals over and above any self interests.
1.5	Establish a Collaboration Plan and Project Behavioural Charter	The adoption of a collaborative project strategy will require some additions to the usual project management planning process. For collaborative projects a Project Collaborative Relationship Management Plan should be prepared. The development of a Project Charter (aka Project Initiation Document) is part of established project management practice and process. However, the generation of a Project (Team) Behavioural Charter, which concentrates on the desired behaviours of individuals who are engaged in and contributing to the project, is a critically important tool for developing a collaborative project culture and for monitoring and (where necessary) controlling / changing project behaviour.
1.6	Partner Selection Process	In order to achieve the benefits to the project that can be delivered by a collaborative delivery culture (See ECITB Case for Project Collaboration), the processes used by the lead entity to select project service and support contractors, subcontractors and supply chain organisations should be tailored to project collaboration. The process of selecting key project partners should be conducted as early as practically possible during the project lifecycle.
1.7	Establish Contracting Principles	In order to support the development of a collaborative project environment it is important for the Lead Project Entity to adopt an overall contracting strategy and philosophy that will support collaboration between stakeholders and delivery partners.
1.8	Phase 1 - Review & Phase Learning	

Responsible	Supporting Information and References (By Exception)
Lead Entity Project Sponsor	ISO44001 - Collaborative Business Relationships methodology refers to the appointment of a Senior Executive Responsible (SER) for collaborative working. In the context of projects, the role of Collaboration Champion is synonymous with that of SER and carries overall responsibility with sufficient authority to adopt a collaborative strategy for the project.
Lead Entity Project Sponsor Lead Entity Collaboration Champion Project Manager	Institute for Collaborative Working (ICW) - ISO44001 Collaborative Capability Self-Assessment
Lead Entity Project Sponsor Lead Entity Collaboration Champion Project Manager	The Stakeholder Management Conference is an important event for the early stages of project collaboration. It has a variety of purposes:- * To present the Project Brief (how the Business Case will be met) with potential project partners * To engage potential project partners at an early stage and as part of the selection process * To provide participants with an opportunity to express how their organisation and people can support the achievement of project objectives * To openly discuss risk & reward, determine the appetite (and boundaries) of participants for risk sharing - all as input to the project contracting strategy * To discuss the required project behaviours and prepare the framework for the Project Behavioural Charter * To check the outcomes of participant Collaboration Capability Self Assessments (a requirement of the market enquiry) and assess the potential of participants and their organisations for collaborative working * To observe how potential collaboration partners might work together in areas of interdependency
Lead Entity Project Sponsor Lead Entity Collaboration Champion Project Manager Invited Stakeholder Management Conference - Potential Project Delivery Stakeholder organisation representatives	ISBN 978-0-19-516111-3 "Building Trust in Business, Politics, Relationships and Life" - Robert C. Solomon and Fernando Flores ISBN 978-0-7432-9560-4 "The Speed of Trust (The One Thing That Changes Everything)" - Stephen M.R. Covey
Lead Entity Project Sponsor Lead Entity Collaboration Champion Project Manager Invited Stakeholder Management Conference - Potential Project Delivery Stakeholder organisation representatives	The ISO44001 Collaborative Business Relationships Standard is aimed at longer term collaborative business relationships. The methodology and standard are designed to allow audit and assessment of collaborative business systems against the standard. The Relationship Management Plan (RMP) is a key document within the ISO44001 approach. Whilst for potentially shorter term project collaborations, the audit and assessment value of the ISO44001 approach may not be necessary, it is recommended that a Collaborative Relationship Management Plan is developed to support strategy implementation on collaborative projects. Ref: Engineering Construction Industries Association (ECIA) - Collaboration - Best Practice Guide - no. 7 The generation of a Project Behavioural Charter is recommended for collaborative project undertakings. Whereas the Collaborative Relationship Management Plan will frame the planned collaborative interfaces between all potential project parties, The Project Behavioral Charter concentrates on the <u>behaviours</u> that should be adopted by all potential project partners and their representatives across all relationships.
Lead Entity Project Sponsor Lead Entity Collaboration Champion Project Manager	Industry custom and practice for the selection of project contractors, subcontractors and supply chain partners is heavily weighted toward the appointment of the party with the best commercial / tender price offering received against a conventional market enquiry exercise. For collaborative projects a different approach to partner selection needs to be taken that considers not only the competence, knowledge and experience of the potential partner (in terms of fulfilment of anticipated project role and reliable delivery of the project service or section of the project scope) but also the parties' experience and disposition toward collaborative working. Whilst a formal market enquiry is still recommended, the approach should be very different and a number of considerations other than tendered price should be built into the enquiry process.
Lead Entity Project Sponsor Lead Entity Collaboration Champion Project Manager Invited Stakeholder Management Conference - Potential Project Delivery Stakeholder organisation representatives	* European Construction Institute (ECI) – ACTIVE Principle AP5 – Effective Project Risk Management; Value Enhancing Practice (VEP) 5.2 - Risk and Benefit Framework Agreements

OBJECTIVE

To establish the environment in which the project can be delivered through effective collaboration between all project delivery stakeholders.

1.1 APPOINT COLLABORATION CHAMPION

PHASE ACTIVITY OBJECTIVE

The appointment by the Project Lead Entity of a suitable person to the role of Collaboration Champion.

GUIDANCE

Before undertaking this first step in Phase 1 of the Project Collaboration Toolkit, an important principal decision needs to have been taken by the Project Lead Entity to adopt a collaborative strategy for the delivery of the project. All ECITB Project Collaboration Toolkit activities in Phase 1 are intended to support the establishment of a collaborative project environment when it is in the early Front-End Loading (FEL) phases of the project lifecycle. Just as FEL activities are an investment up front to reap rewards later on, the Collaboration Toolkit – Phase 1 activities represent a similar up-front investment to achieve the benefits to the project that collaborative behaviours can deliver. Timing of the appointment of a Collaboration Champion should be at a point during FEL where there is high certainty that the project will proceed. A Project Sponsor will likely have been appointed by the Project Lead Entity. The role of Collaboration Champion could be fulfilled by either the Project Sponsor or Project Manager, although for sizeable, complex projects the Collaboration Champion may need to be another executive who is sufficiently skilled and experienced to manage the internal and external relationships that collaboration will require.

A Collaboration Champion should be appointed to the role based on proven leadership and associated relationship management skills. Highly developed leadership and behavioural skills are the key to the performance and success of the role and more important than project management or technical skills. The use of psychometric testing such as Myers-Briggs personality type indication and Belbin team role profiling can be useful in ensuring the characteristics for an appropriate Collaboration Champion appointment. The fundamental aims of the Collaboration Champion are effective collaboration and integrated team engagement. Since achievement of these aims will be heavily reliant on shared values and behaviours, a values based profiling tool such as the Judgment Index can also be used. (The Judgment Index has also been very effectively used in many other project management scenarios - See references below)

The appointment of a Collaboration Champion should not be solely a consideration for the Project Lead Entity. On particularly large, complex projects all collaborative partners should consider the appointment of a Collaboration Champion within their respective organisations to support their commitment to the project collaboration.

Appointees should carry sufficient authority within respective organisations to make decisions in support of the collaborative ethos and where necessary over-rule in circumstances where functional representative / individual stakeholder decisions are founded on self-interest and are misaligned to the collaborative achievement of project objectives by the project delivery stakeholders.

REFERENCES

- ICW / ISO44001 - Collaborative Business Relationships
- European Construction Institute (ECI) – ACTIVE Principle AP2 – Effective Project Team Management – Value Enhancing Practice VEP 2.1 Project Team Organisation
- ECITB & APM Competence Frameworks
- Myers-Briggs Personality Assessment - <http://www.myersbriggs.org/my-mbti-personality-type/>
- Belbin Team Role Assessment - <http://www.belbin.com/>
- Judgment Index Values Assessment - <http://judgementindex.co.uk/>

OBJECTIVE

To establish the environment in which the project can be delivered through effective collaboration between all project delivery stakeholders.

1.2 UNDERTAKE COLLABORATIVE ASSESSMENT AND ESTABLISH ENABLING CLIMATE

PHASE ACTIVITY OBJECTIVE

To verify the decision to adopt a collaborative project strategy, develop a list of potential partners and identify the criteria to be used for partner selection in support of the strategy.

GUIDANCE

The Project Lead Entity - Collaboration Champion should undertake an assessment of his/her organisation to determine the level of collaborative maturity that it demonstrates and therefore its capability to successfully lead the collaborative effort in order to deliver the project successfully. Potential blockers to collaboration within the Project Lead Entity organisation should be identified and these should be addressed within an action plan aimed at securing a position from which the project collaboration strategy can succeed. The Institute for Collaborative Working (ICW) has developed a Collaborative Capability Self-Assessment Tool as a low cost, high-value entry point to the collaborative capability pathway and undertaking this assessment by all project parties should be considered. Other Collaborative Assessment approaches have been taken by projects, based on behavioural observation and evaluation. It is recommended that a proven, effective type of Collaborative Capability Assessment becomes a key feature of project strategy verification and the subsequent identification of potential project collaboration partners.

The Project Lead Entity should prepare a listing of the types of organisation, their corresponding capabilities (in respect of project scope contribution) and any critically important collaborative interfaces required to successfully deliver the strategy. Initial communication with potential collaboration partners (recommended no more than two or three in each required category) should take the form of a market enquiry. Whilst the enquiry should clearly address aspects of capability, competence and track record in the usual way, emphasis needs to be placed on organisational values and each potential partner's disposition toward effective collaboration. The criteria that will be used for partner selection should be clearly stated. The attendance and participation in a Stakeholder Management Conference (Collaboration Toolkit Phase 1; Step 1.3) of all listed potential partners should be a requirement of the enquiry and selection processes. The Stakeholder Management Conference affords an opportunity for the Project Lead Entity to test the values, attitudes and behaviours of potential partner organisations and their representatives.

Projects develop their own culture and way of doing things and this is usually founded on the influence of the leading entity. Behaviour is a key element of culture and the behaviour of Project Lead Entities and their senior team representatives will be closely watched by potential project support contractors, subcontractors and supply chain partners. It is particularly important that appropriate (collaborative) behaviours are exhibited during the initial communication and contact with prospective partners. Project Lead Entities will have a major influence on behaviours within the entire project supply chain, from initial engagement through to project completion.

REFERENCES

- ICW / ISO44001 – Collaborative Capability Self-Assessment
- ICE Client Best Practice Guide - ISBN 978-0-7277-3650-5
- European Construction Institute (ECI) – ACTIVE Principle AP3 – Effective Supply Chain Relationships – Value Enhancing Practice VEP 3.1 Procurement Cycle Management

OBJECTIVE

To establish the environment in which the project can be delivered through effective collaboration between all project delivery stakeholders.

1.3 STAKEHOLDER MANAGEMENT CONFERENCE AND PERIODIC REVIEWS

PHASE ACTIVITY OBJECTIVE

To cascade the Project Brief to all potential project delivery stakeholders, to assess the suitability of potential partner organisations and their representatives for effective project collaboration, to discuss project goals and to establish the foundations for forward working relationships for the project.

GUIDANCE

Senior management and principal project delivery representatives from all potential project service contractors, subcontractors and supply chain partners should be invited to the Stakeholder Management Conference. Invitations to organisations for representative attendance should be based on lead entity 'pre-screening' of organisations in each required project service / support category to identify those demonstrating values that are 'best fit' with the required values of the integrated team working and culture that are targeted (see also Collaboration Toolkit Phase 1; Step 1.2 – Undertake Collaborative Assessment and Establish Enabling Climate).

The Stakeholder Management Conference need not be an elaborate and costly event but should be carefully designed and facilitated to enable the development of a series of aligned project goal statements that will achieve the Project Brief.

The event design should include workshop exercises aimed at building inter-organisational and inter-personal trust

(see also Collaboration Toolkit Phase 1; Step 1.4 – Establish Foundations for Stakeholder Trust) and to demonstrate the benefits to the project and associated stakeholders of a collaborative working approach. As already openly communicated by the Project Lead Entity within prior formal communication and as part of the market enquiry, the event design should provide for the objective assessment of Stakeholder Management Conference participants (potential project partner organisations and their representatives) in terms of their suitability to support the collaborative project strategy.

The production of a first draft Project Behavioural Charter as a key deliverable should be an aim of the Stakeholder Management Conference event (see also Collaboration Toolkit Phase 1; Step 1.5 – Establish a Collaboration Plan and Project Behavioural Charter).

As part of the initial Stakeholder Management Conference agenda, the forum should consider (in the context of the project schedule and timing of lifecycle phases) the required frequency of Periodic Project (Collaboration) Reviews. Such Periodic Project (Collaboration) Reviews are aimed at ensuring that the project collaboration strategy is being progressively achieved (i.e. focus is on collaboration rather than physical progress / status as with Project Management Reviews). Project Management Planning for projects which adopt collaborative project strategies require a number of additional sections within the overall plan content. Project Collaboration and Relationship Management Plans should be addressed during Periodic Project Reviews and these plan sections revised and updated accordingly (see also Collaboration Toolkit Phase 1; Step 1.5 – Establish a Collaboration Plan and Project Behavioural Charter).

REFERENCES

- ICW / ISO44001 - Collaborative Business Relationships

OBJECTIVE

To establish the environment in which the project can be delivered through effective collaboration between all project delivery stakeholders.

1.4 ESTABLISH FOUNDATIONS FOR STAKEHOLDER TRUST

PHASE ACTIVITY OBJECTIVE

To establish a common understanding between potential project partners of the importance of building trusting relationships and to put the foundations for lasting stakeholder trust in place.

GUIDANCE

The building of inter-organisational and inter-personal trust in industry sectors where, in the past, the need for control and competition have driven the established culture, is difficult. Whilst there have been many examples of successful project delivery based on collaboration between delivery stakeholders, the economic cycle and industry sector cultures inevitably drive project delivery approaches back toward conventional competitive tendering, transactional contracting and commonly, a resultant absence of trust in project relationships.

It is not suggested that any project stakeholder should adopt a position of 'blind trust', but rather that all potential project partners should be extended the opportunity to demonstrate the credibility, reliability and integrity upon which trusting relationships can be founded. Collaborative project undertakings need to be founded on "Authentic Trust" (Ref: 1 on page 20) where the relationship participants focus on their own responsibilities rather than their expectations of the other party. Authentic Trust does not operate on the assumption that issues associated with poor behaviour will not arise in the relationship but rather focusses on the responsibility to confront problems when they arise without taking up positions of counter self-interest.

Trust in relationships between organisations and between individuals are founded on similar characteristics. Organisations and individuals supporting collaborative

project strategies should regularly undertake and discuss the outcomes from self-assessment inventories against the following behaviours (Ref: 2 on page 20):-

1. **Talk Straight** – be honest, tell the truth, don't manipulate people or distort facts, call things what they are.
2. **Demonstrate Respect** – care for others and show that you care, treat people with respect at all levels
3. **Create Transparency** – don't work a hidden agenda, work on the basis of openness/disclosure, tell the truth in a way that people can verify
4. **Right Wrongs** – put things right quickly when you are wrong, apologise quickly and show personal humility. Don't cover things up!
5. **Show Loyalty** – acknowledge contributions from others and give credit freely, talk about others as if they are present
6. **Deliver Results** – establish a track record of results, get the right things done, don't overpromise and under deliver!
7. **Get Better** – look for feedback constantly, be a constant learner, continuously improve yourself
8. **Confront Reality** – be prepared to talk about the 'uncomfortable' topics, be courageous in conversation and take on the tough stuff
9. **Clarify Expectations** – disclose and reveal expectations, discuss them, re-negotiate where necessary, validate them
10. **Practice Accountability** – take responsibility, hold yourself and others accountable, don't apportion or deflect blame
11. **Listen First** – be prepared to listen first before you speak – understand the most important behaviours to those you work with
12. **Keep Commitments** – do what you say you are going to do, make commitments carefully, don't break confidences
13. **Extend Trust** – demonstrate a willingness to trust, extend trust abundantly (but not blindly or naively!), don't withhold trust because there is risk involved

PHASE 1: ESTABLISH A COLLABORATIVE ENVIRONMENT

The process of establishing the foundations for stakeholder trust should commence at the Stakeholder Management Conference and in every subsequent Periodic Project (Collaboration) Review (see also Collaboration Toolkit Phase 1; Step 1.3 – Stakeholder Management Conference and Periodic Reviews), the monitoring of behaviours (as documented within the Project Behavioural Charter,

the Project Collaboration Plan and the Relationship Management Plan) and the platform for further development of trust between the partners should be high on the agenda. Alignment and commitment to delivering the project objectives should become the collaboration 'mantra' with no stakeholder operating to a hidden agenda based on self-interest.

REFERENCES

- ISBN 978-0-19-516111-3 "Building Trust in Business, Politics, Relationships and Life" - Robert C. Solomon and Fernando Flores
- ISBN 978-0-7432-9560-4 "The Speed of Trust (The One Thing That Changes Everything)" - Stephen M.R. Covey



OBJECTIVE

To establish the environment in which the project can be delivered through effective collaboration between all project delivery stakeholders.

1.5 ESTABLISH COLLABORATION PLAN AND BEHAVIOURAL CHARTER

PHASE ACTIVITY OBJECTIVE

To ensure that the preparation of an additional key project plan; a Collaborative Relationship Management Plan is included within the Project Management Planning process. Also, to ensure that a Project Behavioural Charter is developed to guide the intended behaviour of all parties during the project lifecycle.

GUIDANCE

Process and practices for Project Management Planning (as distinct from planning / scheduling) are well established for industry projects. Project Management Plans for complex undertakings usually encompass plan sections for a number of functions (e.g. Engineering, Procurement & Supply Chain, Project Controls, HSSEQ, Quality Management, and Construction) and for discreet project phases (e.g. Project Start-up, Project Execution and Project Close-out). For collaborative project strategies, a Collaborative Relationship Management Plan should be prepared. Based on a preliminary Contracting and Procurement strategy, as developed by the Project Lead Entity, the Collaborative Relationship Management Plan should set out how the project scope will be delivered between all of the anticipated project parties (i.e. which potential partner role will be accountable and responsible for the various elements of scope and service provision). Critical interfaces and interdependencies between the anticipated partner roles should be clearly identified within the plan and it should frame how the various project relationships should be reviewed and maintained throughout the lifecycle to completion. Whereas Project Management Plans in their entirety should be considered to be 'live' documents

that are reviewed, refreshed and updated at regular intervals during the project, it is very important that the Collaborative Relationship Management Plan is actively reviewed and regularly updated for collaborative project undertakings.

The Project Behavioural Charter provides a documented summary of the inter-organisational and inter-personal behaviours that the project aims to foster during the implementation of the project. It forms the basis of agreement between the project delivery stakeholders regarding target behaviour and each organisational representative who signs the charter makes a commitment on behalf of the organisation that he / she represents and those individuals from his / her organisation who will be part of the project delivery team. The structure and content of the Project Behavioural Charter should be developed through workshop exercise during the Stakeholder Management Conference. Agreement between the stakeholders on a suitable Code of Ethics, reflecting legal requirements and representing what is ethically and morally acceptable in stakeholder behaviour and relationships should be addressed in the Project Behavioural Charter. The content should reflect desirable and undesirable behaviours as categorised in the following:-

- Performance Enhancing Behaviours (e.g. leading by example, taking initiative, creating and strengthening internal and external relationships, streamlining processes)
- Performance Sustaining Behaviours (e.g. treating people with respect and dignity, openly sharing knowledge & information, unity / teamwork)
- Performance Blocking Behaviours (e.g. tightly controlling the contribution of others, people being openly criticised, avoidance of responsibilities and commitments)

REFERENCES

- Engineering Construction Industries Association (ECIA) – Collaboration – Best Practice Guide – no. 7
- ICW / BS 44001 - Collaborative Business Relationships
- European Construction Institute (ECI) – ACTIVE Principle AP3 – Effective Supply Chain Relationships – Value Enhancing Practices:-
VEP3.1 Procurement Cycle Management
VEP3.2 Supplier Selection
VEP3.3 Contract Dispute Resolution
- European Construction Institute (ECI) – ACTIVE Principle AP4 – Effective Information Management and Communication – Value Enhancing Practice VEP 4.1 Information Management

OBJECTIVE

To establish the environment in which the project can be delivered through effective collaboration between all project delivery stakeholders.

1.6 PARTNER SELECTION PROCESS

PHASE ACTIVITY OBJECTIVE

To establish and follow a Partner Selection Process that is suited to the effective and successful achievement of a collaborative project strategy.

GUIDANCE

To establish an effective Partner Selection Process, the lead entity team must have already established an outline Contracting and Procurement Strategy framework for the project. A shortlist (reflected by Stakeholder Management Conference invitees) of pre-screened organisations for each required project service, contract or supply package should already be available. The process for partner selection needs to encompass many of the considerations of normal competitive tendering to ensure that overall capability and competence criteria are met. However, the main focus should be on 'value fit' with the intended collaborative project culture rather than purely commercial considerations, such as tendered price. Importantly, selection criteria should include categories that assess the organisational values and behaviours of the potential partners. These criteria are important to the assessment of potential project partners' ability to perform and behave collaboratively during project service delivery.

REFERENCES

- ICW / ISO44001 - Collaborative Business Relationships
- European Construction Institute (ECI) – ACTIVE Principle AP5 – Effective Project Risk Management
 - VEP5.1 Project Risk Management
 - VEP5.2 Risk and Benefit Framework Agreements
- European Construction Institute (ECI) – ACTIVE Principle AP3 – Effective Supply Chain Relationships – Value Enhancing Practices:-
 - VEP3.1 Procurement Cycle Management
 - VEP3.2 Supplier Selection
 - VEP3.3 Contract Dispute Resolution

The Partner Selection Process should incorporate a number of important additional steps to those normally used on a conventional project:-

- The agreement of the potential partner to undertake some form of collaborative capability self-assessment and share the outcomes from the exercise, should be a stated tender requirement (see also Collaboration Toolkit Phase 1; Step 1.2 – Undertake Collaborative Assessment and Establish Enabling Climate).
- The initial potential project partner engagement forum – the Stakeholder Management Conference (see also Collaboration Toolkit Phase 1; Step 1.3 – Stakeholder Management Conference and Periodic Project Reviews) should be used as part of the selection process to monitor and assess the performance and values / behaviours of potential partners

Whilst the willingness of potential partners to take a reasonable share of project risk (as related to scope and ability to manage / mitigate) should be an important consideration of the partner selection process, lead project entities should not impose a position regarding risk share as part of the invitation to tender. Consideration of risk sharing across the project supply chain should rather be an agenda item at the Stakeholder Management Conference – the outcomes from open forum discussion and workshops at the Stakeholder Management Conference being used to inform both the Partner Selection Process and establishment of contracting principles (see also Collaboration Toolkit Phase 1; Step 1.7 – Establish Contracting Principles).

OBJECTIVE

To establish the environment in which the project can be delivered through effective collaboration between all project delivery stakeholders.

1.7 ESTABLISH CONTRACTING PRINCIPLES

PHASE ACTIVITY OBJECTIVE

To establish the principles and framework for formal project agreements in support of the project collaboration strategy.

GUIDANCE

Collaboration needs to be supported and reflected within the framework of contracts and agreements that formalise the working arrangements between the project delivery stakeholders. Transactional agreements (e.g. Fixed Price / Lump Sum) will normally drive 'master / slave' relationships and quite often lead to conflict and adversity between the contracting parties - this will not support development of the truly aligned and collaborative relationships that are being sought. This is not to say that collaborative contracts / agreements should be 'soft' in any way and unbalanced in favour of the service provider or supplier. Balanced risk and reward agreements should be the aim, where parties to the agreement share the potential gain or pain associated with project performance in an equitable and proportional manner. The limits and boundaries

associated with risk share by the project parties should be explored and discussed at the Stakeholder Management Conference (see also Collaboration Toolkit Phase 1; Step 1.3 – Stakeholder Management Conference and Periodic Reviews). The Project Lead Entity -Collaboration Champion will need to engage with legal and contract / commercial representatives to gain support for a collaborative project contracting strategy and philosophy.

There are many examples of model form contracts, created to afford balance of interests between the contracting parties (e.g. LOGIC and NEC contract forms), that have been used to support partnership arrangements. However, these contract forms quite often get modified by the addition of special clauses (e.g. NEC Contract 'Z' clauses) which shift the balance in favour of one parties' interests. Balance in contracts and the principles on which they are founded is the key to effective project collaboration and contract terms and conditions (e.g. those associated with Liquidated Damages) should not be unilaterally imposed by one party without the understanding and acceptance of the other. Acceptance of contracting principles needs to be the result of open and honest dialogue between the parties and should not be 'assumed' from the receipt of a tender – this might reflect a lack of understanding of the risks that are being accepted.

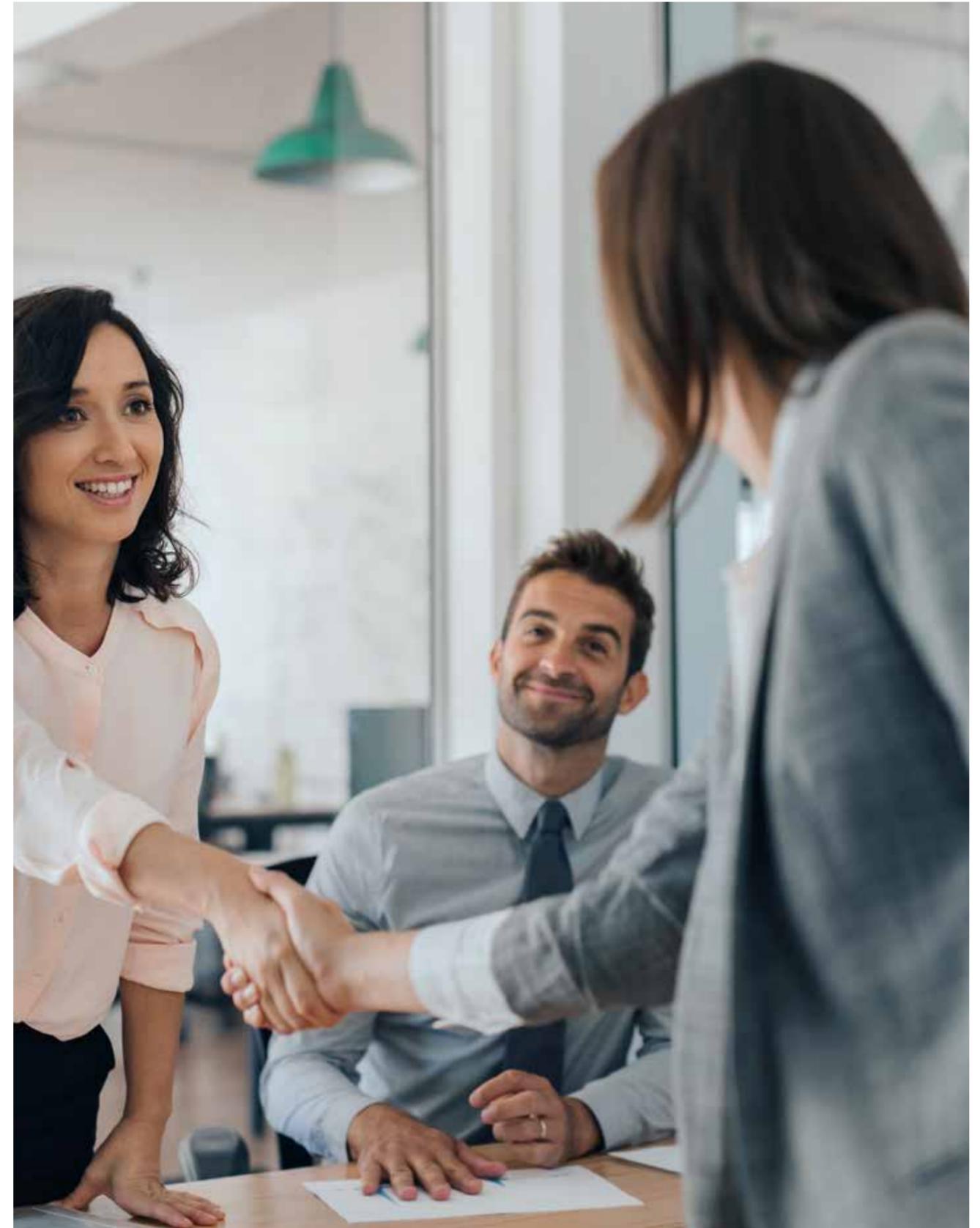
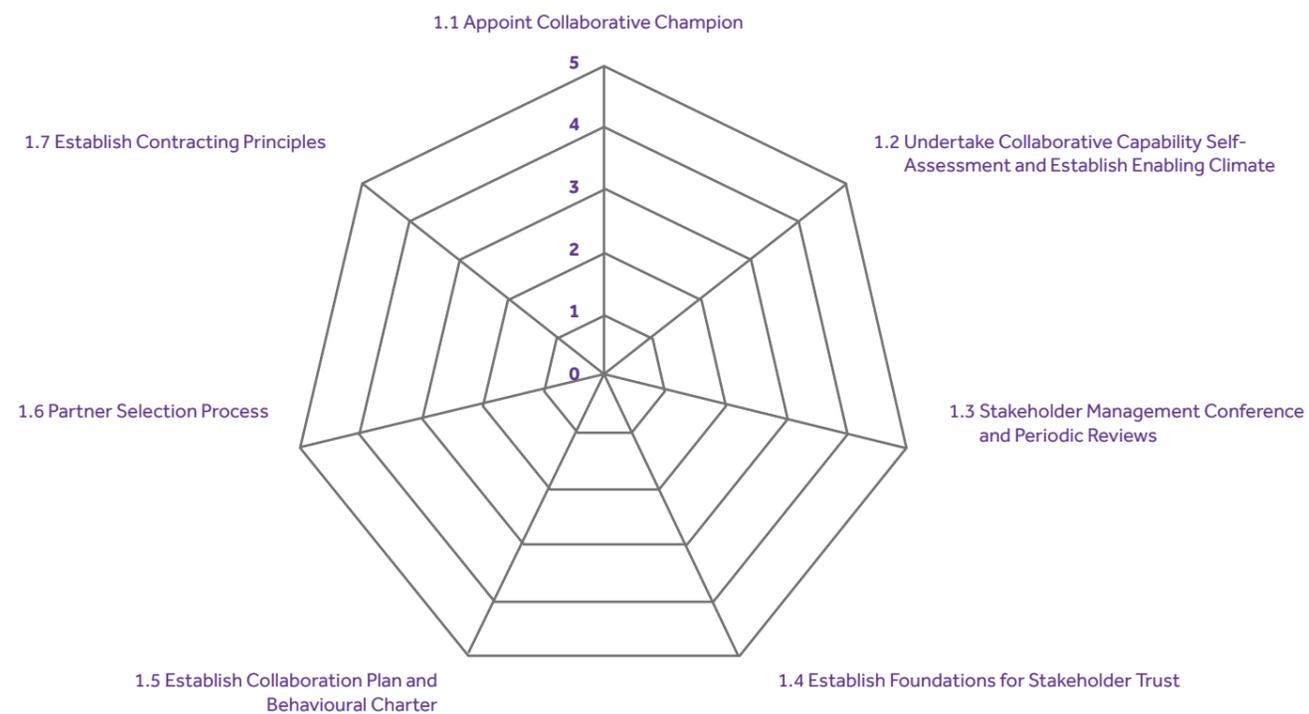
REFERENCES

- European Construction Institute (ECI) – ACTIVE Principle AP3 Effective Supply Chain Relationships
 - VEP3.1 Procurement Cycle Management
 - VEP3.2 Supplier Selection
 - VEP3.3 Contract Dispute Resolution
- European Construction Institute (ECI) – ACTIVE Principle AP5 Effective Project Risk Management
 - VEP5.2 Risk and Benefit Framework Agreements

The phase checklist review (on the following pages) is an integrated tool for phases 1,2 and 3 and can provide an upfront self-assessment of proposed collaboration arrangements and performance to date against the project collaboration toolkit, giving a general overview of areas of strengths and weakness. This information can be plotted on the diagram below.

The phase checklist review can also be used once the project is up and running to check on progress and identify any further actions necessary.

An interactive checklist is available online at:
www.ecitb.org.uk/professional-management-training/project-collaboration/





PHASE 2:
SET UP PROJECT FOR
COLLABORATION

PHASE 2: SET UP PROJECT FOR COLLABORATION

OBJECTIVE

To ensure that the project is correctly structured for effective collaboration between the project delivery stakeholders during Pre-Project Planning and Front End Loading (FEL).

	Activities / Deliverables	Outline Description
2.1	Project Team Selection Process	An agreement between collaboration partners of a selection process for all key roles within the integrated project management team. Selection process emphasis should be on values and behaviours and not merely a consideration of project management and technical skills.
2.2	Establish Common Project Delivery Objectives & Align	The identification and documentation of a set of Project Delivery Objectives (PDOs) that define the full range of targeted project outcomes is critically important to project collaboration between the stakeholders. Their development requires significant effort and stakeholder communication. Output from the project objective setting process is a clearly defined set of project outcomes with which all project stakeholders and members of the integrated project delivery team are aligned.
2.3	Create Collaborative Project Team Environment	To establish a collaborative environment for the integrated project delivery team, the project should look to the utilisation of appropriate web enabled system(s) for collaborative project working and sharing of project information
2.4	Document and Agree Project Scope	For effective project collaboration it is important that all stakeholders have a clear and common understanding of the project scope and which party is responsible for delivering the various scope elements
2.5	Scope Management and Change Management Protocol	The way in which project scope is managed through a management of change process can become an area of potential project conflict through the promotion of 'self interest' by the various stakeholders. The manner in which scope and change are managed on the project and the behaviours that are exhibited by all associated parties is important to effective project collaboration
2.6	Processes for Managing Risk and Uncertainty	An effective process for the management of risk and uncertainty is required to manage the exposure and consequences of risk throughout the project. For collaborative project undertakings a 'single team' approach and programme for the management of risk and uncertainty on the project should be adopted.
2.7	Engagement of Functional Stakeholders	For collaborative project undertakings to deliver the full range of potential benefits it is important that all stakeholders, including functional stakeholders with responsibilities within the respective partner organisations, are engaged early and aligned to the project objectives
2.8	Agree Project Reporting Format	The frequent preparation of substantial project reports and the unnecessary duplication of report production effort by the various delivery stakeholders is inefficient. Report structure, format and content are quite often inappropriate and unsatisfactory in terms of eliciting the right level of understanding from the reported information in those to whom it is circulated. Efficiency and appropriateness of reported data are the aims of this activity.
2.9	Agree Project Processes, Standards and Specifications	Over time the industry has become encumbered by an excess of work process and has moved away from the application of functional specifications. Inefficiency, stifling of creativity and innovation in project teams and over-specification and unnecessary cost has resulted. This activity is aimed at appropriate efficiency and effectiveness in the application of work processes, standards and specifications for collaborative projects.
2.10	Phase 2 - Review & Phase Learning	

Responsible	Supporting Information and References (By Exception)
Project Sponsors Project Manager Contractor, Subcontractor and Supply Chain Delivery Managers	European Construction Institute (ECI) ACTIVE Principle AP2 - Effective Project Team Management: Value Enhancing Practice (VEP) 2.1 Project Team Organisation
Project Sponsors Project Manager Contractor, Subcontractor, Supplier Delivery Managers All Members of the Integrated Project Management Team	Establishment of PDOs should result in a complete set of clear and concise statements that describe the things that the project will achieve. The client should present a draft set of PDOs to the Stakeholder Management Conference for collective development and alignment with participating stakeholder representatives. Subsequently, PDOs should be a focus of attention during the formation and building of the project management team and part of the process for induction of all new team members. European Construction Institute (ECI) ACTIVE Principle AP2 - Effective Project Concept and Definition: Value Enhancing Practice (VEP) 1.2 Project Definition and Objectives
Project Manager Contractor, Subcontractor, Supplier Delivery Managers All Members of the Integrated Project Management Team	European Construction Institute (ECI) ACTIVE Principle AP2 - Effective Project Team Management: Value Enhancing Practice (VEP) 2.1 Project Team Organisation European Construction Institute (ECI) ACTIVE Principle AP4 - Effective Information Management and Communication: Value Enhancing Practice (VEP) 4.1 Information Management European Construction Institute (ECI) ACTIVE Principle AP6 - Innovation and Continuous Improvement: Value Enhancing Practice (VEP) 6.1 Continuous Improvement Value Enhancing Practice (VEP) 6.2 Innovation and Intellectual Property
Project Manager Contractor, Subcontractor, Supplier Delivery Managers All Members of the Integrated Project Management Team	European Construction Institute (ECI) ACTIVE Principle AP2 - Effective Project Concept and Definition: Value Enhancing Practice (VEP) 1.2 Project Definition and Objectives
Project Manager Contractor, Subcontractor, Supplier Delivery Managers All Members of the Integrated Project Management Team	European Construction Institute (ECI) ACTIVE Principle AP2 - Effective Project Concept and Definition: Value Enhancing Practice (VEP) 1.2 Project Definition and Objectives
Project Manager Contractor, Subcontractor, Supplier Delivery Managers All Members of the Integrated Project Management Team	European Construction Institute (ECI) ACTIVE Principle AP5 - Effective Project Risk Management: Value Enhancing Practice (VEP) 5.1 Project Risk Management Value Enhancing Practice (VEP) 5.2 Risk and Benefit Framework Agreements
Project Manager Contractor, Subcontractor, Supplier Delivery Managers Asset Manager Commercial Managers Technical Authorities All Members of the Integrated Project Management Team	European Construction Institute (ECI) ACTIVE Principle AP2 - Effective Project Team Management: Value Enhancing Practice (VEP) 2.1 Project Team Organisation European Construction Institute (ECI) ACTIVE Principle AP4 - Effective Information Management and Communication: Value Enhancing Practice (VEP) 4.1 Information Management European Construction Institute (ECI) ACTIVE Principle AP6 - Innovation and Continuous Improvement: Value Enhancing Practice (VEP) 6.1 Continuous Improvement Value Enhancing Practice (VEP) 6.2 Innovation and Intellectual Property
Project Manager Contractor, Subcontractor, Supplier Delivery Managers All Members of the Integrated Project Management Team	European Construction Institute (ECI) ACTIVE Principle AP2 - Effective Project Team Management: Value Enhancing Practice (VEP) 2.1 Project Team Organisation European Construction Institute (ECI) ACTIVE Principle AP4 - Effective Information Management and Communication: Value Enhancing Practice (VEP) 4.1 Information Management European Construction Institute (ECI) ACTIVE Principle AP6 - Innovation and Continuous Improvement: Value Enhancing Practice (VEP) 6.1 Continuous Improvement Value Enhancing Practice (VEP) 6.2 Innovation and Intellectual Property
Project Manager Contractor, Subcontractor, Supplier Delivery Managers All Members of the Integrated Project Management Team	European Construction Institute (ECI) ACTIVE Principle AP2 - Effective Project Team Management: Value Enhancing Practice (VEP) 2.1 Project Team Organisation European Construction Institute (ECI) ACTIVE Principle AP3 - Effective Supply Chain Relationships: Value Enhancing Practice (VEP) 3.1 Procurement Cycle Management Value Enhancing Practice (VEP) 3.2 Supplier Selection European Construction Institute (ECI) ACTIVE Principle AP4 - Effective Information Management and Communication: Value Enhancing Practice (VEP) 4.1 Information Management European Construction Institute (ECI) ACTIVE Principle AP6 - Innovation and Continuous Improvement: Value Enhancing Practice (VEP) 6.1 Continuous Improvement Value Enhancing Practice (VEP) 6.2 Innovation and Intellectual Property

OBJECTIVE

To ensure that the project is correctly structured for effective collaboration between the project delivery stakeholders during Pre-Project Planning and Front End Loading (FEL).

2.1 PROJECT TEAM SELECTION PROCESS

PHASE ACTIVITY OBJECTIVE

The success of project delivery is determined largely by the people involved and how closely they work collaboratively to achieve the aligned project objectives. A process for the selection of the correct people into key project team roles (whether permanent in-house staff, contractors, consultants or supplier employees) is necessary to achieve the required effectiveness. Partner organisations should work together to agree an integrated project team organisation, with minimum role overlap and 'man-marking' and the right people for team positions should be selected on the principle of 'best fit'. The objective is to have clear leadership of a focussed, integrated team comprising team players who are fully engaged and motivated toward the achievement of common project objectives and the success that will result for all stakeholders.

GUIDANCE

In developing the project team organisation, a role and responsibility profile for each key project team position should be developed and these should become the foundation of the selection process. Whilst it is important to recognise that the right person for the role will possess the necessary technical skills and competencies, the values and behaviours exhibited by each of the individual

candidates should be given equal consideration and weighting. Candidates should be questioned around their understanding of and alignment to the project objectives. Their commitment to exhibiting the desired behaviours, as set out in the Project Charter, should be tested. Aggressive, adversarial and self-interested behaviour is quite often experienced from individuals who do not reflect the culture and values of an integrated project team and avoidance of the selection of such individuals should be a key aim of the selection process. It is recognised that team position selection is quite often highly constrained by who might be available at the time the team is being built. However, technical ability without the desired behaviours in any project team position will likely cause problems at some stage in project performance and delivery. If some potential behavioural weaknesses are identified in team candidates then a programme of coaching and development should be established in response.

The use of psychometric testing such as Myers-Briggs personality type indication and Belbin team role profiling can be a useful part of an effective project team selection process. They can enhance individual and team understanding and provide a useful common language for team building. With the aim of effective collaboration and team engagement being heavily reliant on shared values and behaviours, a values based profiling tool such as the Judgment Index has also been very effectively used in many project management scenarios. (See links below)

REFERENCES

- European Construction Institute (ECI) – ACTIVE Principle AP2 – Effective Project Team Management – Value Enhancing Practice VEP 2.1 Project Team Organisation
- ECITB & APM Competence Frameworks
- Myers-Briggs Personality Assessment - <http://www.myersbriggs.org/my-mbti-personality-type/>
- Belbin Team Role Assessment - <http://www.belbin.com/>
- Judgment Index Values Assessment - <http://judgementindex.co.uk/>

OBJECTIVE

To ensure that the project is correctly structured for effective collaboration between the project delivery stakeholders during Pre-Project Planning and Front End Loading (FEL).

2.2 ESTABLISH COMMON PROJECT DELIVERY OBJECTIVES & ALIGN

PHASE ACTIVITY OBJECTIVE

The primary objective of this activity is to establish a set of Project Delivery Objectives (PDOs) that collectively define what the project needs to deliver in order to fulfil the Project Brief and the Business Case. The resultant objectives can then be used throughout the project as a principal tool for alignment between project delivery stakeholders.

GUIDANCE

A set of Project Goal Statements should have been prepared through the contribution and involvement of potential project partners at the Stakeholder Management Conference (see also Collaboration Toolkit Phase 1; Step 1.3 – Stakeholder Management Conference and Periodic Reviews). As the project enters ECITB Project Collaboration Toolkit – Phase 2, which corresponds to the post FID, start-up stage of the project, these Goal Statements should then be developed and converted into a comprehensive set of Project Delivery Objectives by the integrated project management team. It is important that the PDOs are generated collaboratively and are reflective of inputs from the wider stakeholder community and not just the Project

Lead Entity. Typical categories for PDOs might include HSSEQ objectives, Business Case Delivery objectives (built around commercial, cost and schedule targets), People and Collaboration objectives, Project Management Efficiency (functional specification, elimination of excessive and unnecessary work processes, waste reduction etc.), Stakeholder and Partner Satisfaction, Communication and Information Management and Management of Risk & Uncertainty.

Each PDO should comprise as a minimum the following components:-

- * PDO Heading
- * Goal Statement: A statement of the achievement that is sought
- * Conditions of Satisfaction (COS): The condition to be met which will allow the goal to be achieved
- * Objective Delivery Strategy: A set of high level statements of how the project team will set out to meet the goal
- * Critical Success Factors (CSFs): Those aspects / factors that are required to realise the strategy and meet the minimum conditions of satisfaction
- * Key Performance Indicators (KPIs): The measures that will be used to drive and verify performance towards meeting the minimum conditions of satisfaction

REFERENCES

- European Construction Institute (ECI) – ACTIVE Principle AP2 – Effective Project Team Management

OBJECTIVE

To ensure that the project is correctly structured for effective collaboration between the project delivery stakeholders during Pre-Project Planning and Front End Loading (FEL).

2.3 CREATE COLLABORATIVE PROJECT TEAM ENVIRONMENT

PHASE ACTIVITY OBJECTIVE

To ensure that the Project Management Team have a working environment which supports the 'single team' philosophy of the project collaboration strategy.

GUIDANCE

For collaborative projects, members of the extended project should have been selected on the basis of 'best fit' for the role (see also Collaboration Toolkit Phase 2; Step 2.1 - Project Team Selection Process). It is important that project team members, irrespective of the organisation that they represent, are able to operate in an environment in which they have equivalent standing alongside all other members. For project team members and contributors to feel that they are part of "one team" and genuinely aligned to the achievement of common project objectives,

a non-hierarchical collaborative environment should be created. The integrated project team organisation should not present complex hierarchical layers with numerous levels of authority and access to project information. The organisation should more closely resemble a network centric eco-system and although project information access and security are recognised to be important, simple, non-hierarchical access protocols should be utilised.

Whilst there are a plethora of available project systems with infinite variety in the functionality that they offer, it is recommended that project collaboration is built around a suitable web-enabled Project Management Information System (PMIS). Suitable systems should offer project information and project document collation, access and distribution capability and also access to common team tracking databases (e.g. project issues and risks). The main aim of a collaborative project PMIS is to enhance efficiency by elimination of unnecessary duplication of the document and project information systems which might otherwise be used in parallel by each of the project stakeholders.

REFERENCES

- European Construction Institute (ECI) ACTIVE Principle AP2 - Effective Project Team Management: Value Enhancing Practice (VEP) 2.1 Project Team Organisation
- European Construction Institute (ECI) ACTIVE Principle AP4 - Effective Information Management and Communication: Value Enhancing Practice (VEP) 4.1 Information Management
- European Construction Institute (ECI) ACTIVE Principle AP6 - Innovation and Continuous Improvement: Value Enhancing Practice (VEP) 6.1 Continuous Improvement Value Enhancing Practice (VEP) 6.2 Innovation and Intellectual Property



OBJECTIVE

To ensure that the project is correctly structured for effective collaboration between the project delivery stakeholders during Pre-Project Planning and Front End Loading (FEL).

2.4 DOCUMENT AND AGREE PROJECT SCOPE

PHASE ACTIVITY OBJECTIVE

To establish and agree a baseline project scope of work, define limitations and boundaries and agree the division of responsibilities for the delivery of scope elements between the project delivery stakeholders.

GUIDANCE

The establishment of a project baseline scope, upon which all formal agreements and contracts for project service, supply and support can be founded, is a critically important requirement. Poor management of scope (see also Collaboration Toolkit Phase 2; Step 2.5 Scope Management and Change Management Protocol) through poorly controlled scope changes and scope 'drift' or 'creep' can become a threat to the project collaboration strategy. It is recommended that the Baseline Scope of Work for the project is documented in the form of a 'Scope Book'. The Baseline Scope Book should correspond to the relevant version of the project estimate (e.g. the Baseline Scope Book should normally correspond to the project estimate that was used to support the Final Investment Decision (FID)). All subsequent changes in scope (additions and deletions) that are formalised and agreed through

the Management of Change process should then be documented in periodic Scope Book revisions. The Scope Book should be a key document for the development of alignment and understanding between the delivery stakeholders and should incorporate clear statements of who carries responsibility for delivery of the various scope elements. Any remaining areas of scope uncertainty (e.g. elements of technical scope that still require study and development or items of as yet undefined 'condition dependant' scope for projects with brownfield content) should be recorded within the Scope Book.

The Scope Book may use the following items to achieve the necessary level of definition and agreement between the delivery stakeholders:

- Specifications and Standards – defining functionality and quality requirements as limit defining scope requirements (see also Collaboration Toolkit Phase 2; Step 2.9 – Agree Project Processes and Standards)
- Project Equipment List
- Schedule of Contracts – defined by 'four line' specifications, split by type and discipline
- Material Assignment Schedules – split to contracts and listing division of responsibilities
- Engineering and Design Deliverable Schedules – split to contracts and listing division of responsibilities

REFERENCES

- European Construction Institute (ECI) ACTIVE Principle AP2 - Effective Project Concept and Definition: Value Enhancing Practice (VEP) 1.2 Project Definition and Objectives

OBJECTIVE

To ensure that the project is correctly structured for effective collaboration between the project delivery stakeholders during Pre-Project Planning and Front End Loading (FEL).

2.5 SCOPE MANAGEMENT & CHANGE MANAGEMENT PROTOCOL

PHASE ACTIVITY OBJECTIVE

The agreement by the responsible members of the integrated project management team of an appropriate behavioural protocol for the way in which scope and change are managed on the project.

GUIDANCE

The management of project scope and change can become a 'flash point' and lead to conflict and adversarial behaviour between project delivery stakeholders. This results from the project culture that has developed in many parts of UK industry over the years. Whereas Lead Project Entities (e.g. client / operators) believe that the engaged project supply chain will vigorously pursue additive changes to the project scope in order to increase individual workshare and margin, project delivery support stakeholders correspondingly believe that Project Lead Entities (e.g. client / operators) can be overly stringent when recognising and authorising change in some circumstances. For collaborative projects, both of the above positions represent unacceptable misalignment and expressions of self-interest. The problem manifests itself in the behaviour of the parties involved in the change process rather than problems with the Management of Change process itself. During the early stages of project start-up, the newly formed integrated project management team should agree a behavioural protocol for how potential changes in project scope will be dealt with. The following elements are recommended as the

basis for an aligned and collaborative protocol for scope and change management:-

- A 'single team' process for project Management of Change should be agreed at the onset.
- Having collectively reviewed and agreed the Baseline Scope of Work, the integrated project management team should adopt a basic philosophy of "no change" throughout the project to completion (i.e. additive scope changes should be collectively and vigorously resisted). Agreements and contracts should wherever possible be structured such that there is no commercial advantage to be gained by any party from the pursuance of additive scope change.
- In acceptance of the "management of no change" philosophy, should any potential change or variation to the project scope of work become absolutely necessary, they should be tested, measured and evaluated against the Baseline Scope (see also Collaboration Toolkit Phase 2; Step 2.4 – Document and Agree Project Scope). Agreements and contracts should wherever possible be structured such that the interests of any party cannot be detrimentally affected by change rejection (e.g. parties needing to undertake additional change related work at its own cost, albeit conditional on absence of responsibility and reason for potential change initiation)
- The integrated project management team should 'test' the agreed protocol for behaviours associated with management of change by discussing a number of possible change scenarios, checking the (behavioural) responses of the associated parties and recording the outcomes for future reference.

REFERENCES

- European Construction Institute (ECI) ACTIVE Principle AP2 - Effective Project Concept and Definition: Value Enhancing Practice (VEP) 1.2 Project Definition and Objectives

OBJECTIVE

To ensure that the project is correctly structured for effective collaboration between the project delivery stakeholders during Pre-Project Planning and Front End Loading (FEL).

2.6 PROCESSES FOR MANAGING RISK & UNCERTAINTY

PHASE ACTIVITY OBJECTIVE

The establishment of a 'single team' risk management programme, processes and procedures for the effective management of risk and uncertainty throughout the project lifecycle.

GUIDANCE

The way in which project risks and uncertainties are identified, assessed, mitigated and managed is vitally important to the successful delivery of projects. Within the framework of relationships for a collaborative project the aim should be for specific risks to be managed by the party best equipped to deal with that risk at least cost. However, industry custom and practice over a period of time has moved away from this principle and unreasonable / disproportionate transfer of risk into the supply chain has resulted. Risk should not be unilaterally transferred by Project Lead Entities into project service and supply chain partner agreements without appropriate discussion and prior agreement being reached and without validating

that the partner fully understands the risks and their consequences. To do so may in itself constitute a risk to performance and the outcome of the project. The potential benefits available to each of the partners, as reflected in the contractual agreement, should reflect the degree of risk borne by each party. Proper management of risk in supply chain relationships should encourage and reward effective innovation and performance.

Over time the approach to management of project risk has become cumbersome and inefficient through duplication of the risk management approach and process by each of the various project entities. This is an area where the industry has become encumbered by weighty, duplicated process. It is recommended that a 'single team' programme and process for the management of risk and uncertainty is established early in the project set-up phase so that all parties are aligned to a common approach and can clearly see their respective responsibilities for the management of all allocated project risks. The risk and uncertainty management process should be directed at the project and any overlap with the established processes for business risk management within any of the involved parties to the project should be avoided.

REFERENCES

- European Construction Institute (ECI) ACTIVE Principle AP5 - Effective Project Risk Management: Value Enhancing Practice (VEP) 5.1 Project Risk Management
Value Enhancing Practice (VEP) 5.2 Risk and Benefit Framework Agreements
- European Construction Institute (ECI) ACTIVE Principle AP6 – Effective Innovation and Continuous Improvement: Value Enhancing Practice (VEP) 6.1 Continuous Improvement
Value Enhancing Practice (VEP) 6.2 Innovation and Intellectual Property

OBJECTIVE

To ensure that the project is correctly structured for effective collaboration between the project delivery stakeholders during Pre-Project Planning and Front End Loading (FEL).

2.7 ENGAGEMENT OF FUNCTIONAL STAKEHOLDERS

PHASE ACTIVITY OBJECTIVE

To ensure that functional representatives, having responsibilities for performance and standards within the various project stakeholder organisations, are engaged early and that they fully understand and are aligned with the project objectives.

GUIDANCE

Project performance can be influenced from a variety of different directions. For collaborative projects, the project management team needs to identify the range of functional stakeholders within the organisations that are supporting project delivery and consider the influence that they might have on the project. Such functional stakeholders need to be included in stakeholder management and relationship management planning. Collaborative projects, in pursuing creative, innovative and efficient approaches to project performance and delivery may need to be

granted concessions in order to deviate from established functional processes and standards. Technical Authorities, for example, have a critically important role to fulfil and it is essential that they are communicated with at an early stage in the project lifecycle to share details of the collaborative project strategy and any project policies that are intended around functional specification. In this way Technical Authorities might be afforded the opportunity to appreciate the project objectives and ensure at an appropriate, early stage that their technical requirements and criteria will be met. Similarly, contract and legal functional representatives need early consultation to understand and buy-in to the style of contracts and agreements (e.g. risk and benefit framework agreements) that are intended to be deployed.

Lack of early consultation with the entire range of influential functional stakeholders constitutes an appreciable risk to the project. Functional representatives who have not been engaged early will not feel aligned to project objectives and will not feel a share of ownership for their achievement. Late engagement and involvement can risk adverse influence during project execution.

REFERENCES

- European Construction Institute (ECI) ACTIVE Principle AP2 - Effective Project Team Management: Value Enhancing Practice (VEP) 2.1 Project Team Organisation
- European Construction Institute (ECI) ACTIVE Principle AP4 Effective Information Management and Communication: Value Enhancing Practice (VEP) 4.1 Information Management
- European Construction Institute (ECI) ACTIVE Principle AP6 - Innovation and Continuous Improvement: Value Enhancing Practice (VEP) 6.1 Continuous Improvement
Value Enhancing Practice (VEP) 6.2 Innovation and Intellectual Property

OBJECTIVE

To ensure that the project is correctly structured for effective collaboration between the project delivery stakeholders during Pre-Project Planning and Front End Loading (FEL).

2.8 AGREE PROJECT REPORTING FORMAT

PHASE ACTIVITY OBJECTIVE

To ensure efficiency and fitness for purpose in the preparation, structure and content of project reports.

GUIDANCE

Industry custom and practice has led to a culture of excessive effort and the generation/preparation of unnecessary data in the production of project reports. On sizeable, complex projects some stakeholder organisations may produce a number of reports in different formats to satisfy other project parties and to satisfy corporate functional requirements. Such duplicated effort is wasteful and inefficient and much of the data produced in traditional, voluminous project reports is superfluous and not read or referred to by report recipients. For collaborative projects, the integrated project management team should at an early stage in the project start-up phase, discuss and agree a 'single team' structure, format and content for project

dashboards and project reports. The reporting schedule (frequency) and timing for issue of project reports should similarly be agreed. Clearly the dashboard and report content needs to result from extensive consultation with those in the various project stakeholder organisations (e.g. senior management and leadership teams) to ensure sufficiency and fitness for purpose. However, agreement of a 'single team' format will optimise the effort and time required for production. The project management team should agree who needs to contribute to dashboard and report data with responsibilities being allocated accordingly. Dashboards and project reports should be produced on the basis of minimising the need for manual manipulation and formatting of data.

The agreed dashboard and report structure and content should sit at the core of the project information management and communication strategies and plans. The ability to streamline and minimise unnecessary duplicated effort in the production of project dashboards and reports is one of the many potential benefits to project performance that a collaborative strategy can deliver.

REFERENCES

- European Construction Institute (ECI) ACTIVE Principle AP2 - Effective Project Team Management: Value Enhancing Practice (VEP) 2.1 Project Team Organisation
- European Construction Institute (ECI) ACTIVE Principle AP4 - Effective Information Management and Communication: Value Enhancing Practice (VEP) 4.1 Information Management
- European Construction Institute (ECI) ACTIVE Principle AP6 - Innovation and Continuous Improvement: Value Enhancing Practice (VEP) 6.1 Continuous Improvement
Value Enhancing Practice (VEP) 6.2 Innovation and Intellectual Property

OBJECTIVE

To ensure that the project is correctly structured for effective collaboration between the project delivery stakeholders during Pre-Project Planning and Front End Loading (FEL).

2.9 AGREE PROJECT PROCESSES STANDARDS AND SPECIFICATIONS

PHASE ACTIVITY OBJECTIVE

To optimise project performance, improve efficiency and reduce unnecessary project cost by applying an appropriate level of work process / procedure, functional specifications and standards.

GUIDANCE

Past industry practice has led to a culture of excessively tight control through the application of stringent and prescriptive work processes. Whilst the reasons for this may be understandable (e.g. application of stringent engineering and design work processes to reduce the risk of design error and potential process safety incident), excessive and overly prescriptive work processes drive project management, engineering, procurement and other project costs to an unacceptably high level. In applying a complex network of work processes, many areas of overlap and duplication occur between the various project parties (e.g. in applied assurance processes) and this translates into wasted effort and unnecessary cost. Creativity and innovation are also stifled by the application of excessive work processes and procedures. In the future interests

of the industry a change of practice in the direction of a more efficient application of processes and procedures is required. Applied processes need to be optimised / minimised to those that are essential to the safe achievement of project objectives. Procedures should, as far as practically possible, be limited to "what" needs to be undertaken, rather than a prescriptive set of rules around "how" certain processes should be performed.

For collaborative projects the integrated project management team should determine a 'single team' set of the work processes that are essential to objective achievement and project delivery performance during the project start-up phase.

Similarly, project standards and specifications should be developed to represent functional and project performance requirements. Over-specification through the application of historical standards (and the attendant costs) should be avoided. Project suppliers should be engaged and consulted early to allow contribution to the formulation of specifications and the potential for innovative approaches and solutions before specifications are finalised.

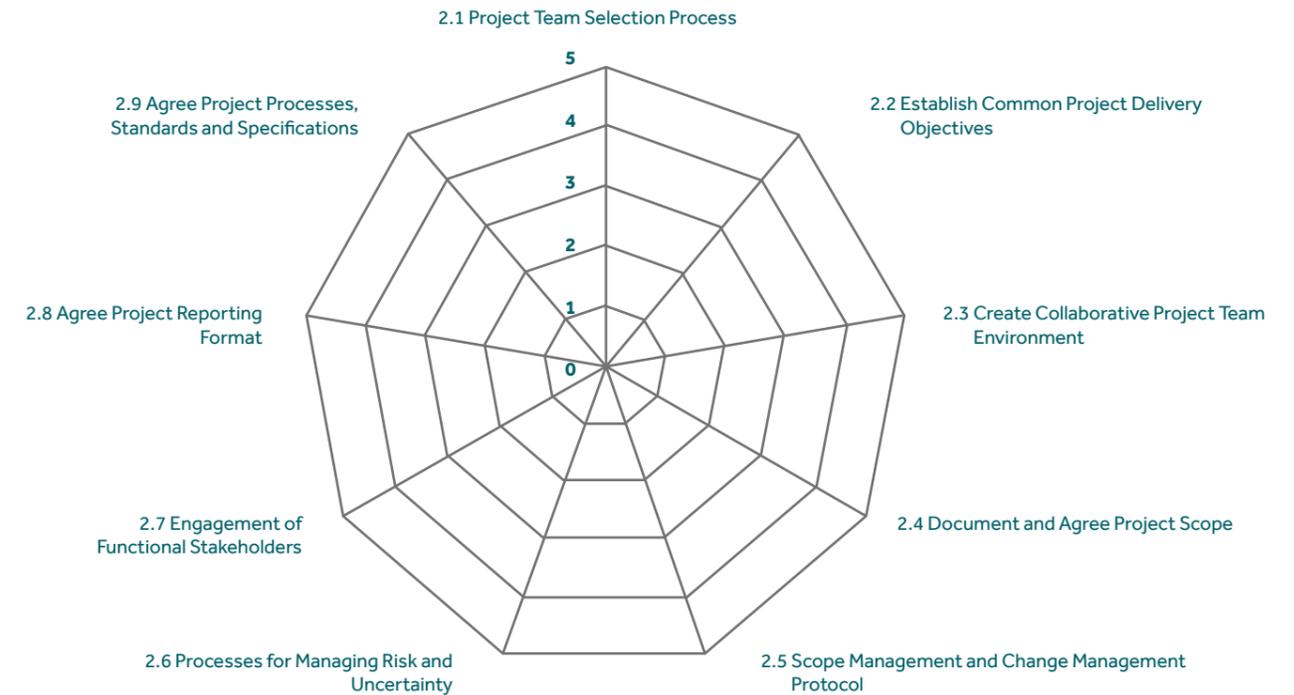
A full list of agreed 'single team' project processes / procedures, project standards and specifications should be included within the Project Management Plan

REFERENCES

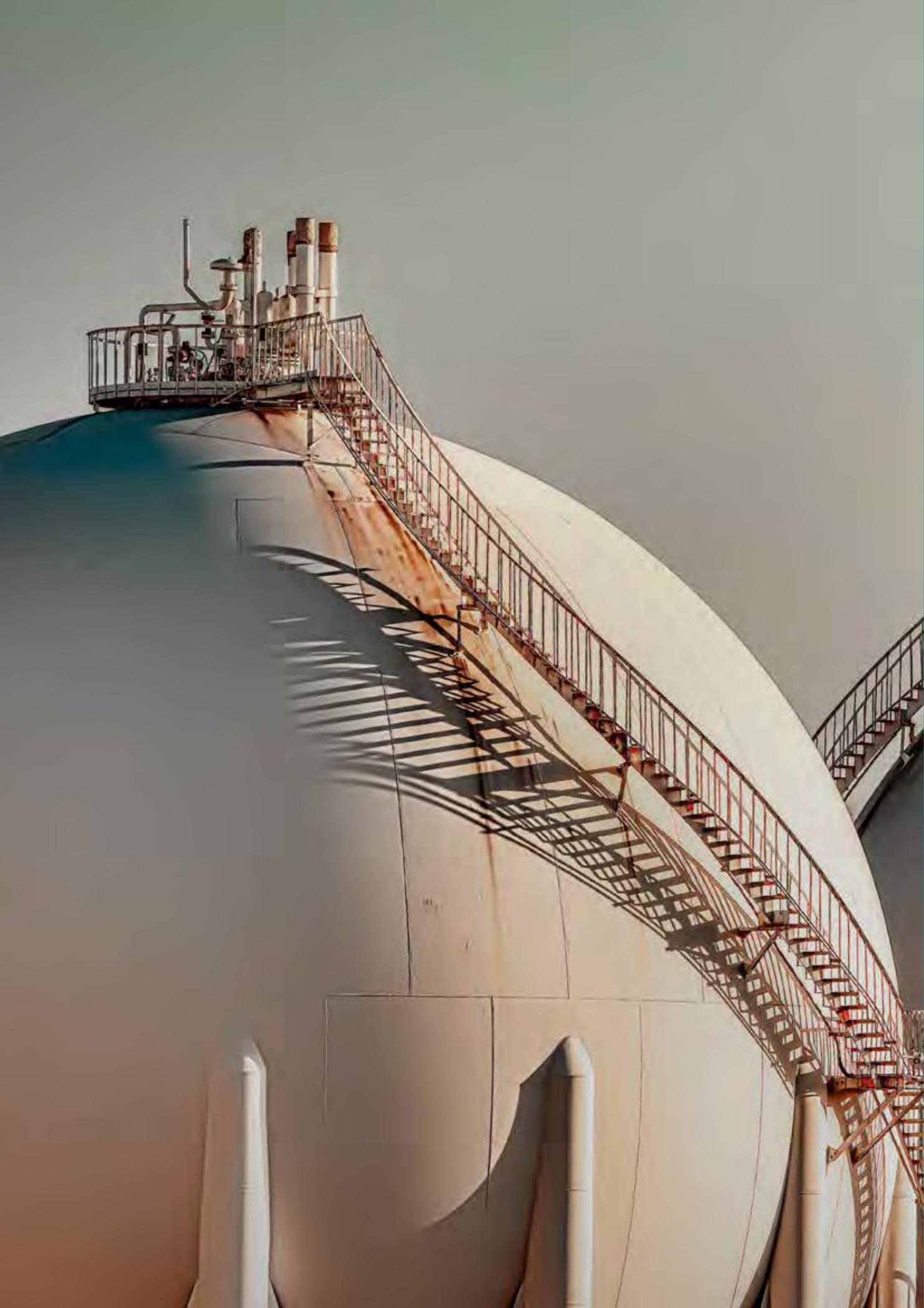
- European Construction Institute (ECI) ACTIVE Principle AP2 - Effective Project Team Management: Value Enhancing Practice (VEP) 2.1 Project Team Organisation
- European Construction Institute (ECI) ACTIVE Principle AP3 - Effective Supply Chain Relationships: Value Enhancing Practice (VEP) 3.1 Procurement Cycle Management Value Enhancing Practice (VEP) 3.2 Supplier Selection
- European Construction Institute (ECI) ACTIVE Principle AP4 - Effective Information Management and Communication: Value Enhancing Practice (VEP) 4.1 Information Management
- European Construction Institute (ECI) ACTIVE Principle AP6 - Innovation and Continuous Improvement: Value Enhancing Practice (VEP) 6.1 Continuous Improvement Value Enhancing Practice (VEP) 6.2 Innovation and Intellectual Property

The phase checklist review (on the following pages) is an integrated tool for phases 1,2 and 3 and can provide an upfront self-assessment of proposed collaboration arrangements and performance to date against the project collaboration toolkit, giving a general overview on areas of strengths and weakness. This information can be plotted on the diagram below.

The phase checklist review can also be used once the project is up and running to check on progress and identify any further actions necessary.



An interactive checklist is available online at:
www.ecitb.org.uk/professional-management-training/project-collaboration/



PHASE 3:
EXECUTE COLLABORATIVE
PROJECT

OBJECTIVE

Following agreement and establishment of a collaborative project strategy and setting up the project for collaboration, the objective of this phase is the adoption of a collaborative approach to key project management operations during project execution.

	Activities / Deliverables	Outline Description
3.1	Collaborative Schedule and Cost Control Processes	For collaborative projects the integrated project management team should openly discuss and agree the basis on which the project will be controlled during the project set-up phase. During project execution, the agreed, integrated project control strategy should be implemented in a collaborative manner which avoids unnecessary duplication of effort on behalf of the project delivery stakeholders.
3.2	Stakeholder Risk & Reward - KPI Measurement	In collaborative project arrangements a number of project delivery stakeholders are likely to have been contracted on the basis of Risk and Benefit Framework style agreements. Project performance will therefore directly translate to the commercial return that such stakeholders achieve during project execution. Any KPI measures that are connected to stakeholder margin / return should be openly and clearly tracked throughout the progress of the project.
3.3	"Single Team" Quality Monitoring & Assurance	Sizeable and complex projects within the industry need to be subjected to appropriate levels of governance and assurance to avoid defects that might result in unacceptable risk consequences, such as process safety incidents. However, duplication and consecutive application of assurance processes can be extremely wasteful and collaborative project strategies afford an opportunity to optimise the approach.
3.4	"Single Team" Safety, Health & Environmental Management	The industry has a strong track record of collaboration for effective management of safety, health and environmental performance on projects. Without exception, industry organisations recognise the industries aspirational goal of 'zero harm' and have developed initiatives and processes to support the path to achievement. However, many of these initiatives are followed and deployed in parallel and this can lead to some confusion in project work teams. For collaborative projects an integrated team Project HSE Plan should be generated and implemented.
3.5	Phase 3 - Review & Phase Learning	

Responsible	Supporting Information and References (By Exception)
Project Manager Contractor, Subcontractor, Supplier Delivery Managers All Members of the Integrated Project Management Team	European Construction Institute (ECI) ACTIVE Principle AP7 - Effective Project Execution: Value Enhancing Practice (VEP) 7.1 Project Control Dr Eliyahu M.Goldratt's – "Critical Chain" book (based on the 'Theory of Constraints')
Project Manager Contractor, Subcontractor, Supplier Delivery Managers All Members of the Integrated Project Management Team	European Construction Institute (ECI) ACTIVE Principle AP7 - Effective Project Execution: Value Enhancing Practice (VEP) 7.1 Project Control European Construction Institute (ECI) ACTIVE Principle AP8 - Effective Performance Measurement: Value Enhancing Practice (VEP) 8.1 Performance Benchmarking Value Enhancing Practice (VEP) 8.2 Contract Monitoring and Measurement
Project Manager Contractor, Subcontractor, Supplier Delivery Managers All Members of the Integrated Project Management Team	APM Publication - "Guide to Integrated Assurance"
Project Manager Contractor, Subcontractor, Supplier Delivery Managers All Members of the Integrated Project Management Team	Oil & Gas (UK) / Step Change in Safety (https://www.stepchangeinsafety.net/)

OBJECTIVE

After setting up the project for collaboration, the objective of this phase is to ensure adoption of collaborative behaviours when undertaking key project management operations during project execution.

3.1 COLLABORATIVE SCHEDULE AND COST CONTROL PROCESSES

PHASE ACTIVITY OBJECTIVE

A collaborative and efficient approach and methodology for effective project controls.

GUIDANCE

The processes to be utilised for effective project controls, including those for cost and schedule control should have been agreed during the project start-up phase (see also Collaboration Toolkit Phase 2; Step 2.9 – Agree Project Processes, Standards and Specifications). Schedule and cost control should be conducted against established baselines – the Baseline Project Control Budget and the Baseline Project Schedule respectively. A single set of systems / tools, as agreed during project start-up, should be used to support effective control to include operations such as forecasting, measurement (earned value based) and changes to control baselines. Any changes to cost and schedule baselines during project progress should be strictly effected through the management of change process (see also Collaboration Toolkit Phase 2; Step 2.5 – Scope Management and Change Management Protocol).

Project control should be conducted in a completely open manner with all project delivery stakeholders having access to current project control status information. Honesty in the reporting of cost and schedule performance by delivery stakeholders for each and every element of the project

scope is of paramount importance. There should be one recognised project control process, project schedule and project cost budget – management of duplicate schedules and cost management processes by the various stakeholders should be discouraged and is potentially wasteful. Agreement should be reached between the members of the integrated project management team as to who is authorised to make decisions associated with take-up of cost contingency and schedule float, against the principle that both contingency and float belong to the project rather than any particular stakeholder.

Project schedules that are developed through traditional ‘critical path’ methodology are vulnerable to inclusion of hidden float (or time safety margin) at activity / task level. Consideration should be given to the adoption of collaborative schedule development methodologies such as Critical Chain Project Management. Methodologies such as CCPM are directed at eliminating potential self-interest from any of the project delivery stakeholders by focussing all parties on support of whoever is conducting the sequence of activities on the critical chain. Any schedule contingency is utilised at the direction of the project manager from activity and project chain ‘buffers’.

Cost and schedule performance are important criteria and are likely to be reflected in risk and benefit framework contract agreements. The outputs from the project control process should provide information (see also Collaboration Toolkit Phase 2; Step 2.8 – Agree Project Reporting Format) to all stakeholders to allow determination of the position relative to their contract agreements.

REFERENCES

- European Construction Institute (ECI) ACTIVE Principle AP7 - Effective Project Execution: Value Enhancing Practice (VEP) 7.1 Project Control
- Dr Eliyahu M.Goldratt’s – “Critical Chain” book (based on the ‘Theory of Constraints’)

OBJECTIVE

After setting up the project for collaboration, the objective of this phase is to ensure adoption of collaborative behaviours when undertaking key project management operations during project execution.

3.2 STAKEHOLDER RISK & REWARD - KPI MEASUREMENT

PHASE ACTIVITY OBJECTIVE

Transparency and visibility of Project KPI measures that directly relate to project stakeholder performance returns.

GUIDANCE

In establishing project control processes (see also Collaboration Toolkit Phase 2; Step 2.9 – Agree Project Processes Standards and Specifications and Phase 3;

Step 3.1 – Collaborative Schedule and Cost Control Processes) the project KPI measures that will directly relate to stakeholder (risk and benefit framework agreement) commercial returns from the project are clearly important. KPIs should be established on S.M.A.R.T. principles (Specific, Measurable, Achievable, Realistic and Time-bound) All such KPI measures should be incorporated into a Project KPI Schedule and the project control process should allow for their measurement and tracking. Visible indicators of tracked KPIs should be incorporated into project dashboards so that all project delivery stakeholders can evaluate their commercial standing throughout the progress of the project.

REFERENCES

- European Construction Institute (ECI) ACTIVE Principle AP7 - Effective Project Execution: Value Enhancing Practice (VEP) 7.1 Project Control
- European Construction Institute (ECI) ACTIVE Principle AP8 - Effective Performance Measurement: Value Enhancing Practice (VEP) 8.1 Performance Benchmarking Value Enhancing Practice (VEP) 8.2 Contract Monitoring and Measurement



OBJECTIVE

Following agreement and establishment of a collaborative project strategy and setting up the project for collaboration, the objective of this phase is the adoption of a collaborative approach to key project management operations during project execution.

3.3 SINGLE TEAM' QUALITY MONITORING & ASSURANCE

PHASE ACTIVITY OBJECTIVE

The application of an effective and efficient approach to governance and assurance for collaborative projects.

GUIDANCE

The need for appropriate governance and assurance processes in order to avoid the potential consequences of damaging defects in the quality of project engineering and design, supplied equipment and materials etc. is widely recognised. Because of the potentially catastrophic consequences of design errors and quality defects that could lead to process safety incidents, many industry client / operators, contractors and suppliers have developed their own extensive assurance processes. Whilst this is understandable, the way in which assurance processes

are applied to projects should be carefully considered so as to avoid wasteful duplication of effort. The 'sequential' application of assurance process by a number of project delivery stakeholders in the supply chain can result in significant schedule time requirement.

For collaborative projects the integrated project management team should discuss and agree a 'single team' approach to project governance and assurance during project start-up (see also Collaboration Toolkit Phase 2; Step 2.9 – Agree Project Processes, Standards and Specifications). The agreed project governance and assurance process for the project should be communicated and agreed with the responsible functional representatives of all project delivery stakeholders in order to avoid conflict with normal business assurance processes. (see also Collaboration Toolkit Phase 2; Step 2.7 – Engagement of Functional Stakeholders). Any required adjustments to, or deviations from stakeholder business assurance processes should be negotiated, agreed and recorded.

REFERENCES

- APM reference: <https://www.apm.org.uk/measures-assuring-projects-apm-toolkit>
- APM reference: <https://www.apm.org.uk/books/guide-conducting-integrated-baseline-reviews>
- APM Publication - "Guide to Integrated Assurance"

OBJECTIVE

After setting up the project for collaboration, the objective of this phase is to ensure adoption of collaborative behaviours when undertaking key project management operations during project execution.

3.4 'SINGLE TEAM' SAFETY HEALTH & ENVIRONMENTAL MANAGEMENT

PHASE ACTIVITY OBJECTIVE

The adoption of a 'single team' approach to the leadership and management of health, safety and environmental performance for collaborative projects.

GUIDANCE

Collaboration between project stakeholders aimed at assuring delivery without harm to the safety and health of those involved or affected and without detrimental impact on the environment is common practice. Many organisations have their own policies, processes and initiatives to support HSE performance along the journey to "Zero Harm". However, many of these laudable initiatives and approaches are applied 'in parallel' on conventional projects and this can result in divergent effort and confusion in some of the project work teams.

For collaborative projects, the integrated project team should develop a 'single team' strategy for leadership and management of HSE. The project should develop a single Project HSE Plan as part of the project management planning process and the following features of the HSE Plan should be standardised and recognised / followed / observed by all project delivery stakeholders:-

- A single HSE vision for the project
- A single set of project targets for HSE (e.g. safety - no lost time injuries)
- A standard for HSE recording and investigation of incidents and near misses
- An agreed single set of proactive initiatives to support HSE performance on the project (e.g. one recognised safety performance observation system)
- A single safety incentive system (if any is agreed to be applied)
- Standard agreement of roles and responsibilities for HSE performance between project line management and HSE functional team members across the project.

REFERENCES

- Step Change in Safety - <https://www.stepchangeinsafety.net/>



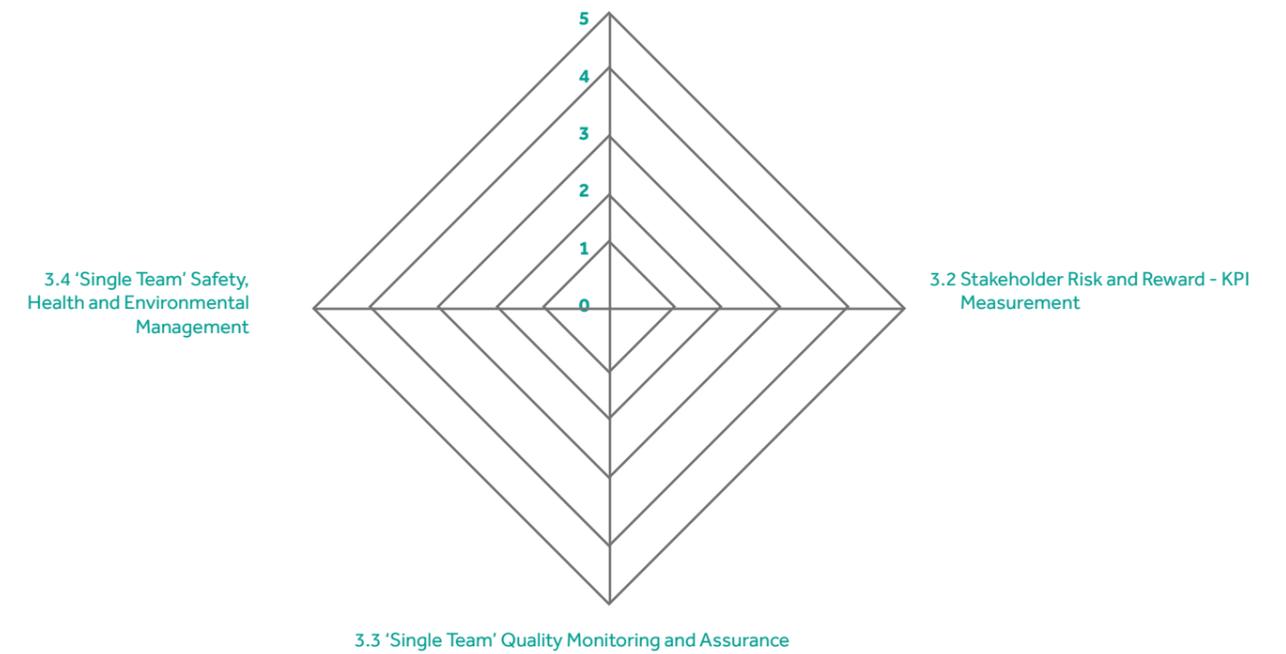
PROJECT COLLABORATION TOOLKIT - PHASE 3 REVIEW CHECKLIST

The phase checklist review (below) is an integrated tool for phases 1,2 and 3 and can provide an upfront self-assessment of proposed collaboration arrangements and performance to date against the project collaboration toolkit, giving a general overview on areas of strengths and weakness. This information can be plotted on the diagram opposite.

The phase checklist review can also be used once the project is up and running to check on progress and identify any further actions necessary.

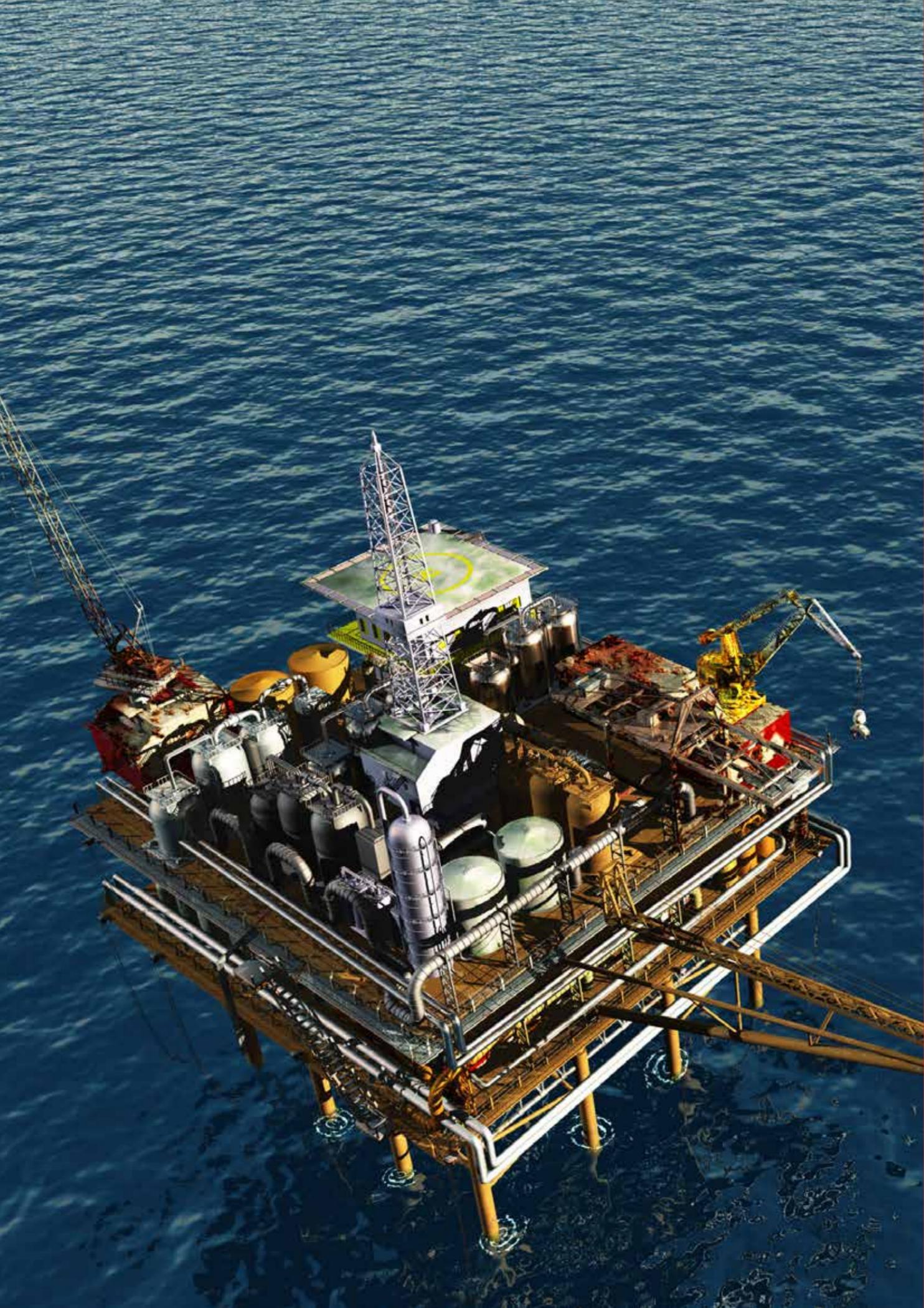
An interactive checklist is available online at:
www.ecitb.org.uk/professional-management-training/project-collaboration/

3.1 Collaborative Schedule and Cost Processes



PROJECT:	
PHASE ACTIVITY	
3.1	Collaborative Schedule and Cost Control Processes
3.1.1	Has a single project control process been applied across the project, as agreed during project set-up?
3.1.2	Are stakeholder responsibilities for project controls clearly understood and accepted?
3.1.3	Has open / honest behaviour been demonstrated by stakeholders when contributing to project control and performance measurement?
3.1.4	Has duplication of project controls effort been avoided on the project?
3.2	Stakeholder Risk and Reward – KPI Measurement
3.2.1	Are the KPI measurement affecting stakeholder risk and benefit agreements and commercial status being actively monitored?
3.2.2	Are KPIs clearly visible to all project stakeholders on project dashboards?
3.3	'Single Team' Quality Monitoring and Assurance
3.3.1	Has a 'single team' approach to project governance and quality assurance been applied to the project?
3.3.2	Are stakeholder responsibilities for assurance in accordance with the established process understood and agreed?
3.3.3	Has unnecessary duplication of effort in the application of assurance processes been avoided?
3.4	'Single Team' Safety, Health and Environmental Management
3.4.1	Has a 'single team' approach to the leadership and management of HSE performance been applied on the project?
3.4.2	Are stakeholder responsibilities for project HSE active leadership, monitoring and performance clearly understood and agreed?
3.4.3	Has unnecessary duplication of processes in the leadership and management of project HSE performance been avoided and energy focussed on a single approach?

SCORE					DATE:	COMMENTS
1	2	3	4	5		
<input type="radio"/>						
<input type="radio"/>						
<input type="radio"/>						
<input type="radio"/>						
<input type="radio"/>						
<input type="radio"/>						
<input type="radio"/>						
<input type="radio"/>						
<input type="radio"/>						
<input type="radio"/>						



PHASE 4:
CLOSE OUT AND LEARN

OBJECTIVE

To summarise the key learning points from the project, assess and measure project outcomes against the project objectives and agree forward intentions.

	Activities / Deliverables	Outline Description
4.1	Evaluate Project Lessons Learned	Collaborative projects should adopt a comprehensive process for identifying and recording Lessons Learned. Lessons Learned should be an agenda item at Project Team Meetings and Periodic Project Reviews. Tracking by the project management team of Lessons Learned in similar manner to Project Issues and Information Needs throughout the project is recommended.
4.2	Collaborative Lessons Learned Conference	It is recommended that all documented Lessons Learned for the project become the focus of discussion between all project stakeholders at a dedicated Collaborative Lessons Learned Conference during the Project Close-out phase.
4.3	Close Out Collaborative (Risk & Reward) Project Agreements	At project closure there will be a range of collaborative contract agreements that need to be formally closed. Since these agreements were brokered for project partner opportunities and risks (i.e. gain and pain) to be matched to project contribution and performance, it is vitally important that the learnings from these arrangements are captured and the strengths and weaknesses of the applied risk and benefit framework agreements are recorded for future use.
4.4	Review, Agree & Record Project Outcomes	At the conclusion of every collaborative project venture, a complete record of the project outcomes should be documented. It is important that this exercise is performed to capture input from all associated stakeholders such that all perspectives are captured.
4.5	Establish Basis for Future Project Collaborations	In consideration of the project Lessons Learned, the outcomes from the Project Collaborative Lessons Learned Conference, Close-out of project contract agreements and documentation of project outcomes, the basis for future project collaborations should be determined.

Responsible	Reference Information / Supporting Documentation
Project Manager Contractor, Subcontractor, Supplier Delivery Managers All Members of the Integrated Project Management Team	European Construction Institute (ECI) ACTIVE Principle AP2 - Effective Project Team Management: Value Enhancing Practice (VEP) 2.1 Project Team Organisation European Construction Institute (ECI) ACTIVE Principle AP3 - Effective Supply Chain Relationships: Value Enhancing Practice (VEP) 3.1 Procurement Cycle Management Value Enhancing Practice (VEP) 3.2 Supplier Selection European Construction Institute (ECI) ACTIVE Principle AP4 - Effective Information Management and Communication: Value Enhancing Practice (VEP) 4.1 Information Management European Construction Institute (ECI) ACTIVE Principle AP6 - Innovation and Continuous Improvement: Value Enhancing Practice (VEP) 6.1 Continuous Improvement Value Enhancing Practice (VEP) 6.2 Innovation and Intellectual Property
Lead Entity Project Sponsor Lead Entity Collaboration Champion Delivery Stakeholder Collaboration Champions Project Manager Contractor, Subcontractor, Supplier Delivery Managers All Members of the Integrated Project Management Team	European Construction Institute (ECI) ACTIVE Principle AP2 - Effective Project Team Management: Value Enhancing Practice (VEP) 2.1 Project Team Organisation European Construction Institute (ECI) ACTIVE Principle AP3 - Effective Supply Chain Relationships: Value Enhancing Practice (VEP) 3.1 Procurement Cycle Management Value Enhancing Practice (VEP) 3.2 Supplier Selection European Construction Institute (ECI) ACTIVE Principle AP4 - Effective Information Management and Communication: Value Enhancing Practice (VEP) 4.1 Information Management European Construction Institute (ECI) ACTIVE Principle AP6 - Innovation and Continuous Improvement: Value Enhancing Practice (VEP) 6.1 Continuous Improvement Value Enhancing Practice (VEP) 6.2 Innovation and Intellectual Property
Project Manager Contractor, Subcontractor, Supplier Delivery Managers All Members of the Integrated Project Management Team	European Construction Institute (ECI) ACTIVE Principle AP3 - Effective Supply Chain Relationships: Value Enhancing Practice (VEP) 3.3 Contract Dispute Resolution European Construction Institute (ECI) ACTIVE Principle AP4 - Effective Information Management and Communication: Value Enhancing Practice (VEP) 4.1 Information Management European Construction Institute (ECI) ACTIVE Principle AP5 - Effective Project Risk Management Value Enhancing Practice (VEP) 5.2 Risk and Benefit Framework Agreements European Construction Institute (ECI) ACTIVE Principle AP6 - Innovation and Continuous Improvement: Value Enhancing Practice (VEP) 6.1 Continuous Improvement Value Enhancing Practice (VEP) 6.2 Innovation and Intellectual Property
Project Manager Contractor, Subcontractor, Supplier Delivery Managers All Members of the Integrated Project Management Team	European Construction Institute (ECI) ACTIVE Principle AP2 - Effective Project Team Management: Value Enhancing Practice (VEP) 2.1 Project Team Organisation European Construction Institute (ECI) ACTIVE Principle AP3 - Effective Supply Chain Relationships: Value Enhancing Practice (VEP) 3.1 Procurement Cycle Management Value Enhancing Practice (VEP) 3.2 Supplier Selection European Construction Institute (ECI) ACTIVE Principle AP4 - Effective Information Management and Communication: Value Enhancing Practice (VEP) 4.1 Information Management European Construction Institute (ECI) ACTIVE Principle AP6 - Innovation and Continuous Improvement: Value Enhancing Practice (VEP) 6.1 Continuous Improvement Value Enhancing Practice (VEP) 6.2 Innovation and Intellectual Property
Project Manager Contractor, Subcontractor, Supplier Delivery Managers All Members of the Integrated Project Management Team	ICW ISO44001 – Collaborative Capability Self-Assessment ICW ISO44001 – Step 8 – Exit Strategy

OBJECTIVE

To summarise the key learning points from the project, assess and measure project outcomes against the project objectives and agree forward intentions.

4.1 EVALUATE PROJECT LESSONS LEARNED

PHASE ACTIVITY OBJECTIVE

To collate all Lessons Learned in relation to the collaborative project undertaking and make available for continuous improvement and as the basis for further, future collaborations.

GUIDANCE

The Lessons Learned process for collaborative projects should be open to contribution from all project stakeholders. A process for recording and reviewing project Lessons Learned should have been followed throughout all previous project phases and a register of Lessons Learned should have been maintained by the integrated project management team throughout the project lifecycle. Importantly, project lesson categories should cater for

capture of lessons associated with performance to the Project Collaboration and Relationship Management Plans (see also Collaboration Toolkit Phase 1; Step 1.5 – Establish Collaboration Plan and Behavioural Charter).

The behaviours exhibited by project stakeholders throughout the project in the various stakeholder relationships and in fulfilling relationship dependencies should be the subject of particular scrutiny. If there have been recorded incidences of poor behaviour which has deviated from the principal agreements signed up to in the Project Behavioural Charter, the basis for future modification and improvement should be agreed and recorded. Although such behaviours should have been addressed and confronted at the time they occurred, these should also be the subject of concluding discussion at the Collaborative Lessons Learned Conference (see also Collaboration Toolkit Phase 4; Step 4.2 – Collaborative Lessons Learned Conference).

REFERENCES

- European Construction Institute (ECI) ACTIVE Principle AP2 - Effective Project Team Management: Value Enhancing Practice (VEP) 2.1 Project Team Organisation
- European Construction Institute (ECI) ACTIVE Principle AP3 - Effective Supply Chain Relationships: Value Enhancing Practice (VEP) 3.1 Procurement Cycle Management Value Enhancing Practice (VEP) 3.2 Supplier Selection
- European Construction Institute (ECI) ACTIVE Principle AP4 - Effective Information Management and Communication: Value Enhancing Practice (VEP) 4.1 Information Management
- European Construction Institute (ECI) ACTIVE Principle AP6 - Innovation and Continuous Improvement: Value Enhancing Practice (VEP) 6.1 Continuous Improvement Value Enhancing Practice (VEP) 6.2 Innovation and Intellectual Property



OBJECTIVE

To summarise the key learning points from the project, assess and measure project outcomes against the project objectives and agree forward intentions.

4.2 COLLABORATIVE LESSONS LEARNED CONFERENCE

PHASE ACTIVITY OBJECTIVE

To stage a project stakeholder forum during project close-out that is dedicated to collective and collaborative review of the project outcomes, the lessons learned and experiences from the collaborative project undertaking.

GUIDANCE

During project close-out an event should be staged, corresponding to the Stakeholder Management Conference (see also Collaboration Toolkit Phase 1; Step 1.3 – Stakeholder Management Conference and Periodic Reviews), aimed at summarising and sharing experiences from the collaborative project. The agenda should be built around collaborative project lessons learned and it is important to ensure the participation and contribution of representatives from all project delivery stakeholders.

The event should proceed with an objective assessment of project performance against the agreed Project Delivery Objectives (see also Collaboration Toolkit Phase 2; Step 2.2 – Establish Common Project Delivery Objectives and Align) and then go on to review the lessons that were learned from the project. There will be a spread of different views concerning the achieved outcomes from the project and some comparative 'winners' and 'losers' in terms of performance related results – it is important for the conference to allow all viewpoints to be heard. Although the behaviours exhibited by the range of project stakeholders and their representatives should have been subjected to regular review (see also Collaboration Toolkit Phase 1; Step 1.5 – Establish Collaboration Plan and Behavioural Charter and Step 1.3 – Stakeholder Management Conference and Periodic Reviews), the Collaborative Lessons Learned Conference should provide a final opportunity to summarise behavioural experiences and set out the basis for improvement on any future collaborative project undertakings.

REFERENCES

- European Construction Institute (ECI) ACTIVE Principle AP2 - Effective Project Team Management: Value Enhancing Practice (VEP) 2.1 Project Team Organisation
- European Construction Institute (ECI) ACTIVE Principle AP3 - Effective Supply Chain Relationships: Value Enhancing Practice (VEP) 3.1 Procurement Cycle Management Value Enhancing Practice (VEP) 3.2 Supplier Selection
- European Construction Institute (ECI) ACTIVE Principle AP4 - Effective Information Management and Communication: Value Enhancing Practice (VEP) 4.1 Information Management
- European Construction Institute (ECI) ACTIVE Principle AP6 - Innovation and Continuous Improvement: Value Enhancing Practice (VEP) 6.1 Continuous Improvement Value Enhancing Practice (VEP) 6.2 Innovation and Intellectual Property

OBJECTIVE

To summarise the key learning points from the project, assess and measure project outcomes against the project objectives and agree forward intentions.

4.3 CLOSE OUT COLLABORATIVE (RISK & REWARD) PROJECT AGREEMENTS

PHASE ACTIVITY OBJECTIVE

To formally close all collaborative (risk and reward based) project agreements and summarise the learning from them for future benefit.

GUIDANCE

In support of the collaborative project strategy, the formal contract agreements for project delivery stakeholders should have been established in the form of risk and benefit frameworks. In this way the agreements should align the potential upside opportunities (i.e. gains) and share of risk (i.e. pain share) to the contracted partner's contribution to project performance. The amount of risk that was taken by each project delivery stakeholder should have been fair and proportional as established in the very early stages of the project (see also Collaboration Toolkit Phase 1; Step 1.3 – Stakeholder Management Conference and

Periodic Reviews). Project delivery stakeholder agreements should also reflect the principle that specific risks should be managed by the party best equipped to deal with that risk at least cost (see also Collaboration Toolkit Phase 2; Step 2.6 – Processes for Managing Risk and Uncertainty). In this context, the formal close-out of collaborative project contract agreements is important in providing an understanding as to whether the required performance and behaviours of the contracted party were suitably incentivised. Any impediments to incentivised performance and collaborative behaviour that were experienced during the contract period need to be carefully recorded together with the underlying reasons.

Close-out of contract agreements will provide important information for continuous improvement and to guide the formulation of any agreements used on future undertakings.

REFERENCES

- European Construction Institute (ECI) ACTIVE Principle AP3 - Effective Supply Chain Relationships: Value Enhancing Practice (VEP) 3.3 Contract Dispute Resolution
- European Construction Institute (ECI) ACTIVE Principle AP4 - Effective Information Management and Communication: Value Enhancing Practice (VEP) 4.1 Information Management
- European Construction Institute (ECI) ACTIVE Principle AP5 – Effective Project Risk Management Value Enhancing Practice (VEP) 5.2 Risk and Benefit Framework Agreements
- European Construction Institute (ECI) ACTIVE Principle AP6 - Innovation and Continuous Improvement: Value Enhancing Practice (VEP) 6.1 Continuous Improvement Value Enhancing Practice (VEP) 6.2 Innovation and Intellectual Property

OBJECTIVE

To summarise the key learning points from the project, assess and measure project outcomes against the project objectives and agree forward intentions.

4.4 REVIEW AGREE & RECORD PROJECT OUTCOMES

PHASE ACTIVITY OBJECTIVE

The preparation of a comprehensive record of project outcomes and achievements on which future collaborative project undertakings can be modelled.

GUIDANCE

Based on output from all other preceding Collaboration Toolkit Phase 4 activities / steps, a comprehensive record of project outcomes should be developed (see also Collaboration Toolkit Phase 4; Step 4.1 – Evaluate Project Lessons Learned; Step 4.2 – Collaborative Lessons Learned Conference; Step 4.3 – Close-out Collaborative (Risk and Reward) Project Agreements). This activity can be considered to closely relate to the generation of a Project Close-out Report on conventional projects but the emphasis for collaborative projects should be different. Focus should be on the achievement of collaborative relationships and the associated behaviours that were demonstrated.

It is expected that the significant investment that was made in a collaborative project strategy will have delivered a range of benefits, as set out in the Case for Collaboration (see ECITB Collaboration Toolkit – Case for Collaboration and Collaboration Toolkit Phase 1; Step 1.2 – Undertake Collaborative Assessment and Establish Enabling Climate). However, there will be many aspects of project performance and the delivered outcomes that will be viewed as either success or failure through the eyes of project stakeholders and these may be viewed and categorised quite differently from different stakeholder perspectives. It is important therefore to ensure that a documented record of the project is produced with the participation of and contribution from all delivery stakeholders and that the resultant document is agreed as being broadly representative of all different and varied stakeholder views.

The project outcome record can be used as the basis for developing the project specific case for collaboration for future collaborative project undertakings and to produce case study information to support continuous improvement.

REFERENCES

- European Construction Institute (ECI) ACTIVE Principle AP2 - Effective Project Team Management: Value Enhancing Practice (VEP) 2.1 Project Team Organisation
- European Construction Institute (ECI) ACTIVE Principle AP3 - Effective Supply Chain Relationships: Value Enhancing Practice (VEP) 3.1 Procurement Cycle Management Value Enhancing Practice (VEP) 3.2 Supplier Selection
- European Construction Institute (ECI) ACTIVE Principle AP4 - Effective Information Management and Communication: Value Enhancing Practice (VEP) 4.1 Information Management
- European Construction Institute (ECI) ACTIVE Principle AP6 - Innovation and Continuous Improvement: Value Enhancing Practice (VEP) 6.1 Continuous Improvement Value Enhancing Practice (VEP) 6.2 Innovation and Intellectual Property

OBJECTIVE

To summarise the key learning points from the project, assess and measure project outcomes against the project objectives and agree forward intentions.

4.5 ESTABLISH BASIS FOR FUTURE PROJECT COLLABORATIONS

PHASE ACTIVITY OBJECTIVE

To provide the basis on which decisions regarding future project collaboration strategies can be made.

GUIDANCE

The results and outcomes from all ECITB – Project Collaboration Toolkit Phase 4 (Close Out and Learn) activities need to be utilised to form the basis for any decisions around the adoption of collaborative strategies for future projects (see Collaboration Toolkit Phase 4; Step 4.1 – Evaluate Project Lessons Learned; Step 4.2 – Collaborative lessons Learned Conference; Step 4.3 – Close Out Collaborative (Risk and Rewards) Project Agreements; Step 4.4 – Review, Agree and Record Project Outcomes).

A significant investment will have been made in the adoption of a collaborative project strategy and as the

project is being closed, an overall Cost Benefit Analysis should be conducted to assess the benefits to the project that were achieved against the resource (cost, effort and energy) that was deployed to pursue collaboration. It is likely that some project collaborative relationships may have been highly successful whereas others may be considered to have failed. Both outcome success and failure need to be openly and honestly recognised in the final assessment. Due to the magnitude of investment in collaborative working it is highly desirable to retain as much of the collaborative framework that has been developed on the initial project for potential use on subsequent collaborative project undertakings. Some project partners may need to be replaced and such considerations need to be guided and evaluated against the criteria that were agreed in the early project stages for 'exit' (see Collaboration Toolkit Phase 1, Step 1.2 – Undertake Collaborative Assessment and Establish Enabling Climate) The philosophy and approach to project collaboration may also need to be adjusted in consideration of the many Lessons Learned and outcomes from other Close Out and Learn activities.

REFERENCES

- ICW / ISO44001 – Collaborative Capability Self-Assessment
- ICW / ISO44001 – Step 8 – Exit Strategy

APPENDICES

APPENDIX A – CONTRIBUTORS

The Oil and Gas Project Management Steering Group (OPMSG) is a voluntary group of individuals working within the UK Oil & Gas Industry. The ECITB would like to thank all the members for their continued support and commitment throughout the year towards all initiatives which are helping to support the continued development of Project Management in the sector.

Particular thanks are expressed to Tony Maplesden who has acted as an ambassador and leading light in the field of project management capability across all the engineering sectors. Tony has undertaken many voluntary roles within his career, promoting skills issues in the sector and across wider industry. Tony made a significant contribution in the development of the Project Collaboration Toolkit and has been instrumental in the review and development of this Edition 2.



APPENDIX B – GLOSSARY OF TERMS

- ACTIVE - Achieving Competitiveness through Innovation and Value Enhancement
- APM - Association for Project Management
- BFD - Basis for Design
- CNS - Central North Sea
- COS - Conditions of Satisfaction
- CSF's - Critical Success Factors
- ECIA - Engineering Construction Industry Association
- ECI - European Construction Institute
- ECITB - Engineering Construction Industry Training Board
- FEL - Front end loading
- FID - Final Investment Decision
- HSE - Health, Safety & Environment
- HSSEQ - Health, Safety, Security, Environmental, & Quality
- ICE - Institute of Civil Engineers
- ICW - Institute for Collaborative Working
- IVB - Independent Verification Body
- KPI - Key Performance Indicator
- LOGIC - Leading Oil & Gas Industry Competitiveness
- MER - Maximising Economic Recovery
- NEC - New Engineering Contract
- OCA - Offshore Contractors Association
- OIW - Oil in Water
- OPMSG - Oil & Gas Project Management Steering Group
- PDO - Project Delivery Objective
- PEP - Project Execution Plan
- RMP - Relationship Management Plan
- SER - Senior Executive Responsible
- SoW - Scope of Work
- UKCS - United Kingdom Continental Shelf
- VEP - Value enhancing practice



APPENDIX C - KEY REFERENCES

- **Institute for Collaborative Working (ICW) and ISO44001: Collaborative Business Relationships Standard**

The ICW are the thought leaders that drove the creation and publication of ISO44001 to provide a process and model (the eight step 'octagon' model) to guide inter-business collaboration. The ISO44001 model, although primarily aimed at longer term business to business collaborations, is also applicable to project undertakings and the ECITB Project Collaboration Toolkit makes reference to the ISO44001 eight step model throughout the toolkit content and cross references to each of the ISO44001 steps are provided.

The ECITB Project Collaboration Toolkit is not intended to amend or supersede any of the ISO44001 process and methodology but to provide supplementary guidance on collaboration aspects particular to projects.

- **ACTIVE – Achieving Competitiveness Through Innovation and Value Enhancement**

The ECITB Project Collaboration Toolkit contains many references to ACTIVE within its content. ACTIVE was a UK Department of Trade & Industry (DTI) sponsored initiative of the late 1990's aimed at improving project delivery performance in the process industry sector. ACTIVE was an onshore process industry initiative but it is relevant to the present move toward collaboration in the UK Oil & Gas sector because many of the principles and value enhancing practices that were created under the initiative relate to collaborative and integrated team working.

ACTIVE generated a workbook around the following eight basic project management principles:-

- AP1. Effective Project Concept and Definition
- AP2. Effective Project Team Management
- AP3. Effective Supply Chain Relationships
- AP4. Effective Information Management and Communication
- AP5. Effective Project Risk Management
- AP6. Effective Innovation and Continuous Improvement
- AP7. Effective Project Execution
- AP8. Effective Performance Measurement

and supporting Value Enhancing Practices (VEPs)

The validity of ACTIVE to effective project management is still recognised across UK industry through the staging of ACTIVE Cup project management competitions that are designed to provide teams with an insight into the benefits that a collaborative approach to project delivery can bring. The ACTIVE Cup is run jointly between Cranfield Management School and ECITB and is supported by the European Construction Institute (ECI) who are the present custodians of ACTIVE information and materials.

- **Infrastructure and Projects Authority**

The Major Projects Authority, which had responsibility for working with HM Treasury and other government departments to provide independent assurance on major projects merged with Infrastructure UK on 1st January 2016 to form the Infrastructure and Projects Authority. There are a number of publications produced by the former Infrastructure UK that are highly relevant to this ECITB Project Collaboration Toolkit:-
Infrastructure UK - Procurement Routemap; "Guide to Improving Delivery Capability"
Infrastructure UK - Procurement Routemap; "Technical Note on Application"

The above documents can be used to support the determination of whether a collaborative strategy is right for a particular project undertaking when considering delivery environment complexity and capability. Infrastructure UK – "Alliancing Best Practice"
Infrastructure UK – "Alliancing Code of Practice"
These documents are directly relevant to the approach and behaviours associated with achieving effective collaboration. Links to the above documents are provided within **Appendix D**.

- **Project Management – Professional Bodies (APM and PMI)**

Whereas the ECITB Project Collaboration Toolkit is focused on what needs to be done to achieve effective collaboration, much of the content relates directly to project management practice. The Association for Project Management (APM) – Body of Knowledge 7th Edition and the Project Management Institute (PMI) – PMBOK 6th Edition are essential references to project management best practice. Some further specific references, as related to particular toolkit phase activities are provided within the content and within **Appendix D**.

APPENDIX D - FURTHER REFERENCES

- APM Project Risk Analysis and Management Guide 2nd edition; ISBN: 978-1-903494-12-7
- APM Body of Knowledge (7th Edition), ISBN 978-1-903494-40-0
- APM Research Report – "Conditions for Project Success"
- APM Directing Change: A Guide to Governance of Project Management, ISBN: 978-1-903494-06-6
- APM Sponsoring Change: A Guide to the Governance Aspects of Project Sponsorship
- APM Co-directing change: a guide to the governance of multi-owned projects
- <http://www.eci-online.org/publications/>
- <https://www.ecia.co.uk/>
- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/329052/iuk_procurement_routemap_guide_to_improving_delivery_capability_280113.pdf
- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/329056/PU1445_Infrastructure_procurement_routemap_techincal_note_on_application....pdf
- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/359853/Alliancing_Best_Practice.pdf
- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/487294/alliancing_code_of_practice_18122015.pdf
- <https://www.ice.org.uk/disciplines-and-resources/case-studies/uk-power-networks-behavioural-assessment-to-aid>
- <https://www.ice.org.uk/disciplines-and-resources/case-studies/network-rails-wessex-alliance-selection-process>
- <https://www.ice.org.uk/disciplines-and-resources/case-studies/high-performing-teams-anglian-water-one-alliance>
- <https://www.ice.org.uk/disciplines-and-resources/best-practice/alliancing-code-of-practice-grid-infrastructure/delivering-commercial>
- <https://www.pmi.org/pmbok-guide-standards>
- RICS / APM Stakeholder Engagement, 1st edition





ECITB skills support / interventions

The ECITB provides a range of support and interventions to address the skills gaps and shortages faced across the engineering construction industry. To see the range of product sand services that the ECITB can offer, visit www.ecitb.org.uk.

This skills support and interventions to support the complete Project Life Cycle include new entrant opportunities, upskill programmes and frameworks to assure the competence of the workforce.



Engineering Construction Industry Training Board
Blue Court, Church Lane, Kings Langley, Hertfordshire WD4 8JP

Tel: 01923 260000
Email: ecitb@ecitb.org.uk
www.ecitb.org.uk