



# COLLABORATE TO SUCCEED - THE ULTIMATE PANACEA OR THE CURRENT MANAGEMENT FAD?

From HKA's experience of supporting the delivery of projects, with a collective capital value exceeding \$400bn, we have captured knowledge<sup>1</sup> showing that delivery teams comprising members with diverse technical disciplines perform best when each party collaborates and shares its capability, experience and know-how to design and deliver a solution. Our experience is that such collaboration will bring greater certainty to project outcomes, improve overall project performance and enable enhanced profitability to be realised.

As documented<sup>2</sup>, the benefits of collaboration include:

- Reduction in total cost of ownership;
- Improved efficiency, delivery and profitability;
- Enhanced problem solving;
- Better supply chain relationships and enhanced security of supply;
- Enriched team capabilities through the development of new competencies and behaviours;
- Improved risk and value management;

- Increased innovation and continuous improvement; and
- Reduced and / or readily resolved disputes.

It all sounds obvious on paper, so why is it so hard to achieve?

Arguably, programme design and delivery have similar attributes to a racing car. Whilst the design of both is based on a fixed formula, a standardised production system or approach, both are also configured to suit local circumstances. For Silverstone, the car requires a team to work together to install the right set of gearbox ratios, tyres and suspension set up to perform at its best, all of which need changing for it to be at its best at Monaco. In the same vein, whilst programmes can be based on a standard 'kit of parts and ways of working', these may well be adapted to meet the demands of the circumstances at hand.

In addition, complex construction and infrastructure programmes clearly need to be set up on the right basis but must evolve in their configuration over their lifespan. Careful consideration needs to be given to how they are guided and organised for success at each phase.

<sup>1</sup> HKA, *CRUX Report* (2018), <https://www.hka.com/download-crux/>

<sup>2</sup> Institute for Collaborative Working, *Benefits Realisation of Collaborative Working Report* (2015), <https://instituteforcollaborativeworking.com/Resources/Documents/sZ>

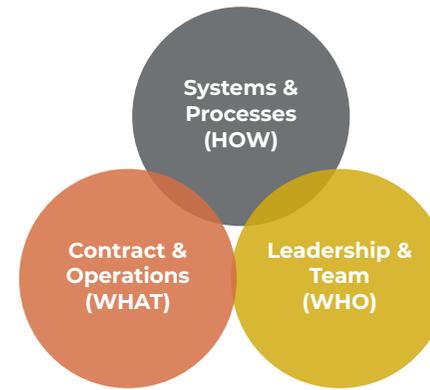
Over the years the work of Sir Michael Latham<sup>3</sup> and Sir John Egan<sup>4</sup> have provided robust observations and recommendations on how to configure project set-up, including: a focus on supply chain integration; contractual and commercial ethos; as well as leadership and team behaviours that drive a collegiate approach between employers and contractors. The findings of these reports have not been wholly addressed since and decades later, quite rightly the work of the ICE's Project 13<sup>5</sup>, as one example has shone the light on recurrent factors that, if addressed, can bring wholesale improvements to project performance.

HKA's observation of these - from the delivery of its professional services and the development of its CRUX Report - is that it is clear there is much good practice to be adopted, but no single 'silver bullet' or formula that can be universally applied to all projects. A common denominator across all is the great benefit that can be achieved by teams that collaborate, but only where projects are configured to suit their local circumstances.

### EVOLVING PROJECT CONFIGURATION TO ENABLE COLLABORATION

Having conducted our own review of over 257 projects worldwide<sup>6</sup>, HKA concurs that collaboration is critical to project success, but works best when combined within a wider set of factors used to configure and run projects. Analysis of our survey data has allowed us to identify three core factors – see Figure 1 - that make up, in effect, an integrated system, which will enable collaboration to flourish and success to be achieved. Our experience is that these need to be both set up correctly at programme inception and then evolved over the life span of the programme in question.

Taking each factor in turn, we have observed specific approaches that could be adopted to yield the benefits of collaboration.



**Figure 1:** Core factors to enable collaboration and an integrated project system

### WHO – LEADERSHIP & TEAM

Different behaviours, working styles and capabilities of team members, compounded by different working cultures, systems and processes from their organisations, mean that collaboration amongst integrated delivery teams can come with its own set of challenges. Challenges that are worth addressing though, as the benefits of successful collaboration far outweigh the costs and efforts of making it work<sup>7</sup>.

HKA found<sup>8</sup> that in instances where projects ended up in dispute, 25% of the root cause issues pertained to poor leadership, a lack of team integration, poor communication across teams and the prevalence of an adversarial operating culture between employers and contractors. Clearly, therefore, the importance of leadership, behaviours and skills should not be played down.

The findings of a recent study by the London Assembly Transport Committee into the Crossrail programme<sup>9</sup> suggest that a fundamental shift in approaches to leadership and culture, governance and skills needs to be taken from the inception of all programmes onwards to deliver better outcomes. We would contend that this is particularly true

3 Sir Michael Latham, *Constructing the Team Report* (1994)

4 Sir John Egan, *Rethinking Construction Report* (1998)

5 Institute for Civil Engineering, *P13 Blueprint* (2018), <http://www.p13.org.uk/wp-content/uploads/2018/06/P13-Blueprint-Web.pdf>

6 HKA, *CRUX Report* (2018), p. 39, <https://www.hka.com/download-crux/>

7 e-Builder, <https://www.e-builder.net/>

8 HKA, *CRUX Report* (2018), p. 39, <https://www.hka.com/download-crux/>

9 London Assembly, Transport Committee, *Derailed: Getting Crossrail Back on Track* (2019), <https://bit.ly/2K1xzjw>

where multiple parties are involved in delivery across a complex supply chain.

As such there needs to be:

- Clear articulation and communication of the programme vision; the outcomes and benefits that a programme is intended to deliver must be understood by all parties, with KPIs that will drive each party towards the achievement of the joint objective. After all, what gets measured, gets done;
- Clear programme/ project governance; this will be essential to enable effective decision making to agree solutions. Often, we have found that large scale complex decisions need to be taken at a centralised, senior level, whilst there should be encouragement of innovation and collaboration at an operational / localised that can readily expedite progress;
- Common understanding of roles and responsibilities of all team members; a small degree of overlap in responsibilities is fine, but too great an overlap could cause unhealthy competition between team members;
- Understanding of the skills required to deliver each stage of the programme; getting the appropriately skilled people in the right roles, at the right time will support the right team composition and set up through rigorous on-boarding of all parties; and
- Analysis of where team members might need development in listening, empathy and communication as capabilities that can complement core technical skills.

## ADAPTING AND EVOLVING LEADERSHIP STYLES

As projects are dynamic and require reconfiguration as they progress, so too does the style of leadership, the team composition and the skills, capabilities and behaviours required to deliver.

Whilst leadership to establish direction at project set up is critical, HKA supports the findings of 'Strategy Execution'<sup>10</sup> and contends that successful project leaders acknowledge that because projects require reconfiguration as they progress, so too does their leadership style. Taking a rudimentary view of project stages from inception to completion, we observe that typically, as team attributes evolve from the well-documented early style of 'storming' to a more mature point where they are truly 'performing', leadership styles need to evolve to optimise collaborative ways of working across teams.

That is, at project inception, leadership needs to bring clear vision and direction for integrated teams. In addition, leaders need to recognise that enabling a collaborative culture isn't only about what leaders say, the direction they give, or the decisions they make. For collaboration to succeed within an integrated system, leaders need to be active visible role models for the desired collaborative environment.

When leaders set a vision for collaboration, their subsequent actions, conversations and behaviours will set the future tone for the team. They need to espouse collaborative behaviours and ways of working across their day-to-day activities, from the project meetings they attend to the one-on-one conversations they may have in the kitchen. If a leader is seen to contradict the collaborative vision, through isolated working, lack of communications or with-holding information, why would a team choose to collaborate?

Therefore, what leaders 'do' is equally important as what they 'say' in engendering the right environment for collaboration to succeed.

With this clarity in place, direction is necessary to draw the team together as the pace of the project increases.

With leaders adapting their style to continually drive projects across the lifecycle, adopting simple rules during the life cycle as the project moves into delivery can be of great benefit to both leaders and the project alike. Bent Flyvberg and Alexander Budzier<sup>11</sup> have demonstrated that understanding simplicity enables project leadership to succeed. Adopting heuristics, the simple rules that guide leaders, can be a key component for leaders to make decisions and build a successful integrated project system. HKA supports this finding as we found<sup>12</sup> 24% of disputes can be attributed to ambiguity of information, differing interpretations, slow decision making, data and information overload, and deficiency in understanding. Applying simple rules can help break down complex data allowing leaders to simplify decision making on project matters, but at the same time can help as they adapt their leadership style. Following the rule "Don't always do! Understand the value of not acting,"<sup>13</sup> can support leaders as they move into a more coaching style of leadership, allowing them to make decisions that enable a collaborative culture.

10 Strategy Execution, *How To Change Your Leadership Style As You Progress Through Your Project* (2015), <https://bit.ly/2YAv0wI>

11 Bent Flyvberg and Alexander Budzier, *Why do Projects Fail?*, *Project Magazine* (2015), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2722475](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2722475)

12 HKA, *CRUX Report* (2018), p. 39, <https://www.hka.com/download-crux/>

13 Brian Eggleston, *The NEC4 Engineering and Construction Contract: A Commentary*, Third Edition (Wiley-Blackwell, 2019)

With team rhythm achieved, leaders can typically move into more of a coaching role to acknowledge the management provided by workstream leaders during prolonged spells of project delivery, whilst also being available to re-guide efforts where necessary. This gives rise to the following pattern of leadership:

**Table 1 - Evolving leadership styles for collaboration**

Leadership style	Visionary & Setting tone	Directive	Affiliative & Coaching		Simplify leadership decision making
Project stage	Inception	Ramp up	Delivery	Completion	Set the right environment for collaboration

Just as leadership needs to evolve and support a collaborative environment, it is imperative that with each phase of project delivery comes the need to develop the structure and skill set of team members, so that they are fit for purpose as requirements change.

This means that whilst behavioural assessments are useful prior to project set-up, there is also a case for appraising the composition of teams over the course of the projects' life cycle. The 'eligibility' of team members – pertaining to qualifications, track record and experience, needs to be appraised in conjunction with their 'suitability'. The suitability, or chemistry and appropriate emotional intelligence of each team member needs to be understood, so that the right structure of team is set up to interface with other parties engaged in project delivery.

The scale of effort directed towards team set up and 'fit' between team members will inevitably vary according to duration of a programme phase (be it a few months or several years). That said, taking time to really understand the factors motivating individuals and teams and their ability to concentrate on the achievement of a common goal (despite their individual, team or own corporate goals) is time well spent.

## HOW – PROCESSES & SYSTEMS

The second element of this 'integrated system' is the necessity to design rigorous processes and systems that can enable integrated, collaborative ways of working and be evolved as the programme stages evolve.

In the same way that leadership styles, skills and capabilities of the team must evolve to suit the changing needs of the programme, so too, processes and systems must be capable of being tuned for each programme stage.

Introduced in 2017 by the International Organisation for Standardisation, ISO44001:2017, the Standard for Collaboration acknowledges the need for integrated ways of working. It also acknowledges the need for new partnerships to be identified, implemented and exited, depending on the evolving needs of the programme.

Building on its predecessor British Standard BS11000, the key difference of the ISO standard is the acknowledgement that successful collaboration requires far greater engagement from the most senior levels of a company's leadership. By initially establishing a Collaboration Policy and Strategy, the standard sets the tone for ways of working for joint delivery teams. The standard also sets out how collaboration needs to permeate all processes, systems and ways of working for all parties involved in joint delivery in order to be successful. It also helps provide a structured means of:

- Identifying the need for collaboration at a given point in a programmes' life cycle;
- Identifying and selecting joint partners;
- Agreeing mutually beneficial joint objectives for all parties involved in the collaboration
- Establishing a Joint Relationship Management Plans between parties that will be adopted for the duration of joint collaborative working over the life of a programme;
- Establishing processes and systems that can be configured to suit delivery requirements; and
- Structuring a measured way of exiting collaborative relationships once they have fulfilled their objectives and run their course.

The manner in which this cycle of collaboration works, from inception to completion is depicted in Figure 2.



**Figure 2:** ISO 44001:2017 Collaborative Business Relationship Management System

Adoption of the ISO standard by companies across the rail design, maintenance and upgrade supply chain, as well as the nuclear and utilities sector has demonstrated the importance of interest that Boards are ascribing to the adoption of the working principles germane to the ISO44001 standard. By ‘walking the talk’ from the top down to front line operations, this marks a significant departure from merely obtaining a standard, such that a certificate can adorn the walls of corporate HQs, so as to demonstrate conformance.

Supporting collaborative business processes: it has long been acknowledged that factors such as co-location of teams and ready access to systems provide beneficial means of keeping tabs on the progress of programmes. Albeit, arguably a new approach to a long-standing issue of managing the status of development, operation and maintenance of

assets, Building Information Modelling (BIM14) continues to gain significant traction as an enabling device to support joint working. Through the production, storage and sharing of information, supply chains that HKA have witnessed operating in the UK Utilities, Rail and construction industries have used BIM to bring transparent access to common, master information which is core to facilitating a collaborative environment.

As a process for best practice in producing, storing and sharing digital information on a construction project across its lifecycle, BIM is known to enable greater sharing of knowledge, support decision making and provide a layer of transparency which is at the core of facilitating collaborative working. To succeed, the correct balance needs to be made between people, process and technology and requires alignment and collaboration throughout the whole supply chain, to ensure everyone is working towards a common goal.

To broaden engagement in the adoption of BIM, as with the evolution of the Standard for Collaboration, the British Standard for BIM has recently been superseded by EN ISO 19650, making the core principle equally as relevant to non-UK programmes. HKA has seen BIM become a big export for the UK and is helping meet the export targets set out in Construction 2025,<sup>15</sup> as well as being critical in meeting the time, cost and sustainability targets.

With such synergies between BIM and ISO 44001, aligning both processes could enable collaboration to succeed at every level of a project. A key trick here will be the provision of:

- The right information in a readily interpretable format delivered to the right people;
- The right amount of information at the right time; the provision of excessive information will be just as dangerous as too little information; and
- Information that will allow decision makers to manage not just their individual functions, departments or workstreams, but critically, the interfaces between each of these.

<sup>14</sup> BIM Level 2, British Standards and Publicly Available Specifications (PAS) from BSI, <https://bim-level2.org/en/standards/> [accessed 26 July 2019]

<sup>15</sup> HM Government, Construction 2025 (2013), [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/210099/bis-13-955-construction-2025-industrial-strategy.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/210099/bis-13-955-construction-2025-industrial-strategy.pdf)

## WHAT – CONTRACT

Another key part of this jigsaw puzzle, aimed at achieving better outcomes from teams working towards a united objective is, of course, the contractual device used to enable programme delivery. HKA's extensive experience of the multiple forms of contracts over a 40+ year period has allowed us to witness industries' migration from traditional adversarial forms of contract onto more collaborative forms such as NEC. The success of NEC in the last 20 years has been accompanied by other forms of contract adopting a more collaborative approach. These include JCT, ICC, PPC and very recently the framework alliance contract FAC1.

It should not be assumed the industry has consistently embraced a more collaborative approach to contracting; for example the increased use of NEC in the UK has to a large extent been driven by the Government adopting NEC as its contract of choice for public funded projects. It is however encouraging that NEC is also now used widely throughout the world in such places as South Africa, Singapore, Hong Kong, Australia and New Zealand.

## EVOLVING NEC TO IMPROVE COLLABORATION

The use of more collaborative standard forms of contract in the UK, such as NEC is commonly accompanied by a large number amendments which often undermine the collaborative approach in the contract and restore the traditional adversarial approach. Mindful of this, introduction of NEC 4 in 2017<sup>16</sup> saw the evolution of the NEC contracts with three key objectives:

- Provide greater stimulus to good management;
- Support new approaches to procurement which improve contract management; and
- To inspire increased use of NEC.

A new option within NEC4, for avoiding disputes and improving collaboration, is the introduction of a new secondary option – 'W3'<sup>17</sup>. This is an option for a Dispute Avoidance Board ("DAB"). Whilst this does not remove a party's entitlement under the contract and the HGCR Act 1998 as amended to refer any dispute at any time to adjudication the purpose of the DAB is to assist the parties in resolving potential disputes before they

become disputes. This approach to dispute or conflict avoidance is a step in the right direction to maintaining the co-operative interaction between the parties which is vital to achieving the benefits of NEC of time and cost predictability.

## RESOLVING ISSUES EARLY TO MAINTAIN COLLABORATION

HKA has extensive experience of assisting parties in incorporating Conflict Avoidance Procedures ("CAP") into their contracts and implementing those procedures by acting collaboratively with all parties to the contract. The use of CAP may be included as part of a site focused early dispute escalation process or may even involve routine site visits by the Conflict Avoidance Board or Member to identify issues as they arise. These may be events where either party does not act as it is required to act in accordance with the contract or in the manner it is required to act. This may involve such issues as an adversarial approach to responding to programmes submitted for acceptance or assessment of compensation events.

The early resolution of such issues maintains the co-operative interaction between the parties and thereby promotes improved collaboration. This is to the benefit of both parties in time and cost predictability and the avoidance of wasted time and cost in dispute escalation and resolution.

NEC's adoption of conflict avoidance procedures in its DAB in secondary option W3 is also a welcome support for the use of conflict avoidance procedures on construction projects as a method of improving collaboration to bring benefit to both parties.

Although industry has been slow to evolve in the twenty-three years since the Latham report, HKA has witnessed progress borne of major changes made in improving the management of construction projects. NEC's embracing of conflict avoidance procedures is another significant step forward in enabling that progress.

<sup>16</sup> Brian Eggleston, *The NEC4 Engineering and Construction Contract: A Commentary*, Third Edition (Wiley-Blackwell, 2019)

<sup>17</sup> Michael Rowlinson, 'Background to the NECECC', in Michael Rowlinson, *A Practical Guide to the NEC4 Engineering and Construction Contract* (Wiley-Blackwell, 2018), pp. 7 – 15

## PARTING SHOT

The ever increasing ambitions for the outcomes of large scale programme mean that a greater array of parties are involved in their delivery. This reinforces the need for careful programme design and set up as a properly integrated system of parts. The system must, however, have adequate inherent flexibility, so as to accommodate the evolving nature of programmes. As external factors impact, there needs to be an awareness of and a suitable adjustment to team set-up, adaptation of process and use of technology to enable delivery, underpinned by use of the most appropriate contractual vehicle, managed in a pragmatic, proactive manner. Critically, flexibility in programme delivery will necessitate constant monitoring, not just of individual departments', functions' or workstreams' performance, but the interfaces between each. If regarded as a whole system, this will allow all parts of the jigsaw puzzle to collaborate in a way that will facilitate successful delivery.

Finally, that Egan, Latham and Project13, amongst other excellent forums, continue to identify and produce learning points for industry over a twenty-five plus period, it is clear that performance improvement takes the form of a sea change, not an immediate step change. The willingness to learn, share and collaborate can only help add to this movement through sharing ways of working, cultural lessons and technology, rather than this can all be achieved by a simple flick of the switch.

## ABOUT THE AUTHORS

### DAVID LATHAM – PARTNER

Having specialised in contractual issues including procurement and dispute resolution for nearly 30 years, David has gained significant experience in the preparation and implementation of contract procedures and presentation and responding to contractual claims and dispute resolution. He is widely experienced in all dispute resolution procedures including negotiation, mediation, adjudication, arbitration and acts as adjudicator or arbitrator to construction and engineering disputes.

### HARRY COLLEDGE – EXECUTIVE DIRECTOR

Harry has been a consultant for over 20 years and he has significant experience in business strategy, stakeholder engagement, knowledge management, facilitation, business development and project management. His experience includes designing strategic responses to complex problems requiring input from diverse stakeholders, whose objectives often vary. These skills have enabled him to develop strong expertise in listening to different parties and synthesising their needs.

### LEANNE DAVIS – SENIOR CONSULTANT, ORGANISATIONAL, DEVELOPMENT & CHANGE

Leanne is an organisational development and change specialist with more than seven years of experience in supporting the delivery of people, culture and change initiatives. With a strong background in behavioural psychology, she has been involved in major, complex projects and programmes across a number of sectors, and supports clients in creating environments where their employees and stakeholders understand, embody and deliver their organisation's objectives.