



Delivering Enterprise models in the UK rail sector

Executive Summary

- Enterprise models are emerging in the UK rail sector to drive improved performance, and to overcome historic challenges.
- Enterprise models bring together clients and suppliers to form a single organisation focused on delivering outcomes.
- Enterprise models have been promoted by the Infrastructure Client Group, and are also the basis of key rail investments, including the East Coast Digital Programme.
- This document has been prepared to outline key points about Enterprises, and how they can be operated successfully to deliver outcomes for UK rail users.
- Successful Enterprises are built upon a culture that is established early, with strong and visible leadership. Individuals are appointed to roles based on ability and there is strong and consistent communication. Individuals are empowered to make decisions that help to achieve the project or programme outcomes.
- Digital transformation creates effective information management across the enterprise and

throughout the delivery process. To achieve this, a digital transformation strategy and roadmap should be developed, at the heart of which should be a common data environment. All parties should be bought in to the strategy, with support provided to smaller members of the enterprise and wider supply chain to ensure that they can play their part in the transformation.

- As with digital transformation, the Enterprise's approach to risk should be managed on a collaborative basis, with all parties within an enterprise taking responsibility for understanding and managing project and programme risks with a similarly joint approach to incentivisation.
- It is vital that the Enterprise develops an integrator function, drawing on the best capabilities from across the owner and its Enterprise partners.

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1. Overview

1.1. The UK Rail Sector has risen to unprecedented challenges in recent years as it shifts to a new normal post-Covid. We must keep delivering for rail users despite emerging risks for the industry.

1.2. To counter these risks, and to shift rail delivery into a new, higher gear, we are seeing the emergence of so-called Enterprise models. Enterprise models bring rail owners, key stakeholders, and suppliers closer together to focus on achieving outstanding outcomes for the network.

1.3. On 4 July 2022, Network Rail, The Civil Engineering Contractors Association and the Railway Industry Association brought together representatives from across the industry to discuss the Enterprise approach and co-develop how it can be optimised for rail.

1.4. An Enterprise is a model whereby an owner and its supply chain form a blended team organisation responsible for the delivery of common outcomes.

1.5. Enterprise models arose from a recognition that the UK infrastructure sector faced serious difficulties with project delivery and supplier sustainability. It was also recognised that existing delivery models were sometimes slow to embrace digitisation and other technological advances.

1.6. The Infrastructure Client Group, a partnership between the UK's largest infrastructure owners and the UK Government, commissioned a review - known as Project 13 - that proposed moving away from transactional models and the creation of an Enterprise-based approach.

1.7. Enterprises promote an approach where:

- The asset owner is central to the change and establishing the Enterprise
- Enterprises are brought together to deliver clearly articulated Outcomes for the ultimate customer
- The Owner ensures a focus on long-term system performance and future operation

- Enterprises are made up of integrated and collaborative delivery teams, drawing on the capability within participating organisations
- An emphasis on Integration brings together partner (and owner) capabilities, processes and information to provide effective production systems for delivery
- Enterprises include an ecosystem of partners and suppliers, with more integrated relationships providing the opportunity for early engagement. From the outset, the Enterprise should include those suppliers who will have the greatest influence on the outcomes required
- Reward is based on value added to the overall outcomes through incentivisation, not on time or volume
- Risk is allocated to align with capability, is jointly owned, and not transferred through tiers of the supply chain
- Establishing these conditions to enable a high performing enterprise requires a fundamental shift in Leadership, Governance and behaviours

1.8. There are already a number of early adopter projects and programmes of the Enterprise approach in rail. These include:

- [The Transpennine Route Upgrade](#)
- [Levenmouth Rail Link](#)
- [East West Rail](#)
- [East Coast Digital Programme](#)
- Network Rail Southern Integrated Delivery

1.9. The July event considered four themes important to the development of effective rail enterprises. They were:

- Delivering an enterprise culture
- Enterprise digital transformation
- Risk share and incentivisation
- Enterprise integration

In each case, delegates considered the enablers and challenges associated with the theme, as well as any case studies of relevant good practice, either from within rail or the wider infrastructure and construction sector.

2. Delivering an enterprise culture

Participants identified the key enablers to delivering an Enterprise culture as:

2.1. Committed Leadership

Leaders of all parties within an enterprise should be committed to its vision. This should be reinforced through regular leadership meetings with a programme board that involves senior leaders from all contributing parties.

2.2. Proactively setting the culture

Setting the right culture will not happen spontaneously. Instead, it should be purposefully designed in from the start. This should recognise that most people will typically want to do the right thing, so there is a need to understand the barriers to this so that they can be overcome. Key behavioural values to be promoted include collaboration, openness and respect for others.

2.3. Right person for job

Appointments within the Enterprise should focus on which individual is best placed to deliver a role, rather than allocating roles based on parent organisations, creating a shared operating model. Individuals work for the Enterprise, with no 'silos'. Everyone should have a clear understanding of their roles and responsibilities, as well as those of others that they work with. These roles and responsibilities will evolve over the life of a project or programme.

2.4. Strong and consistent communication

Good communication is fundamental to a successful enterprise. Everyone involved should have a clear and consistent understanding and an aspiration to achieve the Enterprise's vision and common set of goals and outcomes. The messaging around this should be simple and accessible, with a single source of information for the Enterprise.



2.5. Personal investment

Everyone involved in an Enterprise should feel a personal investment in the successful delivery of its outcomes, with a commitment to act in a certain way in a collaborative environment. This can be developed through engagement activities and individual objectives.

2.6. Empowerment

Individuals should be appropriately empowered to make decisions that help to secure the Enterprise outcomes, rather

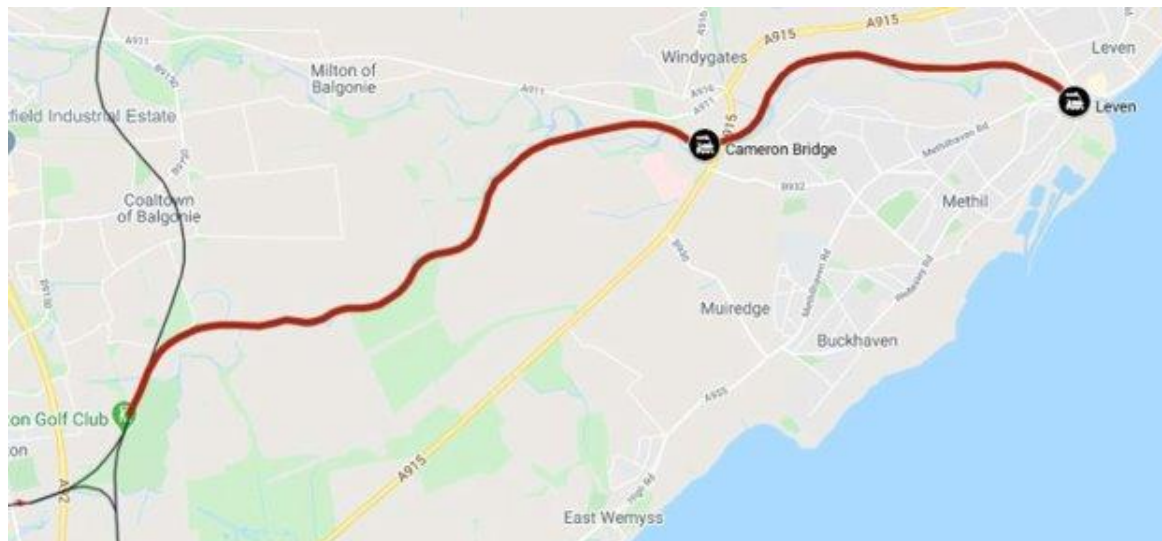
than all decisions being escalated up to more senior leadership. Enterprise members should be willing to provide challenge and support.

2.7. Reinforcement

The work to embed the right culture within the enterprise should be sustained throughout the life of the Enterprise with regular activities to remind, reinforce and review the culture. Where issues arise, all parties should work collectively to ensure Enterprise culture issues are addressed promptly.

Case Study - Levenmouth Rail Link

The Levenmouth Rail Link is an affordable, reliable double track railway between Thornton North Junction and Methil Docks in Fife, Scotland, including two stations at Leven and Cameron Bridge. The project will provide two passenger services an hour and two freight trains a day by 2024, and is future-proofed for electrification, with the possibility of freight and heritage connections.



An Enterprise has been created to develop the Levenmouth Rail Link, with Transport Scotland as investor and Network Rail as owner. It has a steering group with equal representation from Network Rail, seven framework contractors (AmcoGiffen, Babcock, BAM, Siemens, SPL, Story, QTS and RSAS) and the designer (Atkins).

Six individuals were identified to form the Integrator, based on a right-person-for job basis, with an Integrated Management Team that includes 30 per cent SMEs.

It developed its Enterprise culture through a strong focus on outcomes and legacy, a systems-thinking approach to leadership, shared accountability and empowerment, with consistent language, values and brand. There was strong connectivity between networked teams, with a win-win driver of “what is best for Levenmouth?”

2.8. Identifying stakeholders

Part of the Culture design must consider who the Enterprise's stakeholders are - both internal and external - and the impact that they might have on the Enterprise culture.

“Individuals should be appropriately empowered to make decisions that help to secure the Enterprise outcomes”

Challenges to the above include:

2.9. Lack of time for design of culture

Often the front end of projects and programmes can be short, leaving limited time to design in the right culture. Enterprises must work hard to make sure sufficient time is allocated for this purpose.

2.10. Lack of commitment to/belief in cultural change

There can be resistance to cultural change programmes within business, particularly where there has been poor experience of similar programmes in the past, or where contractual arrangement impinge on collaboration. Efforts must be made to ensure that any cultural change programme is not undermined by a lack of belief or commitment. The development of a clearly articulated agreement, defining outcomes, purpose, roles and responsibilities will facilitate this from the outset. **Willingness to speak up where culture not right**

One of the factors that is most likely to undermine an Enterprise would be if the culture does not match that intended. As such, as part of the work to embed the culture there must be an easily accessible mechanism to raise any concerns so that they can be quickly addressed.

2.11. Governance

When you have a range of organisations involved, some may have to report to a parent company which delays decisions and often means decisions are not being taken by those closest to the project. A light touch or mechanisms to improve agility are important. Also, while process is important to ensure auditability, this should not be at the expense of encouraging creativity and empowerment.

Case Study - Sellafield Programme & Project Partners PPP

Sellafield Ltd manages an annual budget of more than £2 billion, with a pipeline of £7.5 billion in capital projects over the next 20 years. In 2019, it developed its Programme & Project Partners (PPP) approach, awarding four contracts to deliver its major projects portfolio.

Four partners - KBR, Jacobs, Morgan Sindall, Doosan - work with Sellafield Ltd, integrating their areas of expertise to form Aligned Delivery Teams (ADTs)

The new model provides long-term certainty over 20 year, moving away from decision-making being driven by short-term concerns. Projects can be developed for the whole lifecycle, with the team taking them from initiation to completion. Good profits are based on successful delivery and handover to operations, with a collaborative no-blame culture. All parties collaborate with in the delivery team with shared incentives.

The diagram below outlines the benefits that are arising from the new model:



Case Study - East Coast Digital Programme

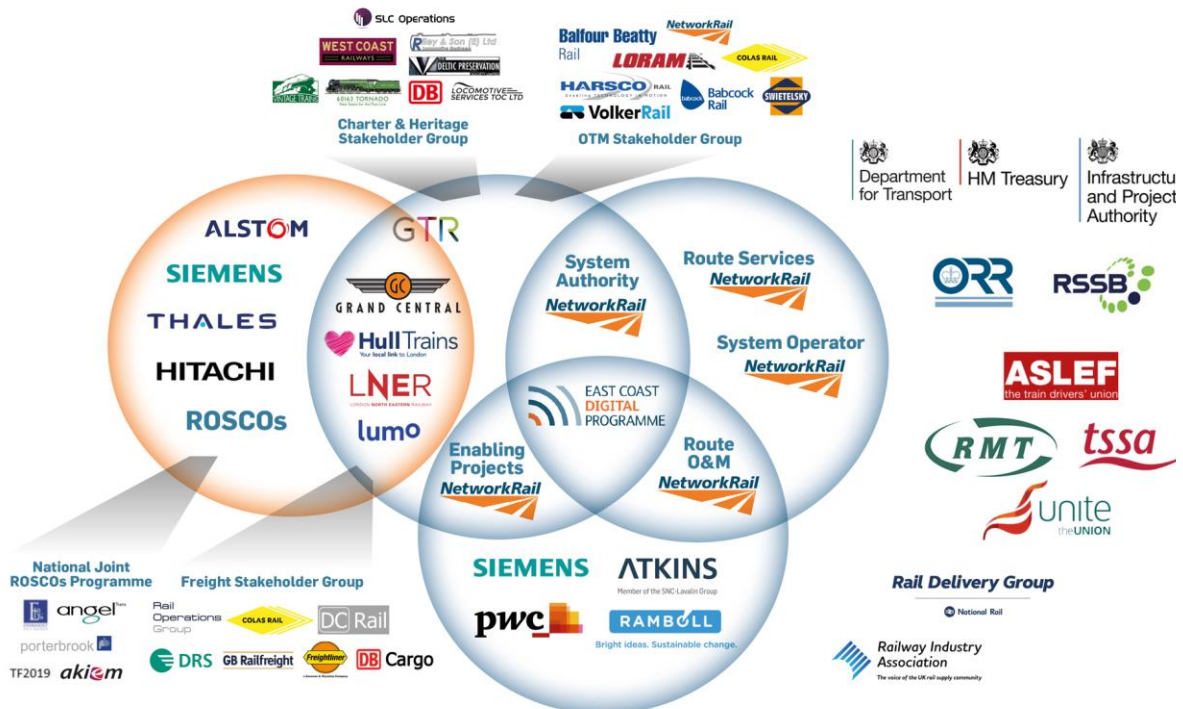
The ECDP is integrating the industry like never before to deliver a railway for future generations on the first 100 miles of the East Coast Mainline South. This includes over 100 projects to remove old technology signalling, fit circa 700 vehicles with new digital technology signalling, training c2750 drivers, and overall impacting c6000 staff.

The success of this large, complex, multiple stakeholder programme can only be possible with a deep industry partnership approach which integrates the industry into an Enterprise that has a mindset of thinking and acting as one with a clear aligned focus on outcomes and benefits.

ECDP is an industry change programme where everything the programme does will support the delivery of transformational change across multiple organisations. It has embraced a user-led approach to embrace the expertise and experience of all partners in defining the Programme.

All 30 industry partners and importantly those specific individuals from those organisations working on the programme, are aligned behind one set of values, critical success factors and behaviours which set the foundations for the way in which all parties will work together to achieve success for all.

Taking the time to identify and invest in building the industry partnership and investing in the right skilled leaders and subject matter experts to change and align the culture and outcomes across multiple organisations, has been essential in such a complex programme.



3. Enterprise digital transformation

Digital transformation creates effective information management across the enterprise and throughout the delivery process. The key enablers to Enterprise digital transformation were felt to be:

3.1. Enterprise-wide digital transformation strategy & roadmap

The creation of a single strategy is fundamental to an effective enterprise digital transformation, linked to a roadmap showing how it will be delivered. This strategy must be co-developed by all enterprise members and should not be imposed on any organisation. It should also consider the digital maturity of all Enterprise members through a common assessment tool, with subsequent work to ensure roadmaps raise all parties to the level of digital competence required to play their role in the strategy delivery.

3.2. A connected and common data environment

There should be a single common data environment that should be accessible to all parties within an enterprise. This should provide a single source of performance data driving a “one version of the truth” culture.

3.3. Understanding your information

The Enterprise should understand the different types of data that it needs, including (but not limited to) engineering, sustainability, social value, commercial, supply chain and asset performance data. Consideration should also be given to how this data can be securely shared both within and, where appropriate, beyond the enterprise.

3.4. Clear benefits

To underpin buy-in for the digital transformation, the benefits of doing so

should be clearly explained to, and understood by, all parties within the enterprise, and aligned to the common set of goals and outcomes. Training should be provided where required to support this.

3.5. Benchmarking

To support the delivery of the strategy and roadmap, it will be important to benchmark performance and digital maturity. The Enterprise and its members need to know how they are doing and whether they are securing the intended benefits. There is significant good practice in digital benchmarking that already exists through the Infrastructure Client Group’s digital transformation taskforce that can be accessed.

3.6. Buy-in at all levels

All parts of the Enterprise must buy in to the digital transformation strategy, with clear and visible leadership from senior individuals within member organisations.

“There should be a single common data environment that should be accessible to all parties within an enterprise”

3.7. Supporting smaller businesses

It is recognised that small and medium-sized businesses (SMEs) can struggle with adoption of digital transformation due to their size and relative lack of resource. As such, a key enabler of full digital transformation will be the provision of support to smaller members of the enterprise. There is substantial support in

the wider industry that can be tapped into to provide this support.

Key challenges and blockers of digital transformation include:

3.8. Lack of resources

Many businesses see the prospect of digital transformation as challenging because they anticipate a heavy investment requirement and man hours to implement the transformation.

Enterprises should seek to support and streamline the transformation so that the burden does not fall too heavily on any enterprise member.

3.9. Lack of leadership support

Digital transformation can be undermined if it is not clear from the leaders of enterprise member organisations that they fully support and embrace the translation strategy. As such, enterprises should seek early and visible commitment from all member organisations leaders in relation to the transformation strategy. The development of a clearly defined charter will support this.

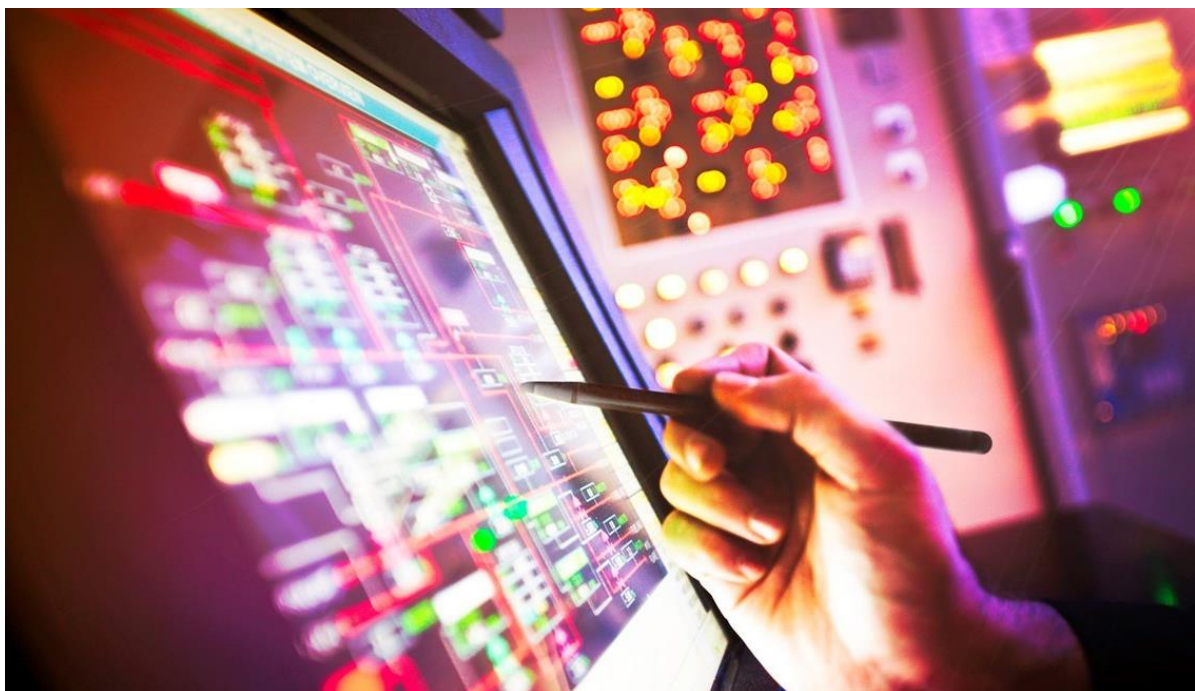
3.10. Failure to adopt existing resources

There is already a significant volume of resource available to industry to support with digital transformation, and yet we are aware that often these are not accessed by businesses, who may be unaware that they exist.

As such, part of an enterprise is the undertaking of early work to develop its digital transformation strategy, with due consideration as to what support is already available in the market that can be used. Failure to engage the end users can also be a blockage or lack of maturity within the sector.

3.11. Lack of interoperability

Many organisations working as members of enterprises will also be working elsewhere for other clients across multiple sectors. This will often mean that they will need to use different digital technologies in different parts of their organisation. This can create confusion and a lack of interoperability between systems. To an extent, this is sometimes unavoidable, but enterprises should consider whether there are options to align their digital approach with technologies and standards used by other organisations.



4. Risk share and incentivisation

The key enablers to Enterprise risk sharing and incentivisation were felt to be:

4.1. Whole enterprise approach to risk

All parties within an enterprise should take responsibility for understanding and managing project and programme risk with a similarly joint approach to incentivisation. Pain and gain share should map across the Enterprise rather than a situation where some partners are more exposed/benefit more from pain/gain structures.

4.2. Standard commercial arrangements & systems

Enterprises should seek to develop standard approaches to commercial relationships between partners based on common systems. This will help to develop consistent understanding and trust through visibility across all enterprise partners.

4.3. Relationship within the Enterprise/ecosystem

Communication about risk, incentivisation and performance is essential to ensure that all partners feel that they understand the risks associated with enterprise delivery, and are therefore able to play their role in managing and mitigating these risks. This relies on transparency and strong project controls / dashboarding / reporting which links to KPIs below. Successful change within organisations discussed in the earlier section on enterprise culture will be vital to secure the honesty and trust that underpins this system. There should also be clarity for all parties on the requirements and deadlines that the Enterprise must deliver.

4.4. Key performance indicators

KPIs must be clearly aligned and shared across the enterprise and with standard pain/gain. The KPIs must clearly link to Business Plan and Enterprise goals and outcomes.



4.5. Certainty and continuity of pipeline

Not all organisations within an enterprise will see incentivisation as being solely based on financial incentives. For some businesses, particularly smaller companies, the clarity and workload continuity that comes with a visible pipeline of future workload will act as an incentive in itself. As such, enterprises should seek to develop and communicate clear pipelines of future activity to support those organisations in the Enterprise and wider ecosystem that will be involved in the delivery of the work.

“All parties within an enterprise should take responsibility for understanding and managing project and programme risk”

Key challenges and blockers of Enterprise risk sharing and incentivisation were felt to be:

4.6. Employees perception

While many employees will welcome the opportunity to operate in an environment where there is great collaboration and fewer transactional relationships between partners, the shift to a ‘one team’ can potentially result in some employees feeling distant from their employer. As such, while individuals will have a focus on securing Enterprise outcomes, it should be recognised that partners will have a dual affiliation - to the project & their employer.

4.7. Timescales

There is a particular challenge in the rail sector given the cyclical nature of investment associated with control periods. This can create uncertainty that

undermines the long-term vision at the heart of enterprise models. As such, this risk should be recognised and understood by Enterprises with clarity about what it will mean for the Enterprise, given the unknowns associated with anticipated activity in future control periods. The Enterprise model provides an opportunity for the client and its supply chain to input early into the Final Business Case and influence the outcome of a control period.

4.8. Client maturity

Suppliers may be concerned that some clients in the rail sector may not live up to the promise associated with Enterprise models, particularly in relation to incentivisation. There is an element of ‘leap of faith’ associated with the move, so all parties should work together early on within the life of the enterprise to develop the respect and trust needed to build confidence that anticipated commercial benefits will be realised.

4.9. Target setting

Linked to the above, there may be concerns about whether some of the enterprise outcomes can be clearly measured and reported, particularly in relation to less defined, potentially softer outcomes. In a situation where outcome measurement is unclear, this would undermine the enterprise. As such, it is vital that the enterprise establishment is very clear, understandable and has clearly defined, well-articulated, measurable outcomes from the start.

4.10. Transition from Network Rail to GBR

Another rail specific challenge for enterprise models is the current transition towards the new Great British Railways model. As this work is still in process, it is not possible to fully understand what impact this may have on existing enterprises and those that are currently under development.

5. Enterprise integration

The key enablers to Enterprise integration were felt to be:

5.1. Clear Outcomes

It is clear that for an Enterprise to be fully integrated, partners must understand and be aligned to the enterprise objectives. The Enterprise should be designed on the basis that it will integrate in order to achieve these objectives.

5.2. An integrator function

Enterprise integration should not be left to chance. Instead, there should be a dedicated element of the Enterprise that focuses on creating and sustaining integration, acting to pull together the

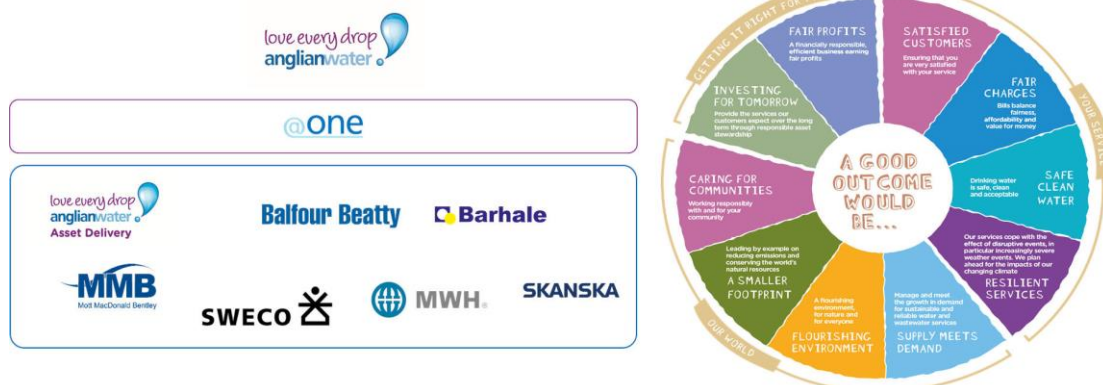
Enterprise partners. This Enterprise function should also be very clear that no one organisation can function as an integrator. Instead, the integrator will draw on capabilities from across the enterprise partners.

5.3. The right culture

Integration will not occur if there are behaviours within the Enterprise driving a culture that does not support collaborative working. As such, it is essential that the activities discussed within this document around Enterprise culture are developed and delivered to secure an environment in which integration can be embedded and flourish.

Case Study - Anglian Water

Anglian Water has created an alliance focussed on delivering its key outcomes, with an integrated organisation featuring an alliance board, alliance management team and integrated delivery teams.



Partners are selected on the basis of capability - both technical and cultural - to deliver these outcomes, which include satisfied customers; clean, safe water; a smaller footprint; fair profits; and flourishing environment. These outcomes provide a framework for managing partner relationships, setting an alliance business plan and performance framework, and incentive mechanisms.

The alliance has drawn learning from other sectors, including car manufacture, recognising the importance of alignment, collaboration, integrated teams, incentive-based models, visible programmes and continuous improvement.

Contributors

We would like to take the opportunity to thank the following individuals for the significant contributions that they made to the preparation of this report:

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