

How Network Divisions can deliver at scale with precision and predictability



As part of our “Time to re-think the Network Division” series, we have highlighted the unprecedented competing demands on telco network operators.

How Network Divisions prioritise and address the different types of demand to grow, improve and maintain networks whilst managing risk can be a differentiator between leading and falling behind the competition at a critical time in the global market development of 5G and fibre networks.



The Challenge

Prioritising and managing the portfolio of telco network projects and programmes for optimised Return on Investment (ROI) is a persistent challenge. The sheer scale is daunting, with Telco's having to manage hundreds of £millions to £billions worth of capex per year across programmes that have national strategic importance. These investments and change programmes include:

- ◆ Roll-out of new **5G networks and infrastructure**
- ◆ **Fibre to the Premise (FTTP)** broadband expansion in line with government targets

- ◆ Expanding **geographic reach, coverage and capacity** for mobile and/or high-speed broadband networks
- ◆ **Stripping out and replacing network equipment** associated with government designated 'High Risk' vendors
- ◆ Driving **network virtualisation**
- ◆ **Reacting to and combating** the increased risk posed from **cyber security threats**
- ◆ Supporting organisation wide **Net Zero targets**

- ◆ **Decommissioning of Time-Division Multiplexing (TDM)** networks and voice services
- ◆ Retiring of **legacy network equipment**

We often see excess demand over supply in the portfolio of about 30-50% in annual planning cycles. Factoring this excess demand against fiscal environments where available capex budgets can be typically challenged by 10-20%, highlights that more needs to be done for less, with greater clarity around why the portfolio of programmes delivers the best return for shareholders.



Intelligence is needed in Network Divisions

Telco Network Divisions no longer support singular roll-out initiatives. They must now deliver with an increasing number of new and competing challenges which need addressing in parallel. These competing demands need to be planned, prioritised and sequenced to optimise time, funding and resourcing. As such, any investment needs to be balanced across these competing demands to optimise value and to minimise risk.

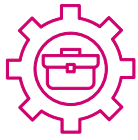
This requires a more intelligent Network Division, with operational processes that can manage new levels of complexity end to end, from the forecasting and planning through to roll-out in the field.

With the race to provide 5G and fibre services showing no sign of slowing, it opens up a huge number of opportunities for providers to roll out more and also higher value products and services. These can be rolled out via existing and/or new ecosystems and used to create new business models.

It also poses several significant challenges that need to be quickly addressed, including:

- ◆ **Large upfront capex infrastructure investment costs** with less clear returns (Network functions are allocated up to 90% of capex budgets which typically range from £500m to £1bn+ per annum)
- ◆ **Unclear and undefined use cases** meaning it is difficult to know how to prioritise the right projects and programmes
- ◆ **Spectrum availability and strategy development**
- ◆ **The role of government, regulation, managing security considerations and re-fitting the network** without High-Risk Vendor (HRV) equipment (for example, BT has already disclosed a £500m likely bill associated with the removal of HRV equipment to meet the initial government imposed 35% limit¹)

- ◆ **Future proofing any investments** and taking a 'digital first' approach, embedding automation and analytics and subsequently identifying how to monetise the network
- ◆ **Integrating the 5G and fibre roll-out strategy** so they are complimentary
- ◆ **Shareholder expectations** and a demand for continued rationalisation of spend and increased inefficiencies
- ◆ **Wholesale customer and partner relationships**
- ◆ **Delivering portfolios** in a way that meets committed energy transition targets. For example, we have seen global telco operators typically set a target of a 50% reduction of Scope 3 emissions by 2030



The importance of Portfolio and Programme Management

Given the complexity and volume of competing demands for time and resources, the key challenge for Network Divisions is how to balance 'keeping the lights on' activities whilst at the same time protecting market position and supporting profitable growth. Making the right investment choices to deliver the outcomes needed for both customers and the business is therefore critical for telco network operators.

In our view, portfolio planning and optimisation has never been so important but it is often extremely difficult for organisations to get right. We see the following common blockers preventing Network Divisions from meeting their targets:














- ♦ **Lack of clear focus** – often 'eyes can be bigger than stomachs' and organisations try to do too much, or start more initiatives than can be delivered with the time and resources available
- ♦ **Optimism bias in planning / poor delivery performance against forecasts** – our experience shows that it is not uncommon to miss by 30-40% against planned delivery in any annual delivery plan
- ♦ **Investment approval processes** – there is a tendency for short termism, where month to month / quarter to quarter release of funds slows delivery and impacts commitment levels from third parties, slowing down any delivery momentum
- ♦ **Highly outsourced project management capability** – an over reliance on 3rd parties can risk driving misalignment between objectives and outcomes. A recent analysis at one telco network operator highlighted this type of over reliance, identifying that around 75-80% of their Project and Programme management resource pool used to deliver business critical programmes were being supplied by external vendors. Being clear on resource capabilities and skillsets allows plans to be better underpinned with the right resources, and helps drive better clarity around medium to long term supply vs. demand
- ♦ **Silo mentality** – as opposed to a portfolio and programme structure, inhibiting collaboration across the Network Division and not supporting an aligned end goal
- ♦ **Need for stronger leadership and building a high performance team culture** – 'Leadership' in the context of major infrastructure projects revolves around leading teams, often from different companies, with competing agendas and potentially opposing financial stakes in the project outcomes. Getting the right people in the right roles at the right time, with aligned incentives is a key success factor for effective delivery of major projects












How to get Project and Portfolio planning right within the Network Division

Figure 1: Project & Portfolio Planning Optimisation

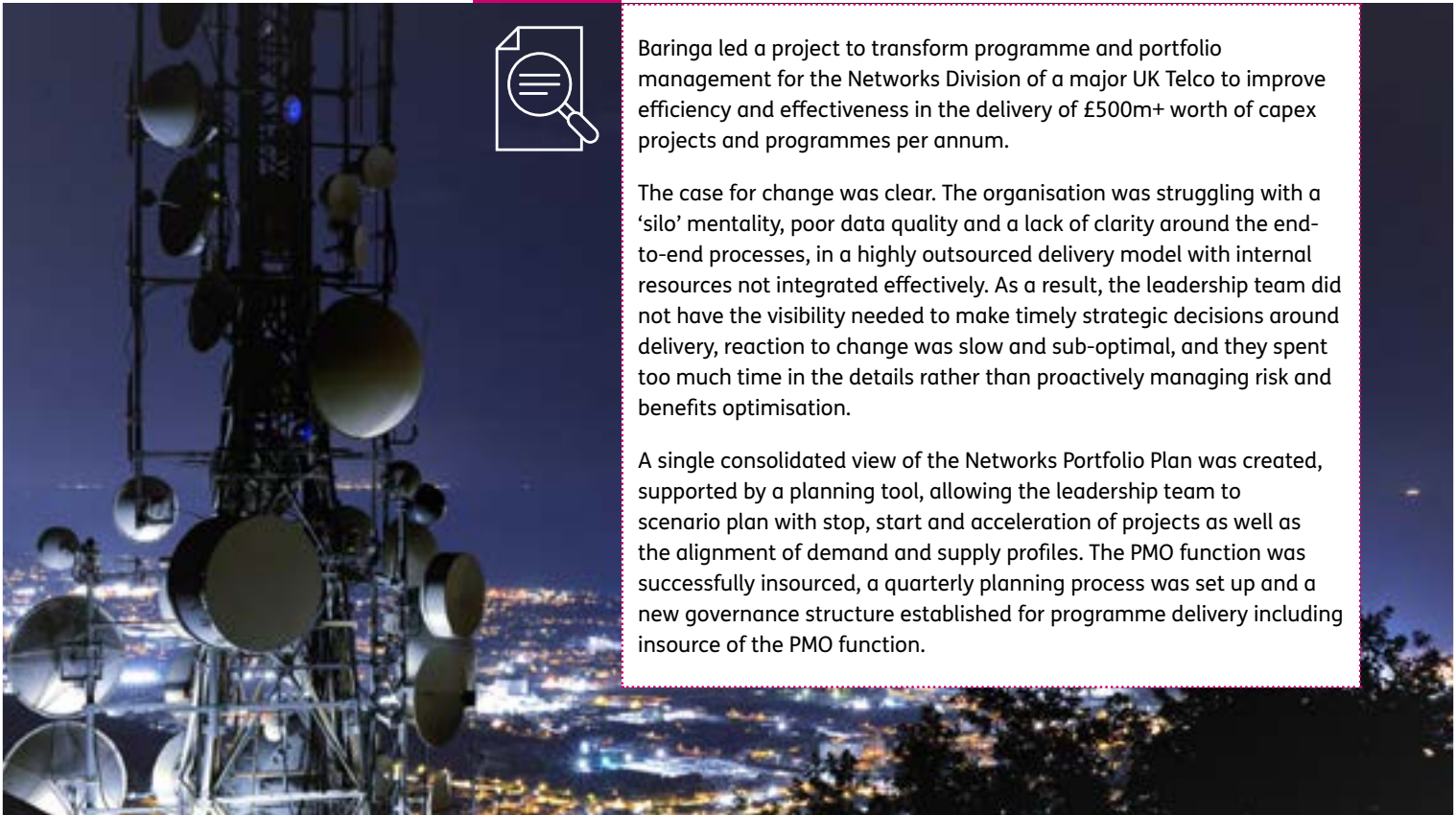
1 	Programme Operating Model, Governance & Strategy	A single mind	Joined up, end to end	Incremental delivery	Aligned to KPIs	Example KPIs  Revenue growth  Customer Experience  NW Capacity  NW Coverage  NW Usage  NW Quality	
2 	Programme Planning / Schedule Optimisation	Opportunities that deliver the Business Case	The impact of changes can be understood	Estimates that are trusted	That can be delivered with our capacity		
3 	Commercial & Contract Management	Support managing commercials with the right incentives	To enable programme delivery to be optimal	Hold partners to account with right governance	Support contracts and rates being managed		
4 	Project Controls	Fit for purpose controls	That don't slow the business down	Allow cost, time and quality to be managed	Controlled changes with audit maintained		
5 	Data & Systems	Trusted Data	To deliver insight	Issues being managed	Systems that are fit for purpose		That enable the programme to deliver
6 	Effective implementation & Continuous improvement	Co-ordinated change	Implemented incrementally	With support to stakeholders	Continuous innovation		Benefits measured
7 	Sustainability	Consideration for, and limiting the impact to our environment					

The first step is to align and agree the overarching strategy and the end goals. Once anchored around a singular strategy and vision, it is important to then recognise the essential elements that will help support an optimised planning and portfolio function:

	<p>1</p> <p>Programme Operating Model, Governance & Strategy</p>	<p>Network Divisions need to redefine how they operate, along with the skills and tools required to become “Intelligent Network Divisions”. Embedding the right operating model and organisational structure allows a clear view of accountability and ownership across the Network Division, for example by moving away from siloed ways of working towards a more programme based approach, focused on working end to end across the network value chain. Instilling the top-down overarching strategy and framework into this new structure ensures all elements pull in the same direction with accountability rolling upwards. For example, at a national fixed line operator, a programme focused operating model was implemented to support their ambition of more than doubling FTTP roll-out over a 2-year timeframe.</p>
	<p>2</p> <p>Programme Planning / Schedule Optimisation</p>	<p>Once aligned to a central strategy, appropriately prioritising projects and programmes which deliver to that strategy is key. Produce a rolling schedule, optimised for capacity constraints and with feedback loops built in based on the delivery progress. A UK national mobile operator recently overhauled their Planning & Scheduling function, taking a data led approach to prioritise projects and programmes and then align available supply to their demand. This allowed critical focus on those projects that positively contributed to the overarching strategy whilst highlighting and ultimately stopping projects that did not.</p>
	<p>3</p> <p>Commercial & Contract Management</p>	<p>Support commercial and contract management teams to set up and manage key processes with design and build partners. When working with clients, we prefer to work closely with these teams to integrate their processes into the programme, in line with contract and system tools. As an example, £15m of addressable spend at a UK Telco was identified as attainable cost recovery from third party vendors following a review of all network contracts over £1m.</p>
	<p>4</p> <p>Project Controls</p>	<p>Project execution methods and processes should be uniform across the organisation with clear ownership, especially where there are hand-offs within the Network Division or to 3rd party suppliers. Governance within the planning and portfolio function needs to be streamlined, standardised and driven top down. Put in place right sized, integrated programme controls across cost, risk, quality, change and schedule and embed the agreed processes across the programme.</p>
	<p>5</p> <p>Data & Systems</p>	<p>Too often a lack of available data, or worse, data of an inconsistent quality, blinds the leadership team from making appropriate and swift decisions. Ensuring data availability is a critical first step but must then be followed by appropriate tooling and embedding a data culture within the organisation.</p>
	<p>6</p> <p>Effective implementation & Continuous improvement</p>	<p>Linked to the point on data above, the ability to centrally monitor and manage performance using a standardised set of KPIs and metrics, supported by aggregated management reporting is crucial. Embedding programme processes and IT systems usage, training and supporting behavioural change are all required to realise benefits.</p>
	<p>7</p> <p>Sustainability</p>	<p>Firmly embedding sustainability at the heart of the project and portfolio strategy will be critical moving forwards if network operators are to meet their Net Zero target ambitions.</p>

CASE STUDY

Network Programme Management Transformation at a Major UK Telco Services Provider



Baringa led a project to transform programme and portfolio management for the Networks Division of a major UK Telco to improve efficiency and effectiveness in the delivery of £500m+ worth of capex projects and programmes per annum.

The case for change was clear. The organisation was struggling with a ‘silo’ mentality, poor data quality and a lack of clarity around the end-to-end processes, in a highly outsourced delivery model with internal resources not integrated effectively. As a result, the leadership team did not have the visibility needed to make timely strategic decisions around delivery, reaction to change was slow and sub-optimal, and they spent too much time in the details rather than proactively managing risk and benefits optimisation.

A single consolidated view of the Networks Portfolio Plan was created, supported by a planning tool, allowing the leadership team to scenario plan with stop, start and acceleration of projects as well as the alignment of demand and supply profiles. The PMO function was successfully insourced, a quarterly planning process was set up and a new governance structure established for programme delivery including insource of the PMO function.



Key Takeaways

By bringing a data first and value led approach to Portfolio Planning & Optimisation, the right decisions can be made at pace and with confidence that they ultimately will align to the overarching strategy of the organisation.

Identifying and delivering appropriate methodologies and toolsets allows the prioritisation of Network projects & programmes by

aligning each to the organisation’s overall strategic objectives. As a result of this approach, the following benefits can typically be released:

- ◆ Balanced Network Portfolio plans based on measurable value to the business
- ◆ Improved and streamlined Programme delivery processes and procedures
- ◆ Optimised use of resourcing across the Network Division’s projects and programmes, including via use of third parties and contingent workers
- ◆ Enhanced visibility to senior leadership via targeted data sets and visual analytics

The time to act is now. Ignoring the move to become an ‘Intelligent Network Function’ and not optimising the delivery engine will put operators at significant risk against their competitors, potentially leaving tens of millions of pounds of benefit per annum on the table, and therefore risking significant disadvantage in the race for 5G and fibre.



About Baringa

Our team is passionate about helping operators to optimise their network strategy and operations to set up for success. We would love to hear your thoughts on the topics we've discussed in this article, and how you see these challenges impacting your organisation.

Baringa Partners is an independent business and technology consultancy. We help businesses run more effectively, navigate industry shifts and reach new markets. We use our industry insights, ideas and pragmatism to help each client improve their business.

Collaboration is central to our strategy and culture ensuring we attract the brightest and the best. And it's why clients love working with us.

We set out to build the world's most trusted consulting firm – creating lasting impact for clients and pioneering a positive, people-first way of working. We work with everyone from FTSE 100 names to bright new start-ups, in every sector.

You'll find us collaborating shoulder-to-shoulder with our clients, from the big picture right down to the detail:

helping them define their strategy, deliver complex change, spot the right commercial opportunities, manage risk or bring their purpose and sustainability goals to life. Our clients love how we get to know what makes their businesses tick – slotting seamlessly into their teams and being proudly geeky about solving their challenges.

We have hubs in Europe, the US, Asia and Australia, and we work all around the world - from a wind farm in Wyoming to a boardroom in Berlin. Find us wherever there's a challenge to be tackled and an impact to be made.

Please get in touch if you're interested in hearing how we can help support you on this issue.



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