

Broadband infrastructure interventions – Achieving value for money

Preface

Broadband infrastructure is now seen as a utility; critical to the future of the country, making us socially inclusive and economically competitive with other nations.

Public sector intervention in the broadband market is a common theme in public policy and will continue to be for the foreseeable future, as an up-to-date national telecommunications infrastructure is seen as critical for the socio-economic development of the country.

All public sector organisations are obliged to seek Value for Money (VfM) for the expenditure of public funds. The key questions regarding broadband infrastructure are therefore:

- Does the public sector wish to own broadband infrastructure?
- Why should the public sector intervene in a private market?
- How is Value for Money captured and measured in a broadband infrastructure intervention?

Does the public sector wish to own broadband infrastructure?

The public sector does not view itself as a telecommunications provider for the population it serves; this is not a public sector service. The public sector is only likely to own infrastructure for the purposes of its own internal networking, and even then this may well be outsourced.

Why should the public sector intervene in a private market?

The public sector does not intend to own broadband infrastructure, but it does spend public funds with private entities to develop broadband infrastructure. Private entities will only invest in broadband infrastructure deployment where they believe it will generate a market return. Many areas which are difficult to deliver in, and therefore costly, will be ignored by the private sector, particularly if the customer base is low relative to other areas. This clearly indicates that rural areas are being left without coverage, but also, less obviously, some densely built inner-city environments due to the complexity of deployment in densely built environments of

high-rise blocks and the associated challenge of procuring cost-effective wayleaves.

This market failure allows the public sector to intervene and 'level the playing field' by providing Gap funding which enables the private sector to generate a more attractive economic return. The public sector dividend is not ownership, but the provision of infrastructure in areas which will help deliver socio-economic policy. This can be defined as populations not being 'left behind'.

How is Value for Money captured and measured in a broadband infrastructure intervention?

Defining VfM in an arena of Gap funding where the public sector does not take asset ownership is complex. VfM is captured by applying the procurement concept of Most Economically Advantageous Tender (MEAT).

MEAT is a concept that allows a public procurement to evaluate other criteria beyond cost. MEAT effectively equates Value for Money to 'Best', not necessarily cheapest. Quality criteria can be evaluated alongside cost. This should, if applied intelligently, provide the 'best' result. However, the UK has seen a number of high-profile public contract failures, particularly in public service outsourcing where not enough attention has been applied to quality evaluation metrics resulting in a focus on cost. This has inevitably led to contracts with very thin profit margins, leading to either poor service delivery or contract failure. There is also an inherent risk of contract failure in the broadband market due to the size and lack of delivery capacity in many private sector entities.

Any procurement should evaluate both price and quality. In the area of broadband interventions, there has not been enough available funding to fix the market failure. The size of the problem has not been matched by the size of the available funding. This means that there is no merit in evaluating a price from a bidder. If there is insufficient funding to fix the problem, price tends to be converted to an evaluation of coverage i.e. – for a fixed sum, how many premises can broadband be deployed to.

To deliver VfM there are a number of quality criteria to evaluate in addition to volume of premises. The selection of these criteria, and their associated weighting of importance, will drive bidder behaviour in how they structure their tender response.

Any procuring body needs to appreciate what they are asking for, which requires a detailed understanding of many diverse areas:

- Networks
- Technologies - their characteristics and capabilities
- Market awareness - of not just the broadband segment, but of other linked segments e.g. business private circuits, and the whole broadband ecosystem
- State aid conditions and requirements, and the broader legal context
- Procurement regulation
- Finance and funding
- Operations
- Civils and network build challenges and pitfalls

- Geography and demographics
- Political drivers
- A crystal ball – a realistic view of what is likely to be required (and available) in the future

It is of fundamental importance to understand how all of the above relate and interact in order to then understand what is being asked for. An old saying from Aesop's Fables comes to mind - 'Be careful what you wish for (in this case ask for) lest it come true!'

In most publicly funded broadband infrastructure projects, the most significant VfM measures are the resulting network coverage, delivery and capability; which commonly uses the 'Speed and Coverage Template (SCT)' approach – a spreadsheet of all in scope premises with their currently available broadband speed and weighting factors relating to each premise. This is probably the most useful and the most powerful but, at the same time, the most dangerous tool in the VfM armoury, as depending on how it is structured may deliver unintended delivery results and therefore not the 'best' procurement solution.

It is easy to 'ask' for very high, perhaps gigabit, speeds to one premise (which may not want or ever use such capability) at the expense of 10 or 20 premises attaining lower speeds, but which would be transformational on their current capability.

State aid requires that broadband infrastructure intervention procurements be technology neutral, such that any technology that meets the capability requirements that allows public intervention are acceptable. Fibre and radio technologies are capable of achieving headline gigabit speeds, so would attract the same value weighting in a SCT, but being different technologies other characteristics are significantly different; not necessarily better or worse, but just different, and clearly need to be fully understood in order to be captured in a procurement specification.

Unless the broadband Gap funding budget is sufficiently high to enable solutions that offer everything to everybody, it is likely that a number of steps and a number of procurements will be involved in achieving this 'Nirvana'. This has certainly been the situation for virtually all procurements to date. Designing and building in such a piecemeal way, often caused by several separate procurements in the same location, also has its own pitfalls as it is unlikely to deliver an optimal solution in the same way as one over-arching procurement might.

So, the best solution for a subset taken independently is not necessarily the best solution if that subset is considered in the context of the whole, however the scoring criteria could easily hide this, resulting in a poor long term VfM for the public spend.

It can clearly be seen that aspects of all of the above interact and impact on what is defined in terms of VfM for a procurement, the outcome of which may perhaps not be as intended or desired.

To ensure success, it is essential that any procurement strategy is defined very carefully in the context of a holistic vision and managed by a team who fully understand, all of the interlinked criteria.

About the authors

Andy Chattell is a consultant with The Project Advisory Group. An experienced senior technical expert with over 32 years' experience in the communications industry; having key specialisms in fibre and broadband networks. His innovative approach to analysis, test and diagnostics, and network design have earned him over 12 patents. From 2012, Andy was the Technical Lead for all of BT Group's broadband access bids, ensuring optimal techno/economic solutions for over £3bn of public investment programmes. He was most recently the Technical Lead for Scotland's £600M R100 programme bids. Prior to this, Andy lead the design and technical trials of BT's fibre broadband network, resulting in the launching of FTTC and FTTP networks in the UK.

Scott Walters is an independent consultant. Scott is a chartered accountant, and an experienced strategic manager both commercially and financially, with over 20 years' experience in the infrastructure arena both in telecoms and the water industry. Having been instrumental in its creation, Scott was a key member of the leadership team of NYnet Ltd from 2007, most recently as Chief Executive from 2015. Scott was responsible for the successful creation, funding, procurement and delivery of the first three phases of the Superfast North Yorkshire programme creating a £100m capital broadband intervention for North Yorkshire. Scott also managed the successful BAU activity of NYnet, providing connectivity and WAN solutions for the public sector.

The Project Advisory Group advise network providers, funders and public sector entities on infrastructure projects and investments. The team provides a comprehensive set of services that cover all of the key advisory requirements of a project from start to finish including commercial, technical, financial, procurement and legal advice. Recent client engagements include leading a successful bid for £165m of public funding for a network provider and technical and contract specification documentation for a new to UK altnet provider.

The Project Advisory Group and International law firm Trowers & Hamlins work together to help our clients create and deliver digital infrastructure projects.

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Contact

With questions please contact:

Steve Edwards – Director
steve@thepag.co.uk

Mark Jury – Director
mark@thepag.co.uk

Website: thepag.co.uk
LinkedIn: [/company/the-project-advisory-group](https://www.linkedin.com/company/the-project-advisory-group/)

Company number – 11961507