Investing in Utility Networks with Less Reliance on Markets and More Uncertainty: How do we Deliver Security and Efficiency?

Emily Clark's speech at the Regulatory Policy Institute: Hertford Seminar in Regulation

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Introduction

I'm delighted to bring a perspective from the communications sector this evening.

Before I do and by way of context, the communications sector is usually thought to be different to other regulated sectors;

- It's a mixture of utility and non-utility;
- There's quite a lot of infrastructure competition driving investment – between BT and VM in fixed and between 2 networks in mobile; and
- There's an awful lot of retail competition between firms with networks; and between firms without networks;
- In fixed there is regulated access to BT's network; in mobile, access is available on commercial terms.

But we are clearly at a very interesting juncture. There's a hot debate both about:

- Ambitions: What the country needs by way of digital connectivity over the next few decades (unsurprisingly, a highly political debate); and
- Delivery: what market and regulatory models are most likely to deliver those ambitions.

So I thought I'd spend a bit of time on these issues:

- **How should we specify our digital connectivity ambitions?** Government talks about technology choices. But customers care about their connectivity (and content) experiences (and are prepared to make trade-offs). And this suggests that different technology strategies can be effective in meeting their needs
- **What does that mean for models of delivery?** A system operation role (in telecoms) is hard to imagine. And it's not obvious that this would better allocate risks where, for telecoms, political risk is less of an issue than market risk (by which I mean demand shifting now (and in the future) to rival technologies and infrastructures).

In fact, Government (and Ofcom) seem more inclined to stoke market risk (to bring forward investment) rather than remove it by specifying a 'system requirement'.

And if this is the world we are in, then regulation can afford to take its hands off a great deal more than it has. In fact, Government (in its FTIR) specifically calls for regulatory forbearance:

> '*The best outcome for full fibre rollout is likely to result from* ***giving the market the freedom to evolve and only regulating if competition concerns clearly emerge***'.

I couldn't agree more and I'll explain why.

What do we want: and is this capable of being specified for the country by Government (os by an ISO?)

So turning first, to our digital connectivity ambitions

To be clear, I think that a debate about the UK's digital ambitions is very important. Not least because decent broadband is akin to a utility in some respect. And because connectivity is a critical input to a lot of other value generative activities.

It is valid to have a debate about what we want and need.

- What is a minimum level of 'decent' service that everyone should expect to get?
- What should we strive for, as an industry, in the harder-to-reach rural areas?
- Would we accept lower - but still very good - average speeds, if it meant fewer people with very poor speed and much better coverage?

But we don't tend to have this debate. Rather you hear a lot about specific technology inputs. To give you an example, the government's ambition is expressed as follows:

> '*We … have set an ambitious target for 15 million premises to be connected to **full fibre** by 2025, with nationwide coverage by 2033. We also want to be a world leader in the next generation of mobile technology, **5G**, with deployment to the majority of the country by 2027 ….*'

Now much of this chimes with BT's own thinking because we want to be a converged network leader in full fibre and 5G. But make no mistake, these targets are technology choices as much as they are a vision for the digital connectivity goals for the UK.

And even at the level of technology choice, they don't really engage with the implications of mobile and fixed convergence. For example, should we target fibre to the premise or fibre to the mobile base station/ or small cell… in order to really fire up 5G. Can we do both? (The relevant question if they are complements). Do we need both? (The relevant question if they are substitutes).

Our technology targets don't really grapple with these issues because they aren't really grounded in what people want (and might trade off).

People actually care about their experience of connectivity (not about technology):

- They care about devices seamlessly working in and out of the home.
- They care whether they can get a given service and speed reliably.
- They care about content and this often drives connectivity choice.
- And often there are tolerances and trade-offs around these things.

This creates differentiated demand and – importantly – scope for competition between services (and the associated technology strategies that sit behind these services). And you see this reflected in market propositions (in the UK and elsewhere);

Verizon, in the US, really focuses on their customer's mobility experience. So they combine fixed and mobile offers to deliver that seamless device experience (with add-ons like an Apple TV). KPN (Netherlands) emphasises bundling of their fixed offering with attractive content. These are valid competitive strategies which adopt different technology strategies and which focus on customer experiences.

Does this dis-joint between our national targets and customer experiences and behaviour matter? Well it depends how you use the targets.

Are they used to specify what market operators will deliver? This – I think – is what Dieter Helm has in mind when he speaks of an 'independent system operator' now called a system regulation model. I'll address in a moment why I don't think this has legs (at least in the telecoms sector).

Or are they used more to signal (to the market and the sectoral regulator) a desired direction of travel. This is effectively where we are. Markets are expected to deliver the country's fibre investment requirements in most parts of the UK.

And there is a growing recognition that a good outcome is more fibre -whether this is fibre to the premise; dedicated fibre business connections or connections to mobile cell sites - to better support the converged propositions and strategies that I've described.

An ISO Model in telecoms is hard to imagine

Going back to Dieter's model (for rail, water catchments and parts of electricity). He has a publicly owned SO deciding an 'infrastructure system', broadly described as 'the level of capacity and USO rights'.

Let's imagine the 'infrastructure system' chosen for broadband is 1G broadband for everyone, requiring fibre to the premise (for everyone). Not far off our national targets as it happens.

In theory, this deals with political risk because decisions about the design and functions of the infrastructure system are made by the (publicly owned) SO. Delivery (of a new fibre to the premise network) is then competitively tendered - so private entities hold operations and project delivery risk. The result – according to Dieter - is an astonishingly low cost of capital (embedded in competitive bids).

But the model simply assumes that customers will pay for the chosen 'infrastructure system' – if not now, then when delivered.

This might be the case in other sectors, but in telecoms (as I've said) there are different technology strategies for addressing customer needs. And assets are held by a variety of existing mobile and fixed operators.

How would a bidder for a fibre deployment contract regard the risk of their investment if customers might become mobile only households at some point, or prefer the bundle offered by Virgin Media (which has its own network)? How would they regard investment risk if the

legacy network offering superfast services proved to be attractive for customers far longer than anticipated?

Customers have more choices than Dieter's model envisages, and their willingness to trade off features against price means that even a spanking new / high speed / ultra-reliable full fibre service may take some time to gain traction (longer, indeed, than a private bidder might be prepared to tolerate and certainly not with a rock bottom bid WACC).

A round-about way of saying that we have market risk more than political risk – and this can't easily be addressed short of making all of broadband and mobile services a licensed activity; only allowing bidders to hold licenses; and distributing expropriated mobile and broadband asset to the winning bidders….

It's obviously very hard to imagine - even in a world with a Corbyn government. In fact, I suspect it's why telecoms is not on his hit list.

So market-driven is still relevant but could go further

We have – in fact – rather the opposite in many respects. The government has an ambition for full fibre and sees (for the moment) delivery as being a matter for markets (except in parts of the country which will not support commercial investment at all, or where a commercial operator might be viable but probably only one.)

Yes there are some 'soft levers' that the Government can use. The threat of bringing structural separation of BT back to the table is waved about a bit. Government talks about 'additional measures' if Openreach doesn't invest in ways that respond to the needs of its downstream customers.

But this does not mention full fibre investment specifically. And away from the heat and noise of the Digital Communications Review, I think that cooler heads see the emptiness of the claimed relationship between legal separation and full fibre investment.

Openreach – as a legally separate entity - might be an exemplar in responding to all its customers. And be open to different investment models and risk sharing. But this won't necessarily unlock full fibre if Openreach's customers don't see value in the investment and are not prepared to share risk.

So the main lever really, favoured by both Openreach and Government is to dial up infrastructure competition:

- By making access to BT's physical infrastructure cheaper (duct and poles) and easier to use to deploy rival fibre; and
- By not dumping Openreach's regulated wholesale prices through the floor to give rivals networks some headroom to invest.

But pivoting to a model which encourages competition and market-led solutions means that regulation can be rolled back quite significantly.

The market risks I described earlier are real. Scale deployment of full fibre is costly. It involves intense civil engineering activity and it takes time.

And even with help from regulators to encourage migration from legacy to new platforms, we bear the risk that customers will sit on lower speed/lower priced products for longer than we expect; or that they get enticed away by rivals (including wireless operators). And obviously this competition risk is a whole lot higher when rivals can get access to BT's physical infrastructure – which Ofcom has put front and centre in its suite of remedies.

Risks need to be addressed in order to unlock investor support, and the market can potentially play a greater role than in the past in allocating those risks.

If the large wholesale customers of Openreach have some credible alternatives – or they can create them – then access to new technologies and pricing can be left to commercial negotiation.

Regulation doesn't need to micro-manage these situations …in fact it's a very poor substitute for commercial arrangements in a fast paced market where market players are testing new things, and bringing them to their customers.

It may not look like access takers hold many cards from where we stand now – altnets being small and Virgin Media not being a wholesaler.

But with physical infrastructure access ramped up, the downstream activities are (in the language of economics) much more contestable.

If so, Openreach's customers have leverage. If so, regulation can be rolled back to some extent….

And let's be clear, this would act as an enormous stimulant to investment.

Because if regulation no longer offers up on a plate cheap access to BT's network…

…make no mistake, alternatives and risk sharing arrangements, which support investment, will be actively considered.

This truly would be a "market-driven" model and would be very effective in achieving our digital connectivity ambitions …

Thank you.

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