

How to make a business case for large-scale NGA projects

NGA Road Show

A presentation by

adroit
economics ltd

This session

- We will present
 - = Overview of steps in making a business case
- Followed by panel discussion
 - Three key topics:
 - Proving demand/impact of NGA
 - Demonstrating market failure
 - Intervention options – maximising the objectives

Our credentials

- Dr Steve Sheppard
 - = Managing Director, Adroit Economics
 - Regional ICT strategies for two-thirds of the UK
 - ICT programme evaluations for RDAs
 - Forecast regional economic impact of ICTs for e-skills UK
 - Made business case to BERR/HM Treasury (on behalf of all RDAs) for ICT business support
 - Helping make local business cases for NGA
 - Wider science, technology, innovation and enterprise policy background/disciplines
 - Contributed to project appraisal guidance
 - = Steve.sheppard@adroit-economics.co.uk
 - = Tel: 07725 646300

Our credentials

- Dr Alexander Roy
 - = Director, Adroit Economics
 - Cost–benefit analysis of South Yorkshire Digital Region to get EC and UK Government approval for funding
 - ICT audits & strategies across the UK
 - Worked with Dr Sheppard on technology for several years
 - Wider experience of technology-driven economic development, case making and funding applications
 - = alex.roy@adroit-economics.co.uk
 - = Tel: 07736 010204

But first...

some Does and Don'ts

Don't

- Start with broadband
- Start with technical benefits of NGA

Do

- Start with economic strategy and within that area, ICT strategy
- Start with the economic and social impacts that ICT delivers
- Then, and only then, focus on specific contribution of NGA to these

HM Treasury Green Book

- **Base the business case on Treasury Green Book appraisal guidance**
- NGA projects are interventions and like any intervention, the business case needs to be appraisal ready
- Moreover, it imposes an excellent rigour which will ensure a strong business case
 - = Maximising the chances of approval – RDA/CPRG/IDAB
 - = Maximising the chances of getting funding

Green Book appraisal steps

1. Need/benefits
 - = if none, then no need to bother
2. Target provision
 - = required to deliver the benefits
3. Current provision
 - = mapped against target provision to identify the gap
4. Will the market deliver
 - = will the market fill the gap
5. Options appraisal
 - = 3–5 genuine (not retrofit) options
6. Arriving at the preferred option

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1) Need/benefits of NGA

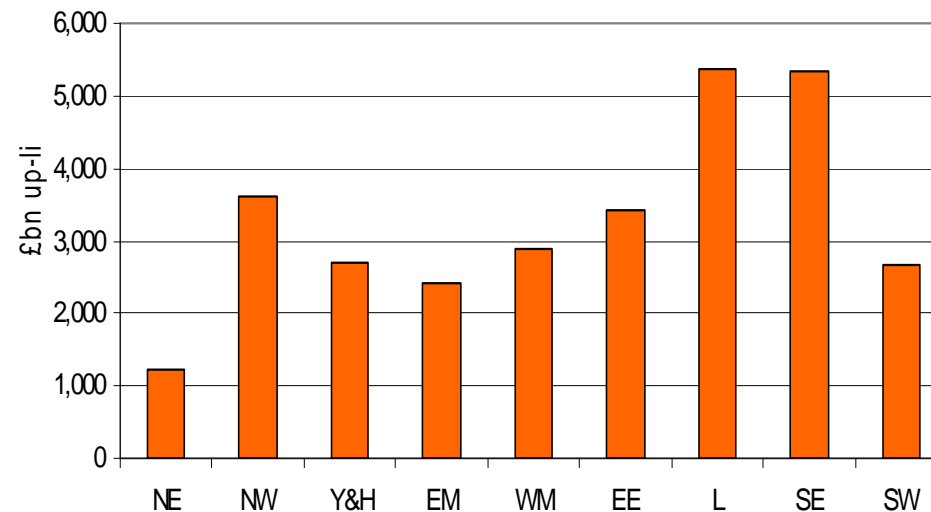
Economic and social net additional impacts

- Start with objectives in economic (and other relevant) strategies for the area
- Demonstrate (and quantify) how ICTs contribute to these
- **One of the most powerful arguments is economic impact:**
 - = Productivity, innovation and enterprise effects
 - = Resulting in net additional economic impact of ICTs
 - = Measured as GVA uplift
 - = Helping close the regional (and local) GDP gap
 - = Also helping combat impacts of the recession
- Identify importance/contribution of broadband (and within this, of NGA):
 - = Combination of evidence, theory and modelling
 - = **Seek to quantify % of GVA uplift attributable to/dependant on NGA**

Economic impact of ICTs

GVA uplift

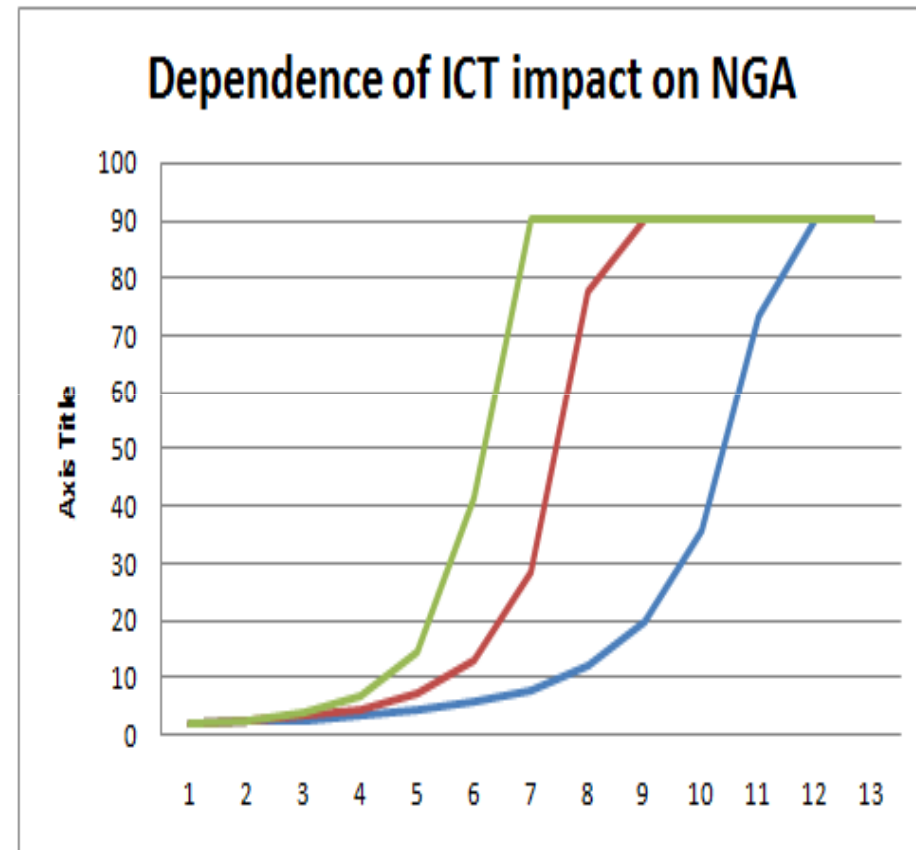
- Business productivity
 - = £35bn. GVA next 5–7 years
- Business innovation/ enterprise
 - = Same again?
- Wider impacts
 - = Community, services, sustainability?
- Could be c.£70bn.



Attributing ICT impact to NGA

Hockey stick effect

- Importance of NGA is relative to how many others have it
- Importance is limited now, but is likely to grow exponentially
- Then, areas that do not have it will be significantly economically disadvantaged



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2) Target provision required

NGA deployment required to deliver benefits

- Key metrics are:
 - = Service level
 - Bandwidth: 2, 10, 50, 100 Mbps or more?
 - Symmetric – high upload speeds also important
 - = Cost
 - Consumer not lease line pricing: £25–40 pcm
 - = Coverage:
 - Not cherry picking – resulting in new digital divide
 - But near ubiquitous i.e. c.90 % businesses and households
 - = Timing:
 - Early-mover advantage – there is evidence of this
 - Don't get left behind and lose economic competitiveness

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3) Current provision

Mapped against target provision to show gap

- OK...we all know you haven't got NGA so why the need to map current provision?
- Its important to show that current 'over-the-counter' provision does not come anywhere near NGA
- This is easily shown, but the point is, **it is important to demonstrate this**
- Use a network typology matrix to map – we developed one for Yorkshire Forward as part of our evaluation of NYnet

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4) Will the market deliver???

Proving market failure

- The UK, along with the rest of G8/20 has just spent last 15 years deregulating the telecoms market to get the market working
- The last thing Govt wants to do is for public sector to pile in and build/ run networks, distorting competition and undermining investment
- So it is especially imperative, in the IT-telecoms sector of all sectors, to prove, beyond doubt, that substantial market failure exists

Proving market failure

View from the top

- There is an implicit consensus amongst senior decision makers that:
 - = There is no real substantive market failure in the IT-telecoms sector – after all its one of the most dynamic, fast moving, globally competitive sectors of all
 - = And that other sectors/policy areas are subject to much greater market failure and hence require attention first
- Any complaints from the regions are more to do with:
 - = Impatience – be patient, we are at the beginning of broadband deployment curve – take a 20-year view
 - = Inequality – remote/deprived areas/regions argument
- Conclusion....none of this comes anywhere near providing justification for Government to pile billions into broadband deployment, and in so doing undo 20 years of deregulation and market building
- **Implication – small scale pilots are OK but intervention to deploy large-scale networks are not**

Market failure

Shifting consensus

- Evidence from approvals:
 - = e.g. South Yorkshire Digital Region
- Evidence from policy:
 - = Caio
 - = Ofcom
 - = Digital Britain
- Credit crunch/recession
- Interpretation on the ground
 - = Market is/will continue to invest
 - = But will fall way short of NGA required to optimise economy
- **Two broad options**
 - = **Let market cherry pick and public sector picks up bill for filling the gap**
 - = **Seek area-wide solution involving market, and therefore cross-subsidy**

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5) Options appraisal

- Ideal: 3–5 genuine options rather than retrofit
- Two level appraisal process:
 - = High level arriving at broad preferred option
 - = Preferred option variants
- Components of an NGA deployment option:
 - = Spec – deliverables
 - = Procurement and funding
 - = Operation
- Objectives of options appraisal:
 - = Impact – maximise
 - = Competition – maximise/not limit or distort
 - = VfM – maximise

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6) Arriving at the preferred option

- A robust, evidence-based business case that is fully appraisal ready:
 - = Specification – what it will deliver & when
 - = How procured
 - = How funded
 - = How operated and managed
 - = State aid and competition compliant
 - = *Net* additional economic impact
 - = VfM
 - = Risk and mitigation

Panel discussion

- Three topics:
 1. Proving demand/impact of NGA
 2. Demonstrating market failure
 3. Intervention options – maximising the objectives

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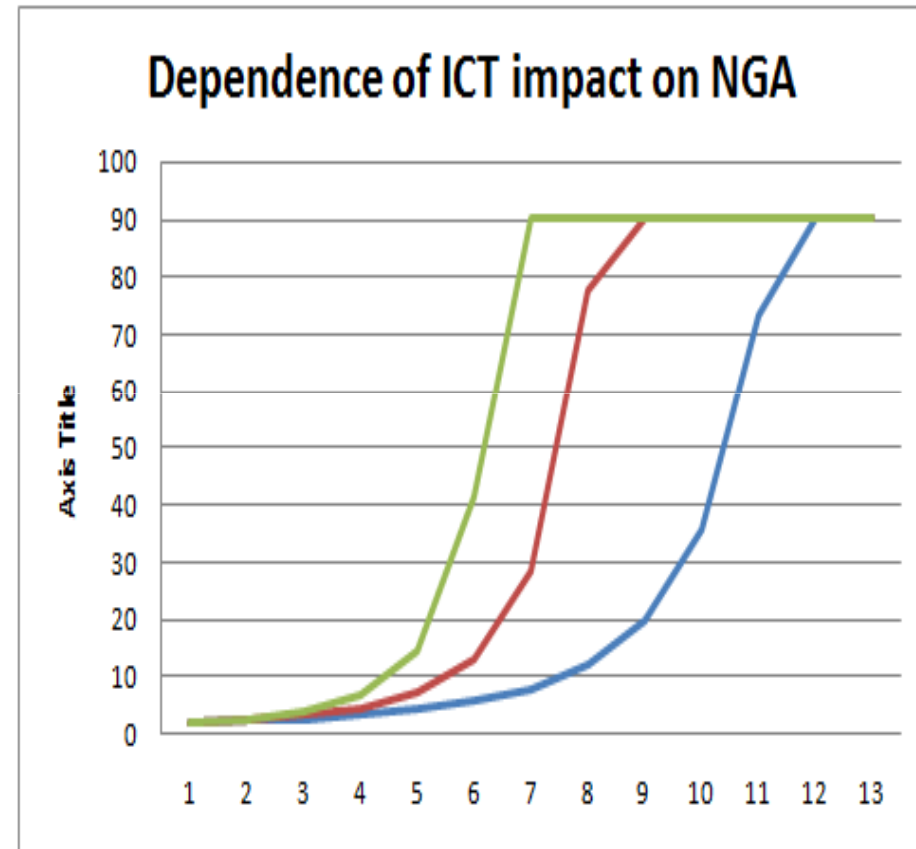
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Discussion topic 1

Proving demand/impact of NGA

Methods

- Top-down
 - = Attributing regional ICT economic impact
- Bottom-up
 - = Evaluations of early deployments
 - = Firms' needs – consultation/surveys



Discussion topic 2

Demonstrating market failure

- Not about the market now but likely state in medium to long-term
- Interpretation on the ground:
 - = Market is/will continue to invest
 - = But will fall way short of NGA required to optimise economy
- **Two broad options:**
 - = **Let market cherry pick and public sector picks up bill for filling the gap**
 - = **Seek area-wide solution that involves market, thereby allowing cross-subsidy**

Discussion topic 3

Options appraisal – maximising objectives

- Maximise economic impact:
 - = Near ubiquitous coverage:
 - 50 %/70 %/90 % businesses and households?
 - = Sooner rather than later:
 - Early-mover advantage (e.g. Sweden?)
- Maximise market/competition and private investment:
 - = Through procurement:
 - Service Level OJEU...or
 - Investment vehicle – some form of PPP/SPV/Fibre Co
 - = Through operation:
 - Open access wholesale network, optimising retail competition
- Maximise VfM for public purse:
 - = Leverage private sector (and community) investment
 - = Optimise public sector savings – connectivity budgets + operational
 - = Withdraw when market working
 - = Maximise impact/benefits through complementary interventions