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Models and Solutions for Financing Broadband in Public and Private Sectors

Nick Flitterman

Head of Telecoms

Portland Advisers



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Key messages



Raising finance for the investment in communication infrastructure projects is a key challenge to the successful implementation of the European economic policies

- The rollout of next generation communications infrastructure is critical to economic growth
- Governments and regional authorities in economies around the world are in the process of meeting this challenge head on
- With significant demand, an increasingly innovative society and a wealth of resources, European nations are ripe for investment in world-class 21st century technology
- Several procurement and funding options have been utilised by Governments to optimise use of public and private sector funds and skillsets



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Benefits of World Class Broadband Infrastructure



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Benefits are high-speed connectivity are real and abundant



“**7 percent increase in broadband** adoption would create **2.4 million jobs** across the USA, would **save \$662 million in health-care costs** and **\$6.4 billion in vehicle mileage**, among other savings”

Study by Connected Nation, 21 February 2008, *USA*

“Broadband will **add 2-3 per cent** to the **country’s GDP** – worth around **NZ\$2 billion annually**”

“New Zealand – Broadband Economy”, Paul Budde Communications, *NZ*

“The advancement of broadband has become a **high national priority in the UK**.... in 2015 broadband will boost productivity by **0.5-2.5 per cent** and **increase GDP by GBP22 billion** whatever the economic climate.”

It is estimated that the BcN will boost the economy by some **A\$100 billion** and **create 370,000 jobs by 2010**.

Ministry of Information & Communication, *South Korea*

“**Next generation broadband** could produce economic benefits of **AUD\$12-30 billion per annum** to Australia”

Federal Government-sponsored Broadband Advisory Group, *Australia*

“Broadband may add **1.2 per cent to GNP** over **20 years**”

Information Society on Broadband, *Ireland*



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Private participation in infrastructure projects



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Investment in infrastructure projects : Public or private ?



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Public sector is used to natural monopoly, whilst private sector is used to competition. They have thus both developed very different skillsets

It makes sense for Private sector participation in infrastructure projects to be promoted

Public sector limitations

- Focus on “natural monopoly” infrastructure has :
 - Limited quality of services provided (lack of emulation)
 - Created severe pressure on Public budgets
- Concerns on :
 - Capacity to improve services
 - Capacity to continue to fund projects independently

Private sector skills

- Increased focus on end user satisfaction
- Increased investment efficiency (cost management)
- Increased service quality & efficiency, hence profits
- Access to infrastructure financing
- Increased investment capacity

Change in the role of Governments in providing infrastructure

Shift from “Owning and Operating” to “Regulating infrastructure projects provided by the private sector”, where :

- Private sector participation can be optimised
- Structuring, funding, and contractual arrangements are complex
- Risks are allocated to the party that is best able to deal with them
- Efficiency in selection processes has become critical

Why promote private sector participation in infrastructure projects ?



Private participation in infrastructure has many advantages

- Private participation in infrastructure brings
 - clear benefits to customers
 - creates valuable investment opportunities for the private sector and
 - frees public resources for other social uses
- Compensating for limitations or unavailability of public or local authority funding (and allowing governments not to resort to tax)
- Accelerating overall economic growth
- Improving performance and end-user satisfaction
- Sharing commercial risk with the private sector






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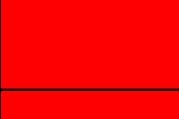
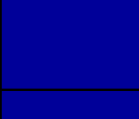

















Possible approaches & funding for broadband infrastructure and operations

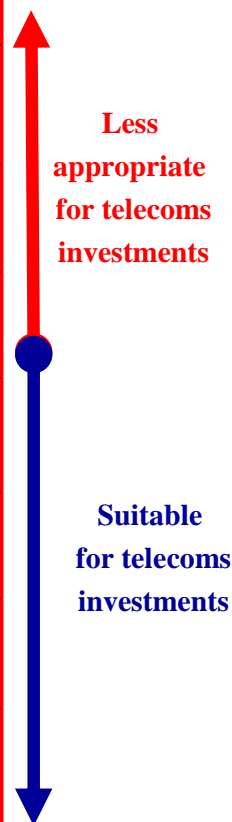


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Private sector participation in infrastructure takes different forms

	Public sector solely responsible
	Shared responsibility
	Private sector solely responsible

	Asset Ownership	O & M	Capital investment	Commercial risk	Contract duration
Service Contract		Public or Private			1-2 years
Management contract					3-5 years
Lease			Public or Private		8-15 years
Concession					25-30 years
PPP – JV					N/A
BOT – BOOT					2-30 years
Divestment					No limit (unless license)



Suitable access to funding for private telecom infrastructure



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The characteristics of Communications Infrastructure credit make it potentially well suited to an Infrastructure / Project Finance approach as they meet key financing criteria

Barriers to entry

- Fixed telecoms infrastructure investment generally provides quasi-monopoly position on part of the service offering (broadband, ...) with high barriers to entry
- Strong customer relationship / competitive position

Predictable and stable cashflows

- Predictable revenues / long-term contracts
- Low customer volatility / low client solvency risk
- High cash generation (high EBITDA margins)
- High capital intensity business with predominantly fixed cost and foreseeable capital / maintenance costs
- Little to no execution risk (either during roll-out or in terms of maintenance)

Sustainability

- Positive market fundamentals in telecoms/broadband + revenue growth prospects (including new products and diversification)
- Stable and diversified revenue base (end users/public)
- Long term / "Indefinite" operating rights – low technology risk in fibre networks
- Availability of experienced management and staff in Europe

Strategic asset

- "Public good" characteristics
- Predictable regulatory environment



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Broadband Infrastructure case studies

- Glasvezernet Amsterdam
- Singapore NGN Project
- Irish MANs
- Welsh FibreSpeed Project



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Glasvezelnet Amsterdam BV (GNA)



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GNA is deploying a citywide fiber-to-the-home network to ensure a wide open marketplace for innovative service-providers

Public entities act as private investors through a separate entity with specific financing.

Summary

- The Amsterdam City Council instigated the construction of a FTTH network. Various options were investigated, with a view to limiting public funding. This led to the creation of Glasvezelnet Amsterdam BV (GNA), now the legal owner of the FTTH network
- GNA's equity is equally shared between 3 shareholder groups :
 - The Amsterdam Municipality
 - 5 Housing corporations
 - Private investors
- Public entities act as private investors, with no state aid (no subsidies and no guarantees), as shareholders invest under the same conditions with an acceptable risk/reward-relationship
- Housing corporations create real estate value, as the investment to connect their property to the local loop becomes cheaper, easier and profitable

The logo for Glasvezel Amsterdam, featuring the text "Glasvezel" in white on a blue rounded rectangle, with "AMSTERDAM" in white on a darker blue rounded rectangle below it, and a small "nl" to the right.

Glasvezel
AMSTERDAM nl

Glasvezelnet Amsterdam BV (GNA)



The fiber network delivers an innovative and freely accessible infrastructure, suitable to support growth in demand for the next 30 years or more

The GNA network is structured in three separate layers

- Infrastructure: GNA commissions the construction of the passive network and own the fiber infrastructure in the local loop. "Smart digging", like laying cables together with utilities will be used as much as possible. Selection process based on the economically most favorable offer
- Exploitation: a wholesale provider who rents the infrastructure from GNA activates the local loop. Selection process based on the economically most favorable offer
- Services: The network is as open as possible (within practical and economical limitations) for service providers: commercial, non-profit, public services, large or small, traditional or very innovative. The service providers are able to purchase transport capacity at non-discriminatory conditions to deliver services to their customers



Singapore Next Generation Network



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The NGN represents a key component of the Governments plan to place Singapore at the heart of communications in the region

Summary

- Combination of ultra high-speed Next Generation Network (NBN) and the Wireless Broadband Network (WBN).
- Intended to entrench Singapore's Infocomm hub status and open doors to new economic opportunities, business growth and social vibrancy for the country.
- Capable of ultra high speeds of symmetric 1 Gbps or more, with initial provisioning of 100 Mbps to over 95% of the country
- It also opens the door for players from the entire telecommunications value chain to participate in Singapore's enlarged broadband market
 - hardware providers
 - systems solution integrators
 - vendors; and
 - content players

The logo for iDA SINGAPORE, with 'iDA' in a large, bold font and 'SINGAPORE' in a smaller font below it, all within a white rectangular box.

iDA
SINGAPORE

Singapore Next Generation Network



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The PPP approach has been adopted by the Government to optimise private sector involvement and best practice

Procurement & Funding

- The Government adopted a public-private partnership (“PPP”) approach. This means:
 - the private sector is expected to build, own and operate the network for a period of 15 years
 - the Government will provide minimal funding to kick-start the project
 - the Government will ensure viability, affordability and long-term sustainability
- The PPP concession for the Network Infrastructure (“NetCo”) for was awarded to the OpenNet Consortium, led by Singtel, in September 2008
- The PPP concession for deploying the active network elements (routers, switches) and providing wholesale broadband services to retail service providers (“OpCo”) was awarded to Nucleus Connect, a wholly owned subsidiary of Starhub Pte Ltd in April 2009

LINK: <http://www.itu.int/osg/spu/ngn/documents/NGNII-Factsheet-060303-Singapore.pdf>

Irish “MANs” Project



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The Irish Government has **recognised** that the market failed to respond to the demand

Summary

- The Irish Government is building and funding
 - open, carrier-neutral, fibre-optic networks (“Metropolitan Area Networks”)
 - in over 120 towns (27 built out to date)
 - where such infrastructure is not supplied by market players.
- The key elements of the project include:
 - Fibre optic ring(s) encircling town
 - Connects business and public sector
 - Provides high-speed internet connectivity to customer premises
 - Linked to national/international backbone
- MANs are publicly owned, while allowing all telecommunication operators open access to the networks.
- Procured by Government/Local Authorities, but managed by private sector service company through a “Concession”



Irish “MANs” Project



“The provision of broadband is a matter for private sector companies in a liberalised market” – Irish Government

Managed Service Contract

- Networks managed by e-Net, a neutral management services from the private sector, who has a 15 year services concession contract
- Concession applies strict performance criteria to payments
- Contract is a balance between Government economic development objectives and e-Net commercial objectives
- e-Net offers its cost-effective interconnection services to telecommunications companies, who will provide high-speed electronic communications services to end users.
- Open networks will enable all operators to offer high-speed broadband services to businesses and citizens in the towns concerned.
- The project will boost competition and promote broadband in areas which would otherwise miss out



LINK: <http://www.enet.ie/>

Welsh FibreSpeed Project



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FibreSpeed will be an open access network, delivering world-class next-generation broadband infrastructure across the whole of Wales

Summary

- The Welsh Development Agency is procuring a Next Generation Network in line with its strategic objectives
- The network will be open access and technology neutral.
- Will act as a catalyst for economic development across Wales.
- The network will meet the developing bandwidth requirements of users at retail prices on a par with the most competitive parts of the UK
- The network will offer a range of wholesale products to service providers on an equitable, non-discriminatory and fully transparent basis
- Through conventional procurement the Welsh Assembly will purchase assets and services from bidders, in a similar way to the Irish MAN model.

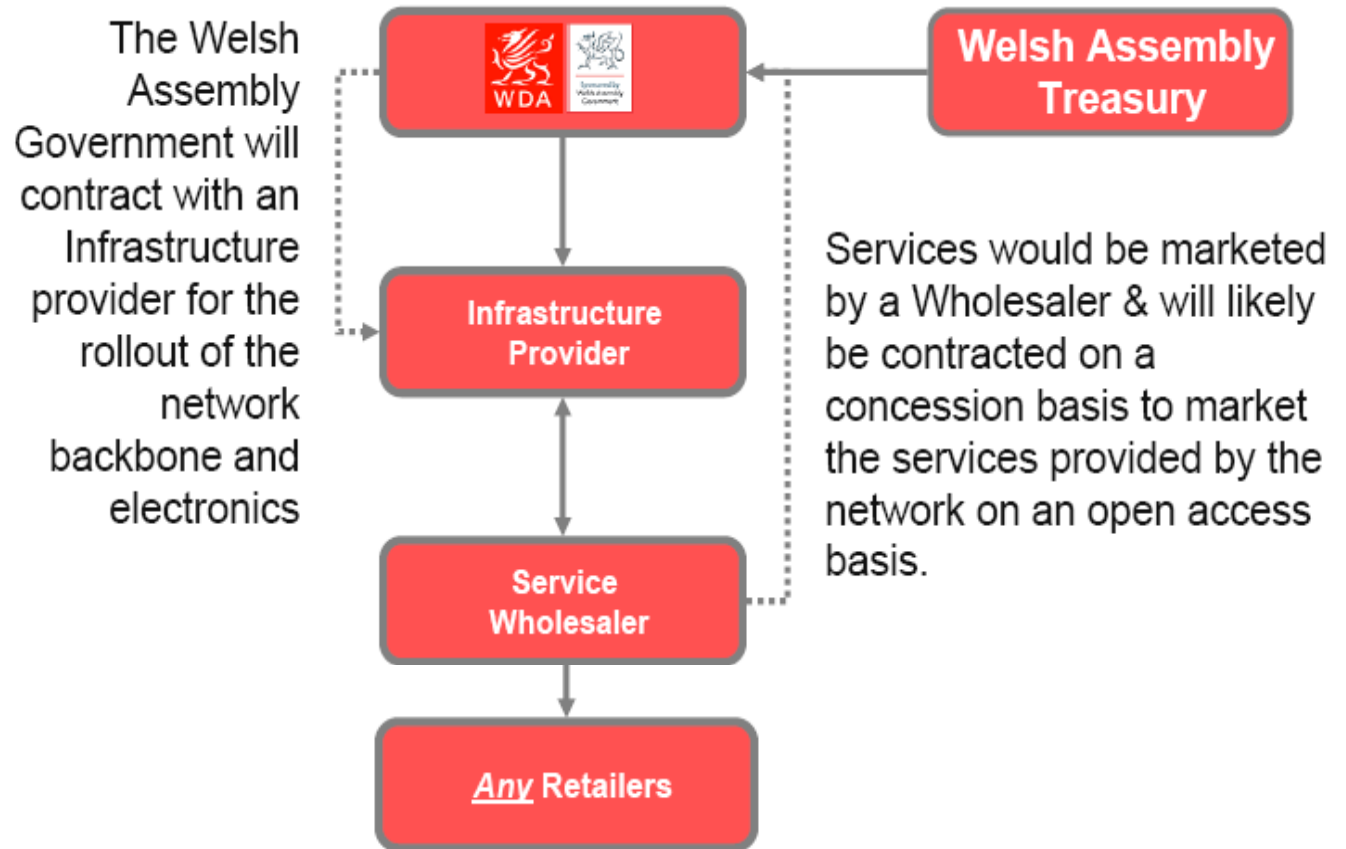
The logo for FibreSpeed, featuring the text "FibreSpeed" in a bold, sans-serif font, with a red square icon containing a white grid pattern to its right. Below the main text, the tagline "Open Access Networks for Wales" is written in a smaller, lighter font.

FibreSpeed
Open Access Networks for Wales

Welsh Fibrespeed



Contractual Structure



<http://www.fibrespeed.co.uk/en/>

Conclusion



- There is clear recognition of the need and benefits of deploying a world class communications infrastructure as a means of supporting economic growth
- There are several procurement and funding options to consider
- There is plenty of precedent to select the optimal solution for individual countries and regions based on key objectives of public and private sector stakeholders
- Future proofing will be critical to driving value from a sizeable investment in the infrastructure
- The highly experienced professionals at Portland Advisers have a strong track record of providing tailored, incisive advice to public and private sector entities seeking to select, procure and/or supply optimal next generation broadband solutions

Thank You

Contact



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NICK FLITTERMAN

T: +44 (0)20 7183 8385

M: +44 (0)7973 481330

14 - 16 GREAT PORTLAND STREET
LONDON W1W 8QW

E: NICK.FLITTERMAN@PORTLANDADVISERS.COM

WWW.PORTLANDADVISERS.COM

