Broadband

Scientific Association of Infocommunications
Presentation

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National Development Plan 2007 - 2013

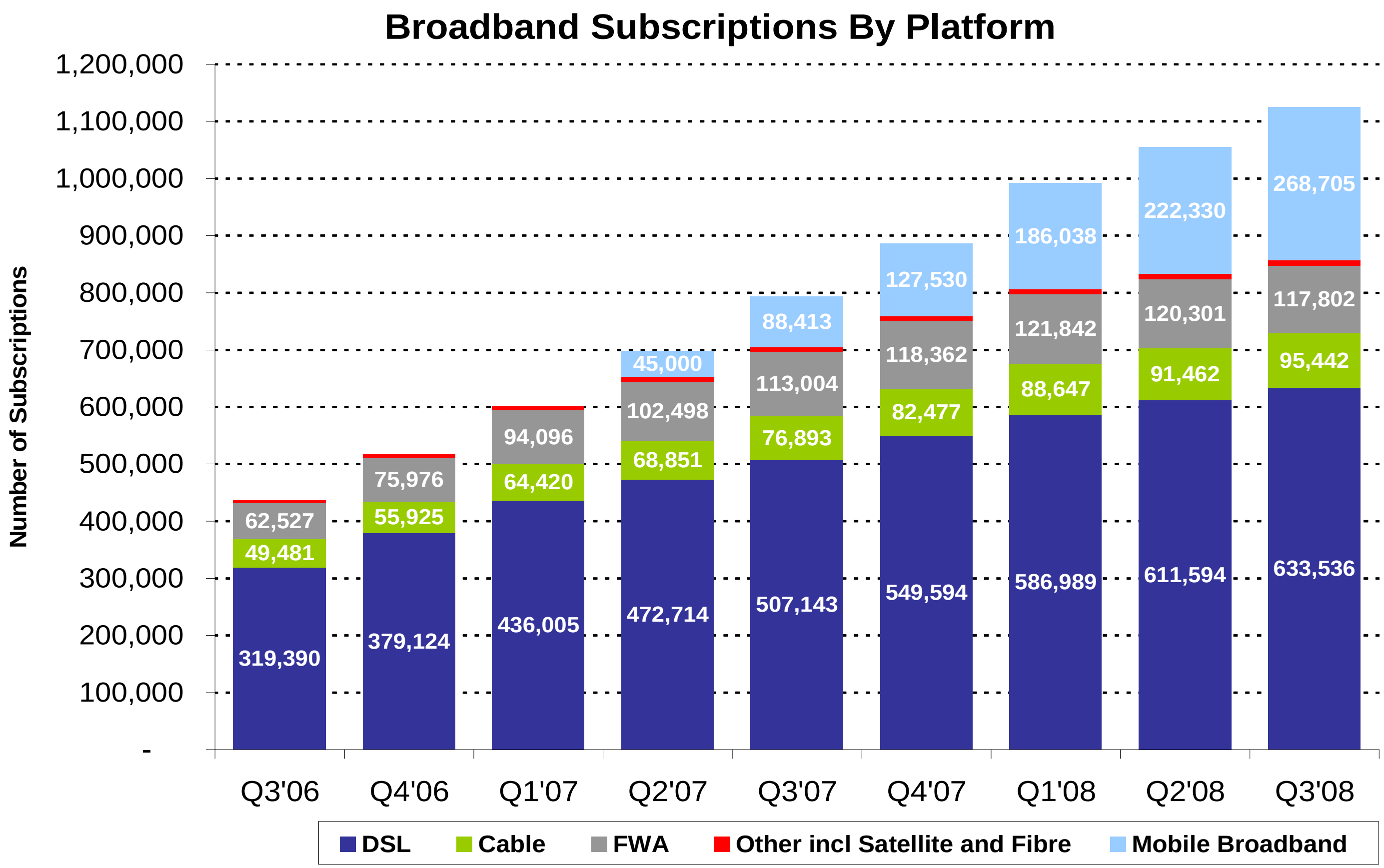
Lessons from Ireland

- Broadband in Ireland
- Some suggestions on:
  - Broadband Availability
  - Broadband Speeds
- Next Generation Networks – Policy

Broadband in Ireland

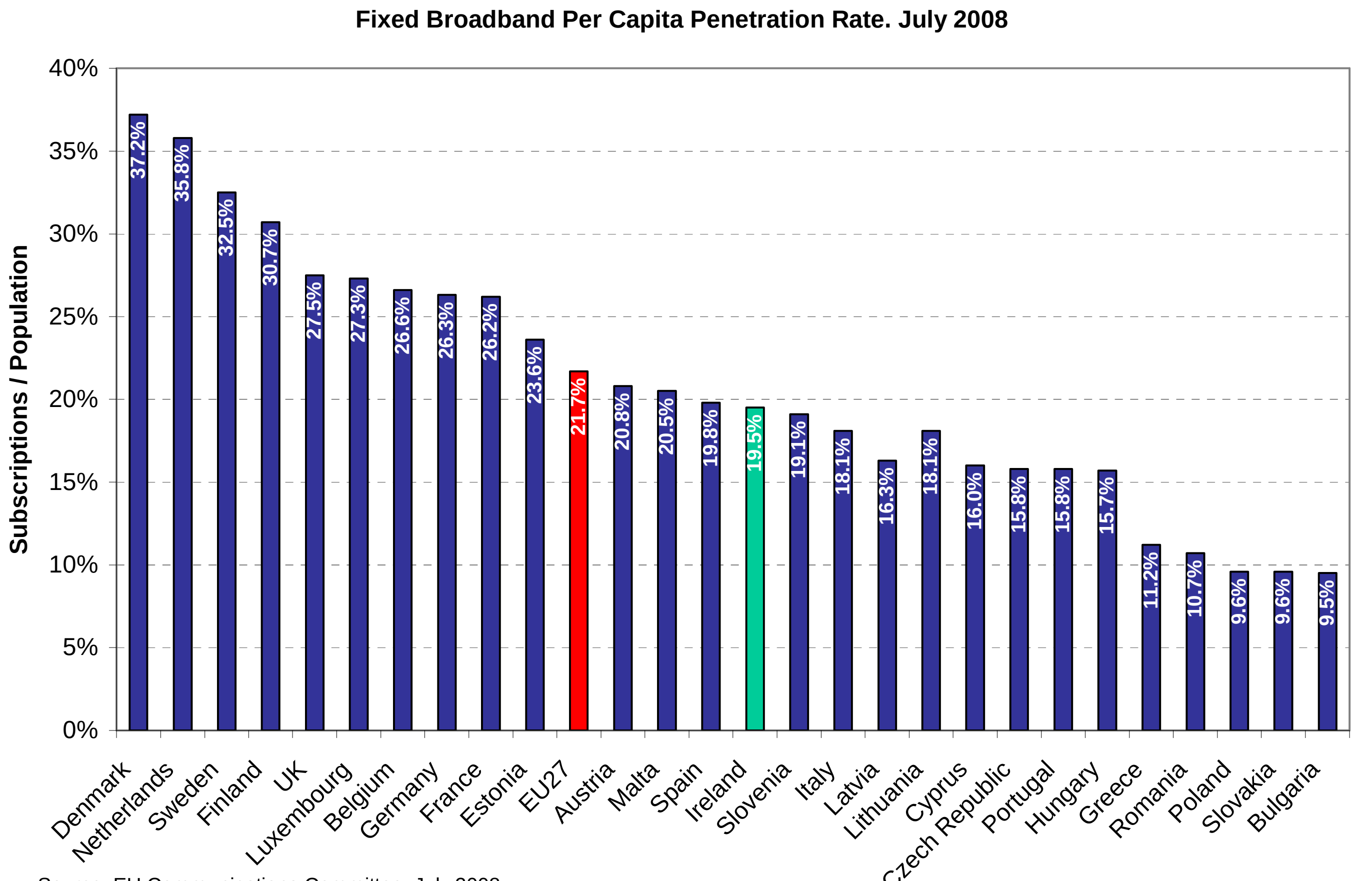
- September 2008 – 1.125m subscribers (1.537m households)
- 25.9 subscribers per 100 population (19.7 excluding mobile)
- Does not mean that only 25.9% of population have broadband
- 59% of households (Q3 2008)
- Household broadband growth since 2006
  - 13% in 2006
  - 45% in 2007
  - 59% at end Q3 2008
  - >60% now

Broadband Growth in Ireland



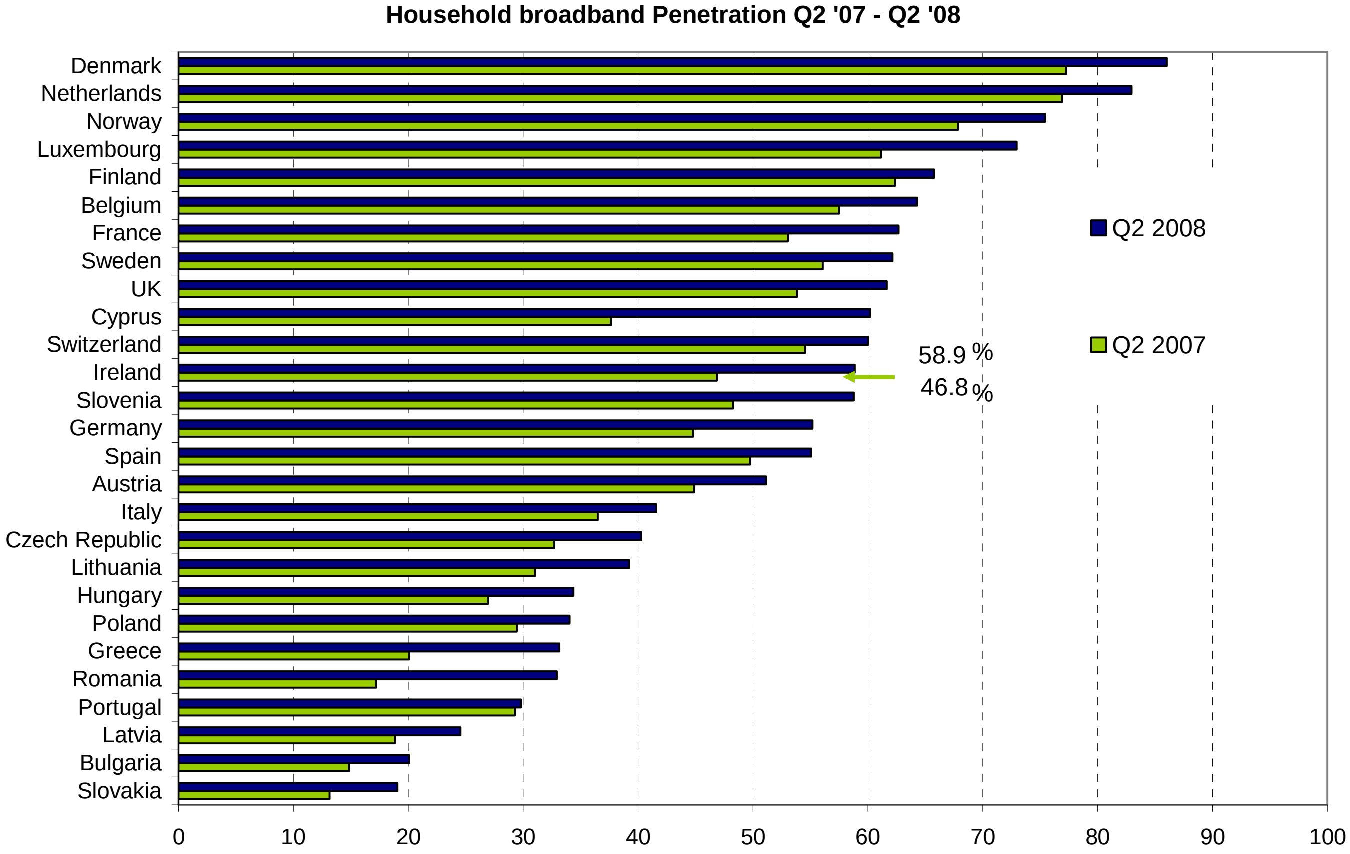
Source: Quarterly Key Data Questionnaire

EU 27 Broadband Table



Source: EU Communications Committee, July 2008

Household Penetration



Source: Informa UK Ltd. 2008, World Broadband Information Service, all rights reserved

National Development Plan 2007 - 2013

Broadband Availability

- Backbone Networks (2000-2003)
  - Various operators received funding (backhaul, DSL)
- Metropolitan Area Networks (2002-2009)
  - Open access, fibre networks
  - When announced, incumbent reacted (rolled out DSL)
  - Crucial for Foreign Direct Investment
- Group Broadband Schemes (2004-2007)
  - Grant: small community / service provider
- National Broadband Scheme (2009)
  - Unserved areas guaranteed broadband

NDP Broadband Presentation

NBS

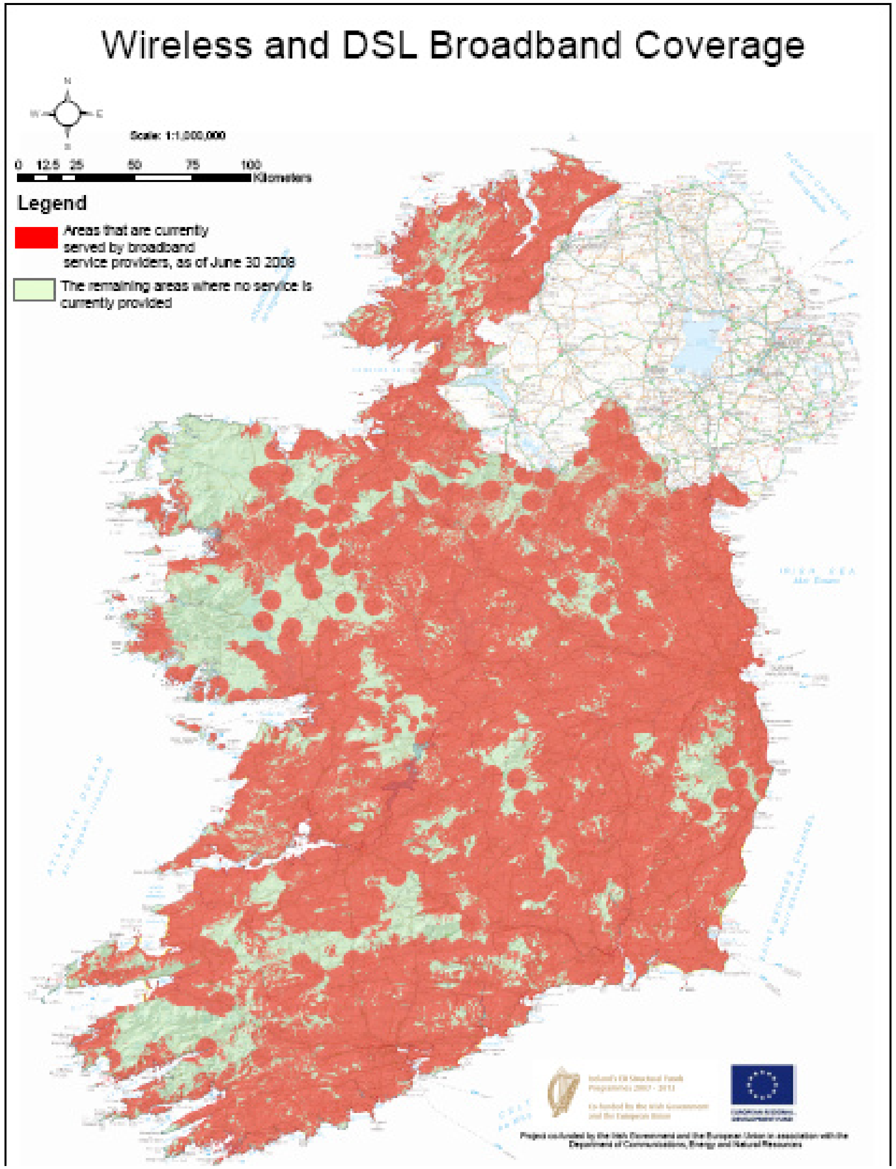
NATIONAL BROADBAND SCHEME

National Broadband Scheme

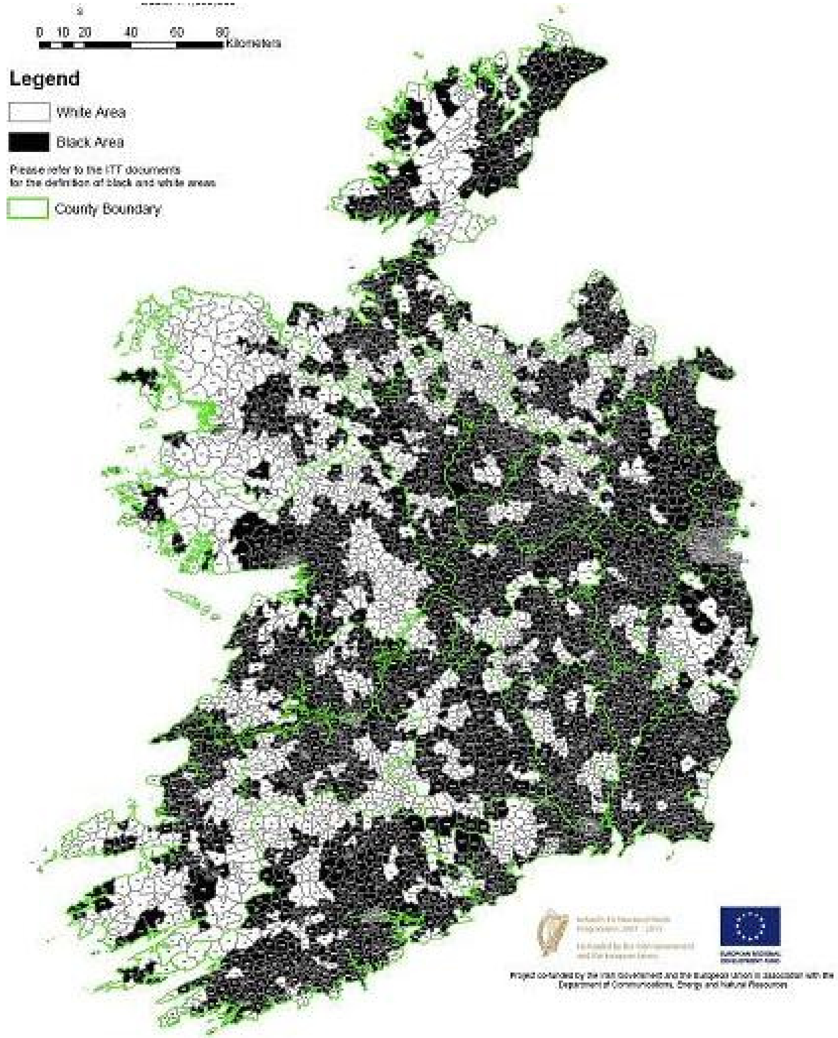
- 3, a Hutchison Whampoa company, won the contract

- Key Points
  - Unserved areas identified / mapped by Electoral Divisions (EDs)
  - A service must be provided in unserved EDs
  - Other service providers can wholesale 3's service
  - Committed to 15% completion by June, 100% by Sept 2010
  - Starts off with 1.2mbps at 36:1, finishes with 2.3mbps at 18:1
  - Speeds of up to 10mbps will be possible at contract end

- Every part of Ireland will have broadband by end 2010


Wireless and DSL Broadband Coverage
N
W
E
S
Scale: 1:1,000,000
0 12.5 25 50 75 100
Kilometers
Legend
Areas that are currently served by broadband service providers, as of June 30 2008
The remaining areas where no service is currently provided

NBS ED map


0 10 20 40 60 80
Kilometers
Legend
White Area
Black Area
Please refer to the ITT documents
for the definition of black and white areas
County Boundary

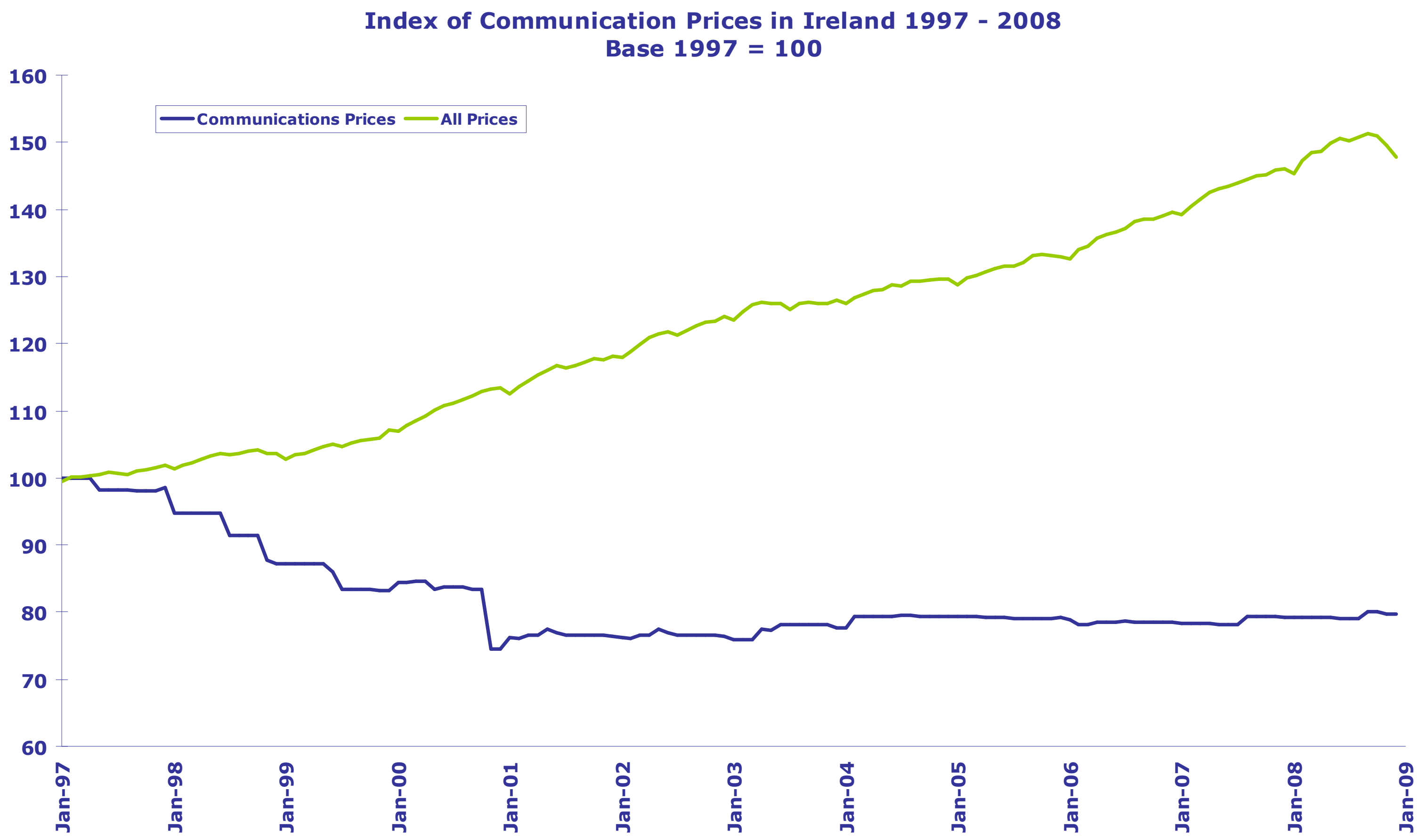
Metropolitan Area Networks Lessons

- 92 towns have a MAN
- Cost €170m
- Main lessons:
  - The incumbent will react -
    - Before: (a) oppose the plan and (b) roll out broadband
    - After: (a) continue to oppose and (b) not use open access networks
  - Other competitors will use them for backhaul
  - They are crucial for Foreign Direct Investment (resilience)
  - Competitors will not connect directly to homes/businesses
  - Cost of direct connections to home/businesses prohibitive
  - Will play a part in NGNs

Broadband Availability

- Open Access (MANs) or Direct Procurement (NBS):
  - Which is the better approach?
  - Both have merits
- To guarantee availability, procure a service
  - NBS guarantees broadband rollout
- Open access networks
  - facilitate competition
  - motivate incumbents
  - crucial for foreign direct investment

Telecoms Price Levels



Market Improvements since 2002

Communications Market 2002	Communications Market 2008
•3,000 – 4,000 broadband customers •Cable operator in serious financial trouble •2 mobile phone operators	•1,125,000 broadband customers •Cable operator investing heavily •Other operators across all platforms investing heavily •4 mobile phone providers •4 mobile operators offering broadband •MANs in 92 towns •National backbone networks from ESBT, BT and eircom •NBS: broadband everywhere by next year •Regulator with stronger enforcement powers •Prices, in real terms, have not risen
Why the improvement? •Competition in voice market from mobile operators •Competition in broadband market from cable, wireless, mobile, and fibre operators •Competition in quality / speed (cable response to mobile was extra speed) •Investment certainty from government policy •Facilitate competition through open access infrastructure •Facilitate competition through open competition for service with wholesale access	

What Next for Ireland?
Next Generation Broadband

- Draft Consultation Paper
  - critiqued by International Advisory Forum
  - discussed at stakeholder Forum
    - positive feedback, all bases covered
- Objective
  - framework for evolution to high speed broadband
  - identify the optimal government policy position
- Proposed Policy Actions
  - National Development Plan (2007-13) funding of €435m
  - Broadband everywhere by 2010, competitive speeds by 2012
  - 100mbps for post-primary schools
  - Access to State assets to facilitate backhaul provision
  - Open access fibre install for new buildings
  - Facilitative regulatory environment

NGB – Overall Goal

- **Private sector**
  - fund required investment (as in Europe and America)
- **Government**
  - facilitate competition
    - ensure effective regulation
    - support private sector investment with targeted actions
- **Next steps**
  - publish final paper next month
    - Focus on facilitating competition

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Thank you

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