

Next Generation National Broadband Network for Singapore (Next Gen NBN)

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7 April 2008



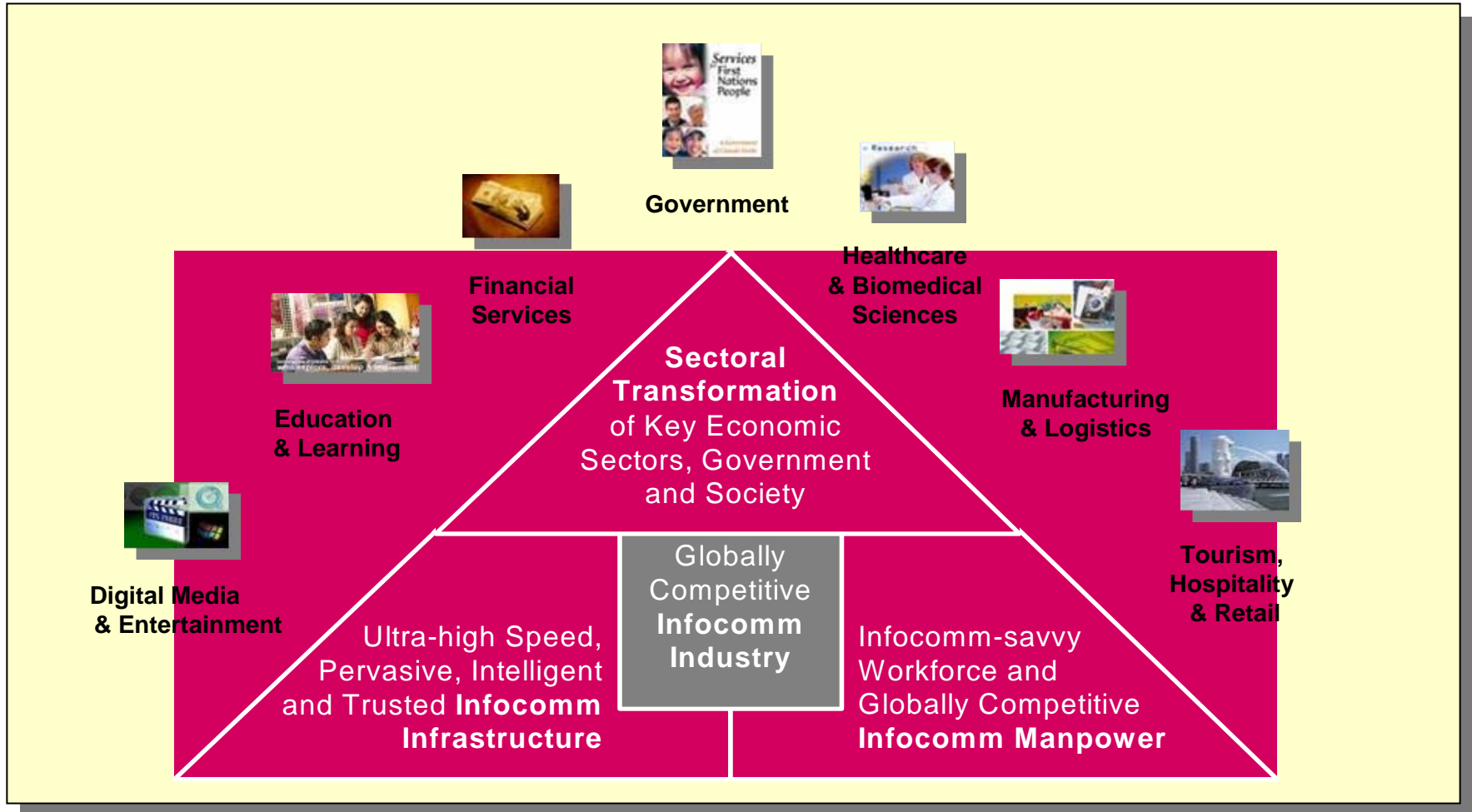
Outline of Presentation

- 1. Recap on Overview of iN2015 and Strategic Objectives of Next Gen NBN**
- 2. Update on Next Gen NBN Developments**
- 3. Next Gen NBN Industry Structure**
- 4. Key Next Gen NBN Project Parameters**
- 5. Procurement Process & Timeline**

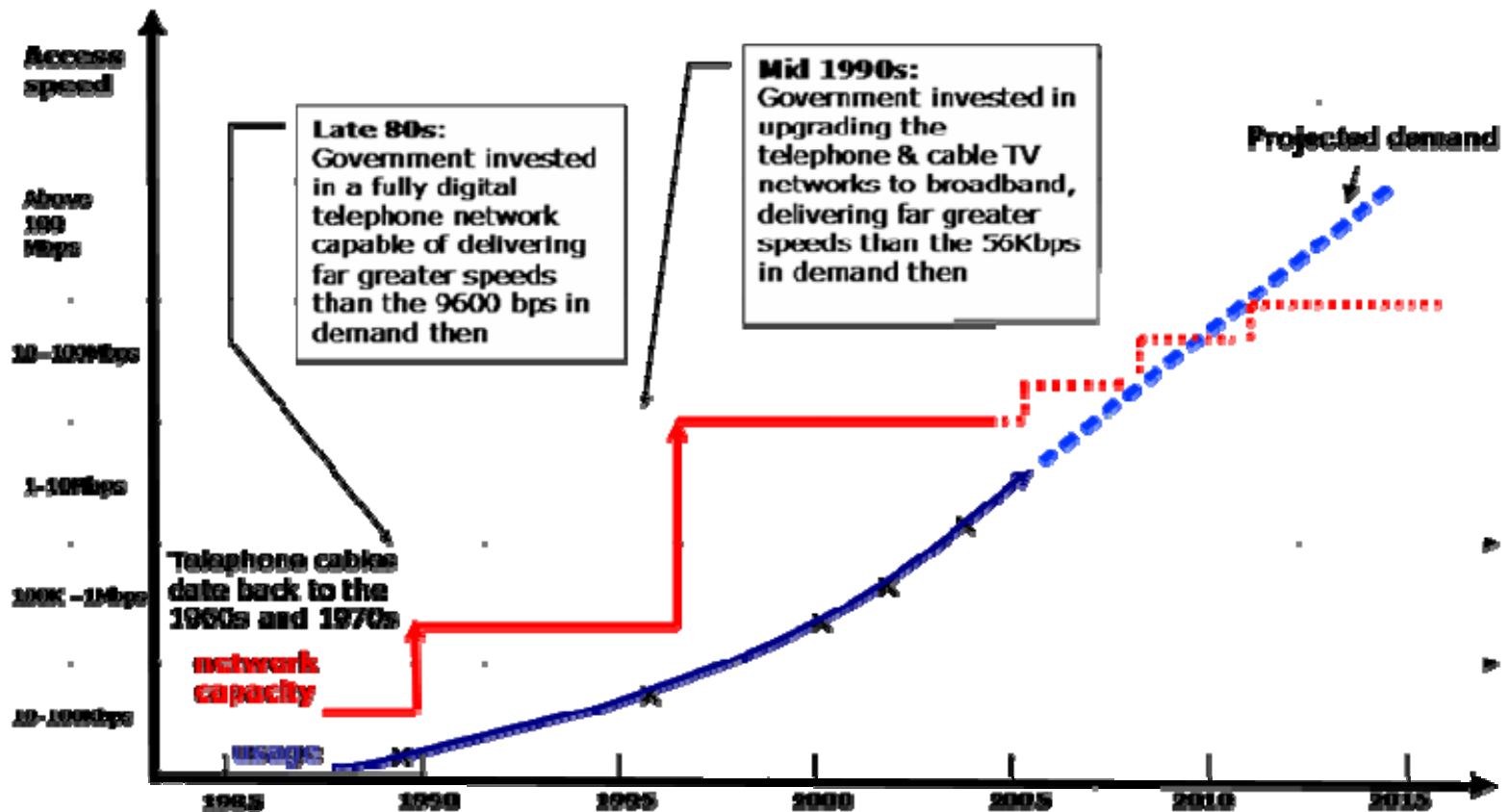
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Recap on Overview of iN2015 and Strategic Objectives of Next Gen NBN

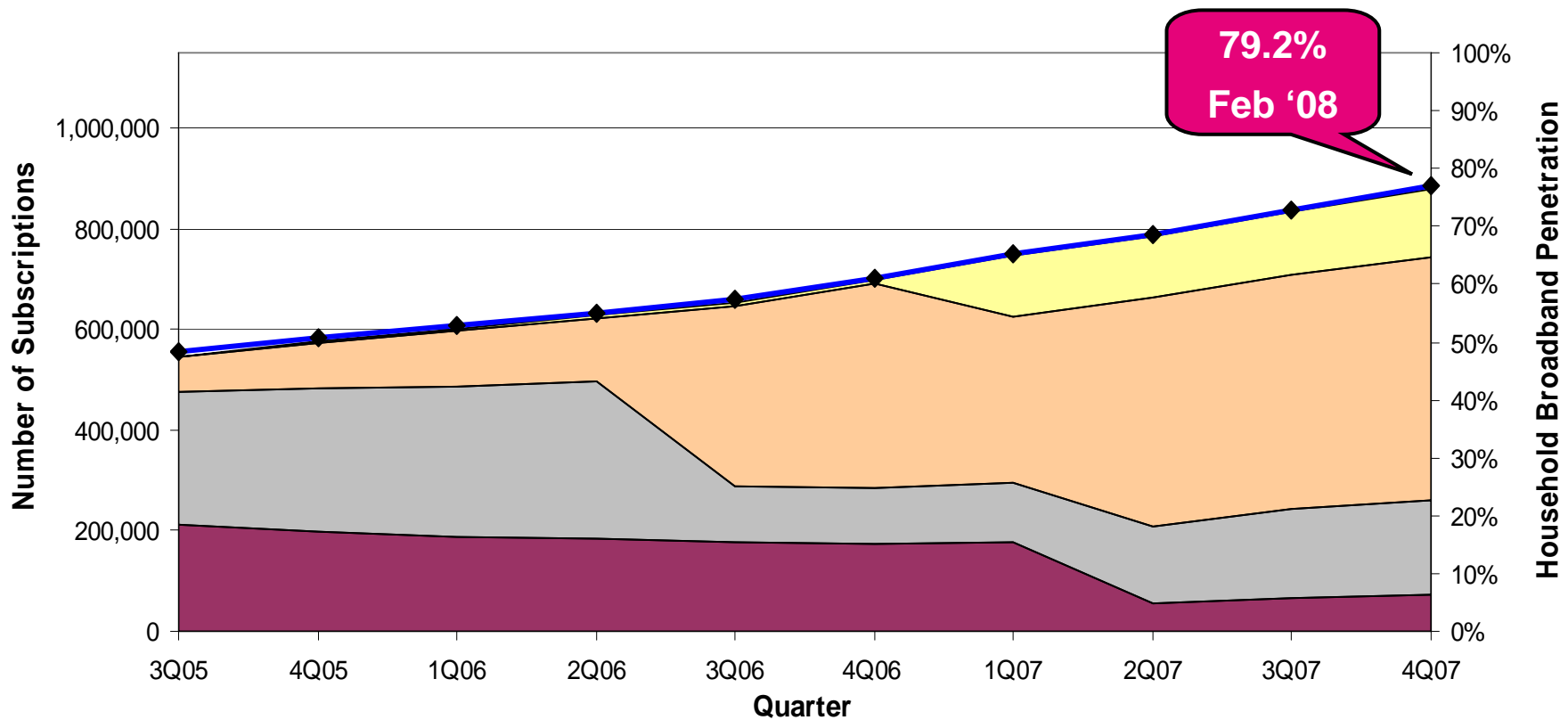
iN2015 Masterplan : Our Digital Vision for Singapore



Infrastructure leadership has been critical to Singapore's competitiveness



Increasing Demand for Broadband and Demand for Higher Speeds



256 to 512 Kbps (inclusive)
 > 512 Kbps to 2 Mbps
 > 2 Mbps to 10 Mbps
 > 10 Mbps
 Household Broadband Penetration

Mainstream Services Increasingly Offered Online

Working from Home



Online Banking



Online Travel Bookings



Online Shopping



Online Chatting



Online Job Search



Video Conferencing



Online Stock Trading



Global Collaboration



Filing e-Taxes



Online Gaming



E-mail



Online Healthcare



E-Learning



Video Streaming



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Update on Next Gen NBN Developments

Extensive Industry Consultation & Dialogue

Budget 2006 Speech
17 Feb 2006



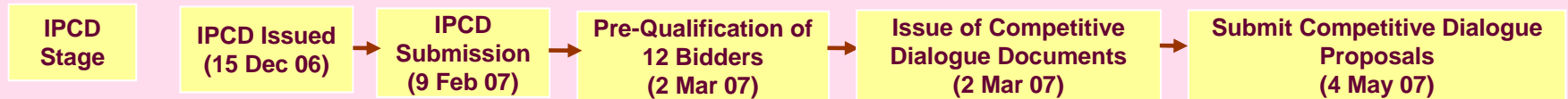
Committee of Supply
3 Mar 2006



Request for Concept (RFC)
Mar 2006

Competitive Dialogue

Invitation to Participate in Pre-Qualification and Competitive Dialogue (IPCD)

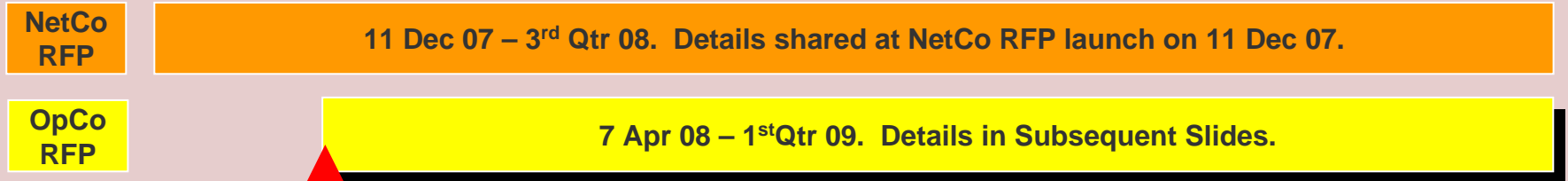


Competitive Dialogue



Request for Proposals (RFP)

Next Gen NBN RFP

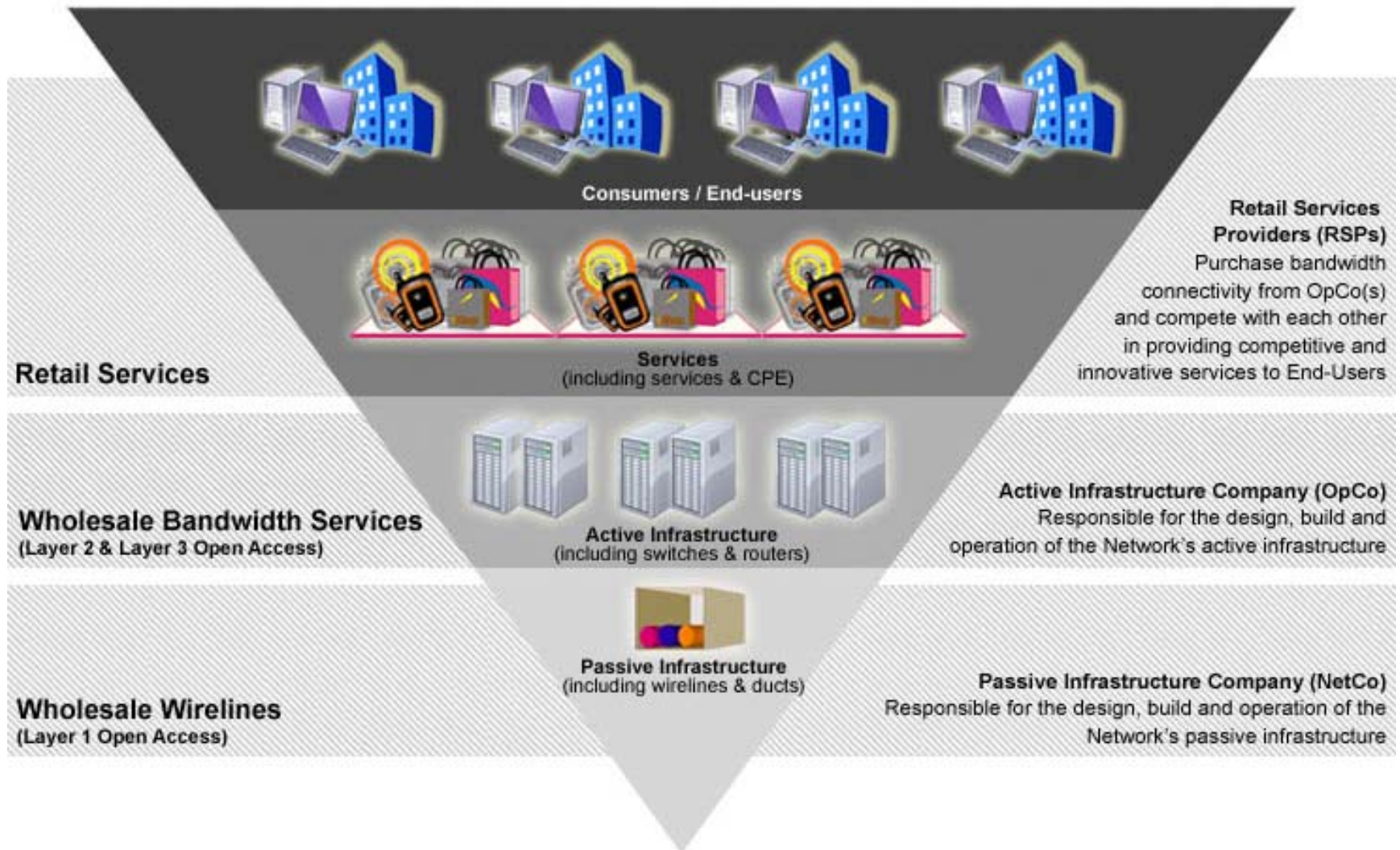


We are here

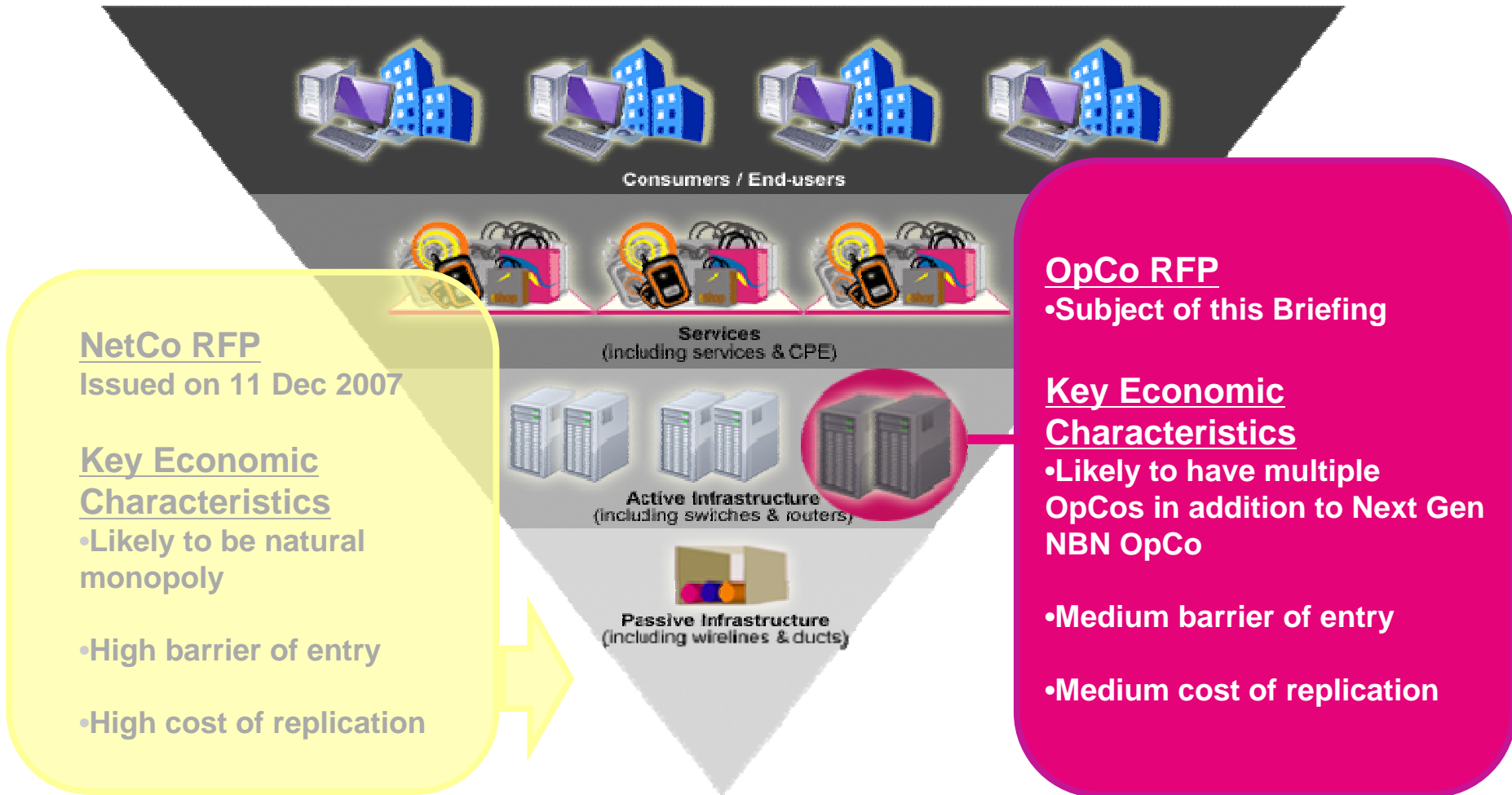
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Next Gen NBN Industry Structure

Next Gen NBN Industry Layers



Key Economic Characteristics of Next Gen NBN Industry Layers



Types of Separation Considered Between Upstream and Downstream Operators to Achieve Effective Open Access

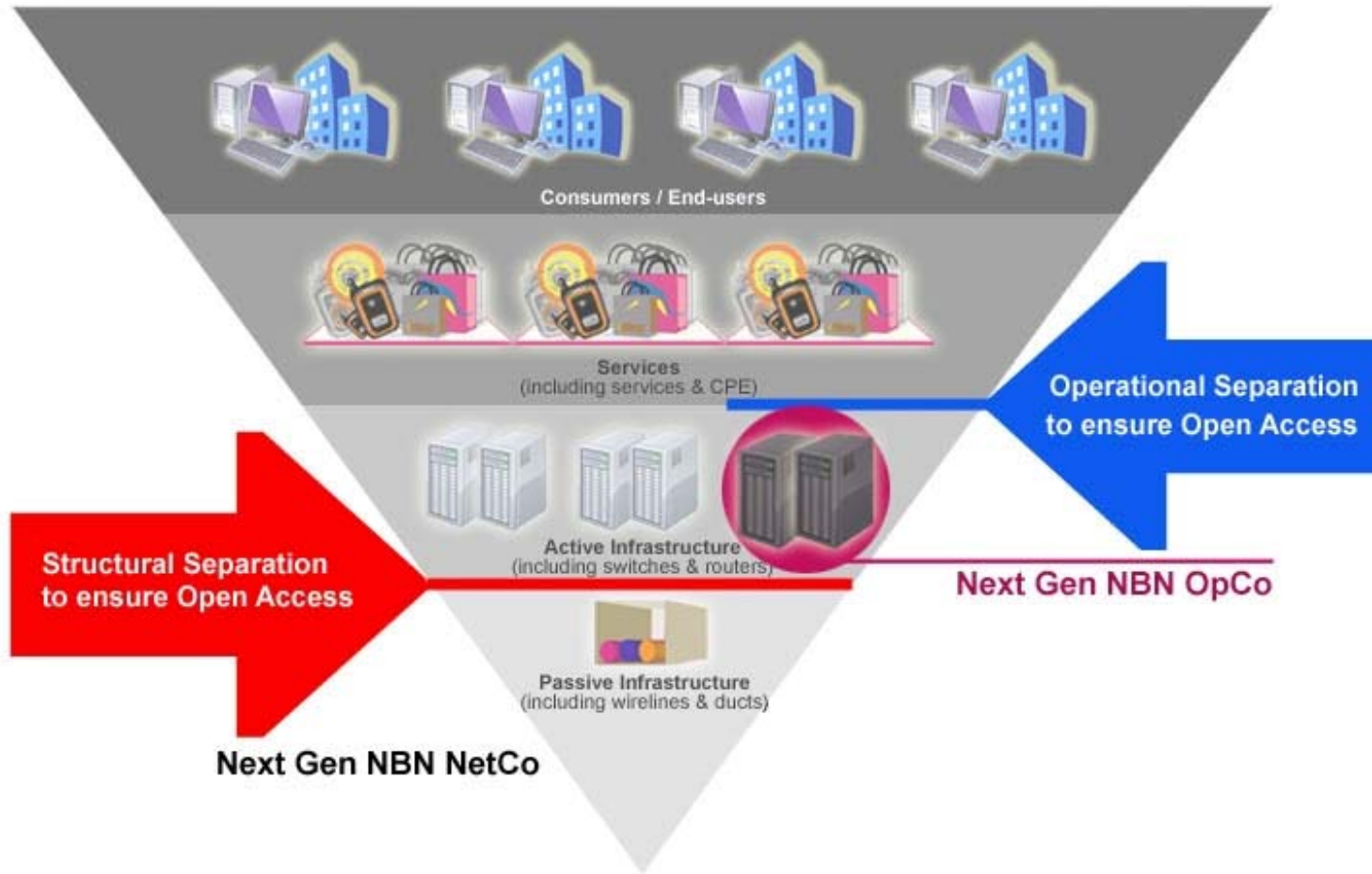
Structural Separation

- Defined as “No Effective Control”
- Stricter form of separation
- For all intents and purposes, they are separate entities with fully autonomous decision-making considerations
- No Effective Control means that Entity A has no control over the management and major operating decisions of Entity B, and vice versa.
- One assessment factor is level of cross-shareholding, amongst others

Operational Separation

- Less stringent form of separation
- Allows the upstream entity to retain full shareholding ownership of its downstream operating units
- Required to set up a separate legal entity for its operations
- Provide Equivalence of Inputs to all downstream operators, i.e., provide services at the same prices and terms, with the same processes and information
- Shall be independent from its affiliated downstream operating units

Vibrant & Competitive Industry through Effective Open Access with Next Gen NBN Separation Requirements



Key Operational Separation Requirements for Next Gen NBN OpCo

Next Gen NBN OpCo shall be independent from its downstream affiliated operating units, including the following:

- **Operate in all respects on a standalone basis, separate from affiliated downstream operating units**
- **Be located in separate premises**
- **Independently formulate & make own decisions on its assets and commercial policy**
- **Not allow its affiliated downstream operating units to have unequal influence on the formulation of commercial policy, and access to commercial information or customer confidential information**
- **OpCo's Board of Directors, Management and employees not to have responsibilities in any Affiliated Operator**
- **All remuneration and incentive schemes for the OpCo's Board of Directors, Management and employees not to be linked to the performance of Affiliated Operator(s)**
- **Ensure compliance with Operational Separation Requirements through the maintenance of a comprehensive governance manual, monitoring against a set of Operational Separation Performance Indicators, & appropriate reporting to the Monitoring Board**

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Key Next Gen NBN Project Parameters

Key Licence Obligations & Targets of Next Gen NBN OpCo

NetCo RFP

Issued on 11 Dec 2007

Key NetCo Obligations

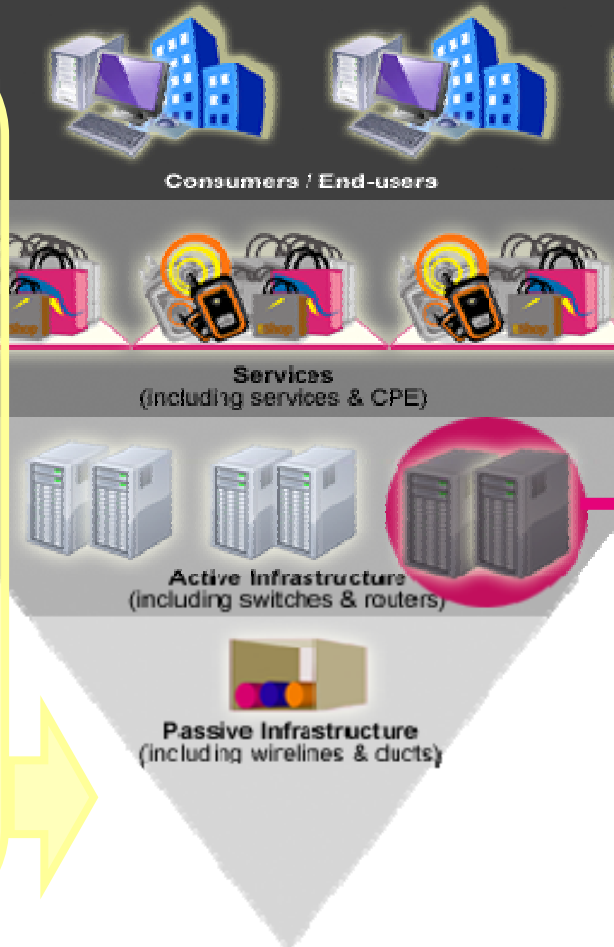
- Structural Separation
- Price Control via Interconnection Offer (ICO)
- Universal Service Obligation (USO)
- Licence period of 25 years

Key NetCo Targets

- Rollout Target
 - 50% by 2012
 - USO in 2015

Government Support

- Grant of up to \$750m



OpCo RFP

- Subject of this Briefing

Key OpCo Obligations

- Operational Separation
- Price Control via Interconnection Offer (ICO)
- Universal Service Obligation (USO)
- Licence period of 25 years

Key OpCo Targets

- Adoption target by 2015
 - 330,000 Residential subscribers
 - 80,000 Non-Residential subscribers

Government Support

- Grant of up to \$250m
- Catalyse further private sector investments
- Bring about NBN OpCo to fulfil above obligations and targets

Exciting Benefits End-Users Can Look Forward To



Key Evaluation Parameters for Next Gen NBN OpCo

Selection of OpCo Proposal to Generate Long Term, Sustainable, Competitive & Vibrant Broadband Market

Attractiveness of Wholesale ICO Price Terms to Industry (~45%)

Attractiveness of Non-Price ICO Terms to Industry (~25%)

Quality of Network Infrastructure (~15%)

Level of Government Grant (~15%)

Business Price Aspects

Business
Price Aspects

Technical
Aspects

Business
Non-Price
Aspects

Financial
Aspect

Attractiveness of ICO Price Terms to Industry (~45%)

**Competitiveness of
Wholesale ICO Prices
(~40%)**

**Competitiveness of
ICO Price Controls
(~5%)**

Factors Include:

- Residential
- Non-Residential
- Non-Building Address Points

Business Non-Price Aspects

Business
Price Aspects

Technical
Aspects

Business
Non-Price
Aspects

Financial
Aspect

Attractiveness of ICO Non-Price Terms to Industry (~25%)

Attractiveness of ICO Terms & Conditions to RSPs (~13%)

Factors include:

- Ordering, Provisioning & Deactivation
- Planning & Forecasting
- Billing
- Service Level Guarantees

Comprehensiveness & Relevance of ICO Offering (~9%)

Factors include:

- Basic Mandated Services
- Ancillary & Basic Non-Mandated Services

Other Business Plan Benefits (~3%)

Technical Aspects

Business
Price Aspects

Technical
Aspects

Business
Non-Price
Aspects

Financial
Aspect

Quality of Network Infrastructure (~15%)

Capability of Network (~11%)

Factors include:

- Access Technology
- Network Enhancements
- Network Security & Management

Scalability & Upgradeability of Network (~4%)

Factors include:

- Scalability
- Upgradeability

Financial Aspect

Business
Price Aspects

Technical
Aspects

Business
Non-Price
Aspects

Financial
Aspect

Level of Government Support (~15%)

Lower level of Government grant requested will score higher.

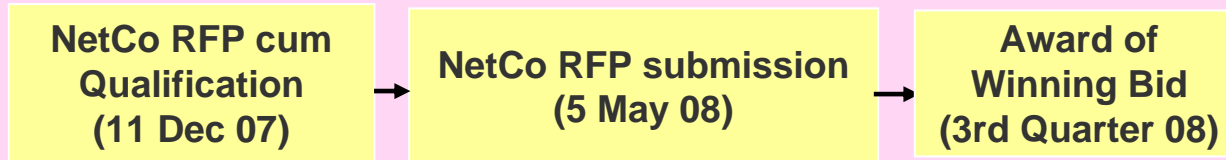
Level of Government grant capped at \$250 Million.

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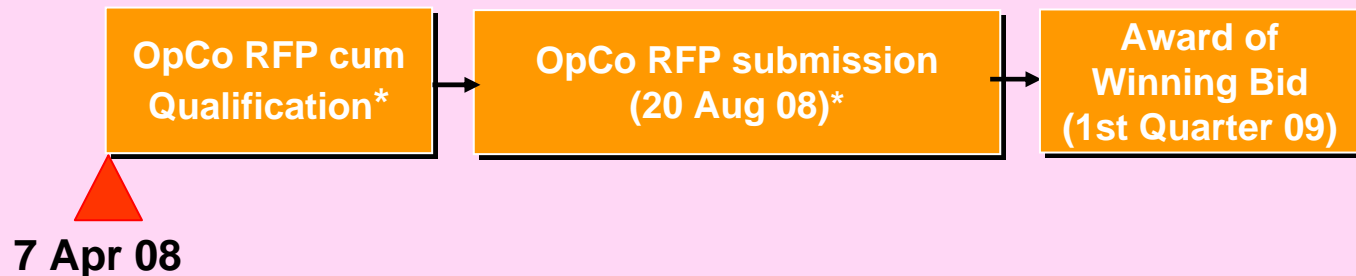
Procurement Process & Timeline

Project Timeline

Next Gen NBN NetCo Request for Proposal



Next Gen NBN OpCo Request for Proposal



** 14-days window for new bidders to submit qualifications. If new bidders are qualified or new consortium leads appointed, IDA will extend tender closing for all bidders by 40 days, or on the next working day.*

C

Q & A Session

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