



Regional Seminar on
Mobile and Fixed Wireless Access
for Broadband Applications
For the Arab Region
Algeria 19th - 22nd June, 2006



بتلكو
Batelco

Broadband Network Rationalisation and It's Effect on Prices

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20th June 2006

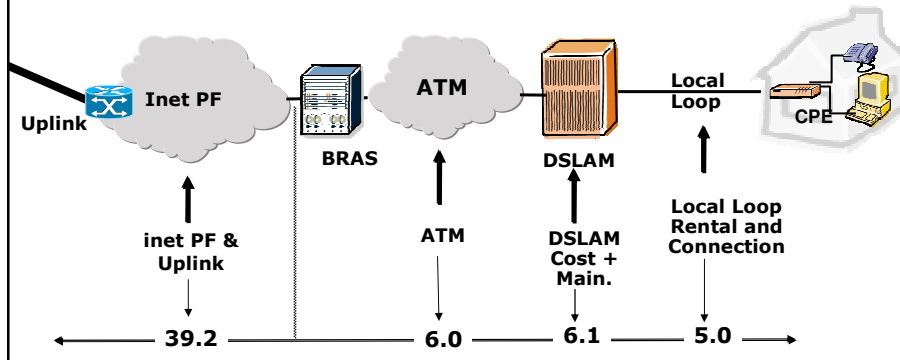
Presentation Overview

- What was the problem (Prior to introduction of NRP)
- The Solution - NRP
- Why is NRP the Solution
- Why, what's the relation of this Program with Mobile and FWA ?
- Complementary and packaging of Wireless and Wireline
 - Typical Applications
- Wireless Vs Mobility
- Conclusion

The Problem

High Cost

2004



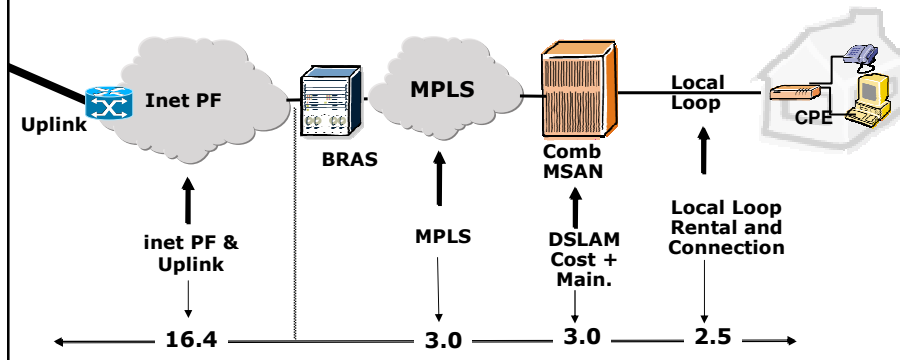
Network : 57.5
+ Retail : 9.9

Total: 57.5 + 9.9 = **BD 67.4**

The Solution

Reduced Cost

Today



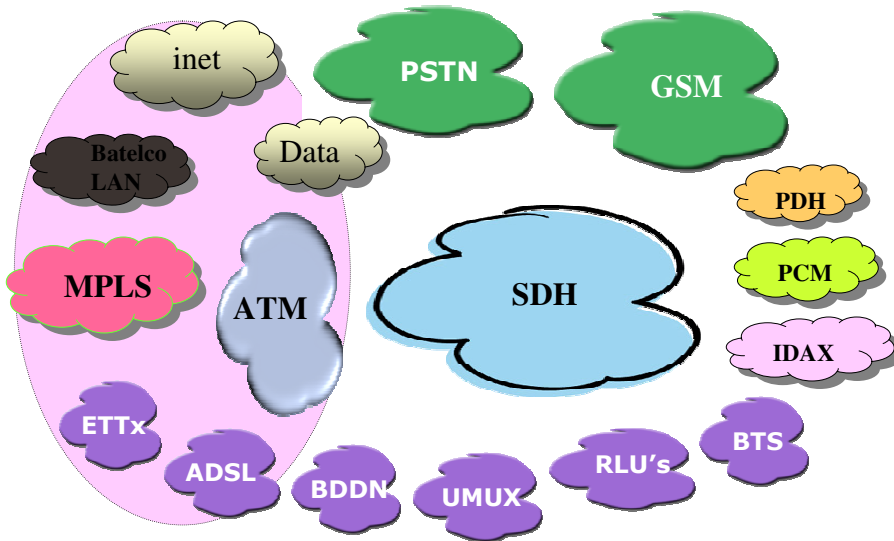
Network : 24.4
+ Retail : 8.4

Total: 24.4 + 8.4 = **BD 32.4 (2004)**
Target = **BD 20 (2005)**
= **BD 10 (2006)**
= **BD 7 (2007)**

Share Access (Voice +Data+ Internet)

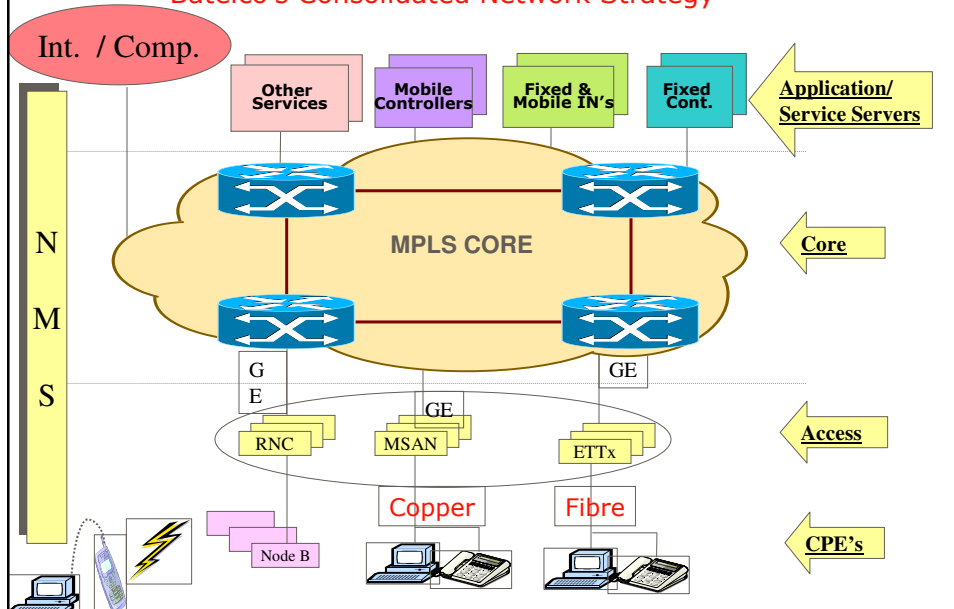
The Problem

Batelco Networks Evolution

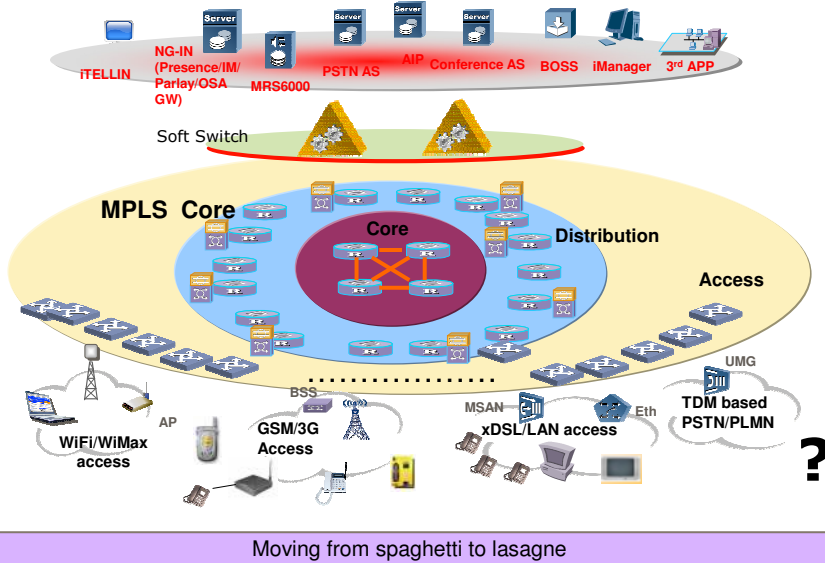


The Solution

Batelco's Consolidated Network Strategy



Batelco's Next Generation Network



Establishing the right infrastructure - NGN

Benefits

- Cost saving through simpler maintenance & support
- Flexibility where you need it
- Reduced risk & improved performance

How the network changes can help

- **Reduce Cost** : Shared network components for Voice, Data & Video
- **More Value** : Higher Speed & usage with lower price – Lower than LL/FR
- **Improve Efficiency** : On-Demand Resource allocation
- **Service Delivery** : Remote & Real-time Service Provision
- **Support for new services** : Easier to create new services (CoS)



Why, what's the relation of this Access Mobile and FWA

- Converged services will increase demand for cost effective transmission capacity
- Complementary and package of Wireless and Wireline
- Wireline is also used for DSL



PhORO Strategy

From

multiple service-specific networks

Phase Out

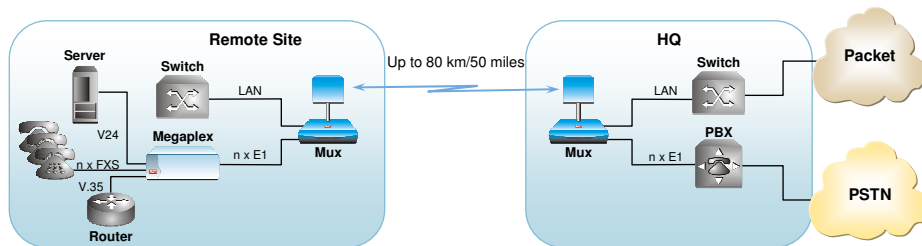
To

one intelligent multi-service network

Roll Out

Complementary and packaging of Wireless and Wireline Typical Applications

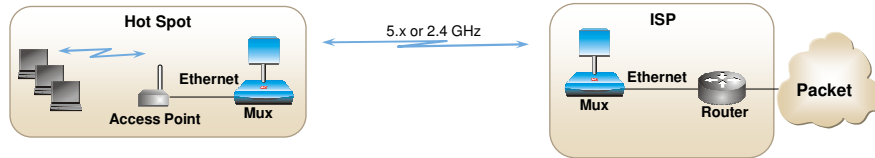
Typical Application – Remote Sites



Main Drivers

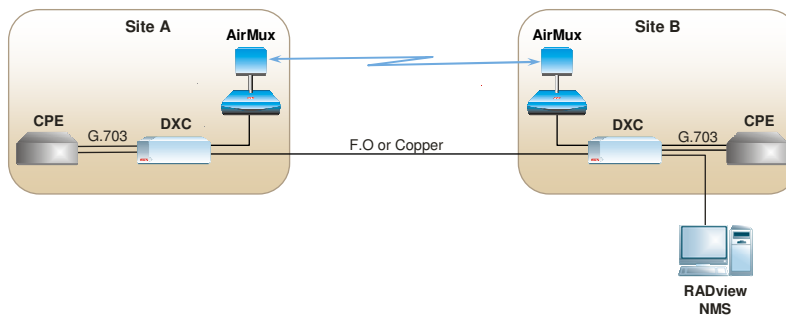
- Fast ROI versus leased lines
- Fast deployment and equipment reuse
- Broadband infrastructure enabler

Typical Application – Backhauling



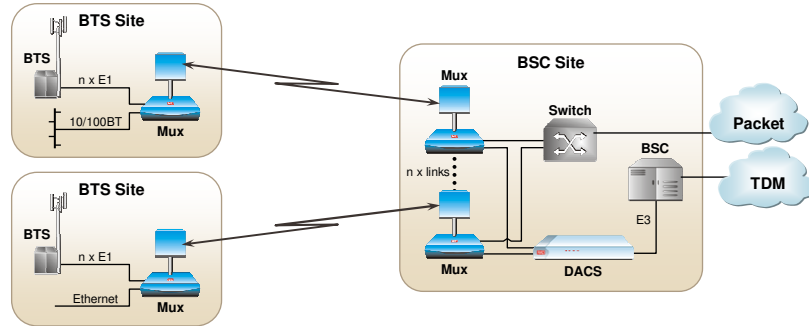
- Supports full 5.x GHz and 2.4 GHz bands for lossless hot spot backhauling including band and channel separation
- Transparent Ethernet forwarding
- Ethernet and power over Ethernet connection

Typical Application – Wireless Backup



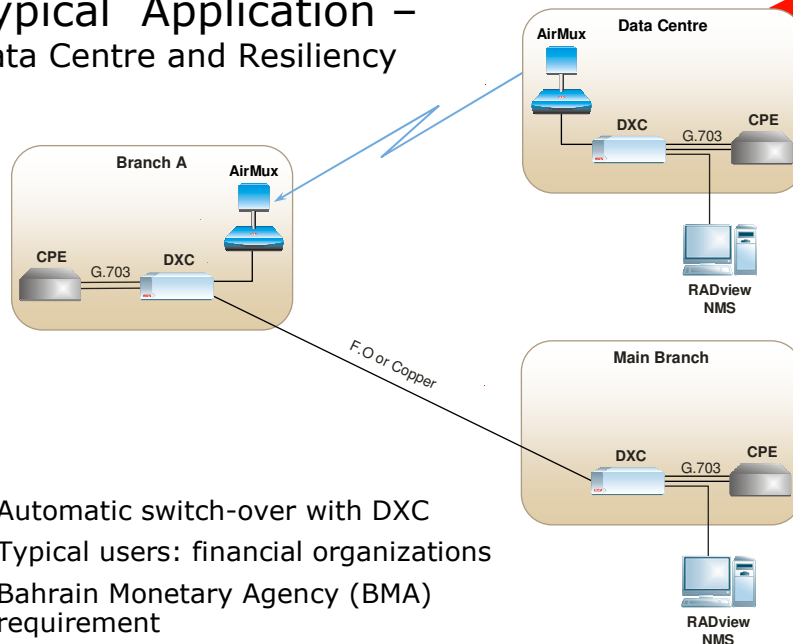
- Automatic switch-over with DXC
- Typical users: financial organizations, government, military

Typical Application – Cellular Backhaul



- Integration of cellular, monitoring and management traffic
- Future migration to IP 3G
- Cost-effective alternative to Microwaves
- High link availability

Typical Application – Data Centre and Resiliency

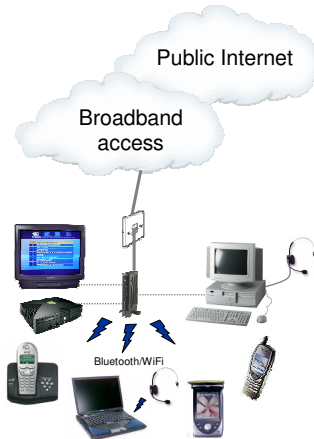


- Automatic switch-over with DXC
- Typical users: financial organizations
- Bahrain Monetary Agency (BMA) requirement

Typical Application

Broadband, VoIP and the mobility network of the **future**

- A broadband-connected WiFi/WiMax 'hub' device is capable of providing a voice and data experience far beyond that of a 3G network today
- Every home and office has the potential to be a 'hotspot' for a transformational set of converged services
 - fixed/mobile, voice/data/multimedia
 - WiFi-enabled devices with VoIP as the underlying voice technology



Broadband, VoIP and WiFi/WiMax – fundamental enablers of future converged portfolio

A new customer experience

Service Convergence
Customer experience
'Offer Set' approach
Customer pull

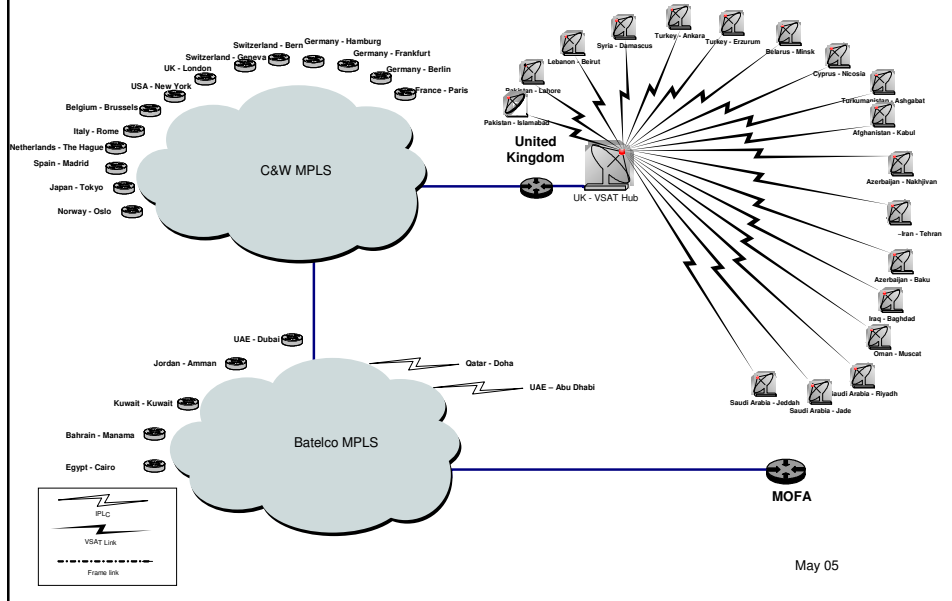
Customer Benefits

Network Convergence
Network rationalisation
Cost transformation
Operator push

deliver innovative converged services in a way that is simple and complete

Typical Application

The Network of the Ministry of Foreign Affairs (MOFA)



Wireless Vs Mobility



It is one thing to **sell** technology... **but**
quite another to **deliver** a quality service!

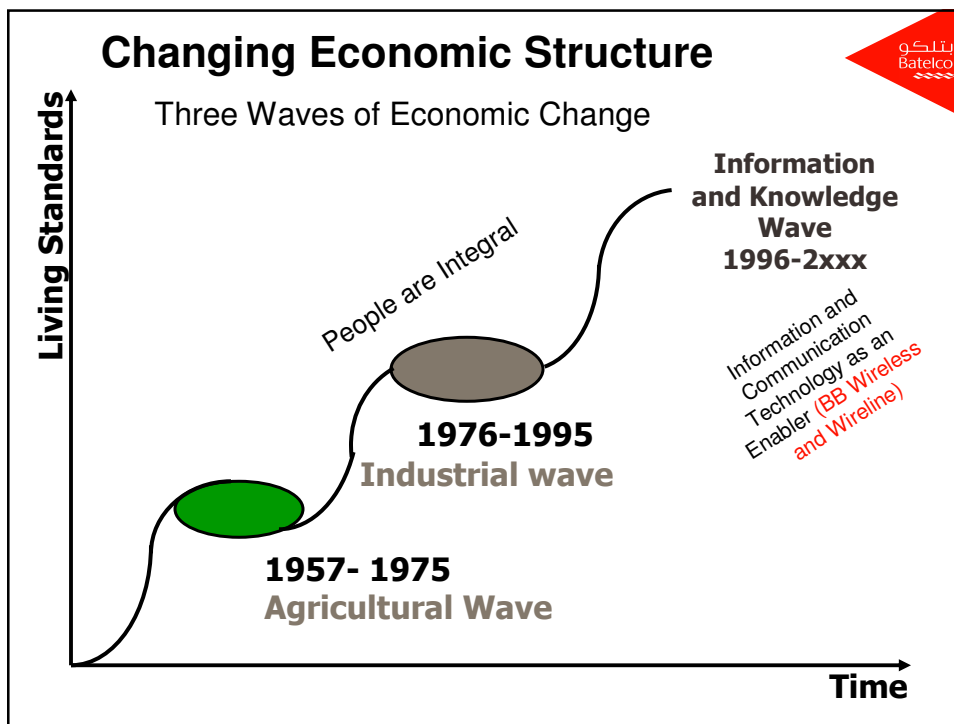
Home Worker package

- Secure Connectivity (Security and Encryption) back to the office environment
 - supports both voice and data, allowing access to the company internal phone, email and data services
- Supports outbound calling with billing to the company
- Full directory enablement, presence - and location-aware
- Office feature phone access

Corporate Remote Access over VPN

Conclusion

- Converged services will increase demand for cost effective transmission capacity
- Complementary and package of Wireless and Wireline
- Note: Wireline is also used for DSL
- Mobility Vs Wireless (people mix these – get the right customer requirement)
- To gain trust start with WiFi



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Thank You