



2012 – A ubiquitous, unified infrastructure for Newham Council & the communities it serves

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Newham and the Host Boroughs





The prize for London & the UK

- **Greatest sporting event on earth**
- **11,000 athletes**
- **1,200,000 visitors**
- **20,000 journalists**
- **up to 70,000 volunteers**
- **£££bn boost for business**
- **Billions of viewers**





The physical legacy

- **New sporting venues**
- **Renewed & relocated venues**
- **Training venues**
- **3,600 new homes – 9,000 in total**
- **Transport improvements**
- **Lea Valley Park and environmental improvements**
- **International Press & Media Centre**





The Paralympic legacy

- **Accessible venues**
- **Athlete's village**
- **Ticketing and travel**
- **Transport improvements**
 - DLR already wheelchair accessible
 - 21,000 licensed black cabs
 - London buses by 2008
 - London underground – by 2012
- **Fully integrated organisation**





Background

- Mostly separate networks for data, voice, CCTV, television and mobile communications
- Extensive use of legacy technology dating back 100 years
- Some services still reliant on analogue transmission
- Uncoordinated development based on suppliers sweating sunk investments, rather than exploiting new opportunities
- Deployment of own “dark fibre” network backbone



What is driving us...

*We require a **ubiquitous, standards-based broadband IP network infrastructure enabling all stakeholders, including boroughs, businesses, citizens and visitors to access any digital service***

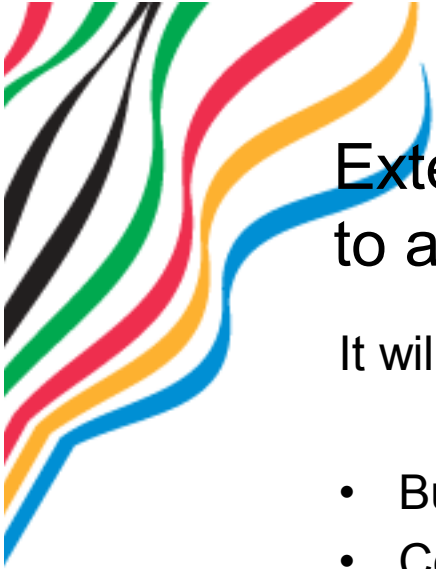


External Drivers....

- London 2012 Games the first 'all-digital' games
- How we can link the IT industry to development of local communities
- Create a legacy for London and the UK

From a Newham perspective.....

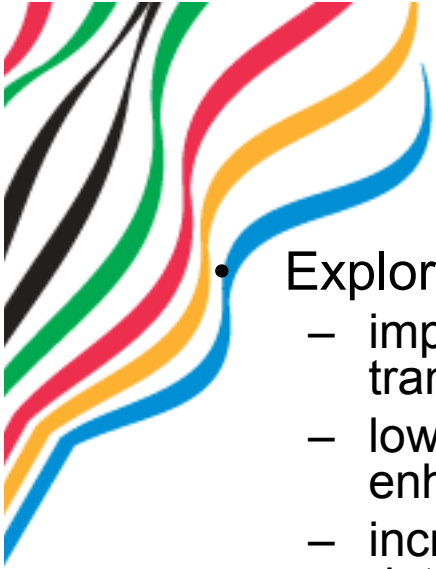
- This is an opportunity to utilise the technology that will be required for the 2012 Games
- Newham is looking to develop its infrastructure



Extend the current primary infrastructure to a borough wide fibre infrastructure

It will support and provide digital capability around:

- Building to building connectivity
- Council offices, community centres, surgeries, schools, etc
- CCTV Network - Surveillance - Real time CCTV footage managed from one central location available to all stakeholders
- Data Centres (Primary & Secondary)
- Traffic Control – Move analog controls on to IP network, cost savings over leased lines
- **Wireless backbone** Commercial benefits of becoming a telecom utility for the roll out of wireless and fixed telecoms services
- **Digital Media Multi-Media** - Provides distribution of high bandwidth connectivity throughout locality and the development of advertising revenue streams



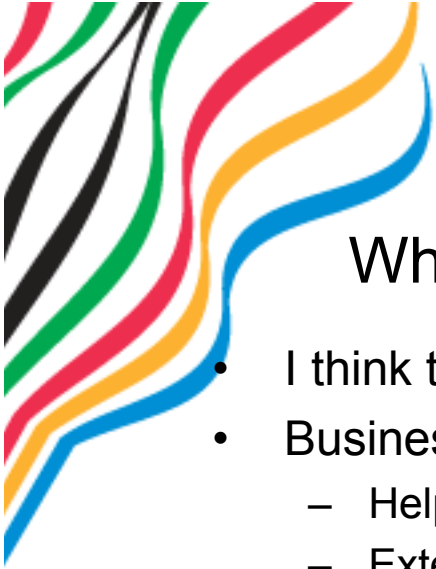
- Explore opportunities and identify solutions to:
 - improve the delivery of government, health, education, transportation & public safety services
 - lower operating costs, streamline management processes & enhance inter-agency communications
 - increase field officer efficiency through real time access to essential data
 - foster economic development, job creation, and tourism
 - bridge the digital divide
- Identify opportunities to partner with cities/counties deploying broadband wireless in their communities
- Build a sustainable business case
- Specific focus on exploring the range of approaches- subscription, ad-based, anchor tenancy, etc
- Compare Wi-Fi, WiMAX, and Cellular technologies



The Local Advantage...

Digital connectivity to all of Newham's Community at vastly reduced costs, benefiting:

- Residents
- Hospitals
- Schools
- Businesses (Stratford City)
- Builds on existing Newham Infrastructure
- Allows other boroughs' Networks to be connected and or provision of shared services between boroughs.
- Connect into LMN as potential backup



Why just cities, what about our rural areas?

- I think the challenges are the same?
- Business Level
 - Help local business succeed in the in global market
 - Extend the benefit of shared services to rural communities
 - Prove the value of Local Govt investment in ICT
- Benefits
 - Bridging the digital divide in unserved communities
 - Shared services bring government closer to citizens and business
 - Funding from local, regional govt. and matched by private sector
- Technology
 - Mesh Wireless Network – use of fiber to connect long distance backbones
 - Designing the optimal Wimax Network and Distributed Network Architecture for Wimax



Technology V i s i o n	Infrastructure <ul style="list-style-type: none">➤ Shared and local digital storage➤ 21st Century network with bi-directional capability
	Network connectivity at high speeds: Fibre – at least 100 mbps?? Wireless – at least 40 mbps??
	Software that is <ul style="list-style-type: none">➤ mature, open standards➤ Natural language interface' Internet that is <ul style="list-style-type: none">➤ reliable➤ layered public, private, low/high priority
	Devices: <ul style="list-style-type: none">➤ Mobile, TV, PCs/Server➤ File formats are exchangeable➤ Homes are digital
	Identity: <ul style="list-style-type: none">➤ Digital form allowing access security for both content and consumer
	Consumer: <ul style="list-style-type: none">➤ Cars, homes, entertainment➤ Digital communications devices➤ Secure connection



Options for Local Government

- **Do nothing**
 - Rely solely on private sector
 - > Irresponsible?
- **Go it alone**
 - Maximum control
 - Introduces substantial risk
 - Regulatory constraints
 - > Missed opportunity to magnify investment with partner?
- **PPP**
 - Compromise of control and risk
 - Uses assets to achieve policy goals
 - > Balancing the Triple Bottom Line (financial, social, and economic development)



Current Status



Planning Considerations

- Vision, Objectives
- Policy
- Regulatory
- Community Input
- Market Demand
- Business Model
- Asset Inventory
- Technology Assumptions
- Radio Study
- CCTV Review
- RFI/RFP
- Defined
- Review
- Review
- Ongoing
- Ongoing
- High Level Bus & Financial Model
- Ongoing
- Specifically wireless
- WIP
- WIP
- Planned for later in the year



Newham and the 2012 Games



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