

A year of global activity

Broader Way Forum **2012**



Preface



“It has been incredibly exciting to see the Broader Way concept catch on and expand around the world, offering a unique channel for individuals from diverse backgrounds to gather and share their recommends and create a better landscape for ICT. Broadband has become an important enabler for societal services and a key engine for economic growth. Broadband penetration will help not only in stimulating economic growth and creating jobs, but also in safeguarding human rights, promoting social justice and balancing regional development. Huawei is committed to supporting broadband development globally and we are pleased to bring together some of the best minds in the industry at our Broader Way Forum to steer dialogue on this important topic and inspire actions that will enrich the lives of people around the world.”

—— **Addressed by Chen Lifang**
Senior Vice President, Huawei



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Vision

Information Floods Will Come

When: 17:30-18:30, September 11, 2012

Where: Roux, Parliament Square, London

Huawei's Ren addressed the media in an hour long session in the heart of London at the Roux, in Parliament Square.

Many questions were asked, and one from a respected writer with the Economist Magazine addressed some key industry issues.

Mr. Ren: I would like to use more time to elaborate on this. I will start from the macro level and then go to the micro level.

At the macro level, I would like to describe information floods by referring to the movie 2012. In the movie, the flood surged and eventually inundated the Himalayas. However, the flood receded in 40 days. Mankind was able to survive by building a Noah's Ark. In contrast, information floods are like flood waters that exceed the capacity of rivers such as the Thames or the Amazon. We may try to build levees on both sides of the river to contain information floods, but they will be easily overwhelmed as such floods continue to grow. Even if we build two additional levees, they will very likely be overwhelmed as well. We think information floods will continuously increase and never recede, eventually inundating the Himalayas.

In our industry, we consider the telecom network to be a pipe through which information flows. We must build a pipe with a diameter wider than the Thames or the Amazon, or even wider than the Mediterranean or the Pacific Ocean, in order to contain the information floods. This requires joint efforts from the entire industry. No single company can do it alone. Information flows are comprised of numerous types of media – we hope that all the media is useful rather than harmful. This cannot be addressed solely through technology. This is a social issue as well as a legal issue. If the world relies on

technology alone to resolve the global information security dilemma, then I would say this may not be the right strategic positioning. Therefore, the building of such a pipe is an issue that the industry has to work on, and it is a social and legal issue to utilize useful information for the benefit of mankind, while discarding useless and harmful information. At Huawei, we make it clear that we will proactively join hands with society and the industry to address this issue. This is my point from the macro perspective.

At the micro level – the electronic equipment through which information flows, let us call it the hardware for the moment; let's also call the software that controls the information flows the pipe operating system. We have set a clear strategic goal for Huawei. We will develop the hardware system into a simple, standard, and general-purpose pipe, similar to a pipe for tap water. We will build the operating system that manages the pipe into a completely transparent software package. For other functions, carriers can separately buy software packages that run on top of the middleware of the pipe operating system. Our company will not develop sensitive software packages. This is our corporate strategy towards information security for future networks, and we have started to implement it.

---- *From Minutes of the Meeting Between
Mr. Ren and the British Media*

Broadband Inclusion for All



ITU and UNESCO set up the Broadband Commission for Digital Development in response to UN Secretary-General Ban Ki-Moon's call to step up UN efforts to meet the Millennium Development Goals (MDGs). The Commission was established in May 2010, five years after the World Summit on the Information Society (WSIS) and ten years after the launch of the MDGs.

The Commission aims to boost the importance of broadband on the international policy agenda and believes that expanding broadband access in every country is key to accelerating progress towards these goals by the target date of 2015. It defines practical ways in which countries - at all stages of development - can achieve this, in cooperation with the private sector.

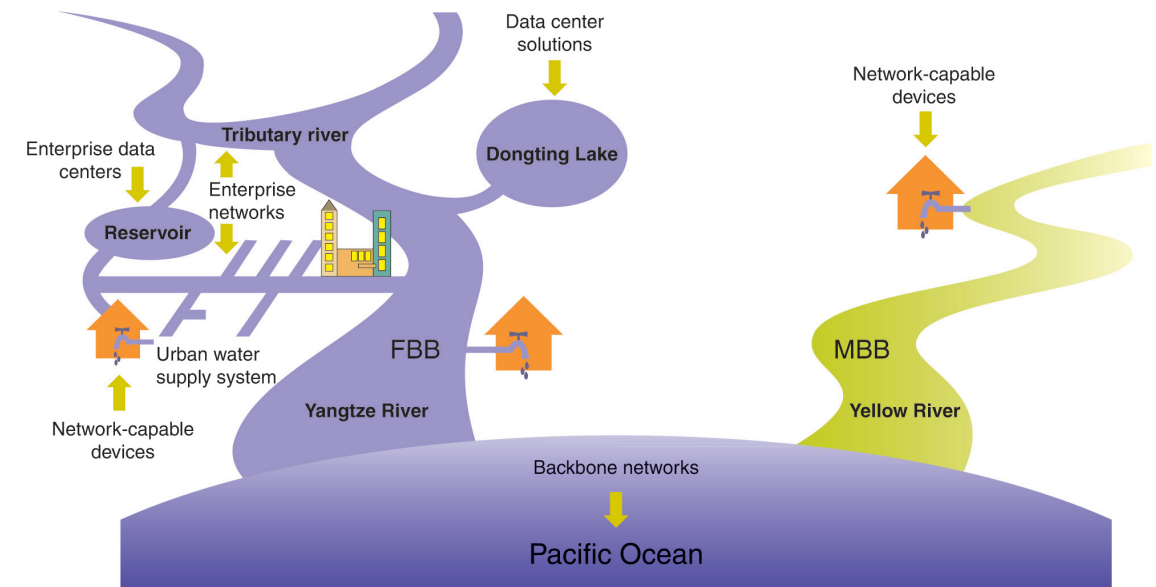
The Commission comprises a high-powered community, including top CEO and industry leaders, senior policy-makers and government representatives, international agencies, academia and organizations concerned with development. Leaders in their field, they each believe strongly in a future based on broadband and offer rich insights and experience in how to deploy and use broadband networks and services to the benefit of communities and end-users.

The Commission is steered and managed by a small group of leading industry experts, one of whom is Huawei's own Ms. Sun Yafang.

On Pipe Strategy

By **Xu Zhijun**

EVP of Huawei Technologies



Companies choose to position themselves differently in the global ICT (Information and Communications Technology) ecosystem. Some focus on chips, some on basic software, some on consumer devices, some on content, and others on service operation. Huawei, however, chooses to focus on the pipe.

And by pipe we mean an information pipe system that is oriented around technology and sector (the ICT sector). China's water system makes for an effective analogy. Network devices can be thought of as the taps. When the tap is open, water flows through, with information generated and consumed. Enterprise networks are like the tributaries or urban water supply systems while enterprise data centers function as reservoirs. If these intermediate waterways are broad and uncluttered, more water can be channeled into the main pipe. Mobile and fixed broadband networks (MBB and FBB) are the principal rivers, like the Yellow and Yangtze, while data center solutions function as flood basins such as Dongting Lake. And finally, the backbone network is the Pacific Ocean. Together, these elements form a complete pipeline that encompasses the generation, aggregation, transmission, and switching of

information, all the way to an "Information Pacific." In this system, the services business also takes a part as it helps manage, maintain, and optimize the entire pipe network so that it runs smoothly.

IP Video and SDP (Service Delivery Platform) both facilitate pipe enlargement, while the BSS (Business Support System) enables pipe operation and service billing. Network power systems get the flow started and keep it moving. All have a role to play in this pipe network.

Huawei's pipe strategy is the company's core, and the pipe business will remain our focus. As the digital flood approaches, we commit ourselves to enhanced pipe capacity, strengthened pipe enablers, and optimized pipe management, to deliver ever wider and more ubiquitous pipes, and an even better user experience. Huawei is striving to build a connected society with endless possibilities - a society where our life and work are greatly enriched, made easier through communication.



Abstract

Overview on Broader Way 2012

Huawei Opens Up Minds to a Broader Way



Every day, we are creating and sharing more data than ever before and companies are becoming holders of larger and larger amounts of that data. To add to this, Huawei projects that network traffic will grow by 75 times in the next 10 years, while mobile broadband traffic will grow by more than 2,000 times. According to Mr. Ren Zhengfei, Huawei Founder and Chief Executive Officer, “the key to managing this coming data flood is to build a new pipeline system that is wide enough to manage huge amounts of data and traffic – one that is as vast as the Pacific Ocean.”

Huawei’s pipeline strategy is a key element of the company’s overall efforts to be a part of the broadband solution. As an active member of the UN Broadband Commission for Digital Development, Huawei works to expand broadband access in every country by 2015. Huawei has demonstrated that its innovation and value-driven approach to NBN is an ideal recipe as the company is involved in eight of the nine current global national broadband network projects – including in Singapore, New Zealand, Malaysia, Qatar and the UK.

Huawei also seeks to advance its broadband objectives and pipeline strategy by promoting discussion about these issues among key global industry stakeholders. Launched at Mobile World Congress 2012 in Barcelona, Huawei’s Broader Way Forum is a series of events that take place around the world,

bringing together influential ICT stakeholders from the public and private sector, including industry experts, academics, operators, Internet service providers, government officials and media, in order to encourage dialogue and concrete actions to promote broadband innovation as an enabler of social and economic development around the world.

During his keynote speech at the first Broader Way Forum event, Mr. Ryan Ding, CEO of Huawei’s Carrier Network Business Group spoke about Huawei’s commitment to the advancement of broadband communications. “As the ICT industry continues to rapidly mature and becomes more sophisticated, the hyper-connectivity offered by broadband is a driving force for economic and social development and an enabler of job creation and capacity-building. Huawei has been an enthusiastic advocate for broadband development for some time and is pleased to bring together some of the best minds in the industry at our inaugural Broader Way Forum to generate greater dialogue on this important topic and inspire actions that will enrich the world we live in. We believe collaboration among stakeholders in both the public and private sectors will effectively shape new national broadband business models, creating a prosperous digital economy for the entire industry ecosystem. This development is also critical in our shared vision to eliminate the global digital divide, making the world a better place through better communication.”

Also speaking at the event in Barcelona, Dr. Touré, Secretary-General of ITU, discussed the importance of broadband to the development of society. “In the 21st century, affordable, ubiquitous broadband networks will be as critical to social and economic prosperity as transport, water and power. Not only does broadband deliver benefits across every sector of society, it also helps promote social and economic development.”

Since launching the Broader Way Forum in February, Huawei has received widespread recognition from the industry for the several events the company has held around the world, including in the UK, Germany, Spain, India, Turkey, South Africa, Indonesia, Poland, Venezuela, the UAE and Nigeria. Focused on themes such as cyber security and enhancing the socio-economic benefits of NBN, many governments have recognized the value of these events and have invited Huawei to hold Broader Way Forums in their countries.

For example, the Polish government asked Huawei to hold a Broader Way Forum as part of the Global Symposium for Regulators 2013 conference being held there. After Egypt’s Minister of Communications attended a Broader Way Forum during ITU 2012, he was so impressed that he invited Huawei to organize a forum in Egypt. The Broader Way Forum is also now part of the official schedule of the INDABA Conference

co-organized by the South African Ministry of Communications and ITU.

Much is being written about the Broader Way concept. The telecom industry’s monthly business publication, Telecom Review, ran a Special Report on Huawei’s Broader Way Forum, which included an in-depth interview with Yi Xiang, President of Huawei Middle East. Following Broader Way Forums in the UK and India, Huawei UK published its own white paper, titled “Superfast Britain---Myths and realities about the UK’s broadband future” and Huawei India released one titled “Connected Possibilities---Innovation, Integration and Inclusiveness”.

As a global ICT leader, Huawei is playing a more active role in the international stage and its Broader Way Forum is quickly becoming recognized by the industry as a unique platform to discuss issues related to the future of broadband.

In 2013, Huawei will hold 20 Broader Way Forum events around the world, themed National Broadband and beginning at MWC 2013. From engaging with media to participating in global conferences and events, to hosting its own forums, Huawei is truly transforming into an industry leader that helps steer the direction of the industry towards a Broader Way for all.

Footprint in 2012



Huawei held a total of 19 forums throughout the world in 2012. Eastern and Southern Africa held three forums. Two forums each were held in Western Africa, Northern Latin America and CEE & Nordic Europe. One forum each was held in the Middle East, Southern Pacific and Central Asia and Caucasia. And one forum each was held in UK, Germany, Russia and India. Another two were led by Huawei Headquarters.



Highlights

Forum Highlights All around the World

Spain

Connected Brilliance
Broader Way
Forum 2012

February 27th, 2012 / Barcelona

Forum theme:
The Broader Way

Media follow up saw over 70 reports talking about how the broader way can benefit the whole world.



Huawei Leaders: Ding Yun, Chen Lifang, Jiang Yafei, Deng Tao and others.

Highlights:

Honorable Guests: Dr Hamadoun I. Touré (ITU Secretary-General), Tifatul Sembiring (Minister of Communication and information in Indonesia), Berge Ayvazian (Senior Consultant at Heavy Reading), Vijay Kelkar (Chairman of Indian development Foundation), Long Yongtu (former Assistant Minister at the Ministry of Foreign Trade and Economic Cooperation, China’s Chief Negotiator), Luigi Gambardella (Chairman Executive Board ETNO), Dr. Khawar Siddique Khokhar (Member, Technical, at Pakistan Telecommunication Authority), Darrell West (Vice President at The Brookings Institution), Roberto Citton (Senior Executive at Accenture), Dr. Tim Williams (Policymaker of ARUP), Paul M. Scanlan (Vice President of South Pacific, Huawei)

This event brought great interest from the media, both trade, national and international. The event was action oriented, identifying new growth potential and business models. This helps the ICT industry show the potential of mobile broadband more efficiently, and to illustrate both the social economic benefits of broadband technology. Media from Australia, India, Spain, Switzerland, Al Ain, Russia, Austria and Belgium attended and the follow up saw more than 70 reports talking about how the broader way holds benefits for the whole world.

Venezuela

Connected Brilliance
Broader Way
Forum 2012

May 23rd, 2012 / Caracas

Forum theme:
Can Broadband continue to promote sustainable economic growth?

We revealed how the contribution of Huawei brought about enhancements and assisted in helping all levels of users



Highlights:

This event brought together the key players in the technology sector of the countries which are setting the technology trends in the world. The Forum discussed how today’s technologies are influencing the development of other segments of the economy. The Broader Way also revealed how the participation and contribution of Huawei has brought about enhancements and assisted in helping all levels of users integrate more effectively in today’s technological world, with services and platforms, unified, harmonious and committed with the environment.

South Africa

Connected Brilliance
Broader Way 2012
Forum

June 4th, 2012 / Cape Town CTICC

Forum theme:

Connected Brilliance - Broadband connectivity for access to content and faster communications

Our session engaged people at the highest level and invited the most important guests to deliver speeches.



Highlights:

Take advantage of the platform with innovative operating: for the first time Huawei cooperated with the host party to arrange the Broader Way Forum, setting an excellent example and taking advantage of international and regional forums. Meanwhile, the ICT conference is hosted by the Communications Ministry of South Africa. Our involvement helps enrich the content and gain popularity.

Smart invitations: We invited those guests invited by the host to deliver speeches at our forum, saving the cost of inviting speakers but also leveraging the opportunities to improve key customers relationship (e.g. Minister of Communications from Botswana). Highest level: Compared with 7 sessions in 3 days, our session engaged people at the highest level and invited the most important guests to deliver speeches.

Widespread attention: Via the Forum, discussions on broadband from industries within the chain intensified. By engaging in the forum, key customers from the Ministries of Communications have deepened their understanding about Huawei and enhanced confidence.

With our forum embedded in the official agenda, we achieved the most concentrated audience. Strong branding publicity: Our forum is the only session with a unique VI design.

Indonesia

Connected Brilliance
Broader Way 2012
Forum

July 16-17th, 2012 / Jakarta

Forum theme:

Cyber Security

Increased trust among external stakeholders Gain high level partners in enterprise industry. Increased awareness for the Huawei brand



Highlights:

Gained trusts from Key Government Stakeholders

Created significant branding platforms for Huawei among big Enterprise

Opened up opportunities to identify potential partners through seminar participants for Huawei

Low Budget and High Return Event through using government facilities (Government meeting rooms)

Key topic with top government officials as spokesperson has attracted media attention Mainstream media Indonesia Post Reported on "Cyber Security Seminar"

Dubai

Connected Brilliance
Broader Way Forum 2012

Oct 14th, 2012 / Dubai International Convention Center
Forum theme:
How to Enhance the Social-economic Benefits of NBN

Attendees were key people holding posts of major importance and influence.



Highlights:
We invited the Minister-level speakers from ITU participants. The attendees were key people holding posts of major importance and influence.

Possible risks were predicted, warned and responded to on time: e.g. We placed route guidance for the meeting room, we also arranged for Huawei’s account managers to accompany their clients to the forum.

Shorthand staff from ITU helped put the forum contents on projector immediately, which was effective. This can be used in future forums.

UK

Connected Brilliance
Broader Way Forum 2012

Oct 30th, 2012 / 12 Great George Street, London
Forum theme:
what implications will the rollout of superfast broadband bring to UK?

Increase trust among external stakeholders
Gain high level partners in enterprise industry.
Increase awareness for the Huawei brand



Highlights:
This Forum was carefully designed to ensure a balance between the UK public policy view on broadband and UK commercial positions. The Forum was also used to launch a new Economist Intelligence Unit report, sponsored by Huawei, on the ‘Future of Broadband in the UK’.

Trust The Forum demonstrates Huawei is a trusted party of both the UK government and customers alike, bringing all sides of the UK broadband debate together.

The Forum has also demonstrated Huawei to be a strong and reliable delivery-partner with UK government and major operators alike in working with our partners to build out the UK’s broadband infrastructure.

Broadband policy positioned Huawei as a key contributor and thought leader in the UK broadband debate.

The Economist Intelligence Unit report sponsored by Huawei has been widely discussed and some findings in the report have been considered and adopted by UK government.

Kenya

Connected Brilliance
Broader Way 2012
Forum

Dec 14th, 2012 / Laico Regency Hotel, Kenya

Forum theme:
Is Kenya the ICT Hub or just Hype?

**Greater visibility,
increased trust at the
highest levels, and
improved stakeholder
communication**



Highlights:

Achievements of this event covered key areas for the company:
Greater visibility: Achievements include more visibility to political and business stakeholders, internally involved Enterprises Business Unit, Operators Units, Terminal Devices Business Units, PACD, and more.

Trust: The event was supported by the Chinese Ambassador, the Office of The President of Kenya, The Ministry of Information and Communication and The Communication Commission of Kenya. Huawei Provided an open platform for both China and Kenya.

Stakeholder Communication: Involved in the Forum were The Ministry of Information and Communication of Kenya, The Office of The President, The Chinese Embassy to Kenya, The Communication Commission of Kenya, ICT Board, Safaricom, East Africa Business Community, East Africa Business Council, Cyber Security Africa , Media House and other national organizations.

Nigeria

June 4th, 2012 / Shehu Musa Yar Adua

Forum theme:
The development of Huawei LTE in Nigeria



As a leader of telecommunication industry, on this forum, Huawei took this opportunity to illustrate the trend of development for LTE and highlight the achievements made on LTE development in Nigeria.

Poland

May 7th, 2012 / Warsaw

Forum theme:
**The Digital Divide and The importance
of Broadband development**



As the only technology enterprise represented at this event, Huawei made a keynote speech at the opening ceremony. Huawei also sponsored the official gala party, with all Forum participants present at the party.

Experts from Huawei hosted the Broader Way Forum, and had essential and productive exchanges with the participants.

Turkey

June 19th, 2012 / Ankara

Forum theme:
Cyber Security Strategy Document Forum



The workshop in the afternoon session was a good outcome. We showed Huawei was on the same side as the government and we had conversations with a wide range of government bodies from the intelligence department to the ministry of forestry. Huawei staff personally participated as moderators in the working group.

Turkey

August 6th, 2012 / Kampala, Uganda

Forum theme:
The first broadband forum in Uganda



This event was the first of its kind and brought together may technology participants, relevant officials and local mainstream press.

The agenda was uniquely created by Huawei and the forum proceeded in a warm atmosphere. The audience was diversified, included students, professors, Government officials.

UAE

September 18th, 2012 / UAE University, Al Ain

Forum theme:

The Broader Way



The forum was organized jointly by Huawei and The Higher College of Technology of Al Ain. Many potential and existing broadband users were in attendance and among the many subjects discussed included broadband accessibility, Cloud computing, VDI technology and applications that can assist a modern education system.

India

October 4-5th, 2012 / New Delhi



Asia Pacific and Russia

Sep 26-27th, 2012 / Hong Kong, The Empire Hotel

Forum theme:

Confidence and Security in the Information Society



This was the 4th International Conference between these major parties. An important dialogue between the Experts of Russia and the Asia-Pacific Region. Discussions covered cooperation in the Information Technologies, Energy, Modernization, Innovation and Security spheres

Mexico

October 24th, 2012 / Mexico City, Presidente Intercontinental Hotel

Forum theme:

LTE's Contribution to Society



Cameroon

December 7th, 2012 / Yaounde, Hotel Mont Febe

Forum theme:

Smarter Cameroon, better Life



Serbia

November 20th, 2012 / Belgrade

Forum theme:

Huawei HybridTV Solution

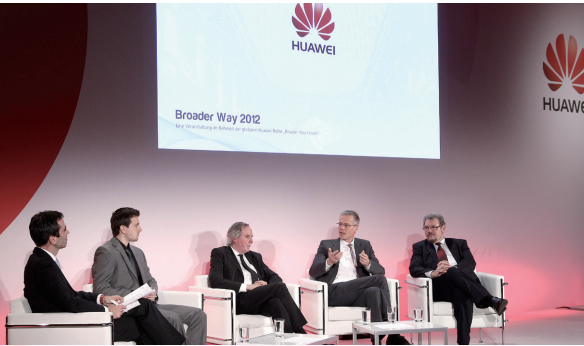


Germany

November 20th, 2012 / Munich

Forum theme:

China & Germany: Perception & Reality



Address key political stakeholders within the Berlin government and to engage Huawei in a broad public dialog regarding the relationship between China and Germany.

Achievements:

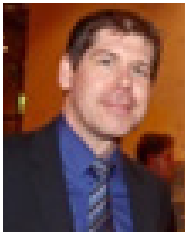
Visibility: Presented Huawei prominently to political and business stakeholders.

Trust: Demonstrated Huawei's commitment to providing a platform for an open dialogue on the relations of China & Germany.

Stakeholder Communication: Networking/ Relationship building with high-level representatives from politics, industry and media.

Quotes from Main Speakers

Germany



Andreas Schröder
Vodafone

“By running this event Huawei choose the right way to enforce the dialogue in the political Berlin.”



Axel E. Fischer
*Head of Enquete-Commission
Internet & Digital Society, MP*

“The Huawei-Study and the corresponding event are good means in order to encourage the dialog between Germany and China.”



Dr. Rainer Gerding,
*Managing Director
of the Economic Council*

“Huawei is demonstrating its commitment to Germany by this excellent organized event.”



Alexander Glatzeder FAZ
*i.e. one of the largest newspaper
in Germany*

“It’s very positive to see that a Chinese company like Huawei gets involved into local activities and shows how both sides can profit from each other.”

ITU



Rahul Khullar
*President of TRAI (Telecom
Regulatory Authority of India),
India*

“The program is exactly what Mr. Scanlan was talking about... so we hope to complete it by 2014, and the intention is that because the funding is a big problem, the Universal Service Obligation Fund ...but that's the beginning.”



Nikoto Emame David
*Director General of Camtel,
Cameroon*

“For five years, Cameroon has already started building the NBN project ...the country can also resolve the democratic problem and also the wideband problem. So the project will be started very soon in Cameroon by the financing of the government”



Paul Scanlan,
*Vice President of South Pacific
Solution Sales & Marketing,
Huawei*



Samuel Poghisisio
*Minister of Information
and communication,
Kenya*

“One is getting the government of Kenya involved in every process of understanding the beginnings of NBN, part and parcel of it, and even participating in funding.”



Basit Riaz Sheikh
*Advisor on IT & Telecom for
Pakistan Government,
Pakistan*

“It’s been quite a successful story in terms of the fiber infrastructure deployment...One problem that comes right away is the last mile ... is the upcoming mobile cellular frequency auction for 3G and 4G technologies in Pakistan. That would be a key enabler because that would stimulate growth for the Pakistani population to taste the fruit of the mobile broadband.”

“There are a lot of good opportunities, and the best advice Huawei could give you is: Let's all talk together in these types of forums or others we could facilitate or through the ITU and share the case studies because that's the most important. And through the case studies you'll understand why certain countries or businesses went in certain directions, why one country is spending \$40 billion on an NBN. Another spent less than half a billion for example to achieve certain outcomes.”

Kenya



Francis Wangusi,
Director-General, CCK

The regulator has created the National Cyber Security Framework, a multi-sectoral body that’s working to come up with a defense strategy against cybercrime. “It will create the policy and enhance safety of infrastructure in Kenya,” he said in a speech read on his behalf by the CCK director of information technology Michael Katundu. “This will ensure we fight cybercrime based on international best practices using the law and technical means.”



Antony Gacanja
Head of Technology Security, Safaricom

"Majority of the population use M-Pesa because many people are unbanked, the transaction cost is low, it is convenient, easy to use. M-Pesa has also enhanced personal security and provides financial security for women to use their cash independently. M-Pesa transacts 80 million shillings per month. There are different form of security threats such as malware, spyware, viruses, and so we create awareness to our customers and educate them on the Do's and Dont's. "



Liu Guangyuan
Chinese Ambassador to Kenya

"This conference comes at a significant period in the Kenya ICT development. Kenya has transformed as into an ICT hub in East Africa and internet usage has also grown. China is committed to fostering collaboration with Kenya through the ICT sector. Huawei has made great contribution through partnerships with local companies such as Safaricom. "



Andreas Schröder
Vodafone

The country is strengthening ICT as a driver of economic growth in line with Visio 2030 economic blueprint. Government documents are well stored for easy retrieval and access. He said a five-year Master Plan has been developed by Ministry of information and communication to increase internet connections through a robust countrywide ICT infrastructure. “The ICT master plan is a platform for partnership with companies like Huawei to work together in order to achieve our goals,” he said. “By 2017, every citizen should be connected for Kenya to be Africa’s ICT hub.”



INTERNAL SECURITY MINISTER

"The Data Protection Act, when implemented, would secure information and data in banks, mobile phones and organizational registries." He said that the government was committed to providing security to lower the cost of doing business in the country.



Dr Bitange Ndemo,
Permanent Secretary, Ministry of Information and Communication

Mobile devices will soon be assigned unique public IP (internet protocol) addresses as part of the government’s efforts to crack down on cybercrime. The government, through the CCK is pushing mobile operators to give each device – including cellphones and tablets – unique IP addresses to ease identification of users. The mobile operators had missed several deadlines to comply with the order and called on CCK to expedite the matter. “We want them to comply, because this information will be linked to other government databases to improve integrity and combat cybercrime since we are able to trace the users,”

UK



Liv Garfield
CEO, Openreach

“Everyone shall be connected in the modern world, superfast broadband is the opportunity.”



Dido Harding
CEO, TalkTalk

“We have to start the discussion now rather than wait for the infrastructure. The country really becomes a digital economy.”



Derek McManus
COO, O2

“Obviously it’s the time to discuss this issue on broadband. What consumers wants to consume and what they are going to pay for will evolve.”



Olaf Swantee
CEO, EE

“Today is a very important day for EE and 15000 employees for launching 4G in 11 cities in the UK. Thanks to partner including Huawei to make this happen.”



Victor Zhang
CEO, Huawei UK

“Huawei need to address the challenges from the UK government and operators. Huawei shall focus on customer experience, sustainability and transfer of skills.”

Indonesia



Tifatul Sembiring
Minister of Communication and IT

"This seminar, arranged by ID-SIRTII and Huawei, is a very good effort to highlight increased internet breaches and it is important to have good teamwork between public and private enterprises to handle the matters."



Rudi Lumanto,
Chairman of ID-SIRTII/CC

"The forum aimed to provide understanding and increase awareness on internet protection and expand knowledge related to internet infrastructure and defenses among Indonesian people."





Impact

NBN2.0 Benefit You



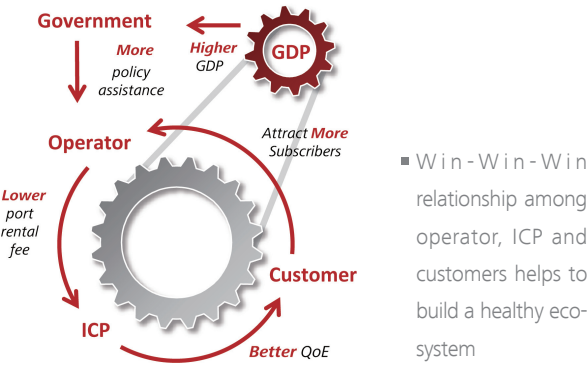
By 2011, out of a total of 144 developing countries,
127 had established a national broadband plan
—— Houlin Zhao Deputy Secretary-General,ITU

The success of Malaysia NBN


RM 10.5 bn


- 1.2 million Home Passed, 347K Home connected (41% new never with TM), 200K IPTV subs
- Saving 43% (RM4.5bn) investment by reusing TM infrastructure


The proposed business model





Top3 success factors of NBN




1.Chose the right construction model

Mode 1

Passive network

OpenNet

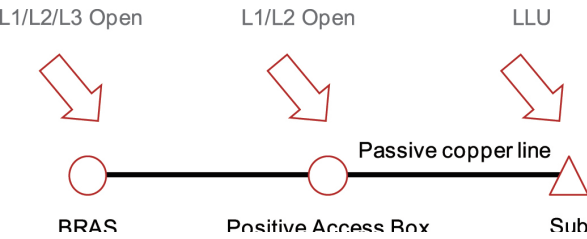
Active Network

nucleus connect

Open platform



Retail Service Providers



MEDIACORP

NBN network is constructed by different entity, and government establishes new entities for service operation. Network is totally open to all RSPs.

2.An open network for any scenario wholesale



Mode 2



NBN network is constructed and operated based on ILEC's legacy network, government provides policy or funding supports. Network is not required to open.

Mode 2 is preferred as a better choice.

3.Sustainable growth by ICT services

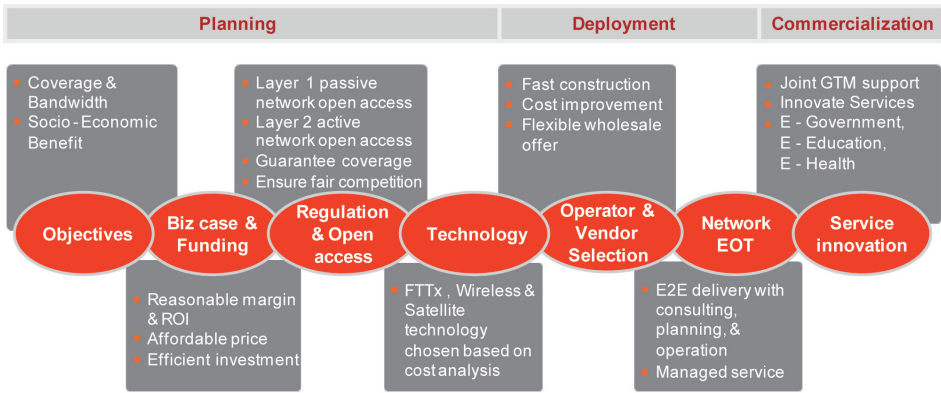
- Include OTT service operation as main revenue contributor
- Monetize the network by architecture optimization
- New revenue source from network and IDC wholesale

Huawei NBN E2E Solution

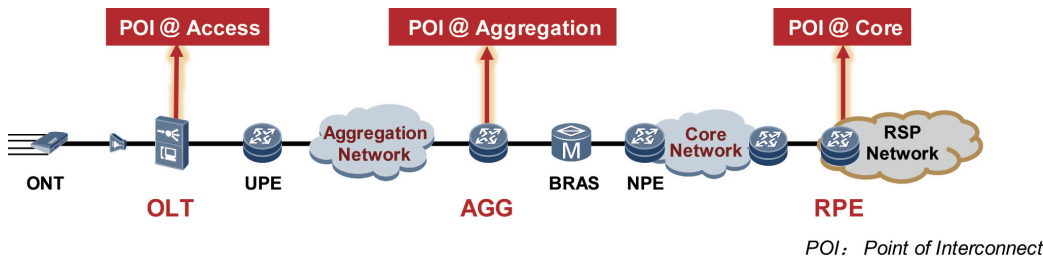
The Most Experienced NBN Network Provider

- Huawei has successfully won 11 out of 12 open announced NBN projects.
- Malaysia TM: provided E2E solutions including Access, Metro, SPOP, IMS, IPTV & E2E management of equipment, network & services, most complicated EOT delivery, shorten TTM.
- Qatar Qtel: delivered an E2E turn key network with rapid deployment, shorten TTM.
- Global 1st open access network: delivered first commercial open access network for Singapore NGNBN at 2010 through EOT model.

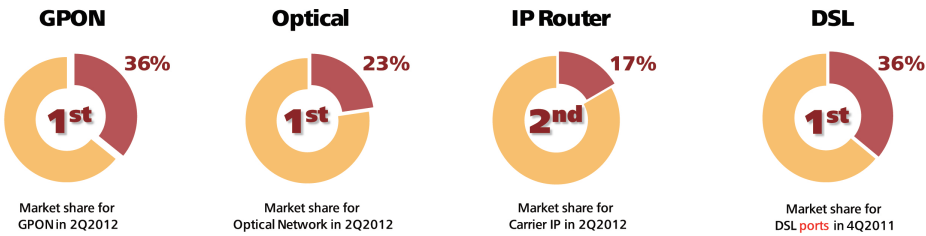
The Most comprehensive E2E NBN Delivery Capability



The Most OPEN Network, Open network resource at any port



Industry Leading E2E Solution Provider



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Broadband Whitepapers in UK and India



Superfast Britain?

Myths and realities about the UK's broadband Future

Huawei sponsors an Economist Intelligence Unit report, exploring the case for the UK's rollout of superfast broadband

This report was created to assess how realistic the hoped-for gains actually are. Here we share some details from the Executive Summary

Looking back, the first generations of Internet connectivity, from dial-up modems to the always-on broadband, delivered clear and significant benefits to the UK. New industries have been created, generating large numbers of jobs. Research now suggests that the Internet accounts for over 5% of the UK's GDP, and a far larger proportion of total economic growth over the past five years. For every job it has displaced, 2.6 new jobs have been created, it suggests.

Given this backdrop, the switch to tomorrow's superfast broadband currently under way should, by some accounts, deliver a sizeable boost to GDP growth and speed up much-needed job creation within the foreseeable future - a godsend to an economy struggling to find its way to recovery. In the view of the government and several experts, superfast broadband will not only deliver jobs and growth, but also fundamentally alter how healthcare, education and other public services are delivered.

Will this next generation of connectivity, however, with its blazing speeds, continue to deliver prosperity in the same way that previous leaps have? The central argument is that, while the gains from significantly faster connectivity will indeed be sizeable over time, a good dose of reality is also in order. Existing networks are capable of delivering many of the services anticipated over the next few years.

Obstacles are also numerous to utilising even the existing technology capabilities to good effect, including a shortage of skills and resistance to change. In this context, some of the expectations about the early returns from superfast broadband rollout in the UK may be overstated.

Analysis is based on a thorough review of existing research and in-depth discussions with expert policymakers, academics and analysts, all with different perspectives and opinions.

Key findings:

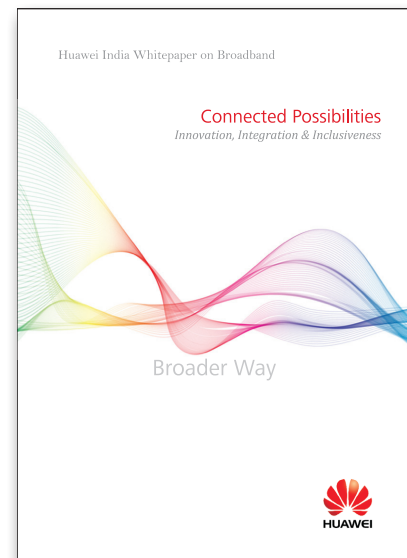
The shift to superfast broadband will certainly deliver added growth and new jobs, but it is difficult to see how this impact will match that resulting from the earlier switch from dial-up to broadband Internet, at least in the near term.

A short-term boost to jobs is inevitable, especially as the engineering work to build the networks gains pace. The longer-term, indirect impact on job growth is more difficult to project. Creation of jobs in some industries and regions may very well be partly offset by job losses elsewhere, for example.

For many anticipated benefits, it is less a case of the pipe needing to change and more that of established systems, processes and skills needing to evolve. This applies across a range of sectors, including healthcare and education.

In healthcare in particular, many anticipated benefits of telemedicine and remote diagnostics are realistic, but require wider reforms of the health system itself before they can be realised. In many areas, especially within business, a shortage of skills is at least as big a hindrance to putting technology to good use as constraints on bandwidth.

In the near term, ensuring pervasive Internet access to all parts of society - rural users, the elderly and others - will be at least as beneficial to society as a whole as upgrading to superfast broadband.



Connected possibilities: Innovation, integration and inclusiveness

The Huawei White Paper on Broadband in India.

Our White Paper for India focused on how telecom services have revolutionized the way India connects, communicates and shares information, across every segment of society. Extracts here show the affects on all industries and services.

Education: The country today accounts for over 20% of the world’s population and over 40% of world’s illiterates. While 95% of children in India attend primary school, only 40% of the youth attend secondary school. Expenditure by the Government on education estimated at 10.7% of total spending is low compared to the BRIC nations. Policymakers understand the power of learning through the use of technology. Access to information will contribute significantly towards skill development and create opportunities for citizens in a knowledge economy.

Healthcare: Lack of accessibility to health care is one of the main reasons for the poor state of health care in India. Broadband connectivity enables a wide range of telemedicine applications for remote diagnosis, monitoring and treatment of patients via video conferencing. ICT adoption and solutions to improve efficiency, productivity, enhanced patient experience and interoperability of disparate hospital systems are expected

to witness growth. The healthcare industry's IT spending is expected to be 67.5 billion annually by 2020.

Banking and financial services: A huge unbanked population presents tremendous growth potential for m-commerce in India. This is likely to be driven by organized retail, entertainment, peer-to-peer (P2P) transactions and trading. M–Commerce presents an attractive opportunity for Indian telecom operators to explore additional revenues of US\$1.2 billion, through retail transactions over mobile phones. Convergence of technology and socioeconomic factors, favorable regulatory policies and an evolved business model will steer India towards a cashless economy.

Entertainment: Television is recognized as a powerful medium for increasing awareness, yet there is still a significant population in the country which doesn’t have access to conventional media or television. According to the Indian Readership Survey Q42010, the overall reach of conventional media is only 64.7% while the reach of TV in urban India is 82.4%. With the advent of 3G and BWA, we expect an enormous increase in digital content consumption using mobile broadband technology.

Governance: Reforming administration organizations and delivering efficient services to citizens has been a constant challenge for the government. E-governance is seen as a platform with the potential to strengthen the very fabric of democracy by ensuring greater citizen participation at all levels of governance. It is expected that broadband will enable wider public access to government information, reduce corruption, help in effective administration, monitoring of law and order, enable vigilance and help create a transparent society.

Enterprise data connectivity: The telecoms sector is helping Indian companies reshape their business models. The enterprise data market in India is expected to grow at 11.0% during the period FY10–16 to reach US\$2.5 billion in FY16 from US\$1.3 billion in FY10. Demand for cloud computing services is providing a boost to telecom enterprise services. The cloud computing market in the country is estimated to touch US\$0.54 billion by 2014 with fast adoption rates. It is expected that by 2015, cloud computing will account for 5% of IT investments in India.

M2M: As the focus amongst telcos shifts towards non-voice revenues, M2M services are likely to garner importance. Growing focus on cost reduction on account of reduced human involvement is a key driver for M2M service growth. The coming years will see a significant rise in advanced M2M solutions such as remote information displays, in-vehicle camera systems, fixed security, video surveillance, etc.



Wireless services are poised to grow at a high rate in the coming years as demand from rural and low income users is expected to spur. It is estimated that the total wireless subscriber base will touch the 1.5 billion mark by end of 2020.

Broadband penetration is expected to grow in the country with the developments on the regulatory front and government’s vision of providing affordable connectivity to the masses.. If the government continues to focus on its “broadband on demand” agenda, India may have 600 million broadband subscribers by 2020.

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