ITU TELECOM WORLD 2006

Telecom world leaders, technologists, academics, science & industry researchers, world youth, and general public gathered at the ITU Telecom World 2006, in Hong Kong from 4th to 8th December. Theme of the ITU event was 'Living the digital world' The message from ITU Secretary General was simple, clear and to the point. Secretary Yoshio Utsumi introducing the event said 'On behalf of the ITU, its 191 member states and some 650 sector members from the industry, it gives me great pleasure to welcome you to Hong Kong , China and ITU Telecom World 2006. Hong Kong provides a dynamic venue for our world event at the heart of Asia – a region which has become a hub for the global information and communication technologies industry'

Industry[1] leaders were upbeat about the future of their industry in 2007 and beyond. Ericsson CEO Carl-Henric Svanberg pointed out that the major industry players underestimate Mobile TV's potential at their own peril. His strong belief in Mobile TV suggests that it is much more powerful than other people think at present. However, the venture is not free of risk. Operators have to change their basic business models to go into Mobile TV, to make it a global success. Ericsson president said that at Ericsson, they are changing from a voice supplier to an entertainment equipment supplier. This puts a lot of focus on having to construct new business models around the new services. For example operators will have to work out how to charge for various services. This is critical to the overall business success. For Ericsson it is favourable to start sooner than later.

A-Comms view on Ericsson venture in Mobile TV is welcome news, but to be treated with caution. Traditionally the130 years old company is one of the leading global suppliers of telecom turnkey networks and systems. In the past Ericsson has developed its own proprietary APZ software platform for AXE systems. Its success in AXE systems sales was phenomenal during the late 1980s, up until mid1990s. Ericsson AXE was the top selling switch for worldwide deployment. GSM and Digital AMPS is another success story for Ericsson. Ericsson initiative to move into mobile TV is a welcome decision, but not without risk. Although worldwide success of AXE was due to its early deployment as first generation digital switch, but now globalisation has changed that equation since, and hence being the first does not guarantee success. 3G could have been a major success for Ericsson, if the regulators and network operators in Western Europe followed the GSM licensing policy of comparative selection for the allocation of 3G frequency spectrum. Some of the Western European governments went for the kill to grant licenses by auctions demanding huge ransoms not in millions but in billions. This approach proved to be reckless for the entire industry. Considering the estimated budgetary price for GSM network builds in the UK was around £1 billion in 1990, with a nominal licensing fee per GSM network operator. As an example, the following licensing fees were paid upfront before 3G networks could be built:

- Austria – Auction of 6 licenses for €832 million
- Belgium – Auction of 4 licenses with starting bid of €150 million for March auction
- France – 4 licenses for a fee of 32.5 billion Francs per license (Comparative Selection)
- Germany – Auction of 6 licenses for €50.5 billion
- Italy – Auction of 5 licenses for €12.2 billion
- Netherlands – Auction of 5 licenses for 2.6 billion
- UK – Auction of 5 licenses for €38.3 billion (£22.5 billion)

[1] ITU Telecom World 2006 Daily News Paper

This approach of 3G licensing for 15 to 20 years lease, puzzled the industry analysts. The question still remains unanswered as to Why did the network operators pay such high ransom to governments? Did they not know it was the low cost that made GSM a world success. Right from the start of new millennium, media was feeding the frenzy. The banks were rolling in huge sums of money, and the major operators were moving towards monopolies and cartels in a big way, to grab the lion's share in the newly liberalised telecom markets, with no regard to the level playing fields. This could only be done with government collaboration at the highest levels. The city analysts are still wondering if Sir Christopher Gent was the wrong man, at the right time, at the right place, to lead Vodafone in the vast international arena of mobile phones. It's a pity Sir Gerald Whent was not around at Vodafone! On 28th of May 2002, BBC News reported Vodafone losses of £13.5 billion, the biggest loss in UK corporate history. Overall the company wrote off nearly £20billion, including other accounting charges. Vodafone CEO Sir Christopher Gent faced mounting protests to resign, over his £10 million bonus payment. Before he left, he seemed no longer to be a darling of the city elite. They were rather glad to see him go.

Planned 3G rollouts in Europe could not go ahead for the next 2-3 years. Downsizing and restructuring began in earnest in supplier as well as in network operator organisations in 2002, slowing down the progress in R&D development, and 3G rollouts in Europe and elsewhere. In the UK five operator licenses were auctioned when there was room for three. It was now black-death surrounding the most dynamic converged industry. Every major corporation in Western Europe and North America seemed to be dying. Highly capitalised industry was almost bankrupt within the space of a few months. Western European governments heartlessly did not come to the rescue of workers made redundant, to become long term unemployed. Unions in Germany were made powerless. Ericsson went into negative equity soon after. In August 2001, Ericsson B shares were trading at SK51.5, in September at SK41.5, in April 2002 at SK25, and in August and September 2002, they were trading for the rights offering at SK3.8. It was like the paradise lost. The year of the shame and anger!

At the ITU, IMT-2000 task force went into overdrive. Four technical specification project organisations 3GPP, 3GPP2, UWCC and ETSI DECT representing Europe, USA, China, Japan and Korea were competing against each other in the regional standards arena at the ITU. There were a number of Standards Development Organisations such as ETSI from Europe, ANSI,T1, T1A from USA, CWTS from China, TTC Arib from Japan and TTA from South Korea, all pushing and pulling for their regional standards development caused chaos and confusion. Still confused ? Yes. We are, but there never is a dull moment in this dynamic global industry.

Coming to the point, we are confident Ericsson can deliver quality Mobile TV network gear at the speed of light. There is no doubt Ericsson can just as well provide quality products and services to support Mobile TV of the future. But Will the content providers, network operators, consumer electronic firms and the media moguls co-operate with Ericsson to help provide quality Mobile TV for the benefit of the consumers? Professionalism is about reaching excellence to excel at it, and produce quality products and services for the global networks. Commercialism is about mass production of consumer electronics in Taiwan and Hong Kong, and moving on to the next best fad. Today's TV market is driven by media moguls, the biggest control freaks, unwilling to compromise with any one. Hollywood actor Kevin Kostner visiting London recently commented 'British TV aint the way it used to be' and he was speaking the real truth – not the virtual one.

Dr Michael[2] Connors, in 1990s from BZW Investment Management Limited, specializing in Labour Economics talked about 'The Race to the Intelligent State' Today in 2006, we are

[2] The Race to the Intelligent State : Blackwell

witnessing a Race to the Global Commercialism focused on sell, sell, and sell more. In 1990s, BBC used to broadcast its news on two channels, BBC1 and BBC2, three times a day with real news, as it happened, when it happened, and where it happened. Today BBC news 24, no longer broadcasts NEWS. Instead it broadcasts doctored HEADLINE-STORIES rolled-over every 15 minutes. This is because BBC News 24, seems to follow and compete with SKY and CNN News to capture the global audience. On the global horizon, BBC follows and borrows contents from others such as SKY and CNN. And these other channels are controlled by media moguls, the likes of Turner, Murdoch and many other control freaks with vested corporate interests. They have no interest in telling the truth, because they are driven by profits alone. At home – BBC no longer produces majority of its programs in-house. Run of- the- mill programs are bought from abroad. Home cinema with High Definition TV on Plasma screens is coming in fast – and a real competitive threat to mobile TV of the future. We wish Ericsson well, but the journey will not be without fret. Good sailing Ericsson.

Vivian Reding EU commissioner for Information Society and Media wants governments to facilitate competition between competing standards. Commissioner Vivian believes governments have a duty to eliminate uncertainty over the adoption of wireless broadband standards, insisting that standards setting procedures are open, streamlined and independent. Living in the digital world seems to be the best environment for development of wireless broadband. And if there was no chance for a global accord, then the governments should facilitate competition between several open standards. EU commissioner pointed out that government responsibility did not extend to making the choice on standards, because this was upto the businesses to develop their own business models, which would appeal to consumers. The government's role was simply to provide the regime for open competition to reduce uncertainty and delays. This certainly was a warning shot before any forceful EU interventions. A-Comms strongly endorses and supports Vivian Reding, in her cautioning the governments to stand on their own turf, and not invade the pitch where others independent businesses are standing. As the commissioner said - Government role is simply to provide the regime for open competition to reduce uncertainty and delays. That will do fine.

Negroponte Chairman of non- profit OLPC project said, the moral purpose of his project is to really look at education, as a tool for eliminating poverty, creating peace and bringing opportunity to people in a different way. This certainly is good tidings for children of 6 developing countries who will receive a total of 5 million x $100 laptops through their governments next year. By 2008, this total will reach to 150 million laptops for worldwide distribution. OLPC has successfully demonstrated to major laptop manufacturers in the developed world. Professor Negropote's goodwill message is simple and clear. Consideration for profits alone will not prosper because of the high price and waste. 'Living The Digital World' needs another way to look at the developing world with a spiritual and moral dimension to make their world a better place to live.

Supporting OLPC initiative with high spirited enthusiasm, we at A-Comms believe there is always another way to meet the needs of those in developing countries. Those who can not afford high market prices prevalent in developed countries. Professor Negroponte by undertaking OLPC project has revived Jack Cohen of Tesco's approach towards volume business in 2006. Jack Cohen of Tesco in his early days of market stalls in 1960s, when he was a simple barrow- boy in the East London fruit and vegetable market. Jack Cohen[3] nick named 'Slasher Jack' explained his business success in retailing when he said 'Pile them high and sell them cheap' This rational and somewhat compassionate thinking of Slasher Jack, saved him the rot and waste of his perishable

[3] Tiger by the tail: Lord Ian MacLaurin: Chairman Vodafone

commodities at the end of his market day. His passionate thinking fed the poor of East End of London. His old customers remaining loyal to Tesco, turned the UK grocery store into one of Europe's top grocery businesses in 2006.

Robert Varol IBM Global Solutions Executive expressed his concerns about integrated view of network security. He said 'Service providers around the globe currently lack properly integrated security tools and management capabilities, to fully meet customer needs for secure and reliable services. Increasingly telcos need to look at their security requirement with a more integrated view, because telcos today have a multitude of point solutions, but these are mostly not integrated and these add to the growing management challenge as well as overall cost of management. There are 2 key challenges. First is how to secure their networks and systems as they migrate to new networks and roll out new services. Second is they need to be seen as reliable and secure service providers. According to Deloitte recent survey, half the telecom firms surveyed, do not feel confident that they are protected by existing security measures. The security risks also lie in the future development of WiFi networks, VOIP, WiMax and 3G networks. Service providers know what tools can secure their own networks, but many lack requisite visibility on network management and security, to help them manage service delivery in a better way. An integrated security platform helps to keep the costs down, at the same time delivering more value to the customers. IBM's Telecom Core Infrastructure Security Solution monitors and manages not only the health of the network but the traffic itself, through a single integrated system.

The biggest threat to PC users, using Microsoft Windows is the new viruses. These can cause untold damage to the PC stored files, incurring huge costs to the owners. A-Comms was hit by a Russian PC Hackers known as Linky Ltd. in July 2004, despite the running of security software from McAfee at the time. Our Information Exchange Forum publications were destroyed and replaced by child pornographic images at a constant rate until the PC hard disk was full and the PC came to a grinding halt. Linky Ltd. remotely changed the settings to camp on our PC for nearly 4 Days. When told about the problem, Service provider Telewest Broadband went into denial, claiming it was not their network to blame. However, they admitted that their network was not secure enough. They contested, Telewest Broadband was not responsible for any collateral damage or loss of the service. On 12th July 2004, a letter of complaint was sent to Telewest UK General Manager, and copy to our local MP as well as OFCOM, to intervene on our behalf. We received the final reply in a letter sent to our MP Sir Teddy Taylor on 14 February 2005, by DTI Mike O'Brien – Minister for Energy and e-Commerce, to MP Sir Teddy Taylor. We here provide an extract of DTI letter for the benefit of our Information Exchange Forum associates. Mike O'Brien wrote the following 'You ask if I agree with Mr Malik's point that we should prevent child pornography being circulated. I agree wholeheartedly with the sentiment, and I have gone on the record several times about our need to address what I refer to as the 'dark side' of the internet. The correspondence with OFCOM indicates the action we are taking to tackle this problem. Clearly there is the disincentive for individuals to transmit and store such images as evidenced by the stringent penalties being imposed by the courts. Moreover, the Police are also trying to close down the hosts of this material on the web. European Service Providers are subject to 'Notice and take down regime' which means they have to remove such content if they become aware of it on their servers. That said, it is clear that this problem is especially difficult given that the vast majority of this sort of material is hosted outside the European Union. Nevertheless, progress is being made, and in relation to the problems cited by Mr Malik, I am happy to report that the National High Tech Crime Unit are developing good working relationships with their Russian counterparts. I will ensure that they are aware of the activities of Linky Ltd'

Tony Glover 'The Business October 2004' reported 'A new computer virus is about to wreak havoc in the corporate world. Called the Drive-By virus because it attacks without warning and it

is by far the worst security threat companies have faced, according to Shlomo Touboul, Chief Executive of Israel based international computer security firm Finjan. Finjan says the new threat works by taking the user to an invisible staging site while he or she is logging on to genuine site. The user is unaware this has happened and need do nothing other than surf the internet to fall prey to a Drive-By attack. Once the unwitting victim has been hit, the criminal can hack into their system, steal their financial details and even take control of their computer. Because of rarely used voice software in Microsoft Operating Systems, the hackers can even listen in on user's conversations.

According to Touboul, the underlying problem is the ancient DOS software code from which Microsoft's modern Windows operating systems have been developed. DOS was designed for standalone PCs and not for code sent remotely. When a computer running Windows receives an external code, it is vulnerable to being taken over. Unlike the recent spate of high profile viruses such as My Doom, the new breed of virus is designed by people who wish to remain anonymous. The criminals who have developed this form of attack want only one thing, to make as much money as possible. The attacks have already begun, but none of the organisations and financial institutions so far affected will admit to having been fleeced because they are afraid it will affect their credibility in the eyes of customers.

Finjan believes virus worm attacks earlier this year could have been dry runs for large-scale attacks, possibly by terrorists. The Witty worm that struck earlier this year was the first widely propagated attack to carry a destructive pay load. With the number of organisations worldwide now dependent on systems connected to the internet, terrorists would not need to hijack a plane to cause economic chaos. All they would need is one bright guy with a computer terminal. Finjan says it recently reported 12 vulnerabilities in Windows. The company has closely guarded research facility that develops ways of attacking computer systems running Windows, to stay one step ahead of criminals and terrorists. The new vulnerabilities we have identified in our labs never leave the building and if they did the effects could be devastating. They would be like live explosives if they got into the wrong hands'

Torbjorn Nilsson[4] Ericsson's Senior Vice President – head of strategy and product management, in response to a question that service providers planning mobile TV rollouts have several technology options. Assuming spectrum availability is sorted out then What criteria should they have in mind when planning services? Torbjorn said Ericsson's focus is on interactivity, tariffs, international roaming and contents for mobiles. As end-users require large number of TV channels and variety of downloads of video clips, operators need to sort out which channels and video clips to provide via MBMS and DVB-H broadcast, and which to support via Unicast HSDPA. Services and prices are to be worked out, and advertising targeted towards attracting the lower end of service users. Torbjorn predicting business in 2007, believes music and flat rate PC connections will be the growing services. Volumes are already large for the mobile music. Mobile TV and video services will grow during 2007, but 2008 will be the year for Mobile TV and Videos.

In September 2001, Torbjorn said – a realistic approach to sound long term telecom market, is to meet the fundamental needs of communications and mobility. A strong economic slow down in several parts of the world probably was triggered by a collapse in some segments of the information and telecom industries. Torbjorn said 'The US economy is declining, but slowly. Japan is seeing no growth. The GDP growth in Europe also is slowing. There are no clear signs of

[4] The new world of communication-What's Next

recovery this year. We may see improvements next year, but prudent companies must plan for tougher times, and we are. It may take some time before the industry shows strong growth again.

Our industry is re-learning that 'Time to New Technologies' is not enough, and what's also important is the 'Time to Customer' with the right products. There is a tendency to rush to market with products that are still in the engineering stage. Proprietary products that lack interoperability and other standard capabilities are being introduced. Many mobile application ventures arrived on the market before the necessary infrastructure was put in place for terminals, billing systems, security systems, standards and so on. As discussed earlier, the tremendous 3G license fees has a major impact on the restructuring of the industry. The big must get bigger, what the economies of scale dictate. As a result of high debt, new ways of raising capital are being found and costs are being cut.

The economic slowdown, high licensing fees and dotcom death are driving the telecom industry from last year's 25 to 30% annual growth figures higher than the US, to flat numbers or even slightly negative numbers this year. This tremendous downturn of growth has no doubt consequences for many companies in the industry where more than 300,000 jobs have been cut in the industry. Many companies have problems with their costs, debts and profitability. As growth slows down we will see production over-capacity and a lot of pressure on the margins. I foresee further re-structuring of the industry in the near and medium term.

In tough times it's important to be realistic. But I also want to stress that the fundamental needs of communications and mobility are still there and valid. The underlying driving forces are positive, and that will help this industry grow. In the mobile industry, the number of new subscribers is growing at 25 to 35% in the USA with traffic and RPS increasing. Many markets have huge potential for traffic and penetration. Most of the technologies such as the internet, wireless, broadband, optics and more are here to stay, but what we are seeing is an adjustment to a more realistic and sound business'

Rob Conway CEO GSM Association believes market HSPA is already delivering mobile broadband that allows users to surf the internet at high speeds while mobile in a car, a bus or the train. HSPA coverage is having a profound impact, delivering broadband for the first time to areas that can't afford to deploy fixed line networks. Over the past 12 months coverage has already become widespread across urban and suburban areas in approximately 40 countries worldwide ranging from the US and Switzerland to the Philippines and South Africa. Initially HSPA was a software upgrade to 3G and GSM networks to increase download speeds to 1Mbps, doubling the network capacity. From the end-user perspective this is moving upwards from dial-up modem to a DSL internet connection, but it does not stop there and will evolve to reach download rates of above 14 Mbps. This has motivated GSM operators worldwide to upgrade. Singular – the largest mobile operator in North America launched its HSPA last year and is rolling out to more US cities. Singular has deployed HSPA in the 850 MHz band, providing for world geographical coverage and is good for building penetration. In Asia – Malaysia and Philippines have launched HSPA services along with a few others. Wide range of data cards is available. Technology is being embedded into a growing number of mobile phones and notebook computers. Intel, Qualcomm, Dell, Lenovo, Option, Novato, Sierra and others have been working with GSMA to produce guidelines to embed HSPA modules into notebook computers. Embed SIM card is an important development. GSMA during 2007 will help to accelerate production.

John Chambers Cisco CEO said at the ITU that Service Providers have to continuously re-invent themselves when moving from charging for calls, to charging for bandwidth and services on top. According to Cisco chief, traditional role of delivering voice and data services is quickly

disappearing. Service providers will define themselves not just as providers of carrier networks, but through other capabilities. He said service providers are uniquely positioned to enable a whole new standard of living processes. Continued growth of next generation networks provides consumers with educational, entertainment, medical and other services. If there is a killer application for service providers and business operators, then this is Video. That's where the future is going to go. If regulators understand what is needed, and if the service providers can deliver technology services. 3G is going to expand and with that, the corporate responsibility is becoming a more important aspect for large global corporations to seriously consider. Corporate social responsibility is about good business ethics.

Cisco Chief Executive John Chambers, it seems, to have a hidden agenda of his own, when he speaks of moving from charging for calls, to charging for bandwidth and services on top. Why should anyone consider paying for one service, and not for the other? This makes no common sense to service providers nor the service users. John Chambers is does not tell us what these other capabilities ought to be. Although John Chambers is one of the best showmen in the business, but unfortunately does not come across clear with such garbled messages. We already know the next generation networks will provide consumers with educational, entertainment, medical and other services. What we want to hear about at this global gathering, is What Cisco has to offer in terms of products and services? John Chambers sounds very much like Father Christmas, asking kids 'Hi kids do you want to buy my toys' if they have the pocket money. Cisco has not moved forward towards significant global technology partnerships in Europe or in the Pacific Region to our knowledge. Western Europe, especially Scandinavia is the gateway to innovations for state of the art wireless technologies. Ericsson and Nokia are world leaders in this field. We look at Eastern Europe, with a vast technology partnerships potential, where perhaps Cisco can make a big contribution, to develop the region. Could find a number of excellent partners in a rising hi-tech regional market. Cisco it seems, is happy with keeping its distance to focus on just me, me and me again.

A-Comms is pleased to note Cisco has made a significant contribution in setting up Cisco Technology Training centres in developing countries such as Pakistan. Comsats runs Cisco training centres in Pakistan and is encouraging its member countries in South Asia. Comsats is a Commission on Science & Technology For Sustainable Development with HQ in Islamabad. Comsats, currently represents 22 countries in the South, to develop Internet Services for private enterprise. Comsats is a quasi-government organisation, funded by the central government, and is in an ideal position to compete with local PTCL, but with a miniscule budget to adequately manage the Internet Services. At A-Comms, we very much hope that other large ICT suppliers in the USA, Europe and the Pacific Region, will take up Cisco's initiative and set up a number of ICT training centres based at a number of universities, hospitals, R&D institutions, and technical colleges that can readily facilitate such supplier ventures on sustainable development levels. This is another way to help sustain the ongoing development in science and technology close to where it's most needed, in the developing countries.

A-Comms in association with COMSATS is planning to launch a sustainable ICT development programme starting in 2007 in Islamabad Pakistan. This will later extended to the entire 22 Comsats member countries in the developing South Asia. We are happy to follow professor Negroponte's initiative, in planning our 'Broadband Wireless IP Access' Project focusing on education, health, science and technology research in the developing countries. A-Comms aims to join ITU-D in partnership with Comsats as the best cost option available for the ITU-D Sector membership at one sixteenth 1/16 of the cost for a developing country Sector membership.

ITU's Connect the World Initiative must be seen as an integral part of our modern life. We also know people in developed countries get ever more connected, but more than one billion people in the developing countries remain unconnected. ITU estimates 800,000 rural and remote villages worldwide still lack access to even basic phone service. ITU is seriously talking about Broadband for All by 2015. Let us together turn this into a reality before that day in 2015. Our endeavour within this giant of an industry should be closer to 2011. Let's race towards this likely achievable goal over the next five years or so. Not loosing sight of our objectives, we can be there on time.

Quoting ITU 'Leveraging partnership' Connect the world is an innovative multi-stakeholder platform that leverages the benefits of ICTs and the power of partnership, to bridge the digital divide. Designed to showcase, consolidate and scale up activities and stimulate industry wide cooperation. Its aim is to accelerate ICT development efforts worldwide. To promote exchange and sharing between partners together, to empower people through communications and information. Connect the world will serve as a catalyst for achieving the connectivity goals set at the World Summit on the Information Society. By emphasizing the need for development efforts in each of these three areas, Connect the World takes a holistic approach to the complex problem of bridging the digital divide. And by showcasing activities and tracking progress in these areas, 'Connect the World' also helps provide a truly global picture of what's being done where, and where more effort is needed. Connect the World aims to identify needs, build synergies, forge relationships and reach out to underserved communities around the world.

COMSATS: Living the digital world – where government and the private sector collaboration is to encourage formal alliances, technology partnerships and joint ventures with others. This leads to a new kind of stimulating growth in national and international economies. We believe the above is achievable through the following incentives:

- Alliances & frame agreements, to procure infrastructure at lower prices
- Mutual cooperation in technology know-how
- Ensure abundance of manpower skills for the in-house technology competence
- Joint investments in R&D Tech Centres, to produce low cost ICT products
- Encourage suppliers for technology transfers to reduce imports

A-COMMS: The mission is to reach out developing countries to look at and engage in:

- Educational, social, cultural and technology needs for further development
- To assess how best ICT industry can provide its products & services
- Accomplish development goals through professional team work and tech-skills
- Understand how to overcome lack of resources in the developing countries
- Facilitate and discuss the needs of beneficiaries with technology sponsors
- Help raise capital, to fund ICT projects with benefits to both suppliers & customers
- Bid Manage, Project Manage and Select Systems & Networks
- Represent at the ITU-D to make recommendations & to seek Assistance
- Help raise aid packages through the various overseas development agencies
- Work closely with major ICT suppliers, to work out most appropriate tech-solutions

Note: This communication is circulated via e-mail to a target group connected with developing country program. A-Comms is a voluntary and non-profit organisation of professional associates from ICT industry. A-Comms was formed at the ITU Geneva quadrennial exhibition in October 1991, and is an independent industry voice, dedicated to developing country needs in ICT.