

The 6th ATIE Forum

Goh Young Kwang
CET Technologies Pte Ltd



6 – 8 June 2000 at the Singapore Exposition Centre

Our Association deserves a pat on its back for organising the very successful 6th ATIE Forum in spite of having an Organising Committee

that is made up of volunteers. The Forum was held in conjunction with CommunicAsia 2000, with the support of iDA. It was an inaugural Forum hosted by Singapore. We take this opportunity to express our appreciation to the event organiser, SES Pte Ltd, for their untiring effort and faith in the success of the event without any financial commitment on our part. We would also like to express our thanks to our generous sponsors and various members of ATiS as we were not only able to pay for the Event but even manage to turn in a small profit. I must add that participation and most meals were provided free-of-charge.

For the record, we have over a hundred registered participants with more than half coming from overseas. Namely, CIAJ, KIAT, TAHK and TEEMA. In addition to overseas members, we also had observers from the People Republic of China and India. Beside the usual useful presentations on the status of telecommunication industry in each territory, there were numerous papers on new technologies and their implementation. Special arrangements were made for participants to visit new technologies that were exhibited during CommunicAsia. For example: Bluetooth and 3G cellular systems. More importantly, it is the networking opportunities, renewing of old ties and establishment of new contacts. These can be seen by the flurry of name card exchanges and numerous “side” discussions during and after each session. Of significance is the attendance of observers from two large economies, China and India, in which there were much interests from

From the Editor

Maurice Nunas
Motorola

ATiS, like any volunteer-based organisation relies on its members to get things done. Sometimes this works well...sometimes it doesn't. We are fortunate to have a hard working Exco, working on your behalf to organise functions, deal with the daily issues and to meet monthly, steering the organisation. The Newsletter is no different; its content and its worth are entirely dependent upon voluntary contributions.

In this issue, we have a host of interesting things. Colin Goh reports on the last ATiS Night, and gives us some insight into what is coming. Goh Young Kwang reports on the ATIE, successfully held in conjunction with CommunicAsia. Wendy Aw, our inimitable President, writes about the next Annual General Meeting, and why it is in your best interests to attend. In our technical section, we have an article on Bluetooth, following up on the presentation made recently by yours truly.

We hear from Ivan Tan the benefits and delights of

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local participants who were doing or are keen to do business in these two economies.

Beside the formal sessions, various social activities were organised. A “wild and wet” session was conducted at the Tiger Brewery where serious drinking and talking was the order of the day. Many birdies and eagles were sighted during the network golf game at Laguna Country Club (I mean exact birds and eagles around the golf course). However, ‘buayas’ (Malay for crocodile) were also reported, especially the one that insisted on a prize for the longest drive (he claimed to a 24-handicapper).

The Event has raised the profile and status of our Association especially within the region and the business communities. We are now recognised as the de facto telecommunication association in Singapore, especially by iDA. For those of you who have participated or assisted in the hosting of the Event, thank you very much. I strongly encourage members to participate in the coming ATIE Forum, which will be hosted by KIAT in Seoul Korea on 23-26 May 2001. □□

Letter from the President

Getting Involved!

Wendy Aw

Radiance Communications Pte Ltd

The lucky 13 Profiteering reasons for attending the Annual General Meeting.

Well, here we are again, another year has gone by and it's time for the Annual General Meeting (AGM) and the highlights of the annual Chair's Report, which everyone will be looking forward to... or is it not? This is a common question at the back of everyone's mind.

I've participated in many of such AGMs, and clearly, there's always a universal problem—**attendance**. However, perhaps with the following benefits, which I've gathered, you might be convinced otherwise and attending AGM in the future could be a profitable and stimulating affair.

As it is an event for everyone, I've categorized the benefits as follows:

For the Information Seekers

1. It's the best opportunity to learn more about current issues in the concerned industry.
2. It's the time to acquire knowledge about what other members are doing for their organisations and how you could apply to your own.
3. It's the period to appreciate the activities organised over the calendar year and be updated on the events for the coming year.
4. It's the moment to understand the receipt and use of funds - all monies received by the association and how they are expensed off.



For the Channel Developers

5. It's a networking convenience for companies with mutual interest in strategic cooperation, joint technology developments and business opportunities.
6. It's an occasion for members to introduce their services to other members of the association.

For the Concerned Players

7. To represent the interest of the industry when any policy is being developed.
8. To play a part in the development and creation of industry tools such as the “code of conduct” and recommended “acceptable use” policies, in order to set high standards for the industry.
9. To understand the extension and growth of the association over the past year.
10. To share ideas and suggestions for improvement to the benefit of the association and the industry as a whole.
11. To make decisions with one united voice over decisions, which could affect the concerned industry.
12. To recommend activities which would benefit all the members of the association.
13. To maintain a dispute resolution process for the industry

In conclusion, I just want to emphasize that it's YOUR association. All the lines of communications are open and your issues and ideas will be taken seriously. The Exco members are only a group of volunteers who administer and manage the programs on behalf of the members.

I am sure that ATiS can be more successful than it was in previous years. Remember, participating in every ATiS event is a very effective way of contributing to the telecommunications industry of Singapore. □□

See you soon.

Wendy

► From the Editor...

becoming an ATiS member. From Ronnie Sims we learn what RP stands for, its origin and the purpose of the RP. And, of course, we have the usual regular features, such as upcoming events, new members' list and so on.

Do you have a new product or service? Have you totally re-organised your company, or created a new one? Do you have something important to say about our industry? ATiS would be happy to provide any ATiS member with a quarter page or so of free space in subsequent newsletters in which to talk about such things. Or, why not write a feature article? Anything up to a page or so on a topic of mutual interest would be most welcome! Please send any contributions to “The Editor, ATiS Newsletter” at atis@pacific.net.sg. □□

We need your Email address! Check out your listing on the ATiS web site. If we don't have your email address, you are loosing out on receiving the ‘quick-turnaround’ items that are so often so important.



ATiS Membership and You

Ivan Tan

Ericsson Telecommunications Ltd

Since the liberalisation of the Singapore telecom market, the telecom industry environment has changed tremendously, mainly due to local and global players heating up the competition. It is vital for any company, directly or indirectly involved in the telecom world, to shape up their strategies or business plans in order to gain from the changed environment. The integration of traditional telecom industry with both data and media industry has created a new challenge – Infocommunication (or Infocomm for short).

It is necessary that ATiS play a leading role in supporting and helping its members to be winners in the infocomm world. Hence ATiS's transformation from a traditional telecom related organisation into an Infocomm oriented organisation. The association has gained strong support through working closely with iDA, EDB, TDB and other important government agencies in Singapore. In this year alone, the association has received invitations to participate in trade visits to India, China, Canada, US, Japan, to name a few. Trade shows are popular events in which the TDB would like association members to take active part.

In June, we successfully organised the 6th Asian Telecommunications Industry Exchange (ATIE) Forum in conjunction with CommunicAsia Exhibition. In total, more than 70 delegates from China, Hong Kong, India, Japan and Korea attended this forum. The forum provided an opportunity for our members to meet and establish relationships with the business associates from these countries and enabled the exploration of business opportunities.

The association organised an ATiS Night on the 28th July, which is another effort of the association in bringing together its members so as to provide a venue for networking and business opportunities. Should you know of a company that should be a member of the transformed ATiS, then take action and convince them to join the association now.□□

Editorial

Maurice Nunas

Motorola

How About 'Co-opertition' ?

We are all out there competing...it's a dog-eat-dog world...do unto others as you would have others do unto you—but do it first...to the victor goes the spoils. These are all slogans of the competitive world, and they paint a picture that we are all pitted against each other. But, is this any way to grow an industry...is it necessary?

I submit to you that in many cases it is not only unnecessary to beat the crap out of the competition, it is counter productive. We can compete with each other and we can co-operate; this is co-opertition.

Increasingly, government regulators are turning to industry to provide data and suggestions for future procedures, policies, standards, regulations and so on. Few of us have the resources to deal with the ever-increasing demands for marketing and technical information. But, most of the time, we all want more or less the same thing, so why should each of us reinvent the wheel? Also, the recent liberalisation has spawned a large number of start-up companies who barely have the resources to get organised, let alone grease the wheels of government with myriad inputs.

ATiS has the potential to represent our common views to the regulators. It can also represent us before foreign trade groups and missions. In the standards arena, this has been happening for a number of years, as ATiS has representatives on three important standards advisory committees to iDA. In the most developed countries, organisations like ATiS no longer merely react to government initiatives, they produce proposals.

But, how does one go about producing an agreed position or proposal? Well, this is a volunteer organisation. So, the next time something comes up that calls for providing comments or a proposal on a new regulatory change, why not engage the power of co-opertition? Take pen in hand and draft those comments, but rather than sending them in as one small voice, send it to ATiS. If we can reach an agreement on the draft, and my experience is that this is usually the case, your voice will be amplified by being underwritten by ATiS.

No big deal. It's a start. Caring people donating their time and sharing their ideas build strong organisations and industries...then they compete like crazy in the marketplace.□□

The views herein are those of the author and are not necessarily representative of all members of ATiS.

Bluetooth

Maurice Nunas

Motorola

What is Bluetooth?

It is a low-cost, low power and short-range radio standard to provide wireless links between mobile computers, mobile phones and other portable handheld devices, and connectivity to the Internet. It is built into a 9mm x 9mm microchip and it is meant to be relatively inexpensive - the target price is US\$5 per microchip.

Bluetooth was originally envisioned as a cable replacement technology linking multiple devices wirelessly for synchronisation, data transmission and file transfer. Motorola's service discovery protocol was contributed to the Bluetooth SIG to enable a much broader vision, including the creation of Personal Area Networks, where all the devices in a person's life communicate and work together.

How does it work?

The Bluetooth radio uses spread spectrum technology to make the radio links robust. It accomplishes spread spectrum by frequency hopping in 79 hops displaced by 1 MHz, starting at 2.402 GHz and stopping at 2.480 GHz. The maximum frequency hopping rate is 1600 hops per second and the nominal link range is 10 centimetres to 10 metres, but can be extended to more than 100 metres by increasing the transmit power.

More information may be obtained from the Bluetooth website: <http://www.bluetooth.com/>

How widely adopted is it?

The Bluetooth Special Interest Group (SIG) includes promoter companies 3Com, Ericsson, IBM, Intel, Lucent, Microsoft, Motorola, Nokia and Toshiba, and 1883 Adopter/Associate member companies. This SIG is driving the development of the technology and bringing it to market.

Bluetooth operates in the 2400MHz ISM (Industrial, Scientific and Medical) band that is available globally and the Bluetooth standard is based on established regulations for Europe, North America and Japan. Recently, France decided to relocate its military applications operating in the 2400 MHz ISM band to another frequency band to make way for Bluetooth.

What is it used for?

Bluetooth uses a short-range radio link to replace signal-carrying wires between: PC and mobile phone; PC and PDA; mobile phone and PDA; hands-free and mobile phone, etc. The possibilities are endless. The protocol enables the exchange of information between many devices, including mobile telephones, PDAs, notebook PCs, handheld PCs, associated peripherals and home hubs.

Unlike infrared devices, Bluetooth does not require line of sight for connection provided they are within operational



range of other Bluetooth-enabled devices.

Bluetooth devices are able to automatically form small networks called piconets the moment they come within range of each other. Depending upon the device in which they are installed and how they are configured, these piconets can either simply provide the opportunity for users to network or they can automatically do so.

Piconets are self-managing, since the devices allocate the master and slave modes among themselves. They also self-reconfigure as masters and slaves come and go. Although piconets may only contain eight devices, many piconets can exist in an area. Where multiple piconets exist, if there is a unit that is within coverage of two nets, it will form a bridge between the piconets. These bridged piconets are called scatternets. You can have up to ten piconets in a scatternet before the users will notice any performance degradation.

Bluetooth can also be used in stand-alone applications. For the next year or two, synchronisation is likely to be the initial key application for Bluetooth-enabled products. Synchronisation of Personal Information Manager (PIM) information or business card exchange from a PDA to: a PDA; to a cellular phone; or a business/home PC is of paramount importance to many customers. Automatic synchronisation of a mobile telephone with a desktop/notebook PC or a hand-held Personal Digital Assistant (PDA) device will be simple. This could be configured to occur whenever the user comes within range of these devices. The cordless desktop is what Bluetooth is all about.

Car manufacturers will be able to install hands-free car kits that work with any Bluetooth-compliant mobile telephone or any telephone with a Bluetooth plug-in. These will allow users to use their cell phone via a hands-free, Bluetooth-enabled device, allowing them to keep their hands on the steering wheel, while conducting business calls.

Similarly, headsets enabled with Bluetooth technology promote a hands-free audio environment providing connectivity to a cell phone worn on your belt or mounted in your automobile and no wire to snag on everything around you

E-mail / Internet / Intranet access is also facilitated using local Bluetooth connections. A Bluetooth-enabled PDA or notebook could connect with a local access point or utilize a Bluetooth-compatible cellular telephone to access e-mail or the Internet.

Most laptops come with a built in microphone and speaker. Connected to the PSTN via a Bluetooth enabled cell phone and the laptop becomes a speakerphone.

How do you make money with Bluetooth?

The following news clips should get the moneymaking side



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of your creative juices flowing.

- According to a report from the Cahners In-Stat Group, by 2005 the manufacture of Bluetooth-enabled equipment will exceed one billion units

- July 27 / AirCell, Inc. and Motorola, Inc. announced today that they successfully completed the world's first in-flight test of "Bluetooth" wireless technology at the Experimental Aircraft Association's AirVenture Oshkosh 2000, in Oshkosh, Wis. The test represents the first application of Bluetooth technology in the aviation industry and paves the way for the in-flight usage of personal wireless phones, laptops and other personal communication devices.

- Compaq Computer Corp. will equip all its product lines with the Bluetooth short-range radio frequency technology, to provide Non-Stop connectivity for delivering Internet-enabled services. For a start, the company is working with a number of mobile phone operators including Motorola, Ericsson and Nokia, to provide notebook-handphone connection over its Armada notebook computer range.

- June 12 – Motorola opens the Bluetooth Congress here this week with a slate of new products and agreements to supply leading personal computer manufacturers with Bluetooth wireless technology. Both IBM and Toshiba intend to work with Motorola to offer Bluetooth functionality as a customer option across portions of their PC lines.

- June 13 - Intel Corporation and Microsoft Corp. today announced they are developing a road map to provide native support of the Bluetooth wireless technology for the Microsoft(R) Windows(R) operating system during the first half of 2001. The companies are also working on a standard method for PC platforms to interface with the Bluetooth technology that the PC industry can implement in their products.

- July, 2000—Hoping to entice developers to begin coding applications for the impending wireless connectivity technology, Bluetooth*, IBM has set the ball rolling for Linux by releasing the BlueDrekar protocol stack for Linux, and by open-sourcing a driver for the HCI UART transport layer.

You could manufacture it; create new products with it; innovate with it; write software for it. Whatever you do, don't ignore it! □□

ATiS Night

Colin Goh

Datacom Cable Technologies Pte Ltd

The 2nd ATiS night for the year took place on the 28th of July 2000 at Laguna National Golf Club.

A total of 50 members and guest were present on that evening. About 10 of the guests were SBO/FBO licensees that were



awarded by iDA recently and most of them have submitted their application to be members of ATiS.

In attendance for the first time as our guests were Mr.Leong Keng Thai, Deputy Chief Executive & Director-General (Telecom) and Mr.Khoong Hock Yun, Assistant Chief Executive Infocomm Development from Infocomm Development Authority of Singapore.

Mr. Maurice K. Nunas from Motorola Electronics (also our Vice President) started the evening off by giving the members a closer look on the new technology in wireless communication, "Bluetooth", and explained what are the business opportunities that comes with the new technology (see the other section in the newsletter for write-up on Bluetooth).

Immediately after the presentation, an eight-course dinner was served. Ms. Wendy Aw, our President, took the opportunity to present all members with a newly designed ATiS membership certificate which all of us will be proud to display in the office.

For those members who did not turn-up on the evening to receive the certificate, ATiS will have the certificates delivered to their offices.

ATiS plans to have the next social gathering on 20th October, probably, in one of the country clubs. Also planned is a round of golf on the day of the ATiS Night. ATiS will inform members when the event is confirmed.

See you again at the next ATiS night.□□



ATiS Resource Panel (RP)

Ronnie Sim

Apemco Marketing

The concept of RP (Resource Panel) started in 1995. At that time, the Executive-Committee realized that Ex-Co members leaving the committee each year on completion of their terms included capable and good members who were still able to contribute to the association but not in the capacity of Ex-Co members. The Ex-Co wanted to cultivate and develop a relationship with this group of good contributors and thus the concept of RP was formed. The aim being to allow the preceding Ex-Co to tap into the knowledge, experience and personal networking of outgoing members so as to provide long term continuity of the association's existence, function and interest to local and international industries.

These members are invited to the honorary posts in the Resource Panel. The main role of RP is advisory. It contributes ideas, suggestions, opinion involving ATiS dealings with other associations, regulators and other industries. In addition it also assists in major projects, activities, publications, public relations, etc undertaken by the association.

We hope that each year a few members are invited into the RP so that a strong and useful team is always available to help the preceding Ex-Co build on its achievements and bring ATiS to a newer height.□□

CALENDAR OF EVENTS

Telecoms Asia, 1 to 2 September, in Singapore. Further information: Email simonp@icmkl.com or visit <http://www.icmworldwide.com/offices/Kualaframe/Kualaset.htm> or call (603) 466 0900

Submarine Networks World Asia Pacific, 5 to 7 September, Oriental Singapore – The foremost forum for submarine cable operators and manufacturers in the Asia Pacific.

http://www.submarine-networks.com/subnetworks_world2000_ap/

Broadband Wireless Access in Asia 2000, 6 to 7 September, Singapore – Conference to address the key issues of how broadband wireless access technologies can position itself to meet this demand for greater bandwidth and capacity in the liberalised telecommunications market.

<http://www.ibt-asia.com>

7th IEEE International Conference on Networks 2000, 6 to 7 September, National University of Singapore International Forum for experts to promote, share and discuss various issues, developments and advances in the broad field of computer and communication networks. <http://www.ibt-asia.com>

AsiaComm / Expo Comm Thailand, 7 to 9 September, Bangkok. For information contact Ms. Pauline Ko, E.J. Krause & Associates (HK) Ltd,

Email: ejkpk@netvigator.com

Internet Business 2000, 1 to 3rd October, Singapore International Convention & Exhibition Centre - A forum on B2B Electronic Commerce (EC), B2C EC and New Internet Technologies.

<http://www.zdnetasia.com/ib2000>

ITU Telecom Asia 2000, 4 to 9th December, Hong Kong Asia 2000 comprises an Exhibition and a Forum. The Exhibition will feature a vast range of telecommunications-related products and services, while the associated forum will focus on the latest telecommunication developments and growth in the region and will provide a platform for telecommunication leaders to share their ideas on future trends and discuss appropriate strategies for the developing as well as the industrialized world.

<http://www.itu.int/ASIA2000/index.html>

ATiS—Who's Who

Executive Committee (Exco)

Like all organisations, ATiS has an executive committee to serve you. These people on the Exco are all volunteers; so let's be thankful for the time and energy that they are putting in to help us.

- President—Wendy Aw, Radiance Communications Pte Ltd, 9834-0040
- Vice-President—Maurice Nunas, Motorola Electronics Pte Ltd, 9637-6220
- Secretary—Joseph Lee, Roots Communications Pte Ltd, 9639-6344
- Treasurer—Michael Teo, Comm & Net Pte Ltd, 9411-8854
- Chairman, Membership—Ivan Tan, Ericsson Telecommunications Ltd, 9617-1972
- Chairman, Website—Phua Aik Hong, StarHub Pte Ltd, 9859-0658
- Chairman, International Affairs – Goh Young Kwang, CET Technologies Pte Ltd, 9633-7605
- Chairman, Activities—Colin Goh, Datacom Cable Technologies Pte Ltd, 9818-0050
- Member—Khor Seng Peng, Jason Electronics Pte Ltd, 9846-4861
- Member—Evelyn Goh, Pinnz Pte Ltd, 9750-8744

Complete Members List

A complete listing is available from our website at:

<http://www.atis.org.sg>

Welcome New Members

The Exco approved the following applications for new ordinary members:

- Pacific Internet Ltd
- Anritsu Pte Ltd
- Teleconsult Pte Ltd
- Aglow Alicom Pte Ltd
- i2U Pte Ltd
- Sakon Singapore Pte Ltd
- Associate members:
- NTL
- Telesource Executive Search Pte Ltd
-

Departing Members

- System Communication Company

- L & H Phone Connection P/L
- Sankosha Engineering
- Keppel Communications
- Lian Yew Tyres
- Ultro Communications Pte Ltd

Amendments:

- Future Enterprised Pte Ltd is replaced by Future Engineering & Communication Pte Ltd
- Oki-Data (S) P/L is replaced by Oki-Electronics (S) Pte Ltd

Members' Details

Promoted to new greatness? Moved to a bigger office? Got a more prestigious phone number?

Please have a look at our list of members and check out the details for your entry. Our secretariat would surely like to have the latest on you!

Send any changes to the secretariat at: atis@pacific.net.sg ☐☐



Association of the Telecommunications Industry of Singapore
30 East Coast Road #03-41/42 Paramount Shopping Centre, Singapore 428751
Tel: 3444838 Fax: 3440626 email: atis@pacific.net.sg Website: <http://www.atis.org.sg>