

Opening Address and Official Launching

**International ICT Infrastructure and Digital Economy Conference Sarawak
(IDECS) 2017**

- Transforming Sarawak Through Digital Economy

By

The Right Honourable

Datuk Amar Abang Haji Abdul Rahman Zohari bin Tun Datuk Abang Haji Openg

The Chief Minister of Sarawak

3rd April 2017, 9:00 a.m.

**Borneo Convention Centre,
Kuching, Sarawak.**

[Salutation]

The Honourable Deputy Chief Ministers

The Honourable Speaker of Sarawak State Legislative Assembly

The Honourable Federal and State Ministers

*The Honourable Tan Sri Datuk Amar Haji Mohamad Morshidi bin Abdul Ghani,
The State Secretary of Sarawak, the Conference Chairman*

The Honourable Deputy and Assistant Ministers

Distinguished Speakers and Delegates of IDECS 2017

Members of the Media

Ladies and Gentlemen,

Good morning.

Assalamualaikum

[Preamble]

1. Let me first, extend a very warm welcome to all of you to the **International ICT Infrastructure and Digital Economy Conference Sarawak 2017**.
2. The theme of this international conference is **Transforming Sarawak through the Digital Economy**.
3. This is a very important conference for us in Sarawak.

[Globalisation]

4. As a result of globalisation, our people also aspire to be prosperous and enjoy the fruits of the latest technology.
5. They see what is happening round the world on their television and computer screens, and their mobile phones.
6. Many of our young people are also pursuing their interests in the latest technologies in their studies in higher education.
7. For the young, this is their real world. This is an aspect of the world that we, as policymakers in Sarawak, cannot ignore any more.

8. We need to create these jobs in Sarawak for them as well. We need to transform Sarawak through the Digital Economy.

Ladies and Gentlemen,

[Progress in Sarawak Development]

9. Sarawak has made great strides in our economic development.
10. Sarawak is richly endowed with natural resources. Our people have been living in peace and quiet for many centuries, relying on the land, sea and rivers for all their basic needs.
11. Because we have a relatively long coastline, we also have oil and gas resources offshore.
12. Because we have a large landmass, we have natural resources in timber and plantations, as well as hydropower.
13. Because we are in the tropics, we have solar power.

14. Conventional economic wisdom says that Sarawak can export these natural resources in return foreign exchange to buy goods and services which we need.
15. With our foreign exchange, we build our basic infrastructure facilities such as roads, airports, seaports and other goods and services which we are now enjoying in this island State of ours in Borneo.

Ladies and Gentlemen,

[Policy Challenge]

16. The challenge for policymakers in Sarawak today is how to propel the economy to greater heights, and with as more direct impact of the benefits on our people, especially their incomes.
17. There are **two major prongs to our economic development strategy.**

[Industrialisation Using Our Resources]

18. The **first prong** is to increase the use of our natural resources for our own industrialisation.
19. We were told in the past that it is better to export our oil and gas because they fetch good prices in the export market, and to use the oil proceeds to subsidise the prices of imported oil and gas that we use at home.
20. Eventually, it was argued that subsidies are not good for the development of a competitive economy. The subsidies are now removed.
21. So we are left in a situation where we have oil and gas and cannot fully enjoy the benefit of having oil and gas. This cannot be.
22. It is therefore of strategic importance that Sarawak should try to use as much as possible our energy resources for our own economic development and industrialisation.
23. We have already started on this strategy by buying back the Bakun Dam.

24. The Bakun Dam is a commercially-viable project where the repayment of the project is covered by the stream of revenues from industries.
25. Our main reason for buying the Bakun Dam is because it is a major strategic asset of Sarawak and we must own it. As a strategic asset, the Bakun Dam has major positive consequences for our economy. We are confident that the growth of our power sector will continue to drive the growth of our economy in the years to come.
26. The same funding model applies to the Murum Dam and the coming Baleh Dam.
27. This is where the signing of major off-takers of the energy is important for the commercial viability of the hydro projects.

[Extending SCORE]

28. But we do not necessarily have to concentrate only on energy-intensive industries in Samalaju.
29. We can concentrate instead on developing downstream industries in Samalaju.

30. We can extend the scope of the Sarawak Corridor of Renewable Energy – that is, **SCORE** – outside Samalaju to other parts of Sarawak especially the major urban centres.
31. SCORE therefore does not mean only Samalaju. SCORE can also be here in Kuching or Sibul or Miri, or wherever we can bring power and clean industries.
32. **Energy-intensive** industries do not necessarily mean **heavy** industries. They can also mean data warehouse and server farms which also require a lot of energy to operate. This is where Bakun and other hydro dams come in to play a strategic role in powering digital economy.
33. The point to make here is that an economy which has plenty of energy is an economy that has the best potential for growth in the long run.
34. Our challenge now is to harness that great potential for growth using our energy resources.

Ladies and Gentlemen,

[Autonomy and Sarawak-Centric Policies]

35. To be able to harness the full potential of growth for Sarawak is to have greater autonomy over our own destiny.
36. We must decide on our destiny here in Sarawak, not somebody else deciding for us.
37. We must create policies that are Sarawak-centric which focuses on the immediate and strategic needs of Sarawak.
38. Our basic challenge in Sarawak is how we can build the basic infrastructure systems that are critically needed by our economy.
39. We have infrastructure that is geared toward the export of oil and gas, timber and palm oil.
40. But, we still do not have a sufficient infrastructure system for the export of agriculture food produce and other products of our local villages.

41. We do not have a good infrastructure system for the development of our entrepreneurship to enable them to be innovative and creative and market new products for the world.
42. Of course, we do not have a proper infrastructure system for the Digital Economy.

Ladies and Gentlemen,

[Digital Sarawak]

43. The **second prong** in our development strategy is to build our Digital Economy – or Digital Sarawak.
44. The Digital Economy will create an entirely new dimension of development and growth for Sarawak. The Digital Economy will create new jobs for the young people in urban centres and rural areas, transforming the way we live and do business. The Digital Economy will challenge the traditional models of doing business in Sarawak and allow young new entrepreneurs and business people to move forward to the front.
45. The Sarawak Government realises its importance and is therefore fully committed to developing the Digital Economy.

Ladies and Gentlemen,

46. I learn that, as we are now talking about the Digital Economy, we are in fact already far behind in the technology cycle.
47. The world is now in the **Fourth Industrial Revolution** – the merging of elements of the physical, digital and biological worlds, to be characterised by cyber-physical systems, cloud computing, mobile technologies, Internet of Things and Internet of Systems as well as innovations in such areas as smart robotics, learning machines and self-driving cars.
48. The Digital Economy is in the **Third Industrial Revolution** which started way back in the 1960s and was based on digital technologies, personal computing and the development of the Internet.
49. The **First Industrial Revolution** involved water power and steam power, and the **Second Industrial Revolution** involved electricity, mass production and assembly lines.
50. With this little history, I have come to realise that we cannot just carry our development programme in an incremental way. We must be brave and leap-frog into the future.

Ladies and Gentlemen,

[Catch-Up and Leap-Frog]

51. To catch up on the Digital Economy, we know that the Sarawak needs to build a **world-class ICT infrastructure**.
52. At the moment, Sarawak has a basic ICT infrastructure which is decent enough for personal use and only in selected spots, but not good enough on which to build the future of the Sarawak economy on.
53. Broadband coverage in Sarawak is only 51.8% households. Among the populated areas, broadband coverage is 72.1% with blind spots. This means there is no cover for lowly populated areas.
54. The average wired network speed for Sarawak is estimated at 4 mbps per household. This is nearly 7 times slower than South Korea with a network speed of 29 mbps per household according to AKAMAI, World Network Audit Organisation.

55. Sarawak has about 1,200 communication towers. I reckon that for Sarawak to have adequate network coverage to a level that is sufficient for us, 1,000 towers are not enough. Not even 2,000 towers. I want 5,000 towers in Sarawak. We must reach every possible settlement and we must close the gap and cover all the blind spots.

56. Our **Digital Village** in Samajaya as I have announced last month during TEGAS event can be strengthened to provide a *Silicon-Valley*-type infrastructure to drive digital-minded Sarawakians to produce new disruptive business models.

57. I am glad to announce today the E-Commerce Transformation Plan up to year 2030 for our youth better known as E-Com Y30. This plan will prepare our youth at this Digital Village to graduate as E-Commerce start ups & Entrepreneurs with Digital knowledge.

58. **SnapChat** is changing chatting environment with online comments and video streaming. **GrabCar** and **Uber** are changing the taxi industry. I am told 3D tourism advertisements can be used to change the way we do tourism in Sarawak. Tourists especially from cold countries can be enticed with 3D models in order to get a feel of our sunny beaches and villages to come and visit us here. All

these digital initiatives will be part of the Digital Village Youth entrepreneur development.

Ladies and Gentlemen,

[Some Technical Specifications]

59. It is obvious that Sarawak needs to have a new strategy to developing a physical ICT infrastructure that is sufficient for Sarawak to build our Digital Economy on and compete globally in the next 5-10 years.
60. To provide seamless and resilient services, the ICT infrastructure in Sarawak must be built wholly on optic fibre with *5G/7G network* and *IP transit*, capable of delivering 20 terabyte as a combination of SACOFA, *SEB Optical Ground Wire (OPGW)*, Pan Borneo, and Telekom Malaysia.
61. We also have to ensure a resilient network and reliable data security. There must be *fibre-interconnection* among sub-districts. Our computing core must be increased to excess of *10,000 cores*. We have to build *exabyte* with *Solid-State Drive (SSD) technology* to cater big data. And we must also have a *data analytic engine*.

Ladies and Gentlemen,

[Driving the ICT Development Strategy]

62. Because we want to build a world-class ICT infrastructure for Sarawak, it may be necessary that the Sarawak Government must take the lead in driving the development of the physical ICT infrastructure, rather than leaving our future to commercial operators and service providers and at the pace and at the mercy of others. Enough is enough.
63. If we cannot achieve commercial viability, we will pursue economic feasibility as we need to move our economy into remote areas where none has dared to go before. After all, the ICT backbone is the infrastructure that will enable other new industries to flourish.
64. This means that the Sarawak Government may have to own our own physical networks – as South Korea is doing.
65. We may have to integrate and utilize our electricity with telecommunications.

66. We may have to invest in our own equipment. I am committed to invest RM1billion to start with to ensure our ICT Infrastructure are fit to support the Digital Industries, commerce and investment that will be lured to Sarawak. I want to have a network speed that are uninterrupted where you can transmit your data, your video, your media either through Wi-Fi or your mobile device anytime, any moment without buffering.
67. We shall embark and embrace the state-of-the-art technology in data transmission – the Optical Transport Network at Edge – to spur the growth of Sarawak’s economy.
68. We may have to open up the field to more commercial operators.
69. To manage the specifications and implementation for the needs of Sarawak, and setting our own rules and regulations and policies, we may need to set up our own **Sarawak Multimedia and Communications Authority.**
70. For funding, we will explore various ways to reduce the funding burden on our project.

71. Sarawak welcomes global players to build their data warehouse and—server farms here because we have sufficient electricity to power them and assist us by doing a back-to-back funding for the ICT infrastructure we wish to build.
72. By the synergistic use of our natural resources, we can make **Sarawak a Cyber Powerhouse**. As with our electricity, we can also sell our network and computing services.

Ladies and Gentlemen,

[Benefits of Digital Economy]

73. The Digital Economy is closely associated with rapidly declining per-unit cost of production, disruptive technologies and disruptive business models.
74. There is rapid innovation and rapid obsolescence, in both technology and innovation. While existing companies try to stick to their true-and-tried traditional business models, young upstarts, with the help of private equity and other sources of funding, enter the fray – using new disruptive technologies and new disruptive business models – to create new markets and new value networks.

75. As a result, a new wave of economic dynamism takes over the world and destroys the old ones.
76. Wikipedia displaces the bulky Encyclopaedia Britannica, Air Asia disrupts the traditional business of Malaysia Airlines, UBER and GRAB upsets the ordinary taxi drivers, Amazon.com rises to destroy the traditional high street retail shops, and Alibaba emerges to try to challenge Amazon and ebay.
77. For ordinary people like us, the smart phone has completely taken over our lives.
78. New digital products with artificial intelligence are slowly controlling our individual behaviours by memorising our peculiarities and responding according to our quirks and idiosyncrasies. Some of us allow digital products to tell us what to do that is supposed to be good for us. These new digital products can indeed be disruptive to our otherwise traditional but peaceful family life, threatening to replace our spouses – while seemingly encouraging our children to abandon us in their minds.
79. This is an exciting area where new successful entrepreneurs can be created.

80. The hope of the ordinary people in Sarawak on the Digital Economy is that it may be possible for them to sell their goods and services on the Internet.
81. The Digital Economy therefore has also significant impact on the real economy in terms of design, marketing, production and distribution.
82. There are serious implications for transport and logistics, especially when we think that the Digital Economy can bring significant improvements to the livelihoods of communities living in remote areas in the hinterland and wishes to network with the rest of the world.
83. In fact, the Digital Economy can be exciting for basic infrastructure development in Sarawak because the Digital Economy provides an added dimension to the economic justification for building basic infrastructure facilities to remote areas in the first place.
84. The development of the ICT infrastructure may well include wireless Long-Term Evolution (LTE) technology in future, as Sarawak has a huge landmass relation to our small population which is mostly isolated in little pockets in the hinterland.

85. For leap-frogging, we can think in terms of welcoming relevant foreign direct investment to Sarawak especially in major urban centres where the lifestyle fits the young and educated graduates who are keen to work on cutting-edge technologies here.
86. Sarawak can also be an attractive place for global companies to undertake their research and development, as Kuching is only an hour and half away from Kuala Lumpur and Singapore and three hours from Hong Kong.
87. Cost here is a fraction of those in those cities, for both R&D and for those working here.
88. Sarawak is also a good place to bring up children, and there is really quite a lot to say for this little State on Borneo Island as a place for developing technologies for the future, not necessarily by ourselves but by hosting global companies.
89. While we embrace Digital Technologies into our lives and our system we need to ensure cyber security is in place to ensure national security and realise modernisation. To do that we must have strong and powerful information technology, high-calibre cyber security and thriving cyber culture.

Ladies and Gentlemen,

[Concluding Remarks]

90. Let me conclude.

91. Imagine one day that the Penan in the jungles of Murum in the hinterland of Sarawak can sell their special hand-woven mats direct on the internet through the E-Commerce to someone in the UK, just because we have the entire Digital Economy set up properly in Sarawak together with the necessary transport and logistics.

92. Imagine in Kuching and other urban centres, young men and women sitting in their air-conditioned spaces of their choice, doing research and development and selling their services to clients around the world. Needless to say, all new houses built from now onwards in Sarawak must be fibre-ready.

93. Imagine the future of learning where young people can learn according to their interest and capabilities, taking lessons anywhere in the world, rather than be subject only to the curriculum set by the national education policy.

94. Imagine a tourist from anywhere in the world can enjoy a multimedia experience from his or her home through an augmented virtual reality and end up actually visiting the spot in Sarawak where they had wished.
95. Also imagine that soon government services will be so well digitised and automated that no one has to deal with a government servant anymore and get their things approved quickly, while government servants spend much of their time trying to improve cyber security and making policies and regulations more responsive to the rapidly changing reality and to enhance public and business community confidence in digital technology.
96. Imagine the public transport will be driven by artificial intelligent system which is driverless and we can move around safely and efficiently by sheer instruction on our mobile device.
97. Imagine a city run on many smart solutions where for example the health of its citizen can be monitored and diagnosed through smart remote detection.

98. Imagine how the **Internet of Things** helps to manage our daily routine life style by integrating various applications to ease our household chores, enhancing our home security, therefore increasing our ability to make our live much better and more productive.
99. All in all, we should expect an enhance citizen experience in Sarawak therefore improve the quality of life and welfare of the people. We want Sarawak happy and safe place, and a superb quality of life with the advancement of application of technologies with real human touch.
100. To ensure that the Sarawak Digital Economy is developed in a wholesome manner, we will have a clear roadmap with specific timeline and a dedicated agency to implement it – such as a new **Sarawak Digital Economy Corporation** to integrate the physical and virtual worlds.

Ladies and Gentlemen,

101. With such great hopes in mind, you will have realised how very much I look forward to the results of your deliberations in the next two days of IDECS 2017 – the **International ICT Infrastructure and Digital Economy Conference Sarawak**. We have experts from abroad, including

Sarawakians who have played prominent roles in the national IT initiatives.

102. I hope you will provide advice for Sarawak to help us along our path to developing a world-class ICT infrastructure as a solid foundation for us to build our Digital Economy. Since Sarawak is new in ICT, there will be much in your experiences and insights that can help us to avoid the pitfalls of the pioneers as well strive to cost-efficient to providing ICT services to our people in towns as well as those in remote villages in the jungle.

103. I shall be here in the final plenary session tomorrow to listen to you.

104. My appreciation to the organising team headed by the State Secretary the Honourable Tan Sri Datuk Amar Haji Mohamad Morshidi bin Abdul Ghani.

105. My thanks to all the speakers and participants for taking your precious time off in order to come to our event. For all those who come from afar, I wish you a pleasant stay in Sarawak and enjoy Kuching.

Thank you.