

Speech for the Launching Ceremony of CIPTA 2015
By YB Pehin Datu Singamanteri Kolonel (B) Dato Seri Setia (Dr.) Awang
Haji Mohammad Yasmin Bin Haji Umar,
Minister of Energy at the Prime Minister Office

Bismillah Hirrahman Nirrahim,

All praises be to Allah Subbahanhu Wataala, salawat and salam upon our beloved Prophet Muhammad Sallallahu 'alaihi Wassalam, his family, companions and faithful and honest followers till the end of time.

Assalamualaikum Warahatullahi Wabarakatuh
and a Very Good Morning,

Permanent Secretaries and Deputy Permanent Secretaries of the Prime Minister's Office and the Ministry of Education,

Associate Professor Dr. Hajah Zohrah bin Haji Sulaiman, the Acting Vice Chancellor of Institute Technology Brunei,

Yang Mulia Awang Mohammad bin Haji Damit, Managing Director of Brunei LNG,

Ladies and Gentlemen,

1. First of all, I would like to express my utmost gratitude to organising committee and Associate Professor Dr. Hajah Zohrah Binti Haji Sulaiman, the Acting Vice Chancellor of Institute Technology Brunei (ITB) for extending an invitation to me to be here with all of you this morning, and to officiate the launching of the latest edition of the Crown Prince Creative, Innovative Products and Technological Advancement Competition. I was made to understand that this would be the 5th edition of the competition, which has been held biennially since 2005. The theme “Towards a Smart Nation” is aligned with the main objectives of the CIPTA competition and seeks to support our national vision of cultivating an innovative society with a diversified and sustainable economy based on a culture of knowledge and innovation.
2. Going back to the invitation letter from Associate Professor Dr. Hajah Zohrah that I mentioned earlier, the letter also invited me to make a speech covering the theme of CIPTA 2015 – TOWARDS A SMART NATION. The advice is for me to talk about Smart Nation! Indeed, to me this is definitely not an easy topic to talk about considering our limited time. Nonetheless, please allow me to say a few words on this topic and also on CIPTA, the ways that I see them and from my own perspective.

3. The very mention of the term 'Smart Nation' brings varied perceptions among our audience this morning. The widely accepted definition of a Smart Nation as been kindly provided by the Secretariat as a background to the theme of this CIPTA 2015, is a nation that uses technology to improve the qualities of life of its people. Applying this definition to our Brunei Darussalam's environment, I would further add it must also be able to do so in a sustainable way. The World Commission on Environment and Development (WCED) in their publication *Our common future*, published by the Oxford University Press, 1987 commented that to be sustainable, a development must be able to meet the needs of the present, without compromising the ability of the future generations to meet their own needs.
4. We have seen how adoption of new technologies has improved our quality of life, work and leisure. We have also seen many examples where they helped to improve productivity and allows an industry to remain competitive and along the way, provides better job security and created more employment. Our main sponsor of CIPTA, BLNG is a very good example. The company adopted new technologies and spent hundreds of million dollars in order to further its efficiency and by doing so, remains in the top quartile amongst the world LNG producers, and is able to maintain its customers' confidence in BLNG's ability and reliability as a medium to long term supplier. Similarly in the upstream sector, new as well as innovated technologies have enabled discoveries previously deemed to be economically or technically non-viable or even impossible to be developed, to be brought into production, in a safe manner with regard to the workers and environment.
5. Yet despite all these, for us here in Brunei Darussalam, there are still challenges that are in front of us toward becoming a smart nation.

Please do not take these challenges in the negative ways – because in many areas, we are still on a journey to become a smart nation. The most obvious challenge was, and still is the cost of technology itself - but then again with advances made in innovations and the availability of low costs applications such as smart phones and so on, if the will and passion are there, our desire to become a smart nation, is not impossible to achieve.

6. There are certain criteria that must exist in a truly 'Smart Nation' :-

First of all, a Smart Nation promotes and embraces a culture that values the importance of technological innovation;

Secondly, it must have an education system that produces individuals with excellent interpersonal and entrepreneurial skills;

Thirdly, it practices policies and have administrative, fiscal and legal mechanisms in place that prioritise and encourage investments in the area of research and development;

Fourthly, it has an ability to both generate and protect patents in order to nurture entrepreneurship and commercialisation; and

Last but not least, able to attract foreign investment that in turn would bring about acceleration in the Nation's economic growth.

7. To achieve the status of a truly smart nation, we therefore need to be proactive in pursuit of producing our very own technological innovations. We must learn from the success stories of countries, some without natural resources that have transformed themselves into sustainable economies by prioritizing the acquisition of new knowledge and innovation.
8. Brunei Darussalam's small population is often seen as a limitation that hinders us from being a nation of inventors and innovators. We must change this mindset and start looking at our unique situation as an advantage. It is the quality of the people, not the number that is important. An equally often quoted reason is the lack of fund. Again this is a flimsy excuse. The 10th National Development Plan (RKN10) has a strong focus on promoting innovation and Research & Development, with a budget of B\$200 million compared to \$145 million allocated under RKN9. Accepted that this is small compared to the billions of dollars spent by the big economies, but it is still significant and demonstrates the Government's strong commitment to develop R&D in this country. However we need to work harder as there is a lot of room for improvements in the level of R&D activities.

Ladies and Gentlemen,

9. As I mentioned earlier, a smart nation is one that cultivates a culture that values the important of innovations. For us to instill this culture, we must have an alignment among our key stakeholders. Namely, the motivator and instigator (and I mean this in a very good way) who in this case, includes the people behind CIPTA; the industry players as sponsors and mentors; and thirdly the roles of the Government including the higher institutions such as UBD and ITB, as providers of facilities as well as training and support staff. I would also like look at the fourth and to me, the most important group of stakeholders of all – the younger generation.
10. Let us briefly look at at the roles and responsibilities of each of these stakeholders. We must applaud the visions and hard works of the people behind the creation of CIPTA and to those who work tirelessly toward achieving the vision and objectives of the programme. CIPTA was able to attract growing number of participants and produced worthy winners for the various categories competed. The standards of judging must be very high as no entry yet has been successful to win the Crown Prince CIPTA Award Trophy. I am not asking the CIPTA Secretariat to lower the standard of judging but instead, would like to issue a challenge to our researchers – lets try harder this time around, and produced an invention or innovation that truly merits being awarded the Crown Prince CIPTA Award Trophy.

11. To me, the challenges in organizing an event like this are firstly to maintain interest and attract a very good number of participants, and secondly, in ensuring that projects submitted are of very high standard. I further understand that initially, there were two categories competed under CIPTA, namely *Creative or Innovative New Product, Process or Technology* and *Creative or Innovative Modification to an Existing Product, Process or Technology*.
12. For the last two CIPTAs held in 2011 and 2013, an additional category was added geared for the younger generation, Creating New and or Modifying Existing Products, Process or Technology by Young Inventors and opened for participations by upper secondary students. I also congratulate the CIPTA Secretariat for coming up with a new initiative to support the theme of this 5th CIPTA, namely the “Smart Junior Competition” that aims to promote, nurture and encourage the culture of invention among Brunei’s younger generation. I lauded this initiative that provides an avenue for them to compete amongst themselves while at the same time instilling an interest into research, promotes creative thinking and hopefully, turned them into the much needed research scientists and technologists of the future.

13. My suggestion to the CIPTA Secretariat is this – why just stop here? Lets look at introducing other sub-categories and even inviting participations from beyond Brunei. Perhaps at the ASEAN School level. This will allow our students more exposure on the activities (and achievements) of their fellow counterparts from other countries. This is only a suggestion. After 10 years, the people behind CIPTA are the best people to bring up proposals as to how the whole programme, its vision and objectives could be further improved and aligned with the present needs of the nation.
14. I am however attracted to one particular objective, the promotion of manufacturing process, technological products development, commercialization and entrepreneurship in Brunei Darussalam. I would like to pose with all sincerity, an important question here. Have any of the components stated in this objective already been achieved? Indeed, the usefulness and value of an invention or innovation should not be measure merely in dollars and cents – but the fact remains, monetary reward is a strong catalyst and very strong motivator for most if not all inventors. The World Intellectual Property Organisation in a paper prepared for the WIPO National Workshops on Assessment and Valuation of Inventions and Research Results for Technology Transfer and Commercialization held in the Philippines in 1997 said “The marketing and commercialization phase of the innovation process is crucial for the success of any invention and innovation. The returns in terms of profit upon its commercialization are the ultimate proof of the success of any invention or new product”.

15. We have several winners since 2005. Have followed up been made on their current status by the CIPTA Secretariat, for example whether advancements or improvements have been made on their winning submissions. For example, has any of the inventions or innovations been put to good use in a real working environment or have successfully been commercialized. I am certain that almost all, if not all the participants when submitting their entries, does so not only with the hope of winning the prestigious and still elusive Crown Prince CIPTA Award Trophy, but also that their brainchild would be widely put to good use, or even be successfully commercialized, while being adequately protected legally through the acquisition of patent rights both locally and internationally. If this could be done, it would bring CIPTA to a new level of successes.

Ladies and Gentlemen,

16. The second stakeholder is the industry. The key players within the various industries, not necessarily just the oil and gas, could help develop our domestic R&D capabilities. There are a number of ways this could be done. The industry can help by identifying and proposing areas of researches that need to be carried out by our researchers for utilisation within the industry itself. They must also be receptive and willing to assist in the development and commercialization of a locally developed invention or innovation.

17. We have within our oil and gas industry – people, both locals and expatriates, with vast experiences in conducting R&D works. We have locals that have had the opportunities to do researches with world-class companies such as Shell, Baker Hughes and so on. I am sure they would be most willing to help in or to be mentors in further nurturing our budding researchers. Perhaps CIPTA Secretariat can be a matchmaker by identifying a suitable mentor from the industry who could teach our winners the finer arts on selling their products to potential customers.
18. Another area where the industry could help is in providing training on entrepreneurship to our inventors and innovators. I see here the correlation between development of inventors and innovators to that of the need to develop our SMEs. Every year, a good number of new local companies participated in tendering for BSP's contracts. Those who failed to get a contract often disappeared from the scene. Others that won a contract but did not get an extension or a new contract also often disappeared. To manage this unsatisfactory situation, BSP has introduced an intervention programme where unsuccessful contractors among others, are taught how to survive in the business world, with or without a contract with BSP. Similarly, our inventors and innovators could be given courses on entrepreneurship - so that they can sell their inventions and innovations to potential customers.

19. Let us move on and have a better look at the roles and responsibilities of the Government, including the higher institutions such as UBD and ITB in providing the right environment and facilities for inventors and innovators to be produced, grown and prospered. Today, we have new and additional facilities in both UBD and ITB. It is important to turn these into specialist laboratories with cutting edge scientific equipment! We also need a highly skilled workforce and support staff with the state-of-the-art technical skills as well as a strong research leadership. On these, we must invest on upgrading the skills and capabilities of both the supporting workforce, management and the researchers themselves, whilst turning our higher technical institutions such as ITB, a very attractive place for our researchers to learn and grow.
20. We have in place the Brunei Research Council that advises the Government on matters relating to the promotion of R&D in Brunei Darussalam. We have also already in place several R&D facilities owned by the Government of His Majesty the Sultan and Yang Di-Pertuan that are bringing about advancements, especially in the fields of agriculture and food productions. To spur researches in the energy sector, we have also set up the Brunei National Energy Research Institute (BNERI). There is no reason why with all these research facilities that we could not turn Brunei Darussalam as a Centre of Excellence for development of new technologies or innovations for the various fields and industries.

We must together strive toward producing highly skilled and able

technologists and technologically competent workforce. During the 1435 Isra Mikraj Gathering held at the ICC on Tuesday, 27th May 2014, His Majesty the Sultan and Yang Di-Pertuan of Negara Brunei Darussalam in his Titah mentioned that he had given his consent for the Brunei Technical Education Institution Order 2013, the Technical and Vocational Education Transformation White Paper, and the Brunei Darussalam Upgrading Plan for Technical Education 2013-2018.

Ladies and Gentlemen,

21. We should be grateful to Allah Subhana Wataala for being blessed with a far thinking monarch who is able to see that these measures would spur further advances in the fields of technological and vocational education, crucial to achieving the Wawasan 2035 whereby Brunei Darussalam would be recognized for the accomplishments of its well-educated and highly skilled people, the quality of life and its dynamic and sustainable economy. For the energy industry, I see these latest measures and those provided under the Energy Industry Competency Framework (EICF) as complementing each other. For EICF, as it is industry driven, training in technological and vocational courses would allow us to produce a workforce with the right qualification and skills as required by the industry.

22. The latest drives to spur advances in the fields of technological and vocational education also target the most important group of stakeholders that I mentioned earlier – the younger generation. Today's youths are the leaders of tomorrow. This also holds true in the area of research & development. Our students must be encouraged to exercise critical thinking, and to seek and experiments with new things or ideas. Teachers have an important role here. We must encourage creativity by giving the young people a lot of choices and different options when it comes to assignments and projects. They must be taught to ask questions and investigate when things do not make sense. We must instill in our young people the ability to view mistakes as an opportunity to learning and discovery rather than something that was unsuccessful. They must be taught to follow their interests and to think 'outside the box' whenever possible. They must be opened to other's idea so that they can learn how to build upon and reconstruct their own conceptual knowledge.
23. We must instill the love of science and mathematics in our primary school children, in addition to other equally important subjects such as islamic religious knowledge. These will together instill greater confidence or jati diri among these younger generation.

Ladies and Gentlemen,

24. I feel that I have covered many aspects on our journey toward becoming a Smart Nation. As I said earlier, we are not just there yet. But every journey starts with a single step. We have together taken not one but many steps. The question I want to pose to every one of the stakeholders or the players within them, is one and the same - those steps that we have taken, are they really aligned and going toward the same direction?
25. Lastly, I would like to again thank the organizing committee for giving the honour of launching this 6th edition of the Crown Prince CIPTA Award Competition. I am confident that with the past track records, this latest edition would be equally successful in attracting a very good number of participants, and more importantly better qualities of entries.

By reciting the qalimah, Bismillah Hirrahman Nirrahim and seeking the blessing of Allah Subhanahu Wataala, I am pleased to officially launched the Crown Prince Creative, Innovative Products and Technological Advancement 2015.

Wabillahi Taufik Walhidayah, Assalamualaikum Warahmatullahi Wabarakatuh.