OPENING SPEECH

BY

YB DATO SRI ALEXANDER NANTA LINGGI MINISTER OF WORKS MALAYSIA

KUALA LUMPUR INTERNATIONAL PAVEMENT SEMINAR

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CONNEXION CONFERENCE & EVENT CENTRE Yang Berhormat Dato' Sri Abdul Rahman Bin Mohamad, Deputy Minister of Works, Malaysia

Yang Berbahagia Dato' Ir. Ahmad Redza Bin Ghulam Rasool Director General, Public Works Department (JKR)

Yang Berbahagia Dato' Seri Ir. Hj. Mohamad Zulkefly Bin Sulaiman President of Road Engineering Association of Malaysia (REAM)

Yang Berbahagia Dato' Ir. Mohd Shuhaimi Bin Hassan Director General, Malaysian Highway Authority (LLM)

Yang Berbahagia Datuk Ir. Ahmad Asri Bin Abdul Hamid Chief Executive, Construction Industry Development Board (CIDB)

Mr Margo Briessink Technical Advisor / Event Planning Coordinator of World Road Association (PIARC)

Dr. Kiezo Kamiya Road Engineering Association of Asia & Australasia (REAAA) Pavement Technology Committee

Distinguished Guests and Speakers

SALAM SEJAHTERA GOOD MORNING DA CHIA HAO ELLORUKKUM VANAKAM SALAM MALAYSIA MADANI

It is a great honor for me to be here with all of you, the road engineering fraternity from far and wide present here today at the *KUALA LUMPUR INTERNATIONAL PAVEMENT SEMINAR 2023 (KLIPS 2023),* hosted by the Ministry of Works and the departments under its wings which includes the lead organizer, the Public Works Department (JKR) in collaboration with the World Road Association (PIARC) and Road Association Malaysia (REAM) and in association with the Road Engineering Association of Asia & Australasia (REAAA).

I would like to take this opportunity to thank the organizing committee of the *KUALA LUMPUR INTERNATIONAL PAVEMENT SEMINAR 2023 (KLIPS 2023)* for inviting me to deliver the opening speech of this seminar today. It is indeed a great pleasure and a privilege to be amongst this distinguished audience this morning, comprising experts, senior public-sector officials and captains of industry in the fields of road engineering, to deliver the opening speech and officially declare open the *KUALA LUMPUR INTERNATIONAL PAVEMENT SEMINAR 2023 (KLIPS 2023).*

Before I proceed, let me extend to all our international delegates a very warm welcome to Malaysia. "**Selamat Datang**". I am very pleased to note that there are about 500 participants, 22 exhibitors and 17 paper presentations from

almost 20 countries represented here. It is a very impressive number. I would like to cordially thank all of you for coming to Malaysia and taking part in this seminar.

I am thrilled with the support and response by local and international industry players and am confident your presence here in Kuala Lumpur will be a fruitful experience and that this seminar will be yet another great success. My sincere congratulations to the Organizing Committee for their efforts in making this conference a resounding success in terms of participation and organizational professionalism.

INTRODUCTION OF KUALA LUMPUR INTERNATIONAL PAVEMENT SEMINAR 2023 (KLIPS 2023)

Ladies and gentlemen,

This seminar's theme "Leveraging Innovation Towards Green Technology and Resilient Pavement" is supported concurrently by the PIARC Technical Committee Meeting, thus adding the much sought after international flavor to the event. In order to sustain the economic growth of a nation, a reliable, safe and comfortable road network is of utmost importance. Hence, this seminar's theme is timely to enable us to sit down together and think of ways to improve pavement engineering consultancy services towards sustainable construction of road for the future.

It is my hope that this seminar will act as a great platform for the experience of 17 experts and lessons learned in the planning, design, construction, maintenance, and rehabilitation process to be shared and disseminated among its participants. In addition, the organizers have also invited speakers with extensive knowledge on the breakthrough technologies applied in pavement engineering to share their expertise and experience. I wish to take this opportunity to thank the speakers for accepting our invitation to come and share your knowledge and experience.

BUILDING CLIMATE RESILIENCE

Ladies and gentlemen,

Climate change continues to be a major threat as it adversely affects economic and social development gains, thus deepening the gap between the haves and the have-nots. A road network that cannot withstand impacts of climate change will be expensive to maintain and operate.

A case in point is the massive floods in 2014 which inundated several states in Malaysia where the road infrastructure was severely damaged and paralyzing the country beyond comprehension.

In its efforts to minimize the impact from the similar disasters, the Public Works Department of Malaysia (PWD) has implemented preemptive measures by raising road levels in several locations above the highest flood levels and incorporating stabilizing additives in recycled road baes and subgrades to improve the stability of pavement structures.

It is therefore crucial to have a resilient road network in place that can withstand the effects of calamities inflicted on it for the sake of the people's wellbeing and to ensure a sustained economic growth.

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SUSTAINABLE DEVELOPMENT

Ladies and Gentlemen,

The annual increase in emission of greenhouses cases colossal damages whereby the infrastructure and transportation sectors were cited to be the leading contributors to the upsurge of greenhouse gas emissions worldwide. As such, the development and environmentally friendly practices must coexist if the right strategies are to be formulated and implemented. One of the initiatives under the "Green Growth" strategy by Malaysia is the introduction of the Government Green Procurement (GCP) policy. Under this policy, the acquisition of products, services, and works must take into account the environment as a strategy to conserve our natural environment and resources.

Likewise, the Ministry of Works is vigilant in taking consistent measures to ensure that our roads and highways are sustainable and environmentally friendly. Among the strategies adopted to achieve these agendas are as follows:

- The implementation of Construction Industry Transformation Programme (CITP) which promotes efficiency in construction and reduction in cost through technology such as the use of Industrialized Building System (IBS);
- The application of Cold-in-Place Recycling (CIPR) for its pavement maintenance as it is an eco-friendly pavement rehabilitation process, which utilizes the existing pavement materials;

- iii) The utilisation of Green Product Scoring System, which is a system to measure the percentage of green products, used in an infrastructure project; and
- iv) The use of Renewable Energy road furniture in road projects.

MALAYSIA ROAD ASSET MANAGEMENT

Ladies and gentlemen,

Apart from constructing roads, maintaining the road structure to perform at its required standard is equally important. Although the allocation of financial resources has been seen to be one of the major hurdles for many countries to meet the required standards, a systematic planning and execution in addressing these constraints must be put in place.

At this juncture, I would like to emphasize an up-to-date information is fundamental to support management decisions on items such as network inventory details, traffic, axle loads, cost and road condition which is critical in assessing the physical conditions, safety, service level and efficiency of the operation of our road infrastructures.

Undoubtedly, it is increasingly important for us to predict the effects of infrastructures and its proposed policies which will affect our development imperatives for our future generation. This is where the Road Management System is useful in enabling decision makers to test alternative courses of action and determining policies and strategies to most effectively and efficiently incorporated in accomplishing the desired level of service, for long-term network performance and expenditure needs.

The road authorities also must keep abreast with the latest cutting edge technologies and innovations. Innovative pavement design should be explored to produce reliable pavement performances. This should include utilizing the results from Long-Term Pavement Performance (LTPP) studies undertaken locally.

Similarly, a more comprehensive scientific research and development needs to be conducted to widen the applicability of bio renewable resources as bio-binders. In this regards, the Public Works Department Malaysia and Malaysian Rubber Board in a joint research to use the frozen rubber "cup lumps" as an additional material in asphalt is exemplary effort towards this end.

With the establishment of the Centre of Excellence for Engineering & Technology (CREaTE) in PWD, all those involved in road planning, design, construction and maintenance, including academia, are welcome to collaborate and lend your expertise in doing research and development on construction related issues, for the mutual benefit of all parties.

PAVEMENT ENGINEERING HARDWARE AND SOFTWARE

Ladies and Gentlemen,

The Ministry of Works is moving towards "digitalising the construction industry" which aims to focus on upgrading and to optimise productivity in the construction industry through technology to push forward the initiatives of technology advancement, digitalisation and innovation. It is not merely just about the development of mechanisms, software and robotics but also to provide accurate data, real-time information and more efficient systems. Among the technology and innovation initiated towards ''digitalising the construction industry are as follows:

- Use of Drones in road structure inspections provide more quantitative data, and are safer, faster and can be used at lower cost.
- ii) Use of Advanced Computational Modeling (ACM) for both the conceptual and design development phases promote early understanding of the structural behavior, visual appearance, fabrication complexities and sustainability issues of road structure.
- iii) Use of Building Information Modelling (BIM) to escape from the inefficiency traps of traditional design tools and workflows.

Therefore, it is important to note that this process continues through the design development and is a tool rather than a driver of the design and controlled through a collaborative and integrated process with the entire design team. Future demand for infrastructure including pavement technology have to take into account not only the demography but also multifaceted topography of the community including special needs users and an ageing society.

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CONCLUSION

Ladies and gentlemen,

This seminar is an opportune time for all of us to make the first step towards the sharing and exchanging of knowledge, ideas and experiences that can make the world a better place to live in. We must fervently embrace innovation in driving productivity for the pavement engineering industry.I sincerely believe this can be achieved from this seminar as well as the Exhibition on show, which offers ideas, solutions and products for road infrastructure.

I would sincerely like to wish the *KUALA LUMPUR INTERNATIONAL PAVEMENT SEMINAR 2023 (KLIPS 2023)* success in achieving its goal.

I thank you again for choosing Malaysia as the venue for the second edition of this congress. To all delegates from abroad, a very warm welcome to Malaysia and I hope your stay here is an enjoyable one.

On that note, ladies and gentlemen, I take great pleasure in declaring the *KUALA LUMPUR INTERNATIONAL PAVEMENT SEMINAR 2023 (KLIPS 2023)* officially open.

Thank you.