WEBINAR

TWO DAY COURSE ON RELIABILITY, AVAILABILITY, MAINTAINABILITY AND SAFETY (RAMS)

Date : 15 & 16 JUNE 2021

Time: 9.00 AM – 5.30 PM

Speaker :
1) Assoc. Prof. Dr. Nor Aziati Abdul Hamid
2) Ts. Dr. Hairulazwan Hashim

BEM Approved CPD/PDP Hours: 15 Hours
(IEM21/HQ/201/C(w)

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No cancellation will be accepted prior to the date of the event. However, replacement or substitute may be made at any time with 7 days prior notification and substitute will be charged according to membership status.

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HRDF REGISTERED TRAINING PROVIDER
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SPEAKERS

We have rich experience in RAMS consulting and certification in the rail previously for MRT 2, and other industries. We provide RAMS services during all phases of a system's lifecycle, from the determining, allocating, design and verifying RAMS targets during the system development phase, to the analysis and improvement of RAMS performance during the system operation and maintenance phase

Dr. Nor Aziati Abdul Hamid is currently an Associate Professor at Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia. She holds a PhD in Information System from Universiti Kebangsaan Malaysia and a Master of Science in Information technology from Universiti Teknologi Mara, Shah Alam. She has published journal and conference papers. She has teaching experience with over 10 years beside a head of several external research grants. Her research interests include manufacturing, ISO, business excellence, manufacturing, and lean. She is actively involved as technical committees for various international conferences locally and internationally. She has experience involved with MRT2 RAMS for Network and Communication, SCADA System and Traction Power System. She also the leader of the RAMS Consortium for 3 universities in Malaysia. She actively involves with RAMS research on system engineering KTMB, on-train data logger analysis for train incident and accident, big data management & analytics, management information system, cloud computing and Internet of Things (IoT). She has been appointed as Ministry of Transport Advisory Panel for Railway Safety under System Safety Assurance cluster.

Ts. Dr Hairulazwan Hashim obtained his PhD from Nagoya University, Japan in 2020, and M.Eng. from Universiti Tun Hussein Onn Malaysia (UTHM), in 2007. He is a Senior Lecturer and currently the Head of the Department of Electrical Engineering Technology in the Faculty of Engineering Technology, UTHM. His teaching and research interest include Micro-Nano Robotics, Industrial Automation, Signaling and communication in railway application, Electrification system in railway application, and Reliability, Availability, Maintainability, and Safety (RAMS) in railway application. His recent work task in railway application is on Signaling and Communication of Urban Railway, Development of Predictive Maintenance Tools for Traction Power Supply (TPS), KTMB Electrification Department and System Assurance (SA) of Power SCADA which focusing more on RAMS for KTMB Electrified Double Track Gemas-Johor Bahru Project. He is a member of IEEE, IAENG, IEM, and MBOT.

SYNOPSIS

Reliability, availability, maintainability, and safety (RAMS) constitute the key element of the assessment in the rail industry today. For rail system operator, RAMS means a safe, reliable, high-quality service and lower operating and maintenance costs. For the rail system provider, RAMS is representing a high-quality system and product. RAMS is the basis of many companies' competitive edge. System assurance is a systematic and proactive to ensure the RAM, Safety and EMC requirements are met in a complex project environment. System Assurance process provides guidance for integration of the highly complex and multiple technology systems that must seamlessly perform to guarantee a safe and reliable railway transport system. It is a holistic engineering management approach multiple to integrated multiple systems seamlessly. RAMS Management is subset of System Assurance and considered as one of the most important activity. RAMS Management process helps to integrate RAM and Safety characteristics into project/product systematically across the project life cycle. Moreover, it provides a process framework for Railway Authorities (Railway Duty Holders and Railway Support Industries (Suppliers) to ensure systems have been designed, constructed, and operated considering all critical factors related to RAM & Safety.

PURPOSE

RAMS means Reliability, Availability, Maintainability and Safety. It is an engineering discipline that integrates reliability, availability, maintainability, and safety characteristics of a railway system into the product design. The course starts by providing the context of RAMS. To introduce participants on the different parameters of as applicable to railway systems in general and metro system. The participants will be understanding on the process of specifying the RAM and Safety targets for the different subsystems of the Metro rail and ensure their compliance from the respective contractors.

OBJECTIVE

- ❑ Learn about the main principles, processes and tools of RAMS and build an efficient system & organization to improve Reliability, Availability, Maintainability & Safety Concepts in a Railway System.
- ❑ Understand the importance of having a good organization of data management and learn from best practice on implementing a RAMS System.
- ❑ Understand the different parameters of RAMS and applicable standards.

TARGET AUDIENCE:

- Professionals in Transportation Industries.
- Professionals Interested in Obtaining A Wider and More International Perspective on The RAMS in Railway Systems.
- Professionals in Traction, Electrification, Signaling, Business Analytics, Data Analysis & Process and Project, Maintenance

TENTATIVE PROGRAMME

15 JUNE 2021 – TIME (DAY 1)	PROGRAMME (SESSION 1)
09.00 – 10.30	EN 50126 (IEC 62278) – RAMS -Overview: European directives -Understanding standardization -Standard in the railway signaling
10:30 – 12:00	-Technology -Elements of RAMS and Affecting -Factors
12:00 – 1.00	-Risk/Risk Analysis -Safety Integrity -Life Cycle Model

TIME (DAY 1)	PROGRAMME – SESSION 2
14:00 – 15:00	EN 50129 / IEC 62425 -Process of risk and hazard control -Safety Integrity
15:00 – 16:00	-Quality Management -Safety Management
16:15 – 17:30	Summary / Q&A / Feedback
17:30	Adjournment

16 JUNE 2021 – TIME (DAY 2)	PROGRAMME – SESSION 1
09.00 – 11.30	EN 50129 / IEC 62425 -Safety demonstration -Identification of Safety
11:30 – 1:00	-Requirements -Technical and functional safety -Basic methods in RAMS

TIME (DAY 2) – SESSION 2	PROGRAMME – SESSION 2
14:00 – 15:00	EN 50128 / IEC 62279 -Definitions -Software safety requirement -Level (SSAS) -Personal and responsibilities
15:00 – 16:00	-life Cycle Model -Requirements of phases -Verification / Validation
16:15 – 17:30	Summary / Q&A / Feedback
17:30	Adjournment

*** IEM reserves the right to postpone, reschedule, allocate or cancel the course**

REGISTRATION FORM

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No	Name(s)	Membership No.	Grade	Fee (RM)
			SUB TOTAL	
			+ 6% SST	
			TOTAL PAYABLE	

PAYMENT DETAILS :

FULL PAYMENT must be settled before commencement of the seminar, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participant fails to attend the course, the fee is to be settled in full. If the participant failed to attend the course, the fee paid is non refundable. The Registration Fee includes lecture notes, refreshment and lunch.

For **ONLINE REGISTRATIONS**, please note that payment **MUST** be made **BEFORE the closing date**. If payment is not received within the stipulated time, the registration the registration automatically cancels.

Contact Person : _____ Designation : _____

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Signature & Stamp Date

TERMS & CONDITIONS:

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- Payment via CASH / CHEQUE / BANK-IN TRANSMISSION / BANK DRAFT / MONEY ORDER / POSTAL ORDER / LO / WALK -IN will be considered as NORMAL REGISTRATION
- The Organising Committee reserves the right to cancel, alter, or change the program due to unforeseen circumstances. Every effort will be made to inform the registered participants of any changes. In view of the limited places available, intending participants are advised to send their registrations as early as possible so as to avoid disappointment

FOR FURTHER DETAILS, KINDLY CONTACT:

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