

TECHNICAL WORKSHOP – PROPOSED AGENDA
HOSTED BY SAHHA AND THE UNIVERSITY OF PRETORIA
8-9 OCTOBER 2015
Birchwood Hotel (provisional), JOHANNESBURG, SOUTH AFRICA

Foreword – From SAHHA Chairperson, Brian Monakali

The South African Chapter of the Heavy Haul, namely, South African Heavy Haul Association (SAHHA), was launched at the first successful Heavy Haul Conference held on 8th and 9th September 2014, Emperors Palace, Johannesburg, South Africa. The board member organizations of the SAHHA are Transnet Freight Rail, Transnet Engineering, University of Pretoria (Chair in Railway Engineering), University of the Witwatersrand, University of Cape Town, South African Institution of Civil Engineers (R&H Division) and South African Society of Railway Engineering (SASRE). The establishment of the South African version of the Heavy Haul Forum will ensure that the technical knowledge and case studies shared at International Heavy Haul Association (IHHA) level are cascaded locally for the advancement of Southern African Railways development. In addition, this will also provide an opportunity for technical advancements originating from South Africa to be shared at the international stage.

Following this successful launch, on 8 & 9 October 2015, SAHHA and University of Pretoria will co-host a 2 day Technical Workshop. We are delighted to have international guest presenter, Mr. Michael Roney, a retired General Manager, Track and Structures and Chief Engineer with Canadian Pacific as part of the workshop proceedings. In addition to Michael, we have a number of other international and local railway experts that will present and share learnings on some of the most interesting and value adding topics.

The first day will cover maintenance aspects of infrastructure and rolling stock. The day will close with a cocktail function which will provide networking opportunity for delegates. The second day will focus on operations, design and technological advancements. During the second day, delegates will have an opportunity to hear about the latest update on heavy haul developments. Lastly, key learnings of the recent International Heavy Haul Conference which was held in Perth, Australia, in June 2015 will also be shared.

The presenters are experts and leaders in their areas of specialization. We expect robust discussions related to how we improve the performance of our Railways

I look forward to seeing you at this technical workshop.

Kind regards,

Brian Monakali

Chairman of SAHHA

FUTHER REGISTRATION DETAILS

To attend as a delegate, please fill in the registration form attached and submit together with proof of payment as per instructions on form.

Note that the workshop will earn you 2 CPD points as a delegate attending the 2 days.

For more information, please send an email to admin@saheavyhaul.co.za or

Call Amanda on [083 700 8473](tel:0837008473) or Kihisha on [0718992940](tel:0718992940).

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KEY NOTE SPEAKER



Michael Roney

Mr. Roney is an independent consultant in railway engineering and management. He retired as General Manager, Track and Structures and Chief Engineer with Canadian Pacific where he was responsible for track standards, rail maintenance, bridge design, geotechnical groups, and automated track inspection processes. He had a 32-year career with Canadian Pacific, North America's safest and 6th largest railway, in engineering and maintenance-of-way. He has also worked with the National Research Council of Canada as General Manager of their Rail Division, with BHP's Melbourne Research Labs, and with Queen's University at Kingston, Ontario, where he has a master's degree in Civil Engineering. He is past Chairman of the International Heavy Haul Association, past Chairman of CPCS Transom Limited, and past Chairman of the 2011 IHHA conference on the theme: "Railroading in Extreme Environments." Mr. Roney is a past president of the American Railway Engineering and Maintenance-of-Way Association and on the Institution of Mechanical Engineers Editorial Board for the *Journal of Rail and Rail Rapid Transit*. He was a joint author of both of the preceding text books published by the International Heavy Haul Association outlining guidelines for best practice for heavy haul railways.

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PROGRAMME

THURSDAY 8 OCTOBER 2015: MAINTENANCE			
7h30-8h30	REGISTRATION		
8h30-8h45	WELCOME		Brian Monakali <i>Executive Manager, Strategy and Long Term Planning, Transnet Freight Rail</i> <i>SAHHA Chairperson & IHHA Board Member</i>
8h45-10h15	SESSION 1	FUNDAMENTALS OF WHEEL/RAIL INTERACTION	Mr Michael Roney <i>Retired General Manager, Canadian Pacific, Canada</i> <i>IHHA Board Member</i>
10h15-10h30	TEA		
10h30-11h00	SESSION 2	MAINTAINING OPTIMUM WHEEL/RAIL PERFORMANCE	Mr Michael Roney <i>Retired General Manager, Canadian Pacific, Canada</i> <i>IHHA Board Member</i>
11h00-11h30	SESSION 3	TOOLS FOR MAKING THE RIGHT DECISIONS IN WHEEL/RAIL MANAGEMENT	Mr Michael Roney <i>Retired General Manager, Canadian Pacific, Canada</i> <i>IHHA Board Member</i>
11h30-12h00	SESSION 4	OPTIMISING MECHANISED TRACK MAINTENANCE ON HIGH TRAFFIC DENSITY LINES - Orex line as a case study	Pieter van Blerk <i>General Manager, Plasser Rail South Africa</i>
12h00-13h00	LUNCH		

Session chaired by Brian Monakali

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13h00-13h30	SESSION 5	UPDATE ON CURRENT AND NEW RESEARCH RELATED TO INFRASTRUCTURE & ROLLING STOCK	Prof. Hannes Grabe <i>Chair in Railway Engineering, University of Pretoria</i> Mr John Kanameyer <i>Acting Chief Engineer, Technology Management, Transnet Freight Rail</i>	Session chaired by Johannes Makhusha	
13h30-14h00	SESSION 6	MAINTENANCE EFFECTIVENESS <ul style="list-style-type: none"> - What role does maintenance play in improving business performance? - Case study of the Coal Line 	Mr Brian Monakali <i>Executive Manager, Transnet Freight Rail</i>		
14h00-14h30	SESSION 7	TRACK GEOMETRY <ul style="list-style-type: none"> - What is acceptable - What are the practical implications of revising SA standards to international standards 	Dr Robert Frohling <i>Principal Engineer, Technology Management, Transnet Freight Rail</i>		
14h30-15h00	SESSION 8	INNOVATION <ul style="list-style-type: none"> - Innovation at the Aurizon Network 	Mr Chris Brown <i>Civil Asset Manager, Aurizon, Australia</i>		
15h00-15h15	TEA				
15h15-16h35	SESSION 9	UCT PAPERS	University of Cape Town		
		Introduction to research and training activities on railway bridges and structures the University of Cape Town (20 Min)	Prof. Pilate Moyo <i>Associate Professor, Civil Engineering Department, UCT</i>		
		Dynamic Testing and Monitoring of a Heavy Haul Railway Viaduct (20 Min)	Dr. Fulvio Busatta <i>Concrete Materials & Structural Integrity Research Unit, UCT</i>		
		Dynamic Testing and Fatigue Analysis of Steel Railway Bridges (20 Min)	Prof. Pilate Moyo <i>Associate Professor, Civil Engineering Department, UCT</i>		
		Reliability Analysis of Railway Bridges: Integrating FEM with Structural Health Monitoring (20 Min)	Mr Matongo Kabani <i>Concrete Materials & Structural Integrity Research Unit, UCT</i>		
16h05-20h00	COCKTAIL – keynote Address By Mr Siyabonga Gama, Acting Group Chief Executive , Transnet				

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FRIDAY 9 OCTOBER 2015: OPERATIONS, DESIGN AND TECHNOLOGY IMPROVEMENTS

8h30-9h00	SESSION 8	UPDATES ON HEAVY HAUL WORLDWIDE <ul style="list-style-type: none"> - Including Highlights of the June 2015 IHHA Perth Conference 	Mr Michael Roney <i>Retired General Manager, Canadian Pacific, Canada</i> <i>IHHA Board Member</i>	Session chaired by Dr. Robert Frohling	
9h00-9h30	SESSION 9	RAIL CAPACITY CREATION APPROCHES FOR HEAVY HAUL OPERATIONS <ul style="list-style-type: none"> - Capacity creation Philosophy and factors affecting capacity 	Ms Tryphina Mathebula Ms Kihisha Suleman <i>Engineers, Strategy and Long Term Planning, Transnet Freight Rail</i>		
9h30-10h00	TEA				
10h00-10h30	SESSION1 0	SYSTEMS THINKING, ENGINEERING, APPROACHES, METHODOLOGIES AND SCIENCE (S-TEAMS) <ul style="list-style-type: none"> - How can these principles be applied in railway environments to improve performance 	Mr Rudolph Louw <i>Director, Wits Transnet Centre of Systems Engineering, University of the Witwatersrand</i> <i>SAHHA Board Member</i>		
10h30-11h00	SESSION1 1	APPLICATION OF SCHEDULE RAILWAY PRINCIPLES <ul style="list-style-type: none"> - What does a scheduled railway mean - What are the challenges and success factors - Transnet Freight Rail and Gautrain Experience 	Mr Fuzile Magwa <i>General Manager, National Command Centre, Transnet Freight Rail</i> Gautrain – Bombadier		
11h00-12h00	SESSION1 2	EVOLUTION OF TRAIN AUTHORISATION SYSTEMS/TECHNOLOGIES IN SIGNALLING <ul style="list-style-type: none"> - Technology roadmap for Transnet Freight Rail - Their Impact on safety, maintenance and rail capacity 	Mr Michael Nku <i>Principal Engineer, Technical Office, Transnet Freight Rail</i>		
12h00-13h00	LUNCH				

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13h00-13h30	SESSION13	TRAIN DYNAMICS IMPLICATIONS ON MAINTENANCE, SAFETY, OPERATIONS AND RAIL CAPACITY <ul style="list-style-type: none"> - Discussion on the South African experience - Where are our limitations on the existing network? - The application of WDP/RDP technology in TFR 	Mr Marthin Mulder <i>Principal Engineer, Technology Management, Transnet Freight Rail</i> Mr Neels van den Berg <i>Senior Engineer, Technology Management, Transnet Freight Rail</i>	Session chaired by Prof. Hannes Grabe	
13h30-14h00	SESSION14	ECP BRAKING SYSTEM IMPLEMENTATION AND DEVELOPMENT IN TRANSNET: <ul style="list-style-type: none"> - Why is it necessary? - Benefits on safety, operations, maintenance - Case Study of practical application in South Africa 	Mr Konrad van der Merwe <i>Senior Engineer, Technology Management, Transnet Freight Rail</i> Mr Poovendren Naidoo <i>Engineer, Technology Management, Transnet Freight Rail</i>		
14h00-14h15	TEA				
14h15-14h45	SESSION15	DESIGN AND MAINTENANCE RELATED ISSUES FOR TUNNELS <ul style="list-style-type: none"> - Lessons learnt : Case Study of existing Overvaal tunnel design and maintenance flaws and challenges - Application of best practices on the design of the new Overvaal Tunnel 	Mr Sguda Sibande <i>Principal Engineer, Technology Management, Transnet Freight Rail</i> Mr Kanak Mistry <i>Principal Engineer, Technology Management, Transnet Freight Rail</i> Mr Owen Phiri <i>Engineer, Strategy and Long Term Planning, Transnet Freight Rail</i>		
14h45-15h15	SESSION16	ADVANTAGES AND CHALLENGES OF TUBULAR TRACK <ul style="list-style-type: none"> - Lessons learnt from Ermelo 3rd Balloon project 	Mr Dave Budler <i>Project Director, Transnet Capital Projects</i>		
15h15-16h00	SESSION17	PANEL DISCUSSION <ul style="list-style-type: none"> - What Best practices can be adopted between Freight and Passenger railways to meet customer expectations 	Panel Membership (still to confirm) <ul style="list-style-type: none"> - Prasa - Gautrain - Transnet Canadian Pacific Railways		
16h00-16h15	SAHHA Word of Thanks		Brian Monakali <i>Executive Manager, Transnet Freight Rail</i>		
16h05-16h30	CLOSING		Caesar Mtetwa <i>General Manager, Rail Network, Transnet Freight Rail</i>		