

The 38th annual

SOUTHERN AFRICAN TRANSPORT CONFERENCE and EXHIBITION

THEME

DISRUPTIVE TRANSPORT TECHNOLOGIES: IS SOUTH AND SOUTHERN AFRICA READY?

PATRON

THE MINISTER OF TRANSPORT

The conference is endorsed by the International Road Federation

CSIR International Convention Centre (CSIR ICC), Pretoria, South Africa

8to 11 July 2019

“Early Bird” registration from 2 May - 10 June 2019

(The full registration fee applies after 10 June)

FINAL ANNOUNCEMENT AND PROVISIONAL PROGRAMME **CONTACT DETAILS**

CONFERENCE SECRETARIAT (Correspondence and Enquiries)

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ORGANISING COMMITTEE SATC

Bean, MsWilna	University of Pretoria
Behrens, A/Prof Roger	University of Cape Town
De Beer, Mr Gerhard	Gibb
Gräbe, Prof Hannes	University of Pretoria
Jennings, Ms Gail	Research Consultant
Maina, Prof James (Chairman)	University of Pretoria
Manana, MsKhibi	Department of Transport
Mashiri, Mr Mac	Gwarajena TRD
Mhlanga-Mochadibane, Ms Mavis	Tshwane Women in Transport
Mokonyama, Dr Mathetha	CSIR Built Environment
Mutombo, Dr Kana	Transnet
Naidoo, DrKavendra	CSIR Aeronautics Systems
Nordengen, Dr Paul	CSIR Built Environment
Oosthuyzen, Ms Jacqui	Secretariat
Pretorius, Dr Pieter	Innovative Transport Solutions
Ribbens, Dr Hubrecht	Consultant
Ssamula, Dr Bridget	AECOM
Steyn, Prof Wynand	University of Pretoria

Verhaeghe, Mr Benoit
 Visser, Prof Alex
 Wang, MrYuchen

CSIR Built Environment
 University of Pretoria
 SACTCC

TECHNICAL COMMITTEE

Mohan, Prof Dinesh
 Prozzi, Prof Jorge
 Wegman, Prof Fred
 Sweatman, Dr Peter

Shiv Nadar University, India
 The University of Texas, USA
 Delft University of Technology, The Netherlands
 CAVita LLC, USA

INVITATION

Everyone in any way connected with transport is invited to register for the 38th Southern African Transport Conference (SATC 2019). It will be of particular interest to: municipal and provincial employees, policy and decision-makers, academics, researchers, students and professionals active in the planning, construction, manufacturing, logistics, operation and safety of passenger and freight transport, road traffic, rail, ports, maritime and aviation. End-users will also find the conference of interest.

SYNOPTIC PROGRAMME

From Monday to Thursday the sessions/workshops (1A-1D, 2A-2D, 3A-3D, 4A-4B) take place over a full day and it is therefore possible to **register for only one session** per day. However, once at the conference, delegates are welcome to **move between sessions**, space permitting.

DATE	SESSION NO	EVENT
Monday, 8 July		Opening Session
	1A	Infrastructure
	1B	Treasury Workshop - Public Transport and Spatial Transformation
	1C	Rural Development/ Capacity Building
	1D	Rail
Tuesday, 9 July	2A	Urban and Public Transport
	2B	Traffic Management, Safety and Security
	2C	Freight and Logistics
	2D	Aviation
Wednesday, 10 July	3A	Public Transport and Paratransit
	3B	Traffic Engineering
	3C	6th China-Africa Transport Co-operation Forum with the Belt and Road Initiative (BRI) and APT Workshop
	3D	Maritime
Thursday, 11 July	4A	Integrated Public Transport Networks
	4B	Empowerment Opportunities in Transport. Brought to you by Tshwane Women in Transport

SPECIAL EVENT

Opening – SOUL BLEND (Afro-Soul acapella group)

SOCIAL FUNCTIONS

Cocktail Party – 17:00 to 18:30, Sponsored by Innovative Transport Solutions:

A cocktail party will be held at the conference venue after the day's proceedings on **Monday, 8 July 2019**. The following awards for papers presented at the conference will be announced:

- SATC Award for the “**Best Paper**”;
- SATC Award for the “**Best Practical Paper**”
- SAICE Transportation Division Award for the “**Best Paper by a Young Professional**”
- The ‘**Distinguished SATC Fellow**’ award

Delegates registered for any of the four days of the conference are invited to attend and are requested to indicate their attendance on the registration form.

EXHIBITION

An exhibition – a showcase for all related industries – will run concurrently with the conference from Monday, 8 to Thursday, 11 July 2019. Exhibition space (3m x 3m) is available on a first come, first served basis. Organisations wishing to exhibit are requested to contact the Conference Secretariat.

PROMOTIONAL OPPORTUNITIES

Organizations interested in Promotional Opportunities should contact the Conference Secretariat.

ACCOMMODATION

The following **special rates will apply to SATC delegates**

TOWN LODGE MENLO PARK Atterbury Rd, Menlo Park, Pretoria Tel: 012 348-2711 (Ask for reservations) E-mail: tmenlo.resv@citylodge.co.za	CITY LODGE LYNNWOOD Cnr Lynnwood & Daventry Rds, Lynnwood, Pretoria Tel: 012 471-0300 (Ask for reservations) E-mail: cllynnwood.resv@citylodge.co.za
R1,000 single R1, 109 dbl(p/room)	R1 363.50 single R1 636.20 double (p/room)
Full English Breakfast R165p.p	Full English Breakfast R165p.p
Quote <u>SOUTHERN AFRICAN TRANSPORT CONFERENCE (or Guest File no 1030685)</u> to qualify for the discounted rate	Quote <u>SOUTHERN AFRICAN TRANSPORT CONFERENCE (or Guest File no 1030685)</u> to qualify for the discounted rate

The above hotels are recommended for accommodation during the conference. **Delegates are responsible for their own arrangements.** They should book by E-Mail sending all the relevant details as well as either credit card details or prepayment and quoting the above reference details in order to qualify for the discounted rates and to ensure a booking at the hotel of their choice.

TRANSPORT (Courtesy bus)

The organisers will arrange a courtesy bus to transport delegates from the above hotels to the CSIR ICC in the morning and back after the day's proceedings/social function. **Delegates wishing to make use of the courtesy bus should tick the relevant section on the registration form.**

CONFERENCE DOCUMENTATION

Delegates registered for any of the conference sessions and workshops will receive the following documentation:

- Conference Handbook containing the programme and abstracts of the papers presented at SATC 2019;
- Memory Stick containing the full papers presented at SATC 2019;
- Delegate bag
- Pen and Notebook

Extra copies of the memory sticks will be available at a cost of R150,00.

STUDENT ESSAY COMPETITION

The Organising Committee has instituted an essay competition open to all registered students (undergraduate as well as postgraduate) at tertiary institutions. The competition is held within the institutions (the Organising Committee has already been in contact with the institutions) and each institution will select its two winners.

Students need to prepare a five-page essay on "DISRUPTIVE TRANSPORT TECHNOLOGIES – IS SOUTH AND SOUTHERN AFRICA READY?". This relates to the theme of SATC this year. Final selections will be done by each institution, and the winning essays submitted to the SATC Secretariat (satc.conference@gmail.com) by 14 May 2019.

The two top authors from each institution and their lecturer will be supported to attend SATC 2019. For winners from outside Gauteng, transport (economy class airfare/ bus), accommodation in Pretoria, meals and registration will be provided.

REGISTRATION AND PAYMENT

REGISTRATION – OPENING 2 MAY 2019

Registration is per day. This four-day conference consists of an opening session, plenary and parallel sessions, including Workshops and Forums.

The **conference sessions** (1A-1D, 2A-2D, 3A-3D and 4A-4C) take place over a full day and it is therefore possible to **register for only one session per day**. However, once at SATC, delegates are welcome to move between the sessions. Registrations are done via the SATC website: www.satc.org.za

FEES AND PAYMENT

Registration fees are payable in advance by:

▪ DIRECT DEPOSIT

Direct deposits may be made into the following bank account and proof of payment sent to the SATC Secretariat (email: satc.conference@gmail.com). Please use the pro forma invoice number as reference so that the payment can be identified and the correct delegate(s) credited:

Bank	FNB	
	Branch and code	Hatfield 242-145
	Account name	Annual Transportation Convention
	Account No	54501151268
	Swift code	FIRNZAJJ (for transfers from foreign countries)

▪ CASH PAYMENT AT THE CONFERENCE

If time is short, registration fees may be paid at the conference (IN SUCH CASES THE LATE REGISTRATION FEES WILL APPLY). **Please arrange with the SATC Secretariat prior to attending the conference.**

The late registration fee will apply for all payments received after 10 June 2019.

ID NUMBER IS REQUIRED FOR REGISTRATION FOR ALL SOUTH AFRICAN RESIDENTS

If you register as a **STUDENT**, you are required to mail a copy of your student card to the secretariat prior to the event. You will also be requested to present your student card at the registration desk.

Fees are per day Fees include 15% VAT (please supply your company VAT number on registration form)	Early bird fee: (For registrations AND PAYMENT up to 10 Jun)	Late fee (For registrations AND PAYMENT from 11 Jun)
Student	R 910	R1 010
Presenter (on day of presentation)	R1 360	R1 960
Young Professional (under35)	R1 980	R2 180
Delegate	R2 400	R3 000

THE REGISTRATION FEE FOR THE CONFERENCE SESSIONS AND WORKSHOPS,INCLUDE:

- Attendance on the registered day(s).
- Lunch and refreshments on the day(s) of attendance.
- Attendance of the cocktail party on Monday, 8July. (Please indicate on the registration form).
- Transport between the appointed hotels and the conference venue. (Please indicate on the registration form).
- A briefbag containing the conference documentation including the written papers (received in time for printing) on Memory Stick and a Programme Handbook containing the Final Programme and Abstracts of the papers presented.

CONFIRMATION

Once your registration is complete, you will receive a pro-forma invoice via e-mail. Therefore, please ensure that your current e-mail address is given on the registration form.

CANCELLATION

Notification of cancellation received, in writing, prior to or on Friday, 5 July 2019 will be subject to a 25% handling fee and processed after the conference. Delegates may be substituted at any stage. No refunds will be made on cancellations received after 5 July 2019.

DELEGATES ARE REMINDED THAT A COMPLETED REGISTRATION FORM IS TAKEN AS A FIRM COMMITMENT AND IN THE EVENT OF NON-ATTENDANCE, THE DELEGATE WILL BE HELD RESPONSIBLE FOR PAYMENT OF THE FULL ACCOUNT.

Please send proof of payment, using the pro forma invoice number as reference.

(A Tax invoice is issued after payment reflects on our bank statement)

CPD ACCREDITATION

The conference is SAICE accredited and professional engineers will earn one credit per day of attendance. No attendance certificates will be issued. ***In order to apply for credits, professional engineers must sign the special registration sheets (not the SATC conference registration sheets) at the conference registration desk on EACH DAY OF ATTENDANCE.***

OPENING ADDRESS

Hon. Fikile April Mbalule
MINISTER OF TRANSPORT

PLENARY SPEAKERS

MONDAY

Dr Gustav Rohde

AURECON – SOUTH AFRICA



Dr Gustav Rohde is a graduate from Stellenbosch where he graduated with a BEng in 1984. He is a professional engineer with a master's degree and PhD from Texas A&M in the USA. In his professional career he has been actively involved in highway and rehabilitation design. He specialized in the analysis of non-destructive pavement testing and long-term performance modelling. He led the implementation of several road management systems in sub-Saharan Africa and Asia. Over the last 18 years he has served on the Executive of Aurecon, an engineering consultancy with 7000 employees operating in Australasia, Africa, Asia, the Middle East. He fulfilled the leadership roles of MD, CEO and the last 10 years as global COO of Aurecon. Gustav has a very keen interest in digital transformation and the impact of the 4th Industrial revolution on engineering and the societies we serve. He currently serves on the Advisory boards of the engineering faculties of the University of Stellenbosch and Cape Town. He has been a Fellow of the South African Academy of Engineers since 2011.

TUESDAY

Prof Imad Al-Qadi

UNIVERSITY OF ILLINOIS AT URBANA – CHAMPAIGN - USA



Professor Al-Qadi, Bliss Professor of Engineering at the University of Illinois at Urbana-Champaign, is the Director of the Advanced Transportation Research and Engineering Laboratory (ATREL), the founding Director of the Illinois Center for Transportation (ICT), and founding Director of the Smart Transportation Infrastructure Initiative. Al-Qadi is also President of the Transportation Engineering Solutions and Technologies, Inc. (TEST). Prior to that, he was the Charles E. Via, Jr. Professor at Virginia Tech. A registered professional engineer, Al-Qadi has authored/ coauthored approximately 700

publications and has delivered more than 650 presentations including numerous keynote and distinguished lectures. He has led more than 120 research projects, with funding in excess of \$100M, to completion. He has managed approximately 50 projects annually in his capacity as director of ICT since 2006.

Professor Al-Qadi has received numerous prestigious national and international honors and awards including the NSF Young Investigator Award, the quadrennial IGS Award, ASCE James Laurel Prize, ARTBA Steinberg Award, ASCE Turner Award, TRR of the National Academies D. Grant Mickle Award, French Limoges Medal, and several other teaching and research awards.

He is a Chapter Honorary Member of Chi Epsilon at the University of Illinois, an Honorary Member of the Societaitaliana Infrastruttura Viarie, Emeritus Member of TRB Committee AHD25 on Sealants and Fillers for Joints and Cracks, and an Honorary Professor at several universities in Europe and China. He is also Past President of the ASCE T&DI Board of Governors and the Editor-in-Chief of the International Journal of Pavement Engineering. In 2010, he was elected as an ASCE Distinguished Member (the highest honor bestowed by ASCE). Dr. Al-Qadi holds a Ph.D. degree from Penn State University. His expertise focuses on highway and airfield pavement mechanics and evaluation, tire-pavement interaction, electromagnetic wave interactions with civil engineering materials and ground penetrating radar (GPR), asphalt rheology, geosynthetics, instrumentation, pavement sustainability, life cycle assessment, and forensic engineering and arbitration.

WEDNESDAY

Mr Victor Radebe

AUTONOMOUS VEHICLES – AFRICA



Victor Radebe is the Founder and Executive Director of the Mobility Centre for Africa, a non-profit company that collaborates with government, industry and academia to develop future mobility solutions. Having worked on some transportation and aviation-related projects like the Ekurhuleni and Durban aerotropolis projects, Victor believes that building efficiencies in global travel requires improvements of the first and last mile of air travel.

The need to improve this ground mobility was the motivation behind his founding of the Mobility Centre for Africa. Through this entity, Victor plans to make a meaningful contribution to solving South Africa's most wicked transport and mobility problems, viz., road crashes, emissions, congestion and affordability. Victor is a futurist who believes that solving these problems lies in seeking to understand the drivers of change that are being fueled or enabled by some of the emerging Industry 4.0 technologies like AI, IoT, Big Data, Blockchain, Sharing Economy, etc.

As the Director at MCA is the corporate author of the 2040 Scenarios on the Future of Mobility in South Africa. This position paper has been developed with help of industry, government experts and academics. In the business front, Victor has founded Mzansi Aerospace Technologies, a drone technology and consulting start-up company.

Victor studied B Comm at Wits, a Post-graduate Diploma in Management at UKZN and is his final lap of completing his MBA studies from Wits Business School. As part of this MBA, Victor is currently writing his research article on Effect of Shared Mobility on Private Car Ownership in South Africa.

KEYNOTE SPEAKER – MARITIME SESSION

WEDNESDAY

MsNoziphoMdawe

TRANSNET NATIONAL PORTS AUTHORITY (TNPA)



Ms NoziphoMdawe took up the reins as Chief Operating Officer (COO) of the Transnet National Ports Authority (TNPA) in May 2018. As COO of TNPA, she is responsible for ensuring that operations at South Africa's eight ports are effective, efficient and affordable. She is currently standing in as the acting Chief Executive Officer (CEO) of TNPA.

In March 2019, Ms. NoziphoMdawe was appointed as Acting Chief Executive of Transnet National Ports Authority. She most recently served as Secretary General of the Port Management Association for Eastern and Southern Africa (PMAESA) in Kenya between July 2015 and April 2018.

During her 27-year professional career, Ms Mdawe has developed her skills in leadership, general management operations, organisational development, production and project management

Ms Mdawe holds a Master's Degree in Business Administration from the Gordon Institute of Business Science and is currently in her third year of studies towards a Doctoral Degree through the Jomo Kenyatta University in Kenya.

She has also completed the Global Executive Development Programme through Gordon Institute of Business Science, the Advanced Strategic Management Programme through IMD in Switzerland and the IRSMI Management Development Programme through the University of France.

(Sessions to follow on next page)

SESSIONS

MONDAY, 8 JULY

07:30 - 08:30	REGISTRATION
08:10	Briefing for presenters and chairs in their respective venues
OPENING SESSION	
08:30 – 08:50	PERFORMANCE BY SOUL BLEND, INCLUDING THE NATIONAL ANTHEM OF SA
08:50 – 08:55	INTRODUCTION – Prof James Maina, Conference Chairman
08:55 – 09:05	WELCOME – MrPhilip Hendricks, Chairman, ATC Board
09:05 – 09:35	OPENING ADDRESS- Hon FikileMbalula,Minister of Transport
09:35 – 10:30	PLENARY ADDRESS – Dr Gustav Rohde, AURECON
10:30 – 11:00	REFRESHMENTS

DELEGATES BREAK INTO PARALLEL SESSIONS AFTER THE REFRESHMENTS BREAK

(Detailed programme following on next page)

MONDAY, 08JULY

07:30 - 08:30	REGISTRATION
08:10	Briefing for presenters and chairs in the respective venues
08:30 - 10:30	OPENING SESSION
10:30 - 11:00	REFRESHMENTS
SESSION 1A – INFRASTRUCTURE	
CHAIR: Dr Martin Mgangira, CSIR	
11:00 – 11:30	EXPERIMENTAL INVESTIGATION OF MARSHALL AND SUPERPAVE MIX DESIGN METHODS FOR RUTTING CRITERIA - S Varma, Indian Institute of Technology, H Sebaaly and J Maina , University of Pretoria and A AIGHbani, Doha Technical Laboratories
11:30 – 12:00	THE ROAD MAINTENANCE BACKLOG IN SOUTH AFRICA - D Ross and M Townshend , University of Cape Town
12:00 – 12:30	FACTORING EXTERNAL COSTS INTO POLICY AND INVESTMENT DECISION MAKING - R Arp , World Wide Fund for Nature and S Keen, University of Cape Town
12:30 – 13:00	PROTECTING THE PROTECTED THROUGH ASSESSING DRIVER BEHAVIOUR IN KRUGER NATIONAL PARK, SOUTH AFRICA - WJ Collinson , Endangered Wildlife Trust, C Marneweck, University of Mpumalanga, Nelspruit and HT Davies-Mostert, Endangered Wildlife Trust and University of Pretoria
13:00 – 14:00	LUNCH
CHAIR: Dr Morris de Beer, CSIR	
14:00 – 14:40	THE JWANENG KALAHARI SAND-ASPHALT LTPP EXPERIMENT: PERFORMANCE OVER 14 YEARS AND DERIVATION OF PAVEMENT DESIGNS - F Netterberg , Pavement Materials & Geotechnical Specialist and MI Pinard, InfraAfrica THE JWANENG LTPP EXPERIMENT: PERFORMANCE OVER 14 YEARS AND A COMPARISON BETWEEN KALAHARI SAND- ASPHALT AND CALCRETE BASE COURSES- F Netterberg , Pavement Materials & Geotechnical Specialist and MI Pinard, InfraAfrica
14:40 – 15:00	EFFECT OF NANO-MODIFIED EMULSIONS (NME) (NANO-SILANES) STABILIZERS ON THE PROPERTIES OF DOLOMITE - M MKidgell a, W JvdM Steyn and G J Jordaan, University of Pretoria
15:00 – 15:30	REFRESHMENTS
15:30 – 15:55	OLD CONCRETE MAKES WAY FOR NEW ASPHALT - AJ Laatz, HHO Consulting Engineers, N Cocks, Western Cape Government and N Burger, Power Construction
15:55 – 16:20	FINITE ELEMENT MODELLING OF ULTRA-THIN CONTINUOUSLY REINFORCED CONCRETE - P Smit and E Kearsley, University of Pretoria
16:20 – 16:40	APPROACHES TO TRANSITION INTO TRANSPORT INFRASTRUCTURE PROVISION AND MANAGEMENT - PDMasango and P Binda, CSIR Built Environment
16:40 – 17:00	THE STUDY ON THE THRESHOLD OF COVER DEPTH OF LARGE SECTION LOESS TUNNEL - Z Hu , YL Xie and JX Lai, School of Highway, Chang'an University, China
17:00 – 18:30	COCKTAIL PARTY
18:30	BUS DEPARTS FOR APPOINTED HOTELS

MONDAY, 08 JULY

07:30 - 08:30	REGISTRATION
08:10	Briefing for presenters and chairs in the respective venues
08:30 - 10:30	OPENING SESSION
10:30 - 11:00	REFRESHMENTS
SESSION 1B – TREASURY SESSION – PUBLIC TRANSPORT AND SPATIAL TRANSFORMATION	
CHAIR: MrMadumetjaMoselakgomo, CSIR	
11:00 – 11:30	SETTING THE SCENE: PRESENTATION OF FINDINGS AND RECOMMENDATION FROM THE PREVIOUS SESSIONS - M Mokonyama , CSIR Built Environment
11:30 – 12:00	SPATIAL TRANSFORMATION AGENDA IN TREASURY'S CITIES SUPPORT PROGRAMME II- MMatolong , National Treasury
12:00 – 12:30	USING UBER TRANSACTIONAL DATA TO SHOWCASE HOW THE USE OF SPACE IS CHANGING AND ITS IMPLICATIONS FOR THE SPATIAL TRANSFORMATION AGENDA – Y Kani , Uber
12:30 – 13:00	YET ANOTHER PIECE OF THE PUZZLE - ARE PUBLIC TRANSPORT SYSTEMS INFLUENCING SPATIAL CHANGE IN SOUTH AFRICA? – M Kihato , Specialist – Urban Planning
13:00 – 14:00	LUNCH
14:00 – 14:30	LAND REFORM – HOW PRACTITIONERS IN CITY PLANNING SHOULD BE INFLUENCING POLITICAL DECISION MAKING - S Friedman , University of Johannesburg
14:30 – 15:00	FACILITATED DISCUSSION: STREAMLINING THE POLITICS AND THE SCIENCE OF LAND REFORM
15:00 – 15:30	REFRESHMENTS
15:30 – 16:00	SPATIAL CHANGE AND TRANSPORT IN GAUTENG: OBSERVATIONS FROM THE QUALITY OF LIFE SURVEY- C Culwick , Gauteng City Region Observatory
16:00 – 16:30	HOW CAPACITY IN LOCAL GOVERNMENT SHOULD BE CONFIGURED TO EFFECTIVELY IMPLEMENT SPATIAL TRANSFORMATION - D Cupido , South African Local Government Association
16:30 – 17:00	FACILITATED DISCUSSION: CAPACITATING CITIES FOR SPATIAL TRANSFORMATION
17:00 – 18:30	COCKTAIL PARTY
18:30	BUS DEPARTS FOR APPOINTED HOTELS

MONDAY, 08 JULY

07:30 - 08:30	REGISTRATION
08:10	Briefing for presenters and chairs in the respective venues
08:30 - 10:30	OPENING SESSION
10:30 - 11:00	REFRESHMENTS
SESSION 1C – CAPACITY BUILDING/ TRANSPORT FOR RURAL DEVELOPMENT	
CHAIR: MrBongisizweMpondo, SAFIRI	
11:00 – 11:30	BROADENING OUR HORIZONS: BUILDING CAPACITY FOR REGIONAL INTEGRATION & THE REALIZATION OF THE AFRICAN CONTINENT FREE TRADE AREA – D Bonnet – Africa House
11:30 – 12:00	A REGIONAL MODEL FOR EQUITABLE SOCIAL SERVICE DELIVERY: SETTLEMENT PRIORITISATION AND SUPPORTING INFRASTRUCTURE TO FOSTER RURAL WELL-BEING - C Green , J Maritz and E VanHuyssteen, CSIR Built Environment, M Oranje, University of Pretoria and Z Sogoni, CSIR Built Environment
12:00 – 12:30	UNPACKING THE DURBAN AEROTROPOLIS AGENDA: PROSPECTS FOR CAPACITY BUILDING – C Hamadziripi – KZN: DEDTEA
12:30 – 13:00	DISCUSSION
13:00 – 14:00	LUNCH
14:00 – 14:30	ESTIMATION OF MARGINAL SOCIAL COSTS, ISSUES AND SUGGESTIONS: THE CASE FOR NAMIBIAN ROADS - HN Petrus and S Krygsman, Stellenbosch University
14:30 – 15:00	PROSPECTS FOR USING CORRESPONDENCE ANALYSIS TO CHARACTERISE TRAVEL DEMAND FOR AUTHORITIES WITH LIMITED TRANSPORT MODELLING RESOURCES - M Nkosi , P Mokilane and M Mokonyama, CSIR Built Environment
15:00 – 15:30	REFRESHMENTS
15:30 – 16:00	MUNICIPAL REGULATORY ENTITY (MRE) ESTABLISHMENT READINESS – DEVELOPMENT OF AN OPERATING LICENCING ADMINISTRATION SYSTEM (OLAS) AND TRANSACTIONAL PLATFORM - L Van den Berg , City of Cape Town
16:00 – 16:30	MODELLING SPATIO-TEMPORAL VARIABILITY IN INFORMALLY RUN TRANSPORT ROUTES TO IMPROVE JOURNEY PLANNING CALCULATIONS - C King , WhereIsMyTransport, B Ryseck, University of Cape Town, L Rall and S Mehenni, WhereIsMyTransport
16:30 – 17:00	INTEGRATION OF INFORMATION COMMUNICATION TECHNOLOGY FOR SUSTAINABLE ROAD TRAFFIC MOVEMENT IN MTHATHA - ML Mvusi and DK Das, Central University of Technology and M Mostafa Hassan, University of KwaZulu-Natal
17:00 - 18:30	COCKTAIL PARTY
18:30	BUS DEPARTS FOR APPOINTED HOTELS

MONDAY, 08JULY

07:30 - 08:30	REGISTRATION
08:10	Briefing for presenters and chairs in the respective venues
08:30 - 10:30	OPENING SESSION
10:30 - 11:00	REFRESHMENTS
SESSION 1D – RAIL	
CHAIR: Prof Hannes Gräbe, University of Pretoria	
11:00 - 11:30	PRINCIPAL FACTORS CONTRIBUTING TO EFFICIENCIES AND ECONOMIC SUSTAINABILITY OF INTEGRATED RAILWAY SYSTEMS IN SOUTH AFRICA – F Marutla , Gibb
11:30 - 12:00	AN INVESTIGATION INTO THE FACTORS CONTRIBUTING TO RAIL FREIGHT LOSING MARKET SHARE: A SOUTH AFRICAN PERSPECTIVE - L Phaladi, Z Toli and C Mara , University of Johannesburg
12:00 - 12:30	TIME DISTRIBUTION RATIOS FOR TRAIN SERVICES – P Onderwater , Hatch Africa
12:30 - 13:00	FUTURE PLANS FOR THE GAUTENG RAPID RAIL INTEGRATED NETWORK – W Dachs , Gautrain
13:00 - 14:00	LUNCH
14:00 - 14:30	QUANTIFYING THE ECONOMIC BENEFITS OF CHANGING THE GAUTENG TO DURBAN RAILWAY CORRIDOR FROM NARROW TO STANDARD GAUGE - CP Demmerez De Charmoy and PJ Grabe, University of Pretoria
14:30 - 15:00	HELP FROM ABOVE – ADDRESSING THE CHALLENGE OF TRANSPORT INFRASTRUCTURE MONITORING – D Mc Cormick and A Roos
15:00 - 15:30	REFRESHMENTS
15:30 - 16:00	FEASIBILITY STUDIES OF SOLUTIONS TO ADDRESS INFORMAL PEDESTRIAN CROSSING OF THE RAILWAY LINES IN THE CITY OF CAPE TOWN - SV Kiewiet , GIBB and T Kok, City of Cape Town
16:00 - 17:00	FAURE LEVEL CROSSING COLLISION, WESTERN CAPE - A CASE STUDY - D Arnold, Independent Railway Safety Consultant
17:00 - 18:30	COCKTAIL PARTY
18:30	BUS DEPARTS FOR APPOINTED HOTELS

TUESDAY, 9 JULY

07:30 - 08:30	REGISTRATION
08:10	Briefing for presenters and chairs in the respective venues
08:30 - 09:25	PLENARY ADDRESS: Prof Imad Al-Qadi; UNIVERSITY OF ILLINOIS AT URBANA – CHAMPAIGN - USA
09:25 – 09:30	Plenary breaks up into parallel sessions
SESSION 2A – URBAN AND PUBLIC TRANSPORT	
CHAIR: A/Prof Roger Behrens, University of Cape Town	
09:30 – 10:00	THE USE OF COAXS IN TSHWANE TO COMMUNICATE TRANSPORT IMPACTS IN STAKEHOLDER ENGAGEMENT - X Li, Massachusetts Institute of Technology, N Lionjanga and C Venter, University of Pretoria and C Zegras, Massachusetts Institute of Technology,
10:00 – 10:30	DISRUPTIVE TRANSPORT TECHNOLOGIES: FORECASTING THE IMPACT ON ROAD-GENERATED REVENUES IN SOUTH AFRICA - J Van Rensburg and S Krygsman, Stellenbosch University
10:30 – 11:00	REFRESHMENTS
11:00 – 11:30	INCENTIVIZING OFF-PEAK MINIBUS-TAXI FEEDER SERVICE: DRIVER PERSPECTIVES ON REFORM APPROACHES - C Plano , R Behrens and M Zuidgeest, University of Cape Town
11:30 – 12:00	DEMAND-RESPONSIVE TRANSIT DESIGN METHODS AND APPLICATIONS FOR MINIBUS TAXI HYBRID MODELS IN SOUTH AFRICA – J Coetzee , N Zhuwaki and D Blagus, GoMetro SA
12:00 – 12:30	CASHLESS FARE COLLECTION IN SUB-SAHARAN AFRICAN PARATRANSIT: A REVIEW OF EXPERIENCES - A Tinka and R Behrens, University of Cape Town
12:30 – 13:00	A 2018 CUSTOMER SATISFACTION SURVEY WITH USERS OF A SUBSIDISED PRIVATE BUS SERVICE IN CAPE TOWN, SOUTH AFRICA - T J Farrar , G J Abiodun, and J Farmer, Cape Peninsula University of Technology
13:00 – 14:00	LUNCH
14:00 – 15:00	PANEL DISCUSSION: CAPACITY BUILDING FOR URBAN MOBILITY – L Seftel, P RamodiseTsolo and P Mabe
15:00 – 15:30	REFRESHMENTS
15:30 – 16:00	DISRUPTIVE TRANSPORT TECHNOLOGIES: COMING, READY OR NOT! - P Browning , TransForum Business Development
16:00 – 16:30	TRANSPORTATION TRENDS AND FUNDING IN SOUTH AFRICA - H J Stander , Hein Stander Professional Services and J C Brink, ITS Global
16:30 – 17:00	RESTRUCTURING THE FRAGMENTED GAUTENG CITY REGION: COULD SMART SHELTERS BE THE ANSWER? - STerwin , GAPP Architects and Urban Designers
17:10	BUS DEPARTS FOR APPOINTED HOTELS

TUESDAY, 9 JULY

07:30 - 08:30	REGISTRATION
08:10	Briefing for presenters and chairs in the respective venues
08:30 - 09:25	PLENARY ADDRESS: Prof Imad Al-Qadi; UNIVERSITY OF ILLINOIS AT URBANA – CHAMPAIGN - USA
09:25 – 09:30	Plenary breaks up into parallel sessions
SESSION 2B – TRAFFIC MANAGEMENT, SAFTY AND SECURITY	
CHAIR: Mr Deon Roux, Road Traffic Management Corporation	
09:30 – 10:00	SPEED MANAGEMENT IN TRANSITION ZONES BETWEEN HIGH-SPEED RURAL AND LOW-SPEED URBAN AREAS - M Schroder and I Britten , Royal Haskoning DHV House
10:00 – 10:30	ACCEPTANCE OF NON MOTORISED TRANSPORT USERS' SAFETY MEASURES IN BUILT-UP AREAS: A CASE STUDY ON SANRAL ROADS - M Mabe and L Chauke - SANRAL
10:30 – 11:00	REFRESHMENTS
11:00 – 11:30	ROAD SAFETY COMPARISON IN SOUTH AFRICA – HOW DO THE DIFFERENT PROVINCES COMPARE? - M Vanderschuren, University of Cape Town and D Roux, Road Traffic Management Corporation
11:30 – 12:00	REVISITING THE STATUS QUO OF ROAD SAFETY AUDITS IN SOUTH AFRICA 2019 - LDV Roodt, Roodt Transport Safety (Presenter, K Labuschagne)
12:00 – 12:30	THE USE OF HARD SHOULDERS AS A TURNING LANE: A SAFETY EVALUATION - T Dollie and M Sinclair, Stellenbosch University
12:30 – 13:00	PRIORITISING AND MITIGATING ROAD SAFETY AT SCHOOLS IN MOGALE CITY, SOUTH AFRICA – B Jonsson , SARF
13:00 – 14:00	LUNCH
14:00 – 14:30	NATURALISTIC DRIVING STUDIES IN SUPPORT OF ROAD SAFETY RESEARCH IN SOUTH AFRICA - K Venter , K Muronga, I Sallie, V De Franca, M Kemp, R Botha, C De Saxe, R Berman, and P Binda, CSIR Built Environment, E De Beer, Capacity Social Corporate Responsibility and M Sinclair, Stellenbosch University
14:30 – 15:00	DISTRACTED DRIVER BEHAVIOUR IN SOUTH AFRICAN TOWNSHIPS: A ROADSIDE OBSERVATION STUDY - P Binda and K Muronga, CSIR Built Environment
15:00 – 15:30	REFRESHMENTS
15:30 – 16:00	NOVICE DRIVER TRAINING WITHIN THE SOUTH AFRICAN NRSS 2016-2030 – K Venter , CSIR Built Environment, M Sinclair, Stellenbosch University and L Lennox, Top Instructor Driver School
16:00 – 16:30	THE CHALLENGE OF DRUNK DRIVING ENFORCEMENT: A STUDY IN VHEMBE DISTRICT – TE Munwana
17:10	BUS DEPARTS FOR APPOINTED HOTELS

TUESDAY, 9 JULY

07:30 - 08:30	REGISTRATION
08:10	Briefing for presenters and chairs in the respective venues
08:30 - 09:25	PLENARY ADDRESS: Prof Imad Al-Qadi; UNIVERSITY OF ILLINOIS AT URBANA – CHAMPAIGN – USA
09:25 – 09:30	Plenary breaks up into parallel sessions
SESSION 2C – FREIGHT AND LOGISTICS	
CHAIR: MsWilna Bean, University of Pretoria	
09:30 – 10:00	BENCHMARKING THE PERFORMANCE OF HIGH CAPACITY VEHICLES IN SOUTH AFRICA - L Kemp , CC de Saxe, RP Berman and AJ Steenkamp - CSIR Built Environment
10:00 – 10:30	THE EFFECT OF ROAD CROSSFALL ON ROAD WEAR CAUSED BY HEAVY VEHICLES - AJ Steenkamp , R Berman, LKemp and CC de Saxe - CSIR Built Environment
10:30 – 11:00	REFRESHMENTS
11:00 – 11:30	COMMISSIONING OF THE CSIR'S TYRE TESTING AND STRESS-IN-MOTION FACILITIES FOR IMPROVED TYRE PARAMETERISATION - R Berman , CSIR Built Environment, CC De Saxe, CSIR Built Environment and Wits University School of Mech, A Clarke and D Reinecke, CSIR DPSS and C Fisher, CSIR Built Environment
11:30 – 12:00	CAMERA-BASED SIDE SLIP MEASUREMENTFOR TYRE TESTING - CC De Saxe and R Berman, CSIR Built Environment, A Clarke and D Reinecke, CSIR DPSS
12:00 – 12:30	COSTING AND MARKETING AS A SOURCE OF RIVALRY IN THE ROAD – KBA De Jenga, J Field, P Thomas and M Mpinganjira, University of Johannesburg
12:30 – 13:00	THE NEED TO HAVE A COORDINATED TRANSPORTATION PLAN TO ENABLE INTRA-AFRICAN TRADE AND ECONOMIC DEVELOPMENT - L Monyatsi , EtheKwini Municipality
13:00 – 14:00	LUNCH
14:00 – 14:30	A CASE STUDY OF AFTER-HOUR DELIVERY COLLABORATION BETWEEN FREIGHT RECEIVERS AND CARRIERS - WL Bean and JWJoubert, University of Pretoria
14:30 – 15:00	FALCON III: DEFINING A PERFORMANCE BASED STANDARDS FRAMEWORK FOR HIGH CAPACITY VEHICLES IN EUROPE – C de Saxe , K Kural, S Kharrazi, F Schmidt, C van Greem, R Berman, J Woodroffe and D Cebon
15:00 – 15:30	REFRESHMENTS
15:30 – 16:00	ELECTRIC CARGO BIKES FOR LAST MILE OF DELIVERIES – S Ndungane , CSIR Built Environment
16:00 – 17:00	Student Essay Presentations: 1. STRATEGIC ASSESSMENT OF THE IMPACT OF THE PRIORITY INFRASTRUCTURE ON THE PERFORMANCE OF MINIBUS-TAXI SERVICES IN THE CONTEXT OF SOUTHERN AFRICA - LR De Beer , University of Pretoria 2. DISRUPTIVE TRANSPORT TECHNOLOGIES AND THE FUTURE OF TRANSPORT IN SOUTH AFRICA - R Ebrahim , Stellenbosch University 3. DISRUPTIVE TRANSPORT TECHNOLOGIES- IS SOUTH AND SOUTHERN AFRICA READY?- A Gweba , University of Fort Hare 4. IS SOUTH AFRICA READY FOR “DISRUPTIVE TRANSPORT TECHNOLOGY”? - N Tsolo , University of Fort Hare 5. DISRUPTIVE TRANSPORT TECHNOLOGIES: IS SOUTH AND SOUTHERN AFRICA READY? - LTM Smith , Stellenbosch University 6. SOUTH AND SOUTHERN AFRICA – ARE DISRUPTIVE TRANSPORT TECHNOLOGIES READY? AN EXPLORATION OF JOURNEY PLANNING TOOLS FOR URBAN PUBLIC TRANSPORT SYSTEMS IN SOUTH AFRICA - B Ryseck , University of Cape Town

	<p>7.SOLUTIONS FOR IMPROVING TRANSPORTATION IN SOUTH AFRICA: TRAFFIC DEMAND FORECASTING OF PUBLIC BICYCLE STATION BASED ON BP NEURAL NETWORK - S Lin, School of Highway, Chang'an University, China</p> <p>8.SHARING ECONOMY DRIVES GREEN TRAFFIC - L Liu, School of Highway, Chang'an University, China</p> <p>9.URBAN TRANSPORT IMPROVEMENT BY ESTABLISHING INTELLIGENT PUBLIC TRANSPORT SYSTEM - X He,Chang'an University, China</p>
17:10	BUS DEPARTS FOR APPOINTED HOTELS

TUESDAY, 9 JULY

07:30 - 08:30	REGISTRATION
08:10	Briefing for presenters and chairs in the respective venues
08:30 - 09:25	PLENARY ADDRESS: Prof Imad Al-Qadi; UNIVERSITY OF ILLINOIS AT URBANA – CHAMPAIGN - USA
09:25 – 09:30	Plenary breaks up into parallel sessions
SESSION 2D – AVIATION	
CHAIR: Maj Nandi Zama, South African Air Force	
09:30 – 10:00	ARTIFICIAL INTELLIGENCE AND BIG DATA: (AN INTRODUCTION) – H Koen, CSIR
10:00 – 10:30	CRUISING THROUGH THE SKIES WITH CONFIDENCE; HOW REAL-TIME BIG DATA EXPLOITATION LEADS TO OPTIMISED OPERATIONS FOR THE AVIATION INDUSTRY - D McCormick and A Roos. Hexagon Geospatial
10:30 – 11:00	REFRESHMENTS
11:00 – 13:00	CHAIR: Ms Aarti Panday, Technology Innovation Agency PANEL DISCUSSION ON THE “SAFE INTEGRATION OF REMOTELY PILOTED AIRCRAFT SYSTEMS INTO CIVIL AIRSPACE” –Panel members from South African Civil Aviation Authority, Air Traffic and Navigation Services, Denel, NTSU Aviation Solutions (represented by S Twala and D McErlean)
13:00 – 14:00	LUNCH
CHAIR: Maj Nandi Zama, South African Air Force	
14:00 – 14:30	AN ASSESSMENT OF KEY SUCCESS FACTORS IN THE SOUTH AFRICAN LOW COST AIRLINE INDUSTRY - S Davids, T Mapinga, Z Mtimkulu and S Dhliwayo, University of Johannesburg
14:30 – 15:00	IATA CEIV LIVE ANIMALS; ANIMAL SAFETY AND WELFARE IN AIR TRANSPORT - M Jitomirski, International Air Transport Association
15:00 – 15:30	REFRESHMENTS
15:30 – 16:00	PASSIVE RADAR TECHNOLOGY, AN EMERGING TECHNOLOGY – F Maasdorp, CSIR
16:00 – 16:30	ADDITIVE MANUFACTURING IN THE AEROSPACE SECTOR: AN OVERVIEW - A Rujub
17:10	BUS DEPARTS FOR APPOINTED HOTELS

WEDNESDAY, 10 JULY

07:30 - 08:30	REGISTRATION
08:10	Briefing for presenters and chairs in the respective venues
08:30 - 09:25	PLENARY ADDRESS: Mr Victor Radebe, AUTONOMOUS VEHICLES – AFRICA
09:25 – 09:30	Plenary breaks up into parallel sessions
SESSION 3A – MULTI-MODAL TRANSPORT	
CHAIR: Ms Gail Jennings, Research Consultant	
09:30 – 10:00	PUBLIC TRANSPORT: POSSIBLE IMPACT OF TRANSIT ORIENTED DEVELOPMENT ON PUBLIC TRANSPORT – CASE CORNUBIA(TO D, or not to D, that is the question) - P Onderwater , Hatch Africa
10:00 – 10:30	PUBLIC TRANSPORT: ACCESSIBILITY OF PUBLIC TRANSPORT - WITH FOCUS ON ACCESS, EGRESS AND THE LINE HAUL TRAVEL TIME - R Kgwedi and S Krygsman, Stellenbosch University
10:30 – 11:00	REFRESHMENTS
11:00 – 11:30	PUBLIC TRANSPORT: INTRAPRENEURIAL ORIENTATION IN THE TRANSPORT INDUSTRY: A PILOT STUDY - C Schachtebeck , University of Johannesburg
11:30 – 12:00	ICT: COULD MOBILITY AS A SERVICE (MaaS) HAVE A ROLE IN AN INTEGRATED PUBLIC TRANSPORT NETWORK IN SOUTH AFRICAN CITIES? - NBM Hlubi and L Seftel, City of Johannesburg
12:00 – 12:30	ICT: ICT FOR HYBRID SYSTEMS: THE ROLE OF INFORMATION IN REALISING MORE EQUITABLE ACCESS TO MOBILITY IN EMERGING CITIES - B Ryseck , University of Cape Town
12:30 – 13:00	PARATRANSIT: MEASURING THE EVOLUTION OF PASSENGER SATISFACTION FOLLOWING THE INTRODUCTION OF SCHEDULED SERVICES:THE CASE OF THE 7TH AVENUE MINIBUS-TAXI ASSOCIATION IN MITCHELLS PLAIN - S Saddier , Transitec, N McLachlan, ODA and D Dass, 7 th Avenue and Districts Minibus Taxi Association
13:00 – 14:00	LUNCH
14:00 – 14:30	TRANSPORT JUSTICE: DO ROADS CONNECT OR DIVIDE? THE OTHER SIDE OF THE ROAD - A Gibberd and O Thobela , National Department of Transport
14:30 – 15:00	NMT: CYCLE ROUTE NETWORK DEVELOPMENT AND EVALUATION USING SPATIAL MULTI-CRITERIA ANALYSIS AND SHORTEST PATH ANALYSIS - JM Vorster , Aurecon South Africa and MHP Zuidegeest, University of Cape Town
15:00 – 15:30	REFRESHMENTS
15:30 – 16:00	NMT: NON-MOTORISED TRANSPORTATION FOR REVITALISING THE CITY CENTRES OF SOUTH AFRICA - DK Das , Central University of TechnologyBloemfontein
16:00 – 16:30	UNIVERSITY TRAVEL: A CASE STUDY ON THE FEASIBILITY OF BRT-ASSISTED TRANSPORT AT THE UNIVERSITY OF PRETORIA - RR Aropet and CJ Venter, University of Pretoria
16:30 – 17:00	UNIVERSITY TRAVEL: BIKESHARE ON A UNIVERSITY CAMPUS: LESSONS FROM A PILOT PROJECT AT THE UNIVERSITY OF PRETORIA - C Venter , University of Pretoria, T Mangane, N Du Plooy and NJW Van Zyl, Royal HaskoningDHV, I Matlawe, M Krynauw and T Shuping, City of Tshwane Metropolitan Municipality
17:10	BUS DEPARTS FOR APPOINTED HOTELS

WEDNESDAY, 10 JULY

07:30 - 08:30	REGISTRATION
08:10	Briefing for presenters and chairs in the respective venues
08:30 - 09:25	PLENARY ADDRESS: Mr Victor Radebe, AUTONOMOUS VEHICLES – AFRICA
09:25 – 09:30	Plenary breaks up into parallel sessions
SESSION 3B – TRAFFIC ENGINEERING	
CHAIR: Mr Carlos Esteves, CE Civil Engineering and Transportation Consulting	
09:30 – 10:00	FREEWAY MANAGEMENT SYSTEMS: SUPPORTING CAPACITY IMPROVEMENTS FOR ALL MODES - W De Klerk and C Krogscheepers, Innovative Transport Solutions
10:00 – 10:30	IMPROVING INCIDENT DETECTION TIME ON SANRAL'S FREEWAYS IN GAUTENG - C Birungi and A Menon, Koleko Solutions
10:30 – 11:00	REFRESHMENTS
11:00 – 11:30	MACRO TRANSPORTATION MODELLING IN ETHEKWINI: AN EXPLORATION OF TRAFFIC PREDICTIONS OVER THE PAST FIVE DECADES AND ITS IMPACT ON TRANSPORT PLANS AND PROGRAMMES- L Moodley and M Rampersad, eThekweni Transport Authority
11:30 – 12:00	TRIP PATTERNS AT PRIMARY SCHOOLS - C Heyns and M Bruwer, Stellenbosch University
12:00 – 12:30	USING COST-EFFECTIVENESS ANALYSIS TO SCREEN AND RANK ROAD PROJECTS IN NAMIBIA - D Ross, University of Cape Town, University College Cork, Ireland, Georgia State University, USA and M Townshend , University of Cape Town
12:30 – 13:00	BRT STATION CAPACITY ANALYSIS: OPTIMISING BUS RAPID TRANSIT STATION DESIGN THROUGH CAPACITY ANALYSIS - R Lowe and A Frieslaar, HHO Consulting Engineers
13:00 – 14:00	LUNCH
14:00 – 14:30	THE EFFECTIVENESS OF CONTROL OF SPEED BY ILLUSION LINES (COSBI Lines) - J Van DerSpuy and M Schröder, Royal HaskoningDHV
14:30 – 15:00	HIGH SPEED, REAR END, PARTIAL OVERLAP CRASH TEST OF A LARGE SEDAN & STATIONARY COMMERCIAL TRAILER - C Proctor-Parker and R Stopforth, University of KwaZulu-Natal
15:00 – 15:30	REFRESHMENTS
15:30 – 16:00	EXPERIMENTAL SKID ANALYSIS OF A VEHICLE ON A GRAVEL ROAD - C Proctor-Parker and R Stopforth , University of KwaZulu-Natal
16:00 – 16:30	CONVENIENCE AND SIMPLICITY FOR THE COMMUTER IS AT THE HEART OF OPEN ARCHITECTURE PAYMENT TECHNOLOGIES - M Hart and A Kelly , Vix Technology
17:10	BUS DEPARTS FOR APPOINTED HOTELS

WEDNESDAY, 10 JULY

07:30 - 08:30	REGISTRATION
08:10	Briefing for presenters and chairs in the respective venues
08:30 – 09:25	PLENARY ADDRESS: Mr Victor Radebe, AUTONOMOUS VEHICLES – AFRICA
09:25 – 09:30	Plenary breaks up into parallel sessions
SESSION 3C – 6TH CHINAAFRICA TRANSPORT CO-OPERATION FORUM WITH THE BELT AND ROAD INITIATIVE (BRI) AND APT WORKSHOP	
CHAIR: Mr Gerhard de Beer, GIBB and Ms Ivandra Udoyen, Koleko	
<p>In December 2015 and September 2018, Johannesburg Summit of the Forum of China-Africa Co-operation (FOCAC) and Beijing Summit of the FOCAC were successfully held. 52 African countries and African Union and China have worked on the Action Plans of 2016-18 and 2019-21 continuously. The number of medium and large-scale transport infrastructure projects have been achieved. In April 2019 Belt and Road Forum (BRF) was hosted by Chinese government. South African Department of Science and Technology (DST) and South African Academy of Engineering (SAAE) attended the BR. Both South Africa and China signed the agreements on Science, Engineering and Technology (SET) . Smart Transport and 4th Engineering Revolution are important fields of the co-operation. As the world class on APT (Accelerated Pavement Testing) technologies, led by South Africans, the big data and artificial intelligent have being guided the innovation on transport sustainable development.</p>	
09:30 – 10:00	<p>INVITING THE KEYNOTE SPEAKERS FROM SOUTH AFRICAN AND CHINESE GOVERNMENTS REPORTING THE INSTITUTIONAL DEVELOPMENT ON JOINT RESEARCH INSTITUTIONS ON SMART TRANSPORT BETWEEN SOUTH AFRICA AND CHINA: DST AND ITS CHINESE COUNTERPART OFFICIALS TO BE INVITED A Visser, Advisor of South Africa-China Transport Co-operation Center(SACTCC) and Y Wang, SACTCC</p>
10:00 – 10:30	<p>BRITA (BELT AND ROAD INTERNATIONAL TRANSPORT ALLIANCE) AND ITS ACTIVITIES IN THE WORLD–J Mei, China Highway and Transport Society (CHTS), China THE ROLE OF HIGHER EDUCATION IN SOUTH AFRICA TO CO-OPERATE ON BELT AND ROAD INITIATIVE(BRI) - W Steyn, University of Pretoria</p>
10:30 – 11:00	REFRESHMENTS
11:00 – 11:30	<p>THE DESIGN AND CONSTRUCTION TECHNOLOGY OF RUBBER ASPHALT PAVEMENT – RYang, Changán University, China</p>
11:30 – 12:00	<p>FACILE PREPARATION OF CHEMICALLY GRAFTED NANO-GRAPHENE AND ITS APPLICATION AS SURFACTANT - P Zhao, Shandong Jianzhu University, China</p>
12:00 – 12:30	<p>MEASURING THE CAPACITY UTILIZATION OF CHINA'S TRANSPORTATION SECTOR CONSIDERING UNDESIRABLE OUTPUT – J Zhang, Changán University, China</p>
12:30 – 13:00	<p>CEMENT STABILIZED MACADAM COMPACTION VIBRATION ACCELERATION SIGNAL RESEARCH - H ZHOU, Shandong Jianzhu University, China</p>
13:00 – 14:00	LUNCH
14:00 – 15:00	PRESENTATIONS ON THE APT WORKSHOP IN GAUTENG (SITES TO BE NOTICED)
15:00 – 15:30	REFRESHMENTS
15:30 – 16:00	MOBILE LOAD SIMULATOR WORKSHOP IN WESTERN CAPE
17:10	BUS DEPARTS FOR APPOINTED HOTELS

WEDNESDAY, 10 JULY

07:30 - 08:30	REGISTRATION
08:10	Briefing for presenters and chairs in the respective venues
08:30 – 09:25	PLENARY ADDRESS: Mr Victor Radebe, AUTONOMOUS VEHICLES – AFRICA
09:25 – 09:30	Plenary breaks up into parallel sessions
SESSION 3D – MARITIME	
CHAIR: Dr Kana Mutombo and MsLwandile Mabuza, Transnet National Ports Authority	
09:30 – 10:30	KEYNOTE SPEAKER “COULD A DEEP OFFSHORE PORT BE A PLAUSIBLE FUTURISTIC GREEN PORT DEVELOPMENT SOLUTION FOR SOUTH AFRICA?”– N Mdawe , Transnet National Ports Authority
10:30 – 11:00	REFRESHMENTS
11:00 – 11:30	A PORT DISRUPTED; THE FUTURE ROLE OF PORTS – L Mabuza , Transnet National Ports Authority
11:30 – 12:00	THE POTENTIAL OF CABOTAGE FOR PORTS – S Smith-Godfrey - CSIR Built Environment
12:00 – 12:30	BIO-INVASION AND ONSHORE BALLAST WATER MANAGEMENT: A VIABLE SOLUTION FOR DEVELOPING ECONOMIES - L Kuroshi , Nigerian Ports Authority
12:30 – 13:00	COPE LEVELS IN MODERN PORTS:A CASE STUDY FOR THE PORT OF NGQURA - TA Ahmed and K Mutombo, Transnet National Ports Authority
13:00 – 14:00	LUNCH
14:00 – 14:30	THE POTENTIAL OF ELEPHANT GRASS (<i>Pennisetum purpureum schum</i>), A NIGERIAN INDIGENOUS GRASS, IN BIOETHANOL PRODUCTION: A DECARBONIZATION ALTERNATIVE FOR THE TRANSPORT INDUSTRY - EM Azeke , CL Eze and I Ubong, Rivers State University, Nigeria and LR Kuroshi, Nigeria Ports Authority Headquarters
14:30 – 15:00	TRANSNET MARITIME SCHOOL OF EXCELLENCE SERVICE OFFERINGS – T Maphumulo , Transnet
15:00 – 15:30	REFRESHMENTS
15:30 – 16:00	TOWARDS SECURE MARITIME TRANSPORT IN SOUTH AFRICA: AN INVESTIGATION OF CYBERSECURITY READINESS OF ORGANISATIONS – K Muronga , University of South Africa and CSIR Smart Logistics and Infrastructure, MLetebele, P Bindaand SSmith, CSIR Smart Logistics and Infrastructure
16:00 – 16:30	IMPACT OF THE FOURTH INDUSTRIAL REVOLUTION IN AFRICA FOR BETTER PORTS PERFORMANCE – T Basi , Transnet National Ports Authority
16:30 – 17:00	OPERATION PHAKISA – R Bhikraj , Transnet National Ports Authority
17:10	BUS DEPARTS FOR APPOINTED HOTELS

THURSDAY, 11 JULY

08:00 - 08:30	REGISTRATION
08:10	Briefing for presenters and chair in the Diamond Auditorium
SESSION 4A – INTEGRATED PUBLIC TRANSPORT NETWORKS	
CHAIR: Dr MathethaMokonyama, CSIR Built environment	
08:30 – 09:00	KEY NOTABLES IN THE NLTA AMENDMENT BILL AND IMPLICATIONS FOR INTEGRATED PUBLIC TRANSPORT NETWORK IMPLEMENTATION– L Mabece , Bulumko Corporate Law Advisors and Consultants
09:00 – 09:45	WHAT A BUS MANUFACTURER WANTS CITIES TO KNOW ABOUT SPECIFICATION OF BUSES IN PROCUREMENT CONTRACTS, AND HOW INNOVATION SHOULD BE INCORPORATED IN THE CONTRACTS – P Nodada , Busmark
09:45 – 10:30	FINDINGS OF THE PUBLIC PASSENGER TRANSPORT MARKET INQUIRY ON THE STATE OF PUBLIC TRANSPORT GOVERNANCE IN SOUTH AFRICA – N Moeketsi , The Competition Commission
10:30 – 11:00	REFRESHMENTS
11:00 – 11:30	CITY OF TSHWANE - PROGRESS, LESSONS, AND INNOVATION IN THE IMPLEMENTATION OF IPTN IN TSHWANE - R Mutasa , A Re Yeng
11:30 – 12:00	CITY OF RUSTENBURG - PROGRESS, LESSONS, AND INNOVATION IN THE IMPLEMENTATION OF IPTN IN RUSTENBURG - O Moleele , Rustenburg Rapid Transport
12:00 – 12:30	CAPE TOWN - PROGRESS, LESSONS, AND INNOVATION IN THE IMPLEMENTATION OF IPTN IN CAPE TOWN – K Naidoo , Transport Planning
12:30 – 13:00	CITY OF ETHEKWINI - PROGRESS, LESSONS, AND INNOVATION IN THE IMPLEMENTATION OF IPTN IN eTHEKWINI – M Mhlanga , Go!Durban
13:00 – 14:00	LUNCH
14:00 – 14:30	NORMS AND STANDARDS FOR PUBLIC TRANSPORT IN GAUTENG PROVINCE – F Masuku , Gauteng Department of Roads and Transport
14:30 – 15:00	A SCIENTIFIC FRAMEWORK TO GUIDE PLANNING OF TRULY SUSTAINABLE INTEGRATED PUBLIC TRANSPORT NETWORKS IN SOUTH AFRICA – L Mokoma , CSIR
15:00 – 15:30	REFRESHMENTS
15:30 – 16:30	DISCUSSION: OVERCOMING IMPLEMENTATION CONSTRAINTS APPROACHES TO TRULY INTEGRATE THE NETWORK EXPANDING THE NETWORK
17:00	BUS DEPARTS FOR APPOINTED HOTELS

THURSDAY, 11 JULY

08:00 - 08:30	REGISTRATION
08:10	Briefing for presenters and chair in the Ruby Auditorium
SESSION 4B – EMPOWERMENT OPPORTUNITIES IN TRANSPORT BROUGHT TO YOU BY TSHWANE WOMEN IN TRANSPORT	
CHAIR: Ms Mavis Mhlanga-Mochadibane and MsYolisaMabece, Tshwane Women in Transport	
08:30 – 09:00	CREATIVE RENDITION – R Moosajee
09:00 – 09:45	KEY NOTE ADDRESS - Minister MammolokoKubayi-Ngubane, Tourism
09:45 – 10:30	THE SOCIAL IMPACT OF CURRENT TRANSPORT SYSTEMS – L Mokoma, CSIR
10:30 – 11:00	REFRESHMENTS
11:00 – 11:30	TRANSPORT AS A TERRAIN FOR WOMEN ECONOMIC EMANCIPATION – Y Kani, UBER
11:30 – 12:15	THE ROLE OF LEGISLATION IN TRANSPORT AND SAFETY AND OPPORTUNITIES FOR WOMEN PARTICIPATION – A Swanepoel, Alta Swanepoel and Associates
12:15 – 13:00	PROMOTING ACCESSIBILITY TO PUBLIC TRANSPORT - T Malele, National Taxi Alliance
13:00 – 14:00	LUNCH
14:00 – 14:30	TRIPARTITE TRANSPORT AND TRANSIT FACILITATION PROGRAMME – J Botha, Latamus Consultants
14:30 – 15:00	THE IMPORTANCE OF COLLECTING AND DIGITALISING INFORMALLY RUN PUBLIC TRANSPORT DATA IN EMERGING CITIES - L Rall, WhereIsMyTransport
15:00 – 15:30	REFRESHMENTS
15:30 – 16:00	APPLICATIONS OF UNMANNED AERIAL VEHICLES (DRONES) IN TRAFFIC ENGINEERING AND TRANSPORT PLANNING – I Udoyen, Koleko
16:00 – 16:30	TELEMATICS – THE KINGPIN TOWARDS CONNECTED FLEETS- M Wadsworth, CTrack
16:30 – 17:00	TRANSPORT OPPORTUNITIES FOR WOMEN IN TRANSPORT – O Mashilo, BolengBontle Consultant
17:00	BUS DEPARTS FOR APPOINTED HOTELS

Please note that this is a DRAFT Programme and may be subject to some alterations before the Conference.

Please register on-line at www.satc.org.za

We look forward to welcoming you at SATC 2019