

LatAm Rail Opportunities 2013

"Accelerating rail innovations in a dynamic region"

5 – 6 March 2013, Sheraton WTC Hotel, Sao Paulo – Brazil

Portuguese, Spanish & English

HOT SPOTS

New York CityTransit System case study



1 Regional case study - Brazil

2 International case studies – Spain & UK

CONFIRMED SPEAKERS & PANELISTS

Joubert Fortes Flores, Metro Rio

Director - Brazil Jean Carlo Pejo, ALAF (the Latin American

Railways Association)

Consultant Logistics Solutions - Brazil

Nelson Siffert, (BNDES)National Economic and **Social Development Bank**

Superintendent of Infrastructure- Brazil

lan Thomson Newman, International Railways iournal

Regional Editor Chile & a Transport Economist -Chile

Vicente Abate, (ABIFER) Brazil Rail road

Industry Association President - Brazil

Andrew Bata, New York City Transit Chief, Strategic Improvements and Best Practices -

Kuldeep Gharatya, London Underground Head of Systems Integration and Train Systems Engineering – UK

Angelo Baptista, Transnordestina Logistica CEO - Brazil

Julio Lopes, State Government of Rio de

Secretary of Transport – Brazil

Mario Fioratti, Metro Sao Paulo Director of Operations - Brazil

Helio Mauro Franca, Brazilian Enterprise for **Planning and Logistics** Director - Brazil

Mario Dirani, (DNIT) National Department of **Transport Infrastructure**

Railway Infrastructure Director - Brazil

Aurelio Rojo, (ALAMYS)Association of Latin **American Metros and subways** General Secretary- Spain

J.Chris Rooney, Consults on Public policy and financial issues US government – USA

Claudio Andrade, ViaQuatro

Director - Brazil

Romulo Fortes, The Metropolitan

Transportation Company of Ceará - Metrofor President - Brazil

Humberto Kasper, TRENSURB (Company of Urban Trains from Porto Alegre SA)

President and CEO - Brazil Representative - Moxa

Jean-François de Lantsheere, 21Net Deputy Managing Director, Belgium

Leo Tsao, Moxa

Senior Director, Global Rail Automation Solution Division, Taiwan

Amjad Bangash, Bechtel Managing Director, Rail -UAE

P.Takies Salpeas, Parsons Corporation

Senior Vice President and Global Rail Manager - USA

EVENT OVERVIEW

There is a major boom in the railway industry in South America, notably in Brazil. Apart from the deep lack in infrastructure, mainly due to decades of priority given from the government to the highways, there are some important factors pushing the trend forward. The recent deep sea oil fields discovered there; the football 2014 world cup and the 2016 Olympics are certainly among them.

We bring you LatAm rail opportunities 2013 to explore the opportunities available in the region; the major issues and probable solutions to the concerns facing the industry. The platform will be used to share best practices in the industry and the latest innovations in rail technology

Brazil as one of the BRIC states is among the most dynamic rail markets in the world, also driven by the upcoming 2014 FIFA World games and 2016 Summer Olympics.

There are a lot of projects going on in Brazil. The big majority of them taking place in São Paulo (nearly R\$ 50 billion until 2018, with several new lines for Metrô SP and CPTM). With Governemnt being encouraging by making historic investments in addressing the problem of time taken by people to move around large cities.

WHO WILL YOU MEET

Directors, Presidents, General Managers, Project managers, Senior representatives, Head of operations: Rail operators, Government authorities, Construction companies, rolling stock companies, consultancy firms, engineering companies, rail projects etc

Joubert Fortes Flores, Metro Rio Director - Brazil

Rafael Gustavo Galeano, ALAF (the Latin American Railways Association)Infrastructure area. Ferrocarril Belgrano Cargas Safety Manager - Argentina

Pablo Martorelli (IAF) Instituto Argentino de **Ferrocarriles** President - Agrentina

lan Thomson Newman, International Railways journal Regional Editor Chile Transport Economist & - Chile

Nelson Siffert, (BNDES) National Economic and Social Development Bank Superintendent of Infrastructure- Brazil

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Day 1 | 5th March 2013

8:15 Registration and Coffee

8:45 Welcome Note from Fleming Gulf

8:50 Opening Remarks from the Chair

Vicente Abate | (ABIFER) Brazil Rail road Industry Association

President - Brazil

9.00 Keynote Address – Invited Minister of Transport Brazil



RAIL INFRASTRUCTURE IN LATAM

9:30 Updates on rail infrastructure development in Latin America

- Identifying issues in construction of rail contours
- · Challenges faced in construction of new lines
- Best practices adopted to ensure efficient performance

Mario Dirani | (DNIT)National Department of Transport Infrastructure

Railway Infrastructure Director - Brazil

10:00 The way ahead for the rail infrastructure in South America – Perspective Brazil

- · Revamping of existing rail lines
- Port Infrastructure growth
- · Supply chain future
- Questions & Answers

Joubert Flores | Metro Rio

Director - Brazil

10:30 Morning Coffee and Refreshments



RAIL FINANCE IN LATAM

11:00 Demystifying rail project finance in LatAm

- The concessioning model the lessons learnt from it
- Upcoming models of privatization
- Information on infrastructure funds & privatization
- Questions & Answers

Nelson Siffert \mid (BNDES) National Economic and Social Development Bank

Superintendent of Infrastructure- Brazil

11.30 Metro areas & Rail lines - a public private experience

Claudio Andrade | Via Quatro

Director - Brazil

RAIL EXPANSION & PROCUREMENT

12.00 Leveraging global experience in project delivery

Amjad Bangash | Bechtel

Managing Director, Rail - UAE

12.30 Analysis of Procurement Strategies

- Supply chain infrastructure in South America the issues and the solutions to them
- Further outsourcing needs and opportunities
- Counting more on the local produce / Developing capacities of the local suppliers
- Questions & Answers

Vicente Abate | (ABIFER)Brazil Rail road Industry Association

PRESIDENT - BRAZIL

13.00 Conference Luncheon

14.00 Project Manager at Risk: The next tool in rail project delivery toolbox

P.Takies Salpeas | **Parsons Corporation**

Senior Vice President and Global Rail Manager -USA

GLOBAL BEST PRACTICES



14.30 Latest trends in data communication technology for onboard, train to ground and wayside

- Onboard communications
- Wayside communications
- Train to ground wireless communications

Leo Tsao | Moxa

Senior Director, Global Rail Automation Solution Division - Taiwan

15.00 Presentation by

Julio Lopes | **State Government of Rio de Janeiro** Secretary of Transport

15:30 Afternoon Coffee & Networking

16:00 ► CASE STUDY New York City Transit System

- Best strategies & practices New York City transit system
- Innovative customer service initiatives for New York through real time information systems and applications of social media
- Questions & Answers

Andrew Bata | New York City Transit

Chief, Strategic Improvements and Best Practices - USA

16:30 Challenges and opportunities for passenger urban rail projects

17:00 PANEL DISCUSSION Making Latin American rail sector more investor friendly

- Matching political expectations with economic reality
- Financing difficult projects in difficult environments and difficult times
- Passenger Rail vs. Freight Rail-Parallel Universes from a financial perspective
- Local partners-the most important piece of the economic puzzle
- Case Studies
- Tax structures acting as gate keepers into investment
- Entry into the Latin American market How to prepare for it What barriers you face and how to overcome it

Special address: J.Chris Rooney \mid Consults on Public policy and financial issues US government – USA

Vicente Abate | (ABIFER) Brazil Rail road Industry

Association

President – Brazil

17:40 Closing Remarks from the Chair

Vicente Abate | (ABIFER) Brazil Rail road Industry Association

President – Brazil

18:00 Cocktail Reception

Day 2 | 6th March 2013

Registration and Coffee

9:00 **Opening Remarks from the Chair**

Vicente Abate | (ABIFER) Brazil Rail road Industry Association President – Brazil

SPECIAL FEATURE: Global & regional country case studies

During this session there will be an opportunity to benefit from best practice case studies from different countries/continents to assure higher learning opportunity and understanding of best practices carried out regionally and worldwide



International focus:

9:10 Focus Spain

Spain boasts the second longest network in the world, together with a varied fleet of trains made up of 13 different classes. High-speed rail has come to 19 provincial capitals and links the Spanish capital with all the main population centres: Valencia, Barcelona, Seville, Málaga, Zaragoza and Valladolid

Rail Development in Spain - Case study

- Overview of latest developments Commuter trains, Metro's, Light rails and High speed trains
- Advance technical systems implemented

Aurelio Rojo | (ALAMYS)Association of Latin American Metros and subways

General Secretary- Spain

9:50 Focus UK

Case study - London Underground

- Effective implementation of systems engineering at London Underground
- Challenges faced by the system
- · Strategies developed by the team
- Case Study 1: The sub surface railway ATC contract
- Case study 2: The Deep Tube programme
- Summary and conclusions

Kuldeep Gharatya | London Underground

The Head of Systems Integration UK

10:30 Morning Coffee and Refreshments



Regional focus:

11:00 Focus Brazil

"Expansion of Regional Lines" - the Transnordestina Railroad project case study

- Scope of the project
- · The challenges
- The highlights
- Project management practices implemented

Angelo Baptista | Transnordestina Logistica

11:40 ► CASE STUDY Brazilian High Speed Line: Rio – São Paulo - Campinas

- High speed lines
- The Rio São Paulo Campinas Region/Market
- The studies for the project TAV BRAZIL
- Technological development
- Concession model for project
- Bidding procedures
- Implementation of the project

Helio Mauro Franca | Brazilian Enterprise for Planning and Logistics (EPL)

Director - Brazil

The challenges & benefits of offering Internet & multimedia on high speed trains

Jean-François de Lantsheere | 21Net Deputy Managing Director, Belgium

13:00 Conference Luncheon

Maximising Rail Safety in Latin America 14:00

- Safety systems available and what lies ahead International case studies and practices
- The responsibility over safety on the rail parts industry.
- Rail safety: Need for a common standard and an external organization to certify the safety.

Jean Carlo Pejo | ALAF (the Latin American Railways Association)

Consultant Logistics Solutions - Brazil

► PANEL DISCUSSION Rail safety techonologies

- Challenges faced in implementing safety systems
- Better Risk Assesment

Panelists:

Jean Carlo Pejo | ALAF (the Latin American Railways Association)

Consultant Logistics Solutions - Brazil

Helio Mauro Franca | Brazilian Enterprise for Planning and Logistics (EPL)

Director - Brazil

15:20 Coffee break

Latin American railways ;what has been accomplished in past decades and what still remains to be done

- The reforms that have helped the development
- The factors holding back further development

Ian Thomson Newman | International Railways journal Regional Editor Chile ,Transport Economist - Chile

Future of rail infrastructure in Latin America

- · Driving factors of growth
- Cautions to be taken
- Bridging the gap of skill sets /man power requirement
- Opportunities Challenges

Mario Fioratti, Metro Sao Paulo Director of Operations - Brazil

► LEADERS PANEL DISCUSSION Way forward for LatAm rail infrastructure development

- Building the strength of the public sector
- Encouraging more transparency in the systems & policies
- Coordinated planning for infrastructure development
- Creating more capacity for funding
- Attracting attention from the international markets on the basis of a strong transport infrastructure
- Creating a strong private sector role

Mario Fioratti | Metro Sao Paulo

Director of Operations - Brazil

Romulo Fortes | The Metropolitan Transportation Company

of Ceará - Metrofor

President - Brazil

Humberto Kasper | TRENSURB (Company of Urban Trains

from Porto Alegre SA)

President and CEO - Brazil

17:30 **Closing Remarks From the Chair**

Vicente Abate | (ABIFER) Brazil Rail road Industry Association President - Brazil

I would like to thank everyone who has helped with the research and organization of this event, especially the advisors and speakers for their support and commitment.

Rohan Jagtap | Conference Producer | Fleming Gulf

Speaker profiles

CONFERENCE CHAIRMAN VICENTE ABATE, (ABIFER)BRAZIL RAIL ROAD INDUSTRY ASSOCIATION PRESIDENT – BRAZIL

The president of ABIFER (Brazilian Association of the Railroad Industry), Vicente Abate, is a metallurgical engineer graduated by the Escola de Engenharia Mauá, post-graduated in metallurgy by the Escola Politécnica da Universidade de São Paulo and received an MBA in Marketing from FGV-SP and Babson College in USA. He is the corporate relations director of AmstedMaxion. He is also director of SIMEFRE (Railroad Industry Union), ABIFA (Foundry Association), SAE BRASIL (Society of Mobility Engineers) and of the DEINFRA (Department of Infrastructure) from FIESP (Industries Federation of the State of São Paulo).

ANDREW BATA, NEW YORK CITY TRANSIT, CHIEF, STRATEGICIMPROVEMENTS AND BEST PRACTICES - USA

Andrew Bata is Chief Officer of Strategic Improvements and Best Practices for MTA New York City Transit. In this role he focuses on comprehensive assessments of technology needs and developing practical solutions for deployment. He is responsible for the planning and conceptual design of advanced systems that promote state-of-the art passenger service with emphasis on integrated communication systems and real time passenger information. He is currently involved in a number of new technology and sustainability projects and is responsible for developing recommendation that follow Best Practices for New York City Transit and the entire MTA family. He oversees the agency's Intelligent Transportation Systems projects. At New York City transit previously he held other executive positions in the areas of transit technology, information services and operations planning. At Metro-North Railroad he was Assistant Director of Planning, in charge of scheduling. His career also includes domestic and international transportation management consulting. He is a member of the Board of Directors of ITS New York and has served as its past president. He is a member of the Transportation Research Board's Committee on Emerging and Innovative Public Transport and Technology. Mr. Bata is a member of a number of transportation and technology committees that enhance technical information exchange among transportation professionals. He is widely traveled and is considered to be an expert regarding the characteristics and operations of transit systems worldwide. Mr. Bata is the North American representative for the UTP Metro Committee and manages UITP matters for New York City Transit. He is an Adjunct Professor of Urban Transportation of Polytechnic University and the City University of New York He is a graduate of Northwestern University with a MSc. in Transportation Engineering.

AMJAD BANGASH, MANAGING DIRECTOR, RAIL AT BECHTEL-UAE

Amjad Bangash is Managing Director, Rail at Bechtel, one of the world's leading engineering, procurement and construction companies. Amjad has been working for Bechtel for twenty years and was recently Project Director for Bechtel at the Khalifa Port and Khalifa Industrial Zone Abu Dhabi (KIZAD) Project in the United Arab Emirates. Amjad joined Bechtel in 1992 as a senior engineer at the San Francisco head office, and soon after moved to project assignments in construction and engineering in the United States, Nigeria, Thailand, and Guyana. In 1995, he moved to an engineering management assignment, leading the design and some of the build contracts on the on the Kowloon-Canton RC West Rail Project in Hong Kong. His successes there led to construction and project management positions at the Bechtel led design-build Airport MAX Light Rail Project in Portland, Oregon. This was followed by senior management roles at Bechtel, working for Tube Lines, in charge of the permanent way renewals and station modernization program for the major upgrade of the Jubilee, Northern and Piccadilly lines and where he established new records for track installation during weekend engineering slots. Amjad has a Bachelor of Science and doctorate in civil engineering.

AURELIO ROJO GARRIDO, (ALAMYS)ASSOCIATION OF LATIN AMERICAN METROS AND SUBWAYS, GENERAL SECRETARY- SPAIN

Born in Madrid, Spain , Mr. Rojo Garrido began his professional career in BAZAN (the Spanish Military Naval Construction Company) in 1979 he was responsible for Wave Power R&D Projects. In 1981, he joined Madrid Metro holding a range of top positions such as Train Service Manager, Customer Division Manager, Safety and Security Director, Director of Operations where he was in charge of the operational design criteria of the 150 km Madrid Metro Extension and the 3 new Light Rail Lines in Madrid. Recently he was Managing Director of International Projects and Contracts. In 2001 he was appointed General Secretary of ALAMYS (Latin American and Iberian Peninsula Underground and Metropolitan Railway Association). In 2010 he was also appointed President of APICI (Spanish Fire Protection Engineers Association). He actively participates in international meetings as an expert , advising Institutions such as BID (Inter-American Development Bank), WB (World Bank), OSCE and some USA Federal Agencies notably the GAO (General Accountability office), Homeland Security Department and FED (Federal Emergency Department). Moreover he has been actively collaborating with distinguished world-wide transport and safety and security associations such as NFPA, ASCE, APTA, UITP, CUTA and ANTP, participating in numerous working groups and committees. He was also invited to participate as International Transport and Safety and Security Expert in hearings at some US Senate Committees and recently at the London Assembly in the UK. He has a Ph.D. in Electrical Engineer and holds an MBA in Business Administration. Since 1978, he has been teaching as a university professor in the following fields: Electrical and Railways Engineering, Transportation, Risk Analysis and Fire Protection.

CLAUDIO ANDRADE, VIAQUATRO, DIRECTOR - BRAZIL

Cláudio Augusto Soares de Andrade has 16 years experience in public services/infrastructure concessions, including business development and management. Claudio is graduated as a civil engineer and obtained his MBA degree in Administration. In 1996, Claudio joined CCR, the largest Concession Group in Latin America, as a traffic engineer of one of the most important road concessions of Brazil, between Rio de Janeiro and São Paulo. In 2003, Claudio became the concessionaire's contract manager. In 2006 Claudio joined CCR's Business Development Department, where Claudio's activities ranged from negotiation of consortia agreements, corporate and project due diligence to assessment of opportunities throughout Latin America. Cláudio became ViaQuatro's director in 2006, following closing of ViaQuatro's Concession Agreement, which is the first Public-Private Partnership (PPP) in Brazil. At ViaQuatro, Claudio initially led the Manufacture and Supply Contract and the Project Finance structure, negotiation and closing. From 2008 through 2011, in addition, Cláudio acted as Project Manager for the Manufacture and Supply Contract based on which ViaQuatro made its share in the PPP investments for Phase I of Line 4 of São Paulo Subway. At the moment, Cláudio is closely involved with the challenging preparation of Line 4 Phase II and since February 2012 has also been assigned as the Maintenance and Operational Director in charge of all Line 4, including projects, personnel, training and related activities.

IAN THOMSON, NEWMAN - INTERNATIONAL RAILWAYS JOURNAL, REGIONAL EDITOR CHILE & A TRANSPORT ECONOMIST – CHILE

lan Thomson is an economist by formation (University of Manchester, 1967) who has worked almost his entire career in transport, firstly in consulting companies based in London, Caracas, Sydney and Rio de Janeiro, and from 1976 to his retirement in 2005, with the United Nation's Economic Commission for Latin America and the Caribbean (CEPAL), latterly as Chief of the Transport Unit. Since leaving the Commission, he has been working as an individual consultant or advisor, to the Panamerican Railway Congress, Chilean State Railways, the Arica Port Company, the American Development Bank and various consulting companies, mainly in Chile, but also in Argentina and Paraguay. He also is a regional editor for the International Railway Journal, has contributed to many other railway periodicals, is the author of two books published on Chilean railway history and was integral in the formation of the Chilean Railway Conservation Society (ACCPF), serving as its president for almost ten years.

HELIO MAURO FRANCA, BRAZILIAN ENTERPRISE FOR PLANNING AND LOGISTICS, DIRECTOR - BRAZIL

Hélio Mauro França, 54, is graduated in Law and post graduate in Strategic Management, with professional background in international trade, trade policy and public development. He is currently the Director of the newly formed Brazilian Enterprise for Planning and Logistics (EPL) having the legal mandate to ensure the money is invested correctly and projects are completed and will help the government structure projects and monitor their progress especially reviving the high speed rail project linking Sao Paulo to Rio de Janeiro. With a long career in international business and project management, either as private consultant or occupying executive positions in the Federal Administration at the Brazilian Export Promotion Agency – APEX, Ministry of Industry, Development and External Trade, or Ministry of Mines and Energy.

HUMBERTO KASPER, TRENSURB (COMPANY OF URBAN TRAINS FROM PORTO ALEGRE SA), PRESIDENT AND CEO – BRAZIL

Master in Production Engineering (emphasis in Production Management) in the Graduate Program in Production Engineering from University of Federal do Rio Grande do Sul - PPGEP / UFRGS and submitted to the Dissertation Defense in May 2000. Graduate Diploma in Production Engineering (emphasis in Quality Management) in the Graduate Program in Production Engineering from Universidade Federal do Rio Grande do Sul - PPGEP / UFRGS in 1995. Degree in Electrical Engineering (electronics emphasis) from the Pontifical Catholic University of Rio Grande do Sul - PUC in 1989.

PROFESSIONAL EXPERIENCE

Chief Executive Officer of the Company of Urban Trains from Porto Alegre - Trensurb from June 2011 to date.

Superintendent and Extension Company of Urban Trains from Porto Alegre, 2003/2011.

Secretary of Transportation in the city of Porto Alegre, 2003.

Deputy Secretary of Transportation in the city of Porto Alegre, during 2001/2003.

Planning Officer (Transport) of the Public Company of Transportation and Circulation POA - EPTC, period 2001/2003.

Project Director of the Public Company of Transportation and Circulation of Porto Alegre - EPTC in 2001.

President of Union of Subway Workers of the RS, during 1990/1994.

Supervisor in the operational area of the Company of Urban Trains from Porto Alegre, in 1984 and contracted with professional ties to date.

OTHER ACTIVITIES

Board Member of the National Association of Public Transport - ANTP.

Institutional Coordinator of the coordination structure established by the Municipal Axis North / Northeast Metropolitan Region of Porto Alegre and Trensurb, period 2009/2011

Group Coordinator Institutional Integration of Transportation Metropolitan Area of Porto Alegre, comprising the city of Porto Alegre, Rio Grande do Sul and Trensurb for preparation of the Integrated Transport Plan of the Metropolitan Region of Porto Alegre, during 2006/2009.

JEAN CARLO PEJO, ALAF (THE LATIN AMERICAN RAILWAYS ASSOCIATION)

CONSULTANT LOGISTICS SOLUTIONS - BRAZIL

Jean Carlos Pejo, 59 is MBA in Logistics and Supply Chain in 2010 and Project Manager in 2005, Mechanical Engineer in 1975 and Business Administration in 1978, specialized in designs, maintenance of railway equipment and project management, former Director of Planning and Management of FEPASA - Sao Paulo (Railway Company), former Member of the Board of Directors of Companhia Paulista de Força e Luz (Company of transmission and distribution of electricity). Currently is a consultant in logistics solutions, infrastructure transportation projects, Rolling Stocks maintenance programs and Business Development. It is the representative of ALAF (Latin American Association of Railroads) in Brazil.

JEAN-FRANCOIS DE LANTSHEERE, 21 NETDEPUTY MANAGING DIRECTOR

Jean-Francois brings more than 15 years experience in the telecom and start-up sector. Jean-Francois was responsible for setting up the new telecom venture in Russia and Colombia for Alcatel. Following which he became General Manager of International Operations for Belgacom. Before co-founding 21Net, he was General Manager of Network Services for Alcatel UK. Jean-Francois holds a Law degree from Louvain University in Belgium and an LLM from New York University. He started his career with the international law firm of Coudert Brothers working in New York, Paris and Brussels.

Speaker profiles

J.CHRIS ROONEY, CONSULTS ON PUBLIC POLICY AND FINANCIAL ISSUES FOR THE US GOVERNMENT

Mr. Rooney has been a manager, official and founder of both private and public enterprises. He consults on public policy and financial issues for the US government and for foreign transportation entities and governments and has served as an expert witness in major railroad issues including mergers. During service with the USDOT as Deputy Railroad Administrator, he led the technical support team for the privatization of Conrail. Mr. Rooney was a principal of international consulting firm Booz, Allen and Hamilton in charge of its US railway practice. He was among the founders of the Wheeling & Lake Erie Ry,a large regional railway. Since that time he has worked on railway restructurings and railway finance in more than a dozen countries.

Examples of relevant experience include:

USDOT Railroad Infrastructure Finance performing due diligence concerning loans to Amtrak, Dakota, Minnesota & Eastern RR, Florida East Coast Ry., Kansas City Southern Ry., Northwestern Pacific Railroad, Tex-Mex Ry., etc.

Consultant to State of North Carolina Rail Passenger Division concerning its comprehensive financial planning and prior for its successful Stimulus Act applications

Consultant to a group of utilities concerning feasibility of building a new rail line

Consultant to major power generators concerning future freight rates

Consultant to CSX Transportation on strategic and international operating issues and acquisitions including Brazil's Centro-Atlántica and MRS Logistica privatizations

Consultant to Battelle Memorial Institute for the financial analysis and modeling related to an assessment of Amtrak's Five Year Plan

Consultant to the World Bank in matters pertaining to railway finance and policy in Brazil, Bolivia, Colombia, Korea, Myanmar and Thailand

Consultant to Asian Development Bank concerning rail matters in China, Thailand and Cambodia

Consultant to the governments of Argentina and Bolivia and active in the formation of several privatized freight railways

Subcontractor to Louis Berger, Canarail Consultants, Deutsche Bahn International, Gannett Fleming, Hatch Mott MacDonald and Tioaa Group.

Education: Mr. Rooney is a Chartered Financial Analyst. He holds a Bachelor of Arts degree from Dartmouth College, and a Masters in Business Administration from the University of Chicago.

JULIO LOPES, STATE GOVERNMENT OF RIO DE JANEIRO, SECRETARY OF TRANSPORT – BRAZIL

Julio Lopes was born in April 6th, 1959 in the city of Rio de Janeiro, where he graduated in Business Administration and post-graduated in School Administration and Marketing at Cândido Mendes Faculty. After being a teacher for many years at the faculty where he graduated, he decided to run in the elections for Federal Deputy in Rio de Janeiro, being elected in 2002 with more than 70 thousand votes. During his mandate Julio Lopes was the Congress representative of a commission created with the purpose of fighting piracy, being recognized as a reference in this subject. During the years of 2003 and 2004 Julio Lopes was the vice president of the Piracy Parliamentary Commission of Inquiry (CPI). At that time, he worked very close to the Federal Police, the Public Prosecutor's Office and other authorities, achieving outstanding results, such as the prison of major smugglers Law King Chong and Lobão. In 2005 he was assigned to be the president of the Urban Development Commission, subordinated to the Ministry of the Cities, where he strove for the land regularization in Rocinha and Vidigal, two large poor communities in the southern zone of Rio de Janeiro city. In July, 2005 he was assigned to be the speaker of one of the most important law projects in the Congress: the one that sets the universal directives on Basic National Sanitation regulatory procedures, which will change existing regulation. Julio Lopes was the proponent of projects such as the one that establishes the installation of hydrometers and individual collection of water usage bills. Mr. Lopes was also the proponent of a very relevant project, which reduces the amount of tax paid in real estate transactions in order to accelerate business in this market.

During his mandate he was cited among the 100 most active deputies.

President of the Board of Directors of Centro Educacional da Lagoa

President of the Centro Educacional da Lagoa Tecnologia - CELTEC

President of Liceu Franco-Brasileiro

Business Administration professor on leave at Faculdade Cândido Mendes

President of CENTRAL – Companhia Estadual de Engenharia de Transportes e Logística

President of RIOTRILHOS - Companhia de transportes sobre trilhos do Estado do Rio de Janeiro
Presently Julio Lopes is Federal Deputy by the Rio de Janeiro and Transport Secretary of State of Rio de Janeiro.

JOUBERT FORTES FLORES FILHO, METRO RIO, DIRECTOR - BRAZIL

Mr. Joubert Fortes Flores Filho, 56, has extensive experience in transports and people management. He began his career in Metrô Rio in 1974, having served as electric / mechanics infrastructure and engineering Coordinator. Nowadays he is the Director of Engineering, Management and Development. During the last 4 years, he acted as Institutional Relations and Humans Resources Director. Mr. Flores earned his degree in eletrician engineering at Universidade Federal do Rio de Janeiro (UFR)). In addition Mr. Flores was the President of one of the most prestigious associations in Brazil: ABRAMAN – Brazilian Maintenance Association / FIM – Ibero American Federation of Maintenance. In ANTP – Brazilian Association of Public Transports he is the President of its – Metro-Railway Comittee. Mr. Flores is also the President of Brazilian Association of Railway Passengers Companies and is the Vice President of Latin American Division of UITP. On top of that, he is the co-author of the book" Strategical Management – Key Performance Indicators " of Maintenance Collection.

KULDEEP GHARATYA, LONDON UNDERGROUND, HEAD OF SYSTEMS INTEGRATION AND TRAIN SYSTEMS ENGINEERING – UK

Kuldeep Gharatya is Head of Systems for the Capital Programmes Directorate of London Underground. Assuming this role in 2007, he leads the Systems Group comprising of Systems Engineering, Project Engineering, Telecommunication, Command & Control Systems and Performance Simulation. He joined London Underground in 1997, working with Train Systems Engineering. This work coupled with experiences in other LU departments led him to subsequently promote a Systems Engineering approach. Kuldeep has a Mechanical Engineering undergraduate degree and a Masters degree in Systems Engineering. He is a Chartered Engineer and active member of INCOSE, including the UK Chapter Rail Interest Group. Kuldeep has championed pragmatic and cost effective use of Systems Engineering as a core part of the project delivery lifecycle – within LU's as well as its contractors and industry partners. Recently he championed this approach in the procurement of the Underground's largest ever signalling contract leading to a greatly improved clarity of scope and thus improved unit costs. This approach is now being implemented on the next generation of Line Upgrades and specifically the Deep Tube Upgrade - potentially the largest upgrade to date.

LEO TSAO, MOXA, SENIOR DIRECTOR, GLOBAL RAIL AUTOMATION SOLUTION DIVISION, TAIWAN

Leo Tsao is the Senior Director of Moxa's Global Rail Automation Solution Division. Founded in the 1980s, Moxa is now a global leader in a wide range of IP-based communication solutions. As the demand for IP-based technology has grown, Moxa's solutions have been deployed in major railway systems across Europe, the US, and Asia, including China. Moxa's solutions can be found providing IP-based data communications for many rail systems, including CBTC, ATO and interlocking, CCTV, passenger-oriented services, and passenger Wifi. Thanks to Moxa's exclusive advanced redundancy technology and wireless fast roaming technology, Moxa empowers railway systems to improve efficiency, safety, and customer comfort while reducing total life cycle cost. As an IP-based communication expert, Leo and his team also provide professional IP network design and validation consulting to rail users to increase the flexibility of IP networks for future expansion. His team's participation in the IEC Technical Committee further demonstrates Moxa contribution to next-generation standards for railway onboard, multimedia, and wireless train-to-ground data communications. Leo has a Masters Degree in Computer Science from New York University's Courant Institute of Mathematical Sciences. Prior to his current job, he acted as the Senior Director of Moxa Power and Transportation Division, which provides solutions to the smart grid and transportation industries. He is also the director of the Taiwanese Smart Grid Industry Association.

PABLO MARTORELLI, PRESIDENT OF THE ARGENTINE INSTITUTE OF RAILWAYS (IAF), DIRECTOR OF THE MAGAZINE REDES DE INTEGRACIÓN - ARGENTINA

Railway professional with over 38 years of experience in the areas of track and structures, buildings, planning, organization, direction and leadership of professional teams in planning, studies, projects and operation of railways; management and institutional promotion, organization of congresses and exhibitions; speaker and panellist on railways, transport and territorial planning.

President of the Argentine Institute of Railways (IAF)

Director of the magazine REDES DE INTEGRACIÓN.

Expert in technical standards and security procedures of level crossings.

Author of studies of solutions for the level crossings of the Metropolitan Area of Buenos Aires, Retiro to Rosario Rail Corridor (312 km) and Gran Rosario City, with prioritization and type of solutions scheme in more than 300 level crossings.

Collaboration with the Department of Railways (National Secretary of Transportation) for the development of the Infrastructure Railways Plan (2003).

Collaboration with the Pan-American Railways Congress Association during 2005.

Member of the Permanent Honorary Adviser Comission of the Buenos Aires City Urban- Environment Plan (since 1996).

Representative by IAF to the Buenos Aires City Co-ordination of the 2016 Strategic Plan (since 2000).

MARIO DIRANI, (DNIT)NATIONAL DEPARTMENT OF TRANSPORT INFRASTRUCTURE, RAILWAY INFRASTRUCTURE DIRECTOR - BRAZIL

Civil Engineer (University of Sao Paulo, 1981), Post-graduated in Transports (Federal University of Paraiba, 1984), MBA in Regulation of Concessions (Getulio Vargas Foundation/RJ, 1999). Professor of Engineering and Planning of Transports Systems in the Pontific Catholic University of Rio de Janeiro, Engineer in the former Federal Railway Network (RFFSA) and, Juring the process of its extinction, worked in the National Agency of Terrestrial Transports. Admitted in the Ministry of Transports as a Senior Infrastructure Specialist (2008) and, since September 2011, is the Director of Railway Infrastructure from the National Department of Transports Infrastructure (DNIT).

MARIO FIORATTI, METRO SAO PAULO, DIRECTOR OF OPERATIONS – BRAZIL

Mario Fioratti graduated on electric engineering and enterprise administration, has occupied several positions in Metro São Paulo during the last 30 years. Since January 2011, he is Metro São Paulo Operations Director. From August 2008 to December 2010 he occupied the position of Operation and Maintenance Director of CPTM – Companhia Paulista de Trens Metropolitanos, the commuter railway.

NELSON SIFFERT, (BNDES)NATIONAL ECONOMIC AND SOCIAL DEVELOPMENT BANK, SUPERINTENDENT OF INFRASTRUCTURE- BRAZIL

Born in 1961, Nelson Siffert graduated in Economy at UFRJ (Federal University of Rio de Janeiro) in 1983. He also became a PhD in Economics by USP (São Paulo University). Working at BNDES since 1985, he started as Project Analyst in the Agro-Industry Area; was Manager in Planning Area, participating in the preparation of the National Axles of Integration and Development and Strategic Planning Study during the 2000-2005 period. For four years he worked in the Regional Development Area, became Chief of the Electrical Energy Department, participating in some of the biggest Projects of Electrical Energy Development in Brazil and since April 2009 is the BNDES' Superintendent in the Area of Infrastructure.

Sponsors

P. TAKIS SALPEAS, SENIOR VICE PRESIDENT AND GLOBAL RAIL **MANAGER FOR PARSONS CORPORATION - USA**

P. Takis Salpeas, MSCE, MSSE, CCM Senior Vice President and Global Rail Manager for Parsons Corporation. Takis Salpeas is a rail executive with 30 years of progressive private- and public-sector experience in the development and implementation of large, complex public infrastructure projects. In his role as Parsons' global rail leader, Takis is responsible for project performance, client relationships, business development, and human resource management. He also oversees multiple projects for numerous clients in several countries, is responsible for corporate profit and loss, and is accountable for corporate processes and technology for projects and programs. Takis has earned master's degrees from the University of Pennsylvania in both civil (MSCE) and systems (MSSE) engineering, along with a degree in economics from Athens University. He has taught transportation engineering in the civil engineering department of Widener University, in Chester, Pennsylvania, and has published more than 70 professional papers, reports, and articles. A certified construction manager, Takis' knowledge of engineering practices, economics, planning, and construction management, gleaned from both his extensive education and work experience, contributes to the successful implementation of projects and programs. Prior to joining the Parsons, Takis was responsible for \$10 billion in management of rail transit planning, design, and construction in three of the largest U.S. metropolitan areas; in Washington, DC, at the Washington Metropolitan Area Transit Authority (WMATA), San Francisco, at the Bay Area Rapid Transit district (BART); and in Philadelphia, at the Southeastern Pennsylvania Transportation Authority (SEPTA).

Gold sponsor: Moxa

Founded in the 1980s, Moxa is now a global leader in a wide range of IP-based communication solutions. With

decades of expertise in diverse automation infrastructures and protocols, Moxa is experienced in providing industry-specific and customized solutions to vertical markets. In the railway industry, Moxa's participation in IEC committees and railway organizations demonstrates the company's contribution to the onboard and wireless train-to-ground electronics technology industry. A history of long-term product support and commitment to industry standards such as EN 50155 and EN 50121-4 have given Moxa a broad portfolio of solutions that excel in railway applications and are deployed in major railway systems across Europe, the Americas, and Asia. Railway operators can take advantage of Moxa's accumulated expertise and industry knowledge through the Moxa Professional Industrial Networking Services (PiNS) program. For more information, or to receive Moxa's exclusive Railway Intelligence newsletter, visit www.moxa.com/rail.

Gold sponsor: Bechtel

Bechtel is the world's No. 1 choice for engineering, construction, and project management. Their diverse portfolio encompasses energy, transportation, communications, mining, oil and gas, and government services. They currently have projects in dozens of locations worldwide, from Alaska to Australia. They bring an unmatched combination of knowledge,



skill, experience, and customer commitment to every job. Bechtel has had record revenues for the past five years, and Engineering News-Record (ENR) has named Bechtel the top U.S. construction contractor for 14 straight years.

Official consulting partner: A.T.Kearney

AT**Kearney** A.T. Kearney is a global team of forward-thinking, collaborative partners that delivers immediate, meaningful results and long-term transformative advantage to clients. Since 1926, they have been trusted advisors on CEO-agenda issues to the world's leading organizations across all major industries and sectors. A.T. Kearney's offices are located in major business centers in 39 countries.

Silver sponsor: 21Net

21Net was set up with the sole objective to offer broadband Internet access and multimedia services on board trains, essentially by combining bi-directional satellite, Wi-Fi and cellular connections. Over the year, 21Net has become the leading provider of Internet



and Infotainment on board High Speed trains combining and aggregating both cellular and satellite technologies. Since 2012, 21Net operates on high speed trains, besides Internet services, full on train infotainment solutions with functionalities like Video on Demand and IPTV based on a Gigabit backbone in the train. The 21Net Internet access solution is based on the proposition that since users are familiar with high bandwidth Internet, only a similar type of experience could be successfully offered on board a high speed train.

Silver sponsor: Parsons

PARSONS A leader in the transportation industry since 1944, Parsons has the scope, resources, people, and experience to deliver world-class performance. Our Rail and Transit Systems Division has worked on every major transit system in North America and some of the most renowned systems overseas. We're proud of the long-term relationships we've developed with more than 400 major transit agencies around the world and the support we've provided in helping them achieve their strategic visions. Our services include program and construction management, advanced train control systems, civil and structural facilities design, and the integrated delivery of infrastructure and systems elements.

Silver sponsor: Focon

mobited FOCON Mobitec and Focon - innovative leaders in the design and manufacture of system technology for passenger information accelerating the railway industry's manuacture of system technology for passenger information accelerating the railway industry's ability to make travel experience more secure and enjoyable for passengers. Joining forces as part of the Luminator Technology Group, the leading global provider of electronics and lighting for aerospace, bus, rail and station solutions, Mobitec and Focon bring the advantages of recognized innovative designs and local touch to cater to the needs of many different markets, in terms of

technical, cultural and language requirements. The combination of our unique capabilities within mobile passenger information and real-time passenger information makes us an excellent choice for customers seeking solutions that are built to last.

Associate Sponsor: Nomad Digital

Nomad Digital is the leading global provider of wireless solutions to the transportation sector. By improving the connectivity of trains and buses, we help passengers benefit from more reliable internet, media entertainment and real-time passenger travel information on the move



Associate Sponsor: Nokia Seimens Network

Siemens Networks Railway Solutions helps rail infrastructure operators get further down the track by covering networks' lifecycle fully, from design, implementation, and operation to long-term maintenance, with all the tools necessary for planning and managing networks and providing supporting services. Some of their solutions being GSM & Broadband services for train



Supporting sponsor: ETF

ETF, a member of Vinci group, is a European leader in rail infrastructure. The company specializes in the laying and maintenance of fixed rail installations on national rail networks, urban transport networks and industrial sidings. Today the company offers a comprehensive array of highly technical



competencies also spanning track, Overhead Catenary System, power distribution, and signaling. With operations in France and abroad, ETF has helped build rail transport infrastructures in recent decades, including high-speed rail lines, track laid on concrete modular track sections, iron-wheel and rubber-tyre tramway or light rail systems, automatic metro systems, and so on.

Exhibitor: Comau

Comau originally got its name from the abbreviation of COnsorzio MAcchine Utensili and now with nearly 40 years of experience in advanced manufacturing systems, it represents a proven world-wide leader in sustainable automation and service solutions with a forward focus. Building on a strong history in the automotive industry and their centres of excellence,Comau have developed its experience, skills and know-how and pushed towards the future through a range of industries and applications.



Today, Comau has a truly global presence, with 24 locations in 13 countries, which allows us to offer tailor-made solutions and localized support in a variety of fields.

Exhibitor: Strukton Rolling stock

As an affiliate of Strukton Rail, Strukton Rolling Stock is

About Strukton Rolling Stock



positioned as an independent supplier who focuses specifically on refurbishment and new production of traction installations and other electro technical systems for all types of rolling stock (metros, trams, passenger trains and locomotives). It aims to help operators with spare part obsolescence issues in technically fit vehicles, by offering a Form-Fit-Function replacement with modern components

Strukton Rolling stock is one of the very few traction suppliers who can drive DC driven vehicles with modern (GBT, thus saving the expensive motor modernisation. Small series as well as large series. The engineering roots go back to the he early 1900s, and result today in tailor-made solutions. Strukton Rail is a full-service provider for rail systems in Europe, with a strong financial and technical foundation. With 45% of the turnover, Strukton Rail is the largest division of the Strukton Group (est. 1920, ca. €1.3 billion revenue, ca. 6,000 employees worldwide). Since October 2010 Strukton is owned by Oranjewoud N.V.

The product portfolio contains a range of electrical and electro technical systems:

Modern, modular IGBT-based power modules (air cooled, water cooled), for example for refurbishment Inverters, battery chargers, etc. Junction boxes / high-voltage junction boxes

Train control and management systems

Complete wiring / cabling, both for newly built vehicles or upgrades

Exhibitor: Jafec USA Inc

JAFEC USA, Inc. is the U.S. subsidiary of Japan Foundation Engineering Company, Ltd. (JAFEC) and was incorporated in



October of 2009 as the exclusive representative of the JAFEC Group outside of Japan and the Middle East. The JAFEC Group is one of the leading Ground Improvement specialty contractors in Japan with extensive experience in mitigating complex ground conditions, soil structure systems and foundation problems under diverse field, environmental and loading conditions. The capabilities of the JAFEC Group are specially suited to address the local conditions, needs and requirements of the client wherever Ground Improvement work is needed.

Exhibitor: Ferrovial Agroman

Ferrovial Agroman is the construction division of Ferrovial, the largest major infrastructure operator in the world in terms of invested capital, employing 70,000 people in over 15 countries.



Operating in all areas of civil work and building construction. In civil engineering, Ferrovial Agroman designs and builds all kinds of infrastructures: roads, railroads, hydraulic works, maritime works, hydroelectric and industrial works. The Company also has wide-ranging experience in airports, major industrial facilities, commercial and residential building construction. It is our in-house design and technical capabilities and integrated approach to design, construction and management that differentiate us from the competition. During more than 50 years of international activity in more than 50 countries in 5 continents, Ferrovial Agroman has successfully delivered more than 600 projects, designing and building some of the world's most complex turnkey projects under PPP schem