



**HVTT13**  
SAN LUIS / ARGENTINA

International  
heavy vehicle  
symposium

*13th International Symposium on Heavy  
Vehicle Transport Technology  
EXPANDING HORIZONS*

**Program**


13<sup>TH</sup> INTERNATIONAL SYMPOSIUM ON HEAVY VEHICLE TRANSPORT TECHNOLOGY*EXPANDING HORIZONS*

SAN LUIS, ARGENTINA


## PROGRAM

Monday October 27th	
<b>Time</b>	Welcome and Invited Speaker Place: <i>Auditorium Caja de los Trebejos</i>
<b>5.30 to 6.45pm</b>	<b>Welcome to HVTT13</b> Paul Nordengen – International Forum for Heavy Vehicle Transport Technology (IFRTT) Bob Pearson, Chair of the HVTT13 Scientific Committee Claudio Poggi, Governor of the Province of San Luis  <b>Invited Speaker:</b> Martín Sánchez Zinni, Subsecretary General of the Interamerican Transport Chamber (CIT)  <i>Session Chair: Alejandra Efrón, IFRTT Vice-president for South and Central America.</i>
<b>7 pm</b>	<b>Welcome Barbeque</b>


## Tuesday October 28<sup>th</sup>

Time	Session title/ Chair	Author(s)	Paper title
8.30 to 10.00	Plenary 1:	Harborn	Chinese Road Transport Mass and Dimensions Regulations – An analysis of the challenges ahead
	<b>Paul Nordengen</b>	de Pont	Prescriptive Limits or Performance Based Standards?
		Higuera Gómez	Evolution of Road Freight in Colombia: Infrastructure, Service levels and Technology
10.00 to 10.30			
10.30 to 12.30	Session 1a	Dahlberg & Galvarro	Future European Masses and Dimensions Regulations – A Study into the Technical and Political Developments
	Achieving more efficient heavy vehicles  <b>Loes Aarts</b>	Prati, Besselink & Nijmeijer	A trailer steering strategy for a B-double combination
		Asp & Berndtsson	HCT (High Capacity Transports) - Swedish steps toward an efficient transport system with lower energy usage and less climate gas emissions from heavy road traffic.
		Walker	Obtaining the green light for “Highway Monsters”: the role of industry self-regulation in progressing vehicle innovation, productivity and safety in the road transport sector.
	Session 1b Heavy vehicles/ pavements interaction  <b>Bernard Jacob</b>	Zaabar & Chatti	Investigation of the relationship between dynamic axle load, roughness and fuel consumption
		Xu, Roebuck & Cebon	A Whole Life Pavement Performance Model to Study Interactions between Heavy Vehicles and Jointed Plain Concrete Pavements
		Granlund et al	Lowered crash risk with banked curves designed for heavy trucks
		Prozzi, Banerjee & Walton	Equitable permit fee for overweight trucks


Tuesday October 28<sup>th</sup>

12.30 to 1.30	<i>Lunch</i>		
1.30 to 3.00	Session 2a PBS moving forward  <b>David Rolland</b>	de Pont & Elphinstone	Vehicle Innovation in a PBS Environment
		Kharrazi, Hjort, Asp, Gunneriusson, et al	Towards Performance Based Standards in Sweden
		Di Cristoforo	Can popular PBS trucks enter mainstream regulations?
	Session 2b Improving performance: use of roads, vehicles, drivers  <b>Klaus-Peter Glaeser</b>	Kati, Fredriksson, Laine & Jacobson	Performance Improvement for A-double Combination by introducing a Smart Dolly
		Hense	Heavy vehicle route assessment tool
		Sandin & Nilsson	Drivers' Assessment of Driving a 32 Meter A-Double with and without Full Automation in a Moving Base Simulator
3.00 to 3.30			
3.30 to 5.00	Session 3a: Exploring PBS  <b>Bob Pearson</b>	Bruzsa	PBS Class of 2014, the PBS experience in Australia under the new National Heavy Vehicle Law (NHVL)
		PBS Workshop	
	Session 3b: HV safety issues  <b>Joop Pauwelussen</b>	Henderson and Cebon	Improved emergency braking performance for HGVs
		Hart & Longhurst,	Heavy Vehicle Crash Forces
		Schiapati et al	Intermunicipal Highway Safety Analysis in Urban Areas
8pm	<b>Dinner</b>		

## Wednesday October 29<sup>th</sup>

Time	Session title/ Chair	Author(s)	Paper title
8.30 to 10.00	Session 4 European initiatives for new vehicle concepts <b>John Woodrooffe</b>	Besselink, Kraaijenhagen, Pauwelussen, et al	Greening and safety assurance of future modular road vehicles (workshop style)
10 to 10.30			
10.30 to 12.30	Session 5a  Sustainability and energy savings: the way of the future  <b>Ben Kraaijenhagen</b>	Efrón, Dwyer, Orozco & Arias	Selection and Use of Energy Efficient Opportunities in Logistics vs. Customer Purchasing Behavior: case studies on Argentinean and Colombian organizations using Dynamic Alignment models
		Kalasih,	Developing a fuel savings programme – sharing findings of a New Zealand initiative
		Zwart, Horn & van der Peet	Fuel costs reduction by improving aerodynamics of a semitrailer
		Pereseina	Life-cycle Assessment in the Heavy-Vehicle Industry– a Sustainable Solution
	Session 5b  Four types of more productive heavy vehicles  <b>Rob Di Cristoforo</b>	Billing	Development of an 18.45m (61 ft) semi-trailer
		Glaeser & Irzik	Trial of Longer Truck Combinations in Germany
		Parker	A Review of Increased Load Capacity Initiatives for B-trains in Western Canada
		Bucko, Germanchev & Arredondo	Modular AB-triples: Australia's next generation of very high productivity freight vehicles

Wednesday October 29<sup>th</sup>

12.30 to 1.30	<i>Lunch</i>		
1.30 to 3.00	Session 6a	Nordengen	Vehicle Safety Performance Improvements Using A Performance-Based Standards Approach: Four Case Studies
	HV safety and productivity  <b>Dom Kalasih</b>	Hassall, Driscoll & Welsh	What are the safety benefits of Australian High Productivity Vehicles when compared to the conventional heavy vehicle fleet?
		Woodrooffe & Blower	Evaluation of Collision Mitigation Braking Safety Performance for Commercial Vehicles
	Session 6.b Government initiatives to improve productivity and efficiency  <b>Erik Dahlberg</b>	Arredondo	Tackling productivity – How to reverse the trend in Australian productivity
		Manfré	Trailer and Semi-trailers' Value Chain in Santa Fe province: An innovative methodology for the competitive development of the SMEs sector.
		Jacob & Bouchet	Toward more aerodynamic Heavy Commercial Vehicles in Europe
3.00 to 3.30			
3.30 to 4.30	Session 7a Improving compliance and operation  <b>Loes Aarts</b>	Moore, Regehr, & Rempel	Compliance mechanisms for higher productivity vehicles
		Williams	Expanding enforcement horizons: government access to heavy vehicle data – the privacy challenges of tomorrow and a framework solution
	Session 7b New HV designs and concepts  <b>Rob Di Cristoforo</b>	Berger & Elmer	Configurable and Adaptable Trucks and Trailers for Optimal Transport Efficiency
		Förg, Kreimeyer & Lienkamp	Architecting new vehicle concepts: Virtual design and performance based assessment

## Wednesday October 29<sup>th</sup>

4.30



Annual meeting followed by a meeting of the new IFRTT Board

8pm


**Gala Dinner**



Thursday October 30<sup>th</sup>

Time	Session title/ Chair	Author(s)	Paper title
9.00 to 10.30	Session 8a	Solvay, Haberstroh, Thelen, Schilberg & Jeschke.	New intermodal loading units in the European transport market
	Logistics and intermodal transportation <b>Alejandra Efron</b>	Meers, Macharis & van Lier	Introducing longer and heavier vehicles in Belgium: a potential threat for the intermodal sector?
		Brasileiro, Gilio, Trindade, Mattila & Vourlis	Analysis of Logistics Transport on the highways of the São Paulo State during the World Cup 2014
	Session 8b	Johanson & Marmy	International guidelines on safe load securing for road transport
	HV braking and safety	Güémez	Impact on road safety of the brake systems requirements vehicles of heavy load in Costa Rica
		Hart & Bruzsa	Brake System comparison for European and North American HVs
10.30 to 11.00			
11.00 to 12.30	Session 9a Vehicle-infrastructure interaction <b>Paul Nordengen</b>	Hjort, Källgren, Augusto & Fröjd	Evaluation of truck cabin vibrations by the use of a driving simulator
		Guivant	Multi Agent Learning of the Surface Quality for Fleet Operation in Damage-Prone Roads
	Session 9b Operating the best we can: the human aspect of road regulations <b>Alejandra Efron</b>	Aarts & de Sutter	Truck parking behaviour
		Clementi et al	Long Term Truck parking areas in Mega-Cities: the case of Buenos Aires City port
		Kural, Besselink, Patel Pauwelussen & Nijmeijer	Analysis of driver behaviour during reversing double articulated vehicles



Thursday October 30 <sup>th</sup>			
12.30 to 1.30	Lunch		
1.30 to 3.00	Session 10a Impacts of components of heavy vehicles <b>Les Bruzsa</b>	Midgley & Cebon	Design and specification of hydraulic hybrid system for HGVs
		Trujillo-Cespedes	Durability of Tires in Prime Movers using Remoulding Technology
		Malzahn & Kienhöfer	The Effect of Wheel Configuration on Vehicle Component Temperatures
	Session 10b Efficiency with emphasis on logging <b>Seamus Parker</b>	Fogdestam & Löfroth	The ETT Project- Modular system for timber haulage
		Svenson, Flisberg & Ronnqvist	Calibrated Route Finder – an Objective and Efficient Agreement on Transport Distance Between Haulers and Customers
		Svenson & Fjeld	The Impact of Road Geometry and Surface Roughness on Fuel Consumption for Swedish Logging Trucks
3.to 3.30			
3.30 to 4.30	Plenary 2 (Chair: John de Pont)	Wandel, Sternberg, Hill	Regulatory telematics for heavy vehicles
		Woodrooffe	The State of Size and Weight in the US
		Closing summary	
8pm	Closing BBQ		

## Friday October 31<sup>th</sup>

**Vehicles and Equipment Demonstration and Driving in the Circuit of Potrero de los Funes**