

Global Harmonization of Truck & Trailer Rules

Dr Peter Hart



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Vehicle Standards Regulations

Design rules

Work safety regulations



















Vehicle Standards Regulations

Work safety regulations

Design rules

Proposals go through a rigorous justification process





Truck-Lite KNORR-BREMSE













Vehicle Standards Regulations

Work safety regulations

Based upon the requirement that employers provide a safe workplace

Design rules

Proposals go through a rigorous justification process



















Vehicle Standards Regulations

Work safety regulations

Administered by State Work-Safety **Authorities**













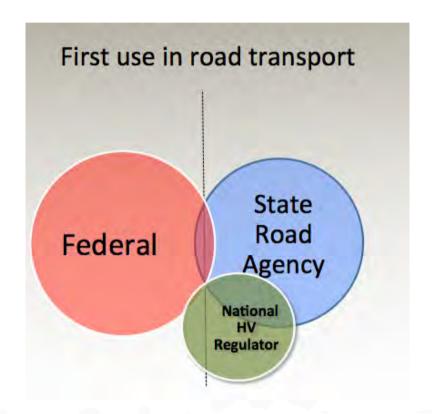








Split of Government Responsibilities























Australian Trucks - There are four main supplier regions:

Australia, USA, Europe, Japan























Australian Trucks - There are four main supplier regions:

Australia, USA, Europe, Japan



Key Factors

- Reliability and longevity.
- High pulling power.
- Customization.
- Moderate servicing costs.
- Publically owned companies.



















Australian Buses – Body and Chassis Usually Built Separately



Key Factors

- The compartment is usually made by a body builder.
- Many buses are built on top of European or Japanese chassis.
- Fully-built imports from China are being introduced.



















Australian Trailers – Mainly locally made:





- High level of custom design.
- Specialist design and manufacturing is needed.
- Highly innovative industry responding to liberalization of access rules.
- Mainly privately owned company suppliers.



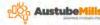
















International Vehicle Standards



Home About UNECE > Main areas of work > Information resources >

UNECE » Environmental Policy » Treaties

Environmental Policy - Home

- > Committee on Environmental Policy
- · Areas of Work

Environment for Europe

Environmental Monitoring

Environmental

Performance Reviews

Education for Sustainable Development (ESD)

Sustainable Development

Transport, Health and Environment

Green Economy

Treaties

UNECE has negotiated five environmental treaties, all of which are now

- Convention on Long-range Transboundary Air Pollution;
- Convention on Environmental Impact Assessment in a Transt
- Convention on the Protection and Use of Transboundary Wat
- Convention on the Transboundary Effects of Industrial Accide
- Convention on Access to Information, Public Participation in I

Their governing bodies are serviced by the UNECE secretariat, which a



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International Vehicle Standards

50th Anniversary of the Agreement on Uniform Technical Prescriptions for Vehicles

50th Anniversary of the Agreement on Uniform Technical Prescriptions for Vehicles

























International Vehicle Standards

50th Anniversary of the Agreement on Uniform Technical Prescriptions for Vehicles



Australia adopted some aspects of the 1958 agreement in year 2000













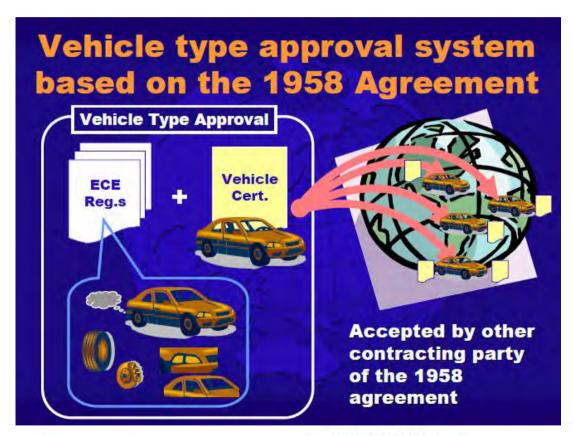








International Vehicle Standards – Trade Liberalization





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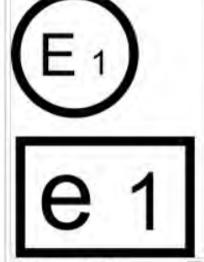






World Standards are Eurocentric

UN ECE Approval Symbol



Two types of EU markings: top - according to UN regulations, bottom according to EC directives

European Union **Approval Symbol**



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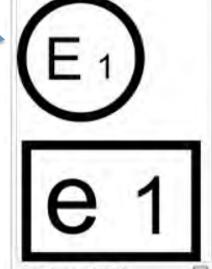




World Standards are Eurocentric

UN ECE Approval Symbol

There are 120 UN **ECE Regulations**



Two types of EU markings: top - according to UN regulations, bottom according to EC directives

European Union **Approval Symbol**



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World Standards are Eurocentric

UN ECE Approval Symbol

There are 120 UN **ECE Regulations**

Two types of EU markings; top - according to UN regulations, bottom according to EC directives

The EU has a policy of adopting ECE Regulations

> European Union **Approval Symbol**



















China gets ECE approvals





















Australian Policy – Base ADRs on ECE Regs



Deputy PM Anderson announced in 2000 that Australia would sign the 1958 agreement.

This committed Australia to basing its vehicle rules on the UN FCF regulations....





















Australian Policy – Base ADRs on ECE Regs



Deputy PM Anderson announced in 2000 that Australia would sign the 1958 agreement.

This committed Australia to basing its vehicle rules on the UN FCF regulations....

But not adopting all of them!



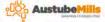
















Australian Policy – Base ADRs on ECE Regs



Deputy PM Anderson announced in 2000 that Australia would sign the 1958 agreement.

This committed Australia to basing its vehicle rules on the UN FCF regulations....

But not adopting all of them!

And accepting ECE certificates....





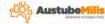
















Australian Policy – Base ADRs on ECE Regs



Deputy PM Anderson announced in 2000 that Australia would sign the 1958 agreement.

This committed Australia to basing its vehicle rules on the UN ECE regulations....

But not adopting all of them!

And accepting ECE certificates....

But not issuing them!





















RDW

Vehicle Technology Division

UN ECE Certificates







COMMUNICATION

Concerning (i):

- approval granted
- approval extended
- approval refused

Approval mark:

- approval withdrawn
- production definitely discontinued

of a type of reversing lamp pursuant to Regulation number 23.

Approval number: E4-23R-0023358

Extension number: 01



Trade name or mark of the device

•

Manufacturer's name for the type of device.

f : HCT99

Manufacturer's name and address

 Jiangsu Hongchang Sci-Tech Co., Ltd., Xinqiao Town, Danyang City, Jiangsu Province, China, 212322

 If applicable, name and address of the manufacturer's representative

e and address of the presentative : Danyang Hongel

 Danyang Hongchang Auto Lamp Factory Xinqiao Town, Danyang City, Jiangsu Province, China, 212322

Submitted for approval on

: As before and February 9, 2010



FOUNDATION

Trucklite



Tel. +31 (0)79 345 81 43 Fax +31 (0)79 345 80 43 www.rdw.nl Vehicle Approval and Information







UN ECE Approval Certificates

UN ECE Treaty:

Recognized elsewhere

Recognized test houses produce evidence of compliance with ECE regulations



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UN ECE Approval Certificates Originating in Australia - Yes



Prince GOOQLE

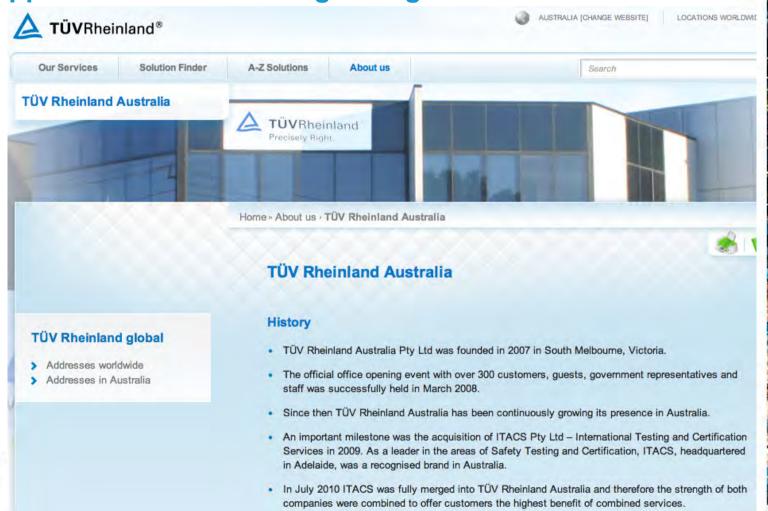








UN ECE Approval Certificates Originating in Australia - Yes





China can provide ECE markings anyway!

Australia is country 45























UN ECE Approval certificates obtained in the USA





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Experience:

ADR 3, 4 & 5

ECE Regs R16, R17, R14

VCA North America 41000 West Seven Mile Suite 140 Northville MI 48167 USA

ECE certificates issued in London





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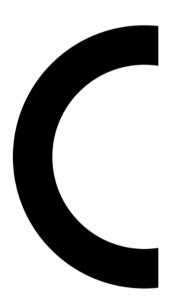






European Regulations

Most consumer goods must have CE status























European Regulations

Most consumer goods must have CE status

CE declarations are mandatory but not formally approved























European Trailer Supply into Australia

Approval No.: 40868 Issue Date: 24 June 2013

Schedule 1

Schmitz Cargobull Pty Ltd

C/0 Winn Croucher Partners Pty

Suite 902 Level 9 153 Walker Street

NORTH SYDNEY

NSW 2060

Schedule 2

Make: SCHMITZ

Model: ST3

Category: TD

Manufactured by : Schmitz Cargobull Pty Ltd

Typical VIN: WSMS6080000503999

ATM: 42 tonnes



















European Trailer Supply into Australia

Approval No.: 40868 Issue Date: 24 June 2013

Schedule 1

Schedule 2

Make: SCHMITZ Schmitz Cargobull Pty Ltd

Model: ST3 C/0 Winn Croucher Partners Pty

Category: TD Suite 902 Level 9 153 Walker Street

Manufactured by : Schmitz Cargobull Pty Ltd NORTH SYDNEY

Typical VIN: WSMS6080000503999 NSW 2060

ATM: 42 tonnes

1. Use to be subject to conditions imposed by registering authorities.

2. THE VEHICLE DOES NOT MEET CLAUSE 6.1.2.3. THE DISTANCE FROM POINT OF ARTICULATION TO THE REAR END EXCEEDS 12.3 METERS.

3. THE VEHICLE DOES NOT MEET CLAUSE 6.2. REAR OVER HANG EXCEEDS 3.7 METERS.











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Australia Has Adopted About 26 of the 123 ECE Regulations

3/ 1 for Germany, 2 for France, 3 for Italy, 4 for the Netherlands, 5 for Sweden, 6 for Belgium, 7 for Hungary, 8 for the Czech Republic, 9 for Spain, 10 for Serbia, 11 for the United Kingdom, 12 for Austria, 13 for Luxembourg, 14 for Switzerland, 15 (vacant), 16 for Norway, 17 for Finland, 18 for Denmark, 19 for Romania, 20 for Poland, 21 for Portugal, 22 for the Russian Federation, 23 for Greece, 24 for Ireland, 25 for Croatia, 26 for Slovenia, 27 for Slovakia, 28 for Belarus, 29 for Estonia, 30 (vacant), 31 for Bosnia and Herzegovina, 32 for Latvia, 33 (vacant), 34 for Bulgaria, 35 (vacant), 36 for Lithuania, 37 for Turkey, 38 (vacant), 39 for Azerbaijan, 40 for The former Yugoslav Republic of Macedonia, 41 (vacant), 42 for the European Community (Approvals are granted by its Member States using their respective ECE symbol), 43 for Japan, 44 (vacant), 45 for Australia, 46 for Ukraine, 47 for South Africa, 48 for New Zealand, 49 for Cyprus, 50 for Malta, 51 for Republic of Korea, 52 for Malaysia, 53 for Thailand, 54 and 55 (vacant) and 56 for Montenegro. Subsequent numbers shall be assigned to other countries in the chronological order in which they ratify or accede to the Agreement Concerning the Adoption of Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these Prescriptions, and the numbers thus assigned shall be communicated by the Secretary-General of the United Nations to the Contracting Parties to the Agreement.





















UN ECE Adoption in the APEC Zone

Thirty Fourth APEC Transportation Working Group Meeting, Brisbane, Australia, 13-17 June 2011



Status of Adopted ECE Regulations of Each Economy

Australia

- Adopt : 26 ECE Regulations - Accept: 26 ECE Regulations - Refer : 4 ECE Regulations

Brunei Darussalam

- Refer : All ECE Regulations

- Approval Authority: LTD (Brunei Darussalam Land Transform Department)

Chinese Taipei

- Refer : 51 ECE Regulations

* Action Plan: 18 Regulations will be introduced in near future

Adopt: Use the UN/ECE certificate as CP of the 1958 Agreement
Accept: Use the UN/ECE Certificate as Non CP of the 1958 Agreement

· Refer : Introducing the Technical requirements of ECE Regs into own country law or regulation

T-WG34, Brisbane, Australia

-2/19-



















UN ECE Adoption in the APEC Zone

Thirty Fourth APEC Transportation Working Group Meeting, Brisbane, Australia . 13-17 June 2011



Status of Adopted ECE Regulations of Each Economy

Canada

- Refer : 17 ECE Regulations

· Hong Kong

- Accept : All ECE Regulations - Refer : 44 ECE Regulations

* Implementation date of 35 Regulations is end of 2011

Japan

- Adopt : 38 ECE Regulations

- Approval Authority: MLIT (Ministry of Land, Infrastructure, Transport and Tourism)

- Technical Service: NTSEL(National Traffic Safety and Environment Laboratory)

Adopt : Use the UN/ECE certificate as CP of the 1958 Agreement
Accept : Use the UN/ECE Certificate as Non CP of the 1958 Agreement

Refer : Introducing the Technical requirements of ECE Regs into own country law or regulation

, Brisbane, Australia

SESSION SPONSORS













-3/19-





UN ECE Adoption in the APEC Zone

Thirty Fourth APEC Transportation Working Group Meeting, Brisbane, Australia, 13-17 June 2011



Status of Adopted ECE Regulations of Each Economy

Korea

- Adopt : 6 ECE Regulations - Refer : 19 ECE Regulations

Singapore

- Accept : 94 ECE Regulations - Refer : 9 ECE Regulations

- Approval Authority: LTA(Land Transport of Authority of Singapore) NEA(National Environment Agency of Singapore)

· Adopt : Use the UN/ECE certificate as CP of the 1958 Agreement

. Accept : Use the UN/ECE Certificate as Non CP of the 1958 Agreement

· Refer : Introducing the Technical requirements of ECE Regs into own country law or regulation

G34, Brisbane, Australia

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-4/19-





Inclusion of USA



Global Technical Regulations (GTRs)

1998 Agreement on Global Technical Regulations (GTRs)



















Inclusion of USA



Global Technical Regulations (GTRs)

No.2 No.3 No.5 No.6 No.8 No.9 No.10 No.11 No.12 No.13 No.14

Global Technical Regulation No. 1 (Door locks)

UN GTR No. 1 - Door locks [™] and door retention components (ECE/TRANS/180/Add.1)

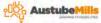
















Global Technical Regulations

The USA adopted GTR8 for light vehicles?

Global technical regulation No. 8

ELECTRONIC STABILITY CONTROL SYSTEMS

(Established in the Global Registry on 26 June 2008)























Global Technical Regulations

The USA adopted GTR8 for light vehicles?

Will the USA base truck ESC on a GTRs or not?

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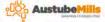
















Global Technical Regulations

The USA adopted GTR8 for light vehicles?

Will the USA base truck ESC on a GTRs or not?

If not, the issue that will arise for Australia is whether an ESC from the USA is acceptable or not

Global technical regulation No. 8

ELECTRONIC STABILITY CONTROL SYSTEMS

(Established in the Global Registry on 26 June 2008)



UNITED NATIONS



















The UN ECE + Dangerous-Goods Regulation



UNECE » Transport» Areas of Work » Dangerous Goods

Transport - Home

Dangerous Goods Home

Schedule of Meetings

- · Meetings and Events
 - · ECOSOC Bodies
 - > TDG Sub-Committee
 - SHS Sub-Committee
 - > Committee of Experts on TDG and GHS
 - · UNECE Bodies
 - > Working Party on the Transport of Dangerous Goods

Dangerous Goods Home

Transport of dangerous goods needs to be regulated in order to prevent, as far as possible, accidents to persons or property and damage to the environment, the means of transport employed or to other goods. However, with different regulations in every country and for different modes of transport, international trade in chemicals and dangerous products would be seriously impeded, if not made impossible and unsafe. Moreover, dangerous goods are also subject to other kinds of regulations, e.g. work safety regulations, consumer protection regulations, storage regulations, environment protection regulations.

In order to ensure consistency between all these regulatory systems, the United Nations





















Australia has adopted most of the UN ECE Dangerous Goods Regulations

seventh edition

Australian Code for the Transport of

Dangerous Goods

by Road & Rail



2011 Electronic Version for Website www.ntc.gov.au Incorporating Corrigendum 1



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Australia has not adopted the Vehicle Standards Section of the UN ECE Model Regulations

PART 9

Requirements concerning the construction and approval of vehicles

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NSW Has Just Announced Mandatory Electronic Stability Control on DG Tanker Trailers



DETERMINATION: TRANSPORT OF DANGEROUS GOODS IN TANK TRAILERS

In accordance with clause 25 of the NSW Dangerous Goods (Road & Rail Transport) Regulation 2009, the EPA hereby determines that particular dangerous goods must not be transported using a certain kind of vehicle, as set out hereunder:





















NSW Has Just Announced Mandatory Electronic Stability Control on DG Tanker Trailers



DETERMINATION: TRANSPORT OF DANGEROUS GOODS IN TANK TRAILERS

In accordance with clause 25 of the NSW Dangerous Goods (Road & Rail Transport) Regulation 2009, the EPA hereby determines that particular dangerous goods must not be transported using a certain kind

- Roll-over control means an electronic control function which:
 - improves stability by reacting to an impending roll-over in order to stabilise the trailer during dynamic manoeuvres within the physical limits of the trailer4, and;
 - meets the performance requirements set out in UN Regulation 13⁵, or other equivalent requirements

ANDY HAWKINS

Manager Chemicals Regulation

by delegation

Date: 23 January 2014



















International Standards for Replacement Parts

Addendum 89: Regulation No. 90

Revision 3 - Amendment 1 - Corrigendum 1

Corrigendum 1 to Supplement 1 to the 02 series of amendments - Date of entry into force: 18 November 2012

Uniform provisions concerning the approval of replacement brake lining assemblies, drum-brake linings and discs and drums for powerdriven vehicles and their trailers



UNITED NATIONS





















International Standards for Replacement Parts

Not adopted in Australia

Addendum 89: Regulation No. 90

Revision 3 - Amendment 1 - Corrigendum 1

Corrigendum 1 to Supplement 1 to the 02 series of amendments - Date of entry into force: 18 November 2012

Uniform provisions concerning the approval of replacement brake lining assemblies, drum-brake linings and discs and drums for powerdriven vehicles and their trailers



UNITED NATIONS











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International Standards for Replacement Parts

























The USA has a test standard for foundation brakes

TP-121D-01 May 9, 1990

U.S. DEPARTMENT OF TRANSPORTATION

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

LABORATORY TEST PROCEDURE

FOR

FMVSS 121D

Air Brake Systems - Dynamometer



SAFETY ASSURANCE Office of Vehicle Safety Compliance Room 6111, NSA-30 400 Seventh Street, SW Washington, DC 20590



















The USA has a test standard for foundation brakes

Australia does not!

TP-121D-01 May 9, 1990

U.S. DEPARTMENT OF TRANSPORTATION

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

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Summary – Global harmonization

Global Harmonization of Vehicle Standards is important.

It is facilitating the supply of imported motor vehicles and parts into the Australian market.

Harmonization has the potential to effect the mix of trailers supplied in the Australian market, but has not as yet.

Australia has not solved the replacement-parts standards problems because of federal-state politics.



















Summary – Global harmonization

Australia, Japan, China, Europe, Canada... are participants.

The level of participation by the USA is unclear.





TUCKLITE KNORR-BREMSE ((C))













Summary – Global harmonization

Australia, Japan, China, Europe, Canada... are participants.

The level of participation by the USA is unclear.

Thanks for Listening!















