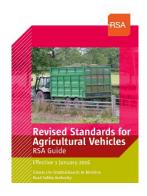
### Working To Save Lives



# Introduction of Revised Standards for Agricultural Vehicles



Presentation to the Irish Tillage & Land Use Society (ITLUS)

4th December 2014

Speaker: Justin Martin

Location: Clanard Court Hotel, Athy, Co. Kildare

### **Introductory Note**



- Revised standards from 1<sup>st</sup> January 2016 in the following key safety areas:
  - Braking
  - Lighting & Visibility
  - Weights Dimensions & Coupling
  - Plating & Speed Rating
- Why? Following a comprehensive review, including a public consultation undertaken by the RSA in 2008 which examined the relevant legislation, policy and practice relating to the use of agricultural vehicles on public roads.

### **Introductory Note**



- Majority of correctly maintained tractors already comply.
- Trailers are also likely to comply, but, due to varying construction standards, some may need remedial work carried out if they are intended to be used at higher weights and speeds. (19 tonnes/40km/h).

### **Background – 2008 Consultation Document**

- -RSA
- Consultation Document entitled document entitled "The Use of Agricultural And Works Vehicles on Public roads" proposed changes be implemented for the operators agricultural vehicles in the following areas:
  - Driver Licensing & Testing.
  - Roadworthiness Testing.
  - Vehicle Standards (Braking, Lighting, Weights & Plating).
  - Speed Limits.
  - Motorway Use.
- Changes for the operators of agricultural vehicles using them for non agricultural purposes were also proposed in the following areas:
  - The requirement to obtain Road Haulage Operator Licences.
  - A ban on the use of rebated fuel.
  - The compulsory use of tachographs.
  - Changes to motor tax rates.
  - The introduction of fixed charge offences.

### **Summary of Changes from 1st January 2016**



- Changes are <u>only</u> being implemented in regard to the standards applicable to agricultural vehicles, i.e.
  - Braking Standards.
  - Lighting & Visibility Standards.
  - Weights, Dimensions & Coupling Standards.
  - Plating & Speed Rating Requirements.

Regulations will take effect from 1st January 2016

- No changes are being implemented in the following areas:
  - Driver Licensing & Testing.
  - Roadworthiness Testing.
  - Speed Limits.
  - Motorway Use.
  - The requirement to obtain Road Haulage Operator Licences.
  - A ban on the use of rebated fuel.
  - The compulsory use of tachographs.
  - Changes to the motor tax rates.
  - The introduction of fixed charge offences.

### **Braking**



- Min tractor & trailer braking performance requirements (expressed as % efficiencies) being introduced depending on speed capability.
- More onerous braking requirements for tractors designed to be driven and trailers designed to be drawn at speeds in excess of 40km/h.
- New agricultural trailers manufactured from 1<sup>st</sup> January 2016 which are capable by design of being drawn at a speed exceeding 40km/h must be equipped with:
  - pneumatic braking systems even if a hydraulic system is being fitted to ensure compatibility with an existing tractor or tractors.
  - a breakaway brake capable of automatically stopping them should they become detached from the tractor while in motion.
- New agricultural trailers manufactured from 1<sup>st</sup> January 2016 which are capable by design of being drawn at a speed exceeding 60km/h must be equipped with ABS.

### **Braking**



### Breakaway Brake:

- Trailers manufactured prior to 1<sup>st</sup> January 2016 which are <u>incapable</u> <u>by design</u> of being drawn at a speed exceeding 40km/h) may alternatively be fitted with a secondary coupling consisting of a chain or wire rope.
- However trailers manufactured prior to 1<sup>st</sup> January 2016 which are capable by design of being drawn at a speed exceeding 40km/h and which are not fitted with a breakaway brake have until 1<sup>st</sup> January 2016 to achieve compliance.
- The same rules regarding breakaway brakes/secondary couplings apply to pieces of interchangeable towed equipment <u>provided such</u> <u>equipment is equipped with brakes</u>.





- A summary of the revised <u>tractor standards</u> is as follows:
  - Agricultural tractors and self-propelled agricultural machines require lighting systems fitted at all times and not only during lighting up hours.
  - However an exemption from compliance with this requirement is provided for agricultural tractors and self-propelled agricultural machines manufactured/first registered prior to 1<sup>st</sup> January 1980 and any trailer/implement drawn by or attached to them provided such a vehicle or combination of vehicles are being used during daylight hours only.
  - Agricultural tractors and self-propelled agricultural machines must also be fitted with a flashing amber beacon which is lit at all times when the vehicle is being used in a public place, with an exemption from this requirement being provided for vintage agricultural tractors taking part in vintage rallies.
  - The use of Lighting Boards will also be required in instances where an agricultural tractor or self-propelled agricultural machine has its lights obscured by an any trailer/implement drawn by or attached to them.





- A summary of the revised <u>trailer standards</u> is as follows:
  - Agricultural trailers and interchangeable towed equipment must be equipped with lights, including side marker lights.
  - Agricultural trailers with a Design Gross Vehicle Weight (DGVW) exceeding 3,500kg must also be fitted with reflective rear markings and those with a DGVW exceeding 3,500kg and forming part of a combination of vehicles exceeding 10 metres in overall length must, in addition to the reflective rear markings, be fitted with reflective side markings.
  - A rear 'LONG VEHICLE' marking must also be fitted to agricultural trailers forming part of a combination of vehicles exceeding 13 metres in overall length.
  - Note: An exemption from compliance with the reflective and rear marking requirements has been granted to interchangeable towed equipment.

### **Weight Limits – Agricultural Trailers**



<u>Wei</u> j	ght Limits – Rigid Drawbar (i.e	. Unbalanced) Single Axle Agr	ricultural Trailers
Axle spacing	National Weight Limit	National Weight Limit	Technical
	Hook/Pin & Eye Type	80mm Ball & Spoon Type	Requirements
	Coupling	Coupling	
N/A	13 tonnes	14 tonnes	
	(10 tonnes on axle & 3 on	(10 tonnes on axle & 4 on	No Suspension
	drawbar)	drawbar)	Required

### **Weight Limits Continued**



#### Weight Limits - Rigid Drawbar (i.e. Unbalanced) Tandem Axle Agricultural Trailers **National Weight Limit National Weight Limit** Technical Axle spacing Hook/Pin & Eye Type 80mm Ball & Spoon Type Requirements Coupling Coupling Less than 1.3 19 tonnes 20 tonnes metres (8 tonnes per axle & 3 on (8 tonnes per axle & 4 on No Suspension drawbar) drawbar) Required 1.3 metres or 21 tonnes 22 tonnes greater (9 tonnes per axle & 3 on (9 tonnes per axle & 4 on Flexible Suspension Required drawbar) drawbar) 1.3 metres or 23 tonnes 24 tonnes greater (10 tonnes per axle & 3 on (10 tonnes per axle & 4 on Flexible Suspension & Flotation drawbar) drawbar) Tyres (≥500mm wide) Required 1.8 metres or 23 tonnes 24 tonnes greater (10 tonnes per axle & 3 on (10 tonnes per axle & 4 on Flexible Suspension & Steering drawbar) drawbar) Axle Required

### **Weight Limits Continued**



We	eight Limits – Rigid Drawbar (i	i.e. Unbalanced) Triaxle Agric	ultural Trailers
		000	
Axle spacing	National Weight Limit	National Weight Limit	Technical
	Hook/Pin & Eye Type	80mm Ball & Spoon Type	Requirements
	Coupling	Coupling	
Less than 1.3	24 tonnes	25 tonnes	
metres	(7 tonnes per axle & 3 on	(7 tonnes per axle & 4 on	No Suspension
	drawbar)	drawbar)	Required
1.3 metres or	27 tonnes	28 tonnes	
greater	(8 tonnes per axle & 3 on	(8 tonnes per axle & 4 on	Flexible Suspension Required
	drawbar)	drawbar)	
1.3 metres or	30 tonnes	31 tonnes	
greater	(9 tonnes per axle & 3 on	(9 tonnes per axle & 4 on	Flexible Suspension & Flotation
	drawbar)	drawbar)	Tyres (≥500mm wide) Required
1.8 metres or	33 tonnes	34 tonnes	
greater	(10 tonnes per axle & 3 on	(10 tonnes per axle & 4 on	Flexible Suspension, Flotation
	drawbar)	drawbar)	tyres (>500mm wide) and
			Steering Axles (i.e. Both
			Foremost & Rearmost Axles)
			Required

### **Weight Limits Continued**

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Weight Limits - Drawba	r/Centre Axle (i.e. Balan	ced) Agricultural Trailers
<u>Double axle</u>	Axle spacing (X)	National Weight Limit
	Less than 3.0 metres	16 tonnes (8 tonnes per axle)
<del>                                   </del>	3.0 metres or greater	18 tonnes
X		(9 tonnes per axle)
Triaxle	Tonnes/Metre (X)	25 tonnes
	5.5 tonnes	
Four axle	Tonnes/Metre (X)	30 tonnes
(a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	5 tonnes	

### **Dimensions**



- Overall width of an agricultural trailer/piece of interchangeable towed equipment increased from 2.5 to 2.55 metres.
- Note: The following items will be disregarded in the calculation of the overall width of an agricultural trailer/piece of interchangeable towed equipment:
  - the projecting part of flotation tyres and associated mudguards protruding beyond the bodywork on each side of the vehicle up to a maximum of 100 millimetres, and
  - devices associated with hydraulic rear door opening mechanisms.
- The exemption previously provided to land implements from compliance with the overall width requirements during the months July-Oct inclusive has now been extended to interchangeable machinery used all year round provided that, during lighting-up hours, such equipment complies with the requirements of the Lighting Regulations.

### Coupling



- Requirements are also being introduced for the maximum vertical load that can be exerted on an agricultural tractor's coupling by a trailer/piece of interchangeable towed equipment. This vertical load must not exceed:
  - the lower of the tractor or trailer manufacturer's specifications,
  - 3 tonnes, or
  - 4 tonnes in the case of a ball and spoon type coupling which has been approved and plated for this load.

### **Plating**



- From 1<sup>st</sup> January 2016, tractors and trailers must be appropriately plated.
- Retrospective fitment of plates to existing agricultural tractors and rigid drawbar trailers will only be required from 1<sup>st</sup> January 2016 where:
  - In the case of tractors where they have a maximum design speed exceeding 40km/h
  - In the case of trailers where they are being operated at a laden weight exceeding 19 tonnes for a tandem axle or 22.5 tonnes for a triaxle.
- These plates must only be fitted <u>by vehicle manufacturers or their</u> <u>authorised distributors</u>.

**NOTE:** Combinations of agricultural tractors and trailers, where either of them is unplated, will have their maximum towable mass capped at 3 times the tractor's unladen weight.

### **Sample Tractor Plate**



CNH EUROPE HOLDING S.A. VAR.: BLPC7B TYPE: BL EC-NO.: e1 #2883/37#8318 IDENTIFICATION NO .: ZBBL54968 8250 -10500 kg TOTAL PERMISSIBLE MASS: PERMISSIBLE FRONT AXLE LOAD: 5150 - 7800kg PERMISSIBLE REAR AXLE LOAD: PERMISSIBLE TOWABLE MASSES 3500kg 5000kg INDEPENDENTLY BRAKED: 8000kg INERTIA BRAKED: 32000kg L ASSISTED BRAKED:

### **Sample Trailer Plate**



Name of Manufacturer			
Type Approval Number (If applicable	)		
Vehicle Identification Number			
Maximum Design Speed (Kilometers	per Hour)		
Tyre Size			
Load Speed Index			
Single or Twin (S/T)			
Inflation Pressure for Weights Spec in Column (1)	ified		
	(1) Weight Not to be Exceeded in Ireland [kg]		n Weights (if higher ermitted in Ireland) [kg]
Maximum Permitted Laden Weight (Including Drawbar)		kg	kg
Foremost Axle		kg	kg
Axle 2 Weight		kg	kg
Axle 3 Weight		kg	kg
Axle 4 Weight		kg	kg
Maximum Drawbar Loading		kg	kg
Vehicle Length (Including Drawbar)			mm
Vehicle Width			mm

### **Speed Discs**

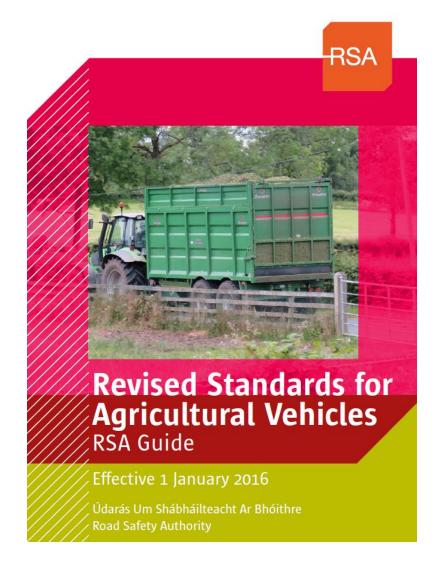




- From 1<sup>st</sup> January 2016, all new agricultural tractors, self-propelled agricultural machines, agricultural trailers, and interchangeable towed equipment must be fitted with a speed disc indicating their maximum design speed.
- Retrospective fitment of discs to existing vehicles will only be required from 1<sup>st</sup> January 2016 where such vehicles are <u>capable by design of</u> <u>either being driven or drawn at a speed exceeding 40km/h.</u>
- Again, these discs must only be fitted <u>by vehicle manufacturers or</u> their authorised distributors.









## Thank You!