

UK Dual-Fuel Vehicle Scene or How the UK is Dealing With HDDDF

S Whelan

UN GFV Meeting, Brussels, 13th December 2012

Vehicle Type Approval, Registration and Use on UK Roads

- Vehicles can meet either EC or National Type Approval standards
- Meeting EC regulations mean vehicles can be sold, registered and operated throughout the EU
- Meeting National regulations mean vehicles can be sold and registered in that country only
- To-date, HDDF vehicles have only had National Approvals

UK Vehicle National regulations

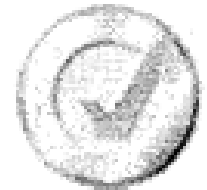
■ Road Traffic Act 1988 – Construction and Use

■ Section 44 – Authorisation and use on roads of special vehicles

- SI 2003 : 1998. Authorisation of Special Types, General Order. Schedule 12, - CNG vehicles
- Vehicle Special Order (SVO) – LNG vehicles

Department for Transport Position on Whole Vehicle Type Approval

Post Registration Conversions 18 October 2007



TYPE APPROVAL
Is your business ready?

Background

Under EC Whole Vehicle Type Approval every new vehicle must be accompanied by a Type Approval certificate (certificate of conformity). This is normally issued by the manufacturer that will have gone through the process of obtaining Type Approval for the vehicle.

Without a CoC the vehicle cannot not be sold or registered for use on the road.

Department for Transport

Position on Whole Vehicle Type Approval

The Position

The Department is aware of the post registration conversion issue and could if it wished put in place the legislation which would prohibit any vehicle being converted for any purpose other than that stated on the registration document. However bearing in mind the following three points:

- The need to ensure that regulation is light touch and not burdensome,
- the uniqueness of the UK automotive industry and
- that UK body builders and vehicle converters conduct their business in a professional manner producing vehicles that meet the required safety and performance standards,

The Department has chosen not to introduce any further legislation. Instead it has chosen to use enforcement to identify vehicles that have been badly converted and that are unfit to be used on the road.

If we are to assume that our roads are full of unsafe / poorly converted vehicles then the evidence to support this is not forthcoming. Of the 2.5 million accidents reported annually only a very small percentage involves modified / converted vehicles.

Notifiable Alterations - **VTG 10** (finished 29th October)

- Registration in UK managed by VOSA – Vehicle Operation and Standards Agency
- Vehicle first registered as diesel only
- Conversion subsequently notified by VTG10 form plus brief details of conversion. VOSA have option to require inspection or testing
- Both CNG and LNG vehicles covered
- VOSA update Dept for Transport reference no.

Notifiable Alterations - VTG 10

Details of Notifiable Alterations or Application for Change of Plated Details of a Goods Motor Vehicle or Trailer or Application for Design Weight Certificate



Vehicle & Operator Services Agency

ROAD TRAFFIC ACT 1988, PART II, SECTION 49 VEHICLES EXCISE AND REGISTRATION ACT 1994 SECTION 61A

VTG10 (Rev November 2005)

Complete all sections on application form. Failure to do so may result in the form being returned or delayed in processing. Completed forms should be sent to Goods Vehicle Centre, 91/92 The Strand, Swansea, SA1 2DH, or to any Goods Vehicle Testing Station.

PART A - YOUR DETAILS AND LEGAL DECLARATION

Company Name _____

Contact Name _____

Address to which the appointment letter will be sent _____

Telephone Number _____ Post Code _____

I (print full name) _____ hereby declare that, to the best of my knowledge, all the statements in this application are true. I understand that to make a false statement is an offence under Section 174(2) of the Road Traffic Act 1988.

Signature _____ Date _____

PART B - VEHICLE DETAILS

Registration Mark (if notifying a cherished) _____

Department of Transport ROAD TRAFFIC ACT 1988 SECTIONS 41, 49, 57 & 58 EXAMINATION OF GOODS VEHICLES Vehicle Inspectorate Plate VTG 6T Rev. 02			Serial No. H99900391608 DTp Ref. No. 5197
Reg./Ident. Mark YN05AHP	Vehicle Identification No. WDB9442332K971792	Type Approval No./Variant 035C117T/003000	
Manufacturer/Model MERCEDES /2543LS			Speed Limiter Exempt N
Function (See note 3) ARTIC R	Year of Original Registration 21/03/05	Year of Manufacture 2004	
(1) Description of Weights Applicable to vehicle	(2) Weights not to be exceeded in Gt. Britain	(3) Design Weights (If higher than shown in column 2)	Date of Issue DEPARTMENT OF 11/05/05 TRANSPORT GREAT BRITAIN
Gross Weight (See notes 1 & 4)	23400	25000	
Train Weight (See note 2)	44000		
Max. Train Weight (See note 5)	44000		
Axle Weights (Axles numbered from front to rear) (See note 1)			
	Axle 1 7100		
	Axle 2 7100		
	Axle 3 11500		

Original

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Updated



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WVTA introduction in UK



Heavy truck (N2 N3) Transition to ECWVTA in UK – v8

Vehicles over 3500kg laden weight (N2 and N3 category).

Under the new ECWVTA regime, category N is used to describe all motor vehicles except those which are primarily designed to carry passengers and thus fall into category M. So some vehicles which do not carry goods are nevertheless in the N category.

1. Vehicles that are subject to Goods Vehicle type approval today.

Approval scheme today for N2/N3 vehicles:

GB Goods Vehicle National Type Approval (GVNTA)

From April 2009 new options for approval were available - ***UK National Small series type approval (NSSTA)***, ***EC Whole vehicle type approval (EC WVTA)*** and ***Individual Vehicle Approval (IVA)***.

From 29 April 2009 DVLA accept ***EC Certificate of Conformity (CoC)***, ***NSSTA CoC*** or ***IVA*** certificate to register a vehicle, as well as the existing ***GVNTA CoC*** or ***Minister's Approval Certificate (MAC)*** or an ***SVA MAC***. An ***EC CoC*** or ***NSSTA CoC*** for an *incomplete* vehicle will be accepted (until 29 October 2014) so long as it shows compliance with the same subjects required by GVNTA. In practice, VCA will not issue an NSSTA for an incomplete vehicle type unless it complies with this requirement.

From **29 October 2012**, the **GVNTA** scheme will cease. VCA will withdraw all approvals and manufacturers can no longer issue Certificates of Conformity or Sub-MACs for new vehicles under **GVNTA**.

Retrofit Regulations

- 2 Routes for retrofits in the UK:
- For small volumes
 - Vehicle Special Order
 - UK specific
 - Individual vehicles
- For Volumes <250/yr – National Small Series Type Approval (NSSTA)
 - Nationally based
 - Recognises R110 – vehicle inspected by VCA (Decision by VCA)
 - Straight-forward for CNG – requires clarification for LNG until R110 catches up
 - OEM route for current Euro 5 Hddf
 - Can be applied to other EU member states
 - Probable route for future retro-fit systems that can be applied across the EU
 - Should apply to all other EU member states

LNG vehicles

- LNG parts not yet covered by ECE R110
 - Chart LNG tanks designed to US DoT 4L.
 - Approved under TPED – Transportable Pressure Equipment Directive.
- Rest of system components meet R110
- Vehicle except LNG tank approved under National Small Series Type Approval (NSSTA)
 - Witness test – approval.
- LNG Tank covered by application to DfT (VCA) for Vehicle Special Order.
 - Application by Owner/Operator for each vehicle.
 - Gives exemption to UK C&U regulations to allow use on road.

UK Summary

- UK DfT approach appears to be not to put up unnecessary barriers to restrict technology adoption
- UK Government low carbon transport organisations have recognised HDDF as a prime route for Low Carbon HGVs
 - CENEX
 - Low Carbon Vehicle Partnership
- UK Technology Strategy Board have awarded significant funding (c.£10m) for fleet trials of mostly HDDF – retrofit and OEM
- Generally flexible approach so far with DfT and VCA coordinating a sensible approach through “uncharted waters”
- OEM & CAP have good long term relationship with VCA from early retrofit HDDF systems and component R110 approvals
 - VCA are familiar with UK HDDF technology