



ECWVTA Seminars – June 2008

Day 3 - Trailer Manufacturers

1. Welcome Address – The Principles of Type Approval
- Alternative UK and EC TA Schemes

Speaker:

Brian Perrett

Head of VCA Product Development



Type Approval Seminars for Industry

Don't let Type Approval put your business in a spin!

VCA is here to help!





Welcome to VCA's Industry Seminars on Type Approval

Brian Perrett

Head of VCA Product Development

No Approval, no sale!



Today's team

- VCA
 - *The UK's Type Approval Authority.*
 - Brian Perrett – Head of Product Development
 - Mick Hepworth – Technical specialist
 - Nick Clay – Certification process specialist
 - Derek Lawlor – Conformity of Production specialist
 - Type Approval 'Consultants'
 - Pete Bawn
 - Chris McCabe
 - Nic Fasci
 - Nick Sanderson
 - Nick Babbage
 - James Ecclestone
- VOSA
 - Roger Trubridge
- SMMT
 - Colin Wilde

Outline of the day

Designed to help you prepare for the new EC-driven Type Approval regulations;

- Overview of different Type Approval Schemes
 - Builds on previous VCA seminars
- Provide an introduction to Technical Requirements
- Walk through the Approval process
- Outline Conformity of Production obligations
 - Sampling requirements
 - Quality system requirements

At-elbow access to VCA experts – ‘Surgery’ process

- Discuss Type Approval with a VCA Type Approval consultant



Background

The EU has approved the Revised Framework Directive (RFD) 2007/46/EC

- Enables vehicles to be sold throughout the EU without hindrance
 - removes barriers to trade
- Common requirements for safety and environmental standards throughout Europe
- Individual Member States may implement national schemes allowing companies to manufacture and sell limited numbers of vehicles annually within that Member State
- Individual Member States may implement national IVA schemes
 - No limits on numbers
- Prohibits any vehicle to be sold or to enter service without a relevant approval
- A UK Statutory Instrument (SI) is under preparation to implement these EU requirements

Type Approval in a Nutshell

- Whole Vehicle Type Approval authorises a manufacturer to;
 - produce vehicles to a proven specification and
 - self-certify these as compliant with relevant legislation - Certificate of Conformity, or '**CoC**'
 - sell without further constraint across the relevant market
- Two fundamental requirements;
 - Meeting the technical and administrative requirements and capturing the design
 - Ensuring that subsequent production vehicles are manufactured in conformance with the approved design (Conformity of Production)

Type Approval Key Questions

Which vehicles are affected?

- Directive extends ECWVTA to all new road vehicles & trailers
- This means new approval requirements for:
 - All large passenger vehicles (M2-M3)
 - All goods vehicles (N1-N3)
 - All trailers (O1-O4)
 - All Special Purpose Vehicles (incl. M1)
 - Does not apply to vehicles already registered



Type Approval Key Questions

What does the change mean?

If you sell in the UK only:-

Current situation

- Bus & Coach manufacturers
 - COIF, C&U & RVLR
- Truck / chassis manufacturer
 - GVNTA, SVA, C&U & RVLR
- Trailers
 - C&U, RVLR(self certification')

Future situation

- EC
 - ECWVTA
 - EC Small series
- National
 - National Small Series Type Approval
 - Individual Vehicle Approval



Type Approval Key Questions

What does the change mean?

If you sell in other EC countries:-

Current Situation

- You have to adhere to member state national schemes
- Each member state has its own national schemes

Future Situation

- ECWVTA – no annual limit
- EC Small Series – 1000/ type/annum (passenger cars only)
- NSSTA and IVA may be accepted across all member states

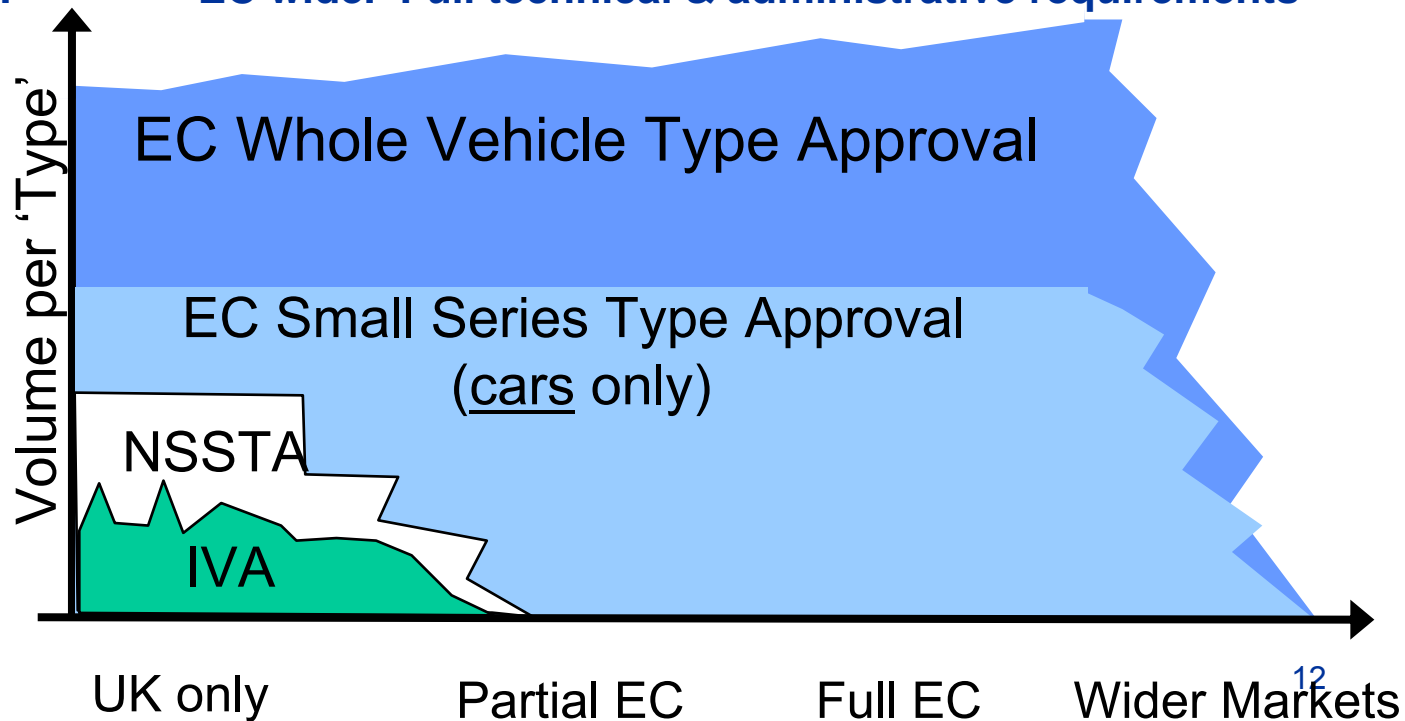
Type Approval Key Questions

- Which approval route?
 - ECWVTA, NSSTA and IVA each have their own detailed technical requirements and costs
 - Economics will depend on sales volumes and complexity of your range
 - If exporting NSSTA or IVA may be accepted in other member states. You will need to check with the other member state (mutual recognition principle)

Which Type Approval route?

All vehicle categories:

- IVA:** UK only. Inspection of each vehicle, 'eased' technical requirements, no limit on numbers
- NSSTA:** UK only. # vehicles limited p.a., 'eased' technical requirements
- EC SSTA:** EC wide. Cars (M1) only, # vehicles limited p.a. (1000)
- ECWVTA:** EC wide. Full technical & administrative requirements





What's a 'Type' anyway?

Definition from the Directive:

- "type of vehicle" means vehicles of a particular category which do not differ in at least the essential respects specified in Section B of Annex II.



What's a 'Type' anyway?

Simply put for our purpose:

- It's a **label given to your products** that links groups with shared characteristics
- Types are broadly based on (amongst other things):
 - Gross Vehicle Weight (GVW)
 - Number of axles
 - Major chassis design differences
 - You and your product 'label'



Reducing Type Approval complexity

- Types, Variants and Versions permit different products to share key technical approvals
 - Helps to shape ‘Chunks’
- Structuring a model range into Types, Variants and Versions also reduces the volume of Approval administration
 - Reduces a manufacturer’s Type Approval burden
 - Simplifies the assessment of whether a new approval is required to cover a new product
- Type/ Variant/ Version definition varies by vehicle category

Multistage Build

- Enables base vehicle manufacturers to approve **incomplete** vehicles. Stage 1
- Enables stage 2 builders to gain approval for the systems and components they add, complete or modify
- There can be as many stages as it takes to arrive at the **completed** the vehicle, eg;
 - Stage 1 Chassis cab
 - Stage 2 Additional axle
 - Stage 3 Bodywork

Multistage Build

- Each stage may issue a CoC covering the stage of completion of their product
- Each stage is only responsible to the Type Approval Authority for their part of the build
- Multistage approval is only permitted as part of a Type Approval process, ***not IVA.***
- But IVA can be used as the final step in getting approval for a completed vehicle
- CoC's for incomplete vehicles may not be used to put vehicles into service

Type Approval Key Questions

Scheme volume limits:

- Full ECWVTA supports unlimited import or production volumes for each vehicle Type
- Annual Community production (or import) limits are enforced for Small Series Approvals;
 - ESSTA (M1 only) – 1000 total
 - NSSTA;
 - M1 - 75 units per annum
 - M2/M3 - 250 units per annum
 - **N1 - 500 units per annum**
 - **N2/N3 - 250 units per annum**
 - O1/O2 - 500 units per annum
 - O3/O4 - 250 units per annum

Type Approval Key Questions

How do I decide which approval route?

- Define your market
 - UK / Europe / The world?
 - How many Types are there in your range?
 - How many vehicles you will manufacture per type?
- Unique requirements?
 - UK technical derogations may preclude export sale



Type Approval Key Questions

When will it happen?

- Regulations for GB and NI in place Spring 2009
 - Phased in between Spring 2009 and October 2014
- Optional approvals available from Spring 2009
- First approvals mandatory from October 2010
- Act now to be ready



Type Approval Timeline

Time line

Type Approval Regulations come into force for the following vehicles:

| | | | | | | | | |
|--|--|---|--|--|---|--|---|---|
| October 2007 2007/46/EC came into force. | 29th April 2009 Type approval is available (on a voluntary basis) for any vehicle type. *SVA becomes **IVA for Passenger Cars. SVA for light vans and trucks will continue until October 2011 | 29th October 2010 Minibuses, buses and coaches built in one stage or first stage of a multi-stage build. | 29th October 2011 Light vans and trucks built in one stage or first stage of a multi-stage build. Minibuses, buses and coaches built in multiple stages. | 29th April 2012 Special purpose passenger vehicles (such as motor caravans, ambulances, hearses and armoured cars). | 29th October 2012 Medium/heavy vans, trucks and trailers built in one stage or first stage of a multi-stage build. | 29th April 2013 Light vans and trucks built in multiple stages. | 29th October 2013 Trailers built in multiple stages. | 29th October 2014 Medium and heavy trucks built in multiple stages and other special purpose vehicles, such as mobile cranes and trailer caravans. |
|--|--|---|--|--|---|--|---|---|

*SVA=Single vehicle approval **IVA=Individual Vehicle Approval



VCA's role in Type Approval

- VCA are the UK's Vehicle Type Approval Authority
- Over 30 years experience in Type Approval of all types of vehicles, systems and components
- Offices around the world
- Relationships with some of the world's biggest – and smallest - manufacturers in all vehicle sectors
 - We understand the motor industry's needs
 - We flex our ways of working to suit ***your*** needs



Type Approval Overview

- Any questions?

