



ECWVTA Seminars – June 2008

Day 2 – Trucks and Body Builders

2. Technical requirements

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TECHNICAL REQUIREMENTS

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TYPE APPROVAL

THERE ARE 58 SUBJECTS IN
FRAMEWORK DIRECTIVE
THAT MANUFACTURERS
TO MEET

THE GOOD NEWS IS THAT
ONLY 44 OF THESE APPLY
GOODS VEHICLES

TYPE APPROVAL

COMMERCIAL VEHICLES
FOR THOSE THAT ARE
WITH THE EUROPEAN VEHICLE
CATEGORIES;

N category are designed for the
of goods.

N1. Having a maximum mass not
exceeding 3.5 Tonnes.

TYPE APPROVAL

N2. Having a maximum mass
3.5 Tonnes but not exceeding 12
Tonnes

N3. Having a maximum mass
12 tonnes.

TYPE APPROVAL

N1 Vehicles have to comply with;

14. Protective steering

39. CO2 emissions and fuel
consumption

54. Side Impact

N2 & N3 do not have to comply with
these requirements but do have to
comply with;

TYPE APPROVAL

42. Lateral protection (Side guards)

43. Spray suppression

57. Front underrun protection

TYPE APPROVAL

Multi Stage Build

This is where a vehicle built in stages
In the framework directive it mentions

COMPLETE

This is where a vehicle is built in one
stage

INCOMPLETE

This is where a vehicle is built in several



TYPE APPROVAL

COMPLETED

This is where the vehicle has all stages and is finished

Only a COMPLETE or COMPLETED vehicle can be given a Certificate of Conformity and then be registered.

You can approve a vehicle at the first stage to full European approval and the same at subsequent stages



TYPE APPROVAL

You cannot approve a stage to Vehicle Approval and then move to the next stage and have the vehicle approved to full European approval



TYPE APPROVAL

Typically, of 40 subjects, I would
30 would fall to the base vehicle
to comply with (the chassis
manufacturer)

10 would be the responsibility of the
converter or bodybuilder

9 would be the component
manufacturer's responsibility

TYPE APPROVAL

A *typical* approval schedule *may* look like this;

1. Sound levels **STAGE 1**
2. Emissions **STAGE 1**
3. Fuel tanks/ rear under run **STAGE 1 or 2**
4. Rear reg plate space **STAGE 1, 2 or 3**
5. Steering effort **STAGE 1**
6. Door latches and hinges **STAGE 1**
7. Audible warning **STAGE 1**
8. Indirect vision devices **STAGE 1**

TYPE APPROVAL

9. Brakes **STAGE 1**
10. Suppression (Radio) **STAGE 2**
11. Diesel smoke **STAGE 1**
12. N/A to lorries
13. Anti theft and immobiliser **STAGE 1**
14. (N1) Protective Steering **STAGE 1**
15. Seat strength **STAGE 1**
16. N/A to lorries

TYPE APPROVAL

- 17. Speedo and reverse gear **STAGE 1**
- 18. Stat. Plates **STAGE 1, 2 and 3**
- 19. Seat belt anchs. **STAGE 1**
- 20. Inst of lights **STAGE 2**
- 21. to 26. lamp approvals done by component supplier
- 27. Towing hooks **STAGE 1, 2 or 3**
- 28. To 30. Lamps as 21. To 26. above

TYPE APPROVAL

- 31. Seat belts **STAGE 1** & Component
- 32. N/A to lorries
- 33. ID of Controls **STAGE 1**
- 34. Defrost/demist **STAGE 1**
- 35. Wash/wipe **STAGE 1**
- 36. Heating systems **STAGE 1**
- 37. N/A to lorries
- 38. N/A to lorries

TYPE APPROVAL

- 39. (N1) CO2 Emissions/fuel consumption **STAGE 1**
- 40. Engine power **STAGE 1**
- 41. Diesel emissions **STAGE 1**
- 42. (N2 & N3) Lateral protection **STAGE 1 or 2**
- 43. (N2 & N3) Spray suppression **STAGE 1 or 2 and Component**

TYPE APPROVAL

- 44. N/A to lorries
- 45. Safety glass **STAGE 1** &
- 46. Tyres **STAGE 1** & Component
- 47. Speed limiter **STAGE 1**
- 48. Masses and dimensions **STAGE 2**
- 49. External projections of cabs
- 50. Couplings **STAGE 1** & Component

TYPE APPROVAL

- 51. N/A to lorries
- 52. N/A to lorries
- 53. N/A to lorries
- 54. (N1) Side impact
- 55. N/A to lorries
- 56. Dangerous goods **STAGE 2**
- 57. Front under run **STAGE 1**
- 58. N/A to lorries



TYPE APPROVAL

This list is an example only!
Responsibility for approvals will
on how your product is built...
Remember no approvals can be
without Conformity of Production

Talk to VCA !!!!

TYPE APPROVAL

WHAT SHOULD I DO NEXT??

MY ADVICE WOULD BE;

1. Think of where you want to sell your product and how many you will produce (Types, Variants and Versions)
2. Choose your approval route
vehicle approval National small approval or Full European



TYPE APPROVAL

3. If you choose Type Approval, come and talk to VCA;

- Introductory meeting
- Worst case meeting

4. Come armed with as much information as possible about your product.

We treat your information as completely confidential

TYPE APPROVAL

At the 'worse case' meeting we can discuss;

1. What we need to test

- minimum amount of testing to cover maximum product range

2. Where to test;

You can choose where to test;

- On your own site, if you have facilities
- VCA have facilities for some tests.

TYPE APPROVAL

2: Where to test, cont.

- Recognised test facilities like Millbrook, MIRA, MI Technology, Status and some Universities to name but a few.
 - **ALPHABETICAL ORDER**
- Overseas facilities (VCA will send out a test engineer to witness the test)
- Using a component supplier's facilities

TYPE APPROVAL

- Before the test you will need to supply an 'Information document' so that the VCA engineer will know what you are covering with the test work you are carrying out.
- This is quite a detailed document to allow a thorough 'Specification Check' of the vehicle or component to be carried out

TYPE APPROVAL

Next, the test...

Make sure you have the correct parts because what is tested will be what approved!

- you may not be able to change or include alternatives if they have not been previously considered

TYPE APPROVAL

Discuss with the Type Approval engineer what documents are required for circulation.

These should be different to the 'information document' in so much they should include less detail than needed at the time of the test. Just enough to identify the vehicle/component.

TYPE APPROVAL

YOU HAVE GOT IT!

...NOW WHAT DO YOU DO WITH IT ?

You now need to maintain your approval

- Make sure you cover changes to your product with changes to your approval documents – talk to VCA!

Depending on the nature of your planned change, VCA will respond in one of four ways;

TYPE APPROVAL

1. Letter of no concern
2. Paperwork exercise
3. Partial test work
4. Full retest

This will be decided based on the extent of the changes you are making



TYPE APPROVAL

In order to keep up to date with legislation, we recommend you subscribe to VCA's legislative information package, **VISTA**

Like other systems, this includes up-to-date copies of EU Directives and (United Nations) Regulations

And VISTA contains other key information, particularly clarification of how VCA interpret these regs, which your design teams will find useful



ANY QUESTIONS?

I am here for the whole of the day.
For specific technical questions please
and talk to me in the 'Surgery'

THANK-YOU FOR YOUR ATTENTION

Overview of the 'Surgery' process





Type Approval 'Surgeries'

- 1 to 1 opportunities to discuss your requirements with a VCA Type Approval expert
- Bookings during any break
- You've probably come a long way...
 - **MAKE THE MOST OF THIS OPPORTUNITY!**

		Topic			
		General	Technical	Control Plans	Quality Systems
12.40	Lunch				
13.30	Control Plans		Surgeries closed		
14.40	Quality Systems	Surgeries open for businesses with ISO/TS certification			
15.10	Free				