



Department
for Transport



Guidance on European Type Approval for certain Electrically Assisted Pedal Cycles (EAPC)

New European rules affecting certain Electrically Assisted Pedal Cycles including "twist and go EAPCs".

This note provides guidance to help retailers, manufacturers, importers and dealers ensure that they do not sell or register non-compliant electrically assisted pedal cycles. The term Electrically Assisted Pedal Cycles (EAPC) includes vehicles that are capable of being propelled either by pedalling or by electric power, but does not include more powerful electric bikes (over 250W), those which can exceed 25km/h (15.5mph) ("speed pedelecs") or those which cannot be propelled by pedal, all of which are treated as mopeds or scooters in UK. A separate guidance note covers the situation as regards the domestic laws in Great Britain covering these vehicles and the criteria they must satisfy in order not to be classed as motor vehicles.

New European laws affect certain EAPC sold new after 1 January 2016. If you import, manufacture or sell certain EAPC then you need to be aware of the law.

1. New requirement from 1 January 2016 - Type Approval for "twist and go" EAPC.

Certain electrically assisted pedal cycles are specified in GB law as not being motor vehicles and thus not subject to the requirements for registration, tax, driver licensing, compulsory insurance, helmet wearing and annual roadworthiness testing that would otherwise apply to all motorised two wheel vehicles. Within the GB definition of Electrically Assisted Pedal Cycle there are two distinct classes – cycles which can only obtain power assistance when the rider is pedalling, and those where power can be obtained even when the rider is not pedalling, often known as "Twist and go".

1.1 Cycles which cannot obtain power assistance when the rider is not pedaling

Under European law (Regulation 168/2013: Article 2-2 (h)) these cycles are exempt from EU type approval.

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1.2 Cycles where power can be obtained even when the rider is not pedalling (twist and go)

Under European law these cycles are categorised as “L1e-A” and are required to obtain EU or domestic type approval. They are not required to be registered. There is however an exemption for cycles where power is available only up to 6 km/h without pedalling, to help start-up, and these are exempt from type approval.

2. Is there some leeway for in-scope EAPC models that were in stock or on sale prior to 1 January 2016?

Yes. We believe that in-scope EAPC without type approval can continue to be sold by importers if they were manufactured and imported prior to 1 Jan 2016. Article 12 of 168/2013 states that importers shall place on the market only compliant vehicles, suggesting that EAPC already placed on the market prior to 1 January 2016 can continue to be sold off. This does not permit the import or manufacture of new in-scope EAPC without approval after this date.

3. What forms of safety buffer exist?

3.1 Single Vehicle Approval (MSVA)

Which is an inspection normally carried out by the Driver and Vehicle Services Agency (DVSA), formerly VOSA. An EAPC will be treated as a low power moped. For more information on how to apply, details of the requirements, the fee and so on, see:

<https://www.gov.uk/vehicle-approval/motorcycle-single-vehicle-approval>

3.2 European Type Approval (ECWVTA)

Which is available from the UK Vehicle Certification Agency (VCA) or from type approval authorities in other member states, for example KBA in Germany. More information on the requirements is given below.

4. European Type Approval - the requirements for EAPC in scope (see para 1.2 above)

4.1 Requirements of European type approval from 1 Jan 2016

We have been advised that initially the only requirement for in-scope EAPC is on lighting: An Automatic Headlamp On (AHO) facility must be fitted. Essentially, a bicycle front lamp which the manufacturer declares complies with ISO 6742-1:1987 must be fitted and designed to be lit automatically when the vehicle is in motion. This could be via dynamo or other technical solution. Under domestic law (The Pedal Cycle Safety Regulations 2010) a number of reflectors must be fitted to a new bike so it would be advisable to cover them in the type approval in preparation for a full type approval as per paragraph 4.2 below. In addition, a manufacturer's Conformity of Production will need to be demonstrated to the VCA (or overseas approval authority).

4.2 Requirements of European type approval for vehicles sold after 1 Jan 2018

From 1 Jan 2018 all EAPC which are of the “twist and go” type will need a full type approval to 168/2013. This encompasses a long list of requirements, on lighting, brakes, and so on, although in case of lights and tyres, “bicycle” CEN standards are accepted, and low speed vehicles are exempt from some requirements

5. What are the penalties for not having type approval?

The relevant domestic regulations are in draft form and will be subject to a short consultation soon. Currently a range of fines are envisaged as penalties, depending on the severity and persistence of the offence. After modification following any comments received, the regulations will be published and enter into force immediately.

6. Q&A

Why are Certain EAPC (the "twist and go" types) required to have approval?

This was decided during a European negotiation and the majority view among member states was that requiring type approval was appropriate for these vehicles. Once obtained, type approval means that the vehicle can be sold throughout Europe without further inspection. This should result in lower costs for consumers and help exporters.

What about electric pedal cycles which are not EAPC under British Law as the power exceeds 250W, or the powered speed can exceed 15.5mph (25kph)?

These vehicles, regardless of the precise mode of power assistance, are classified as mopeds in Great Britain and like any moped, type approval has been a requirement since 2003. Depending on the maximum power and speed the vehicles will be categorised in Europe as L1e-A (not exceeding 1000kW or 25 km/h) or L1e-B (not L1e-A, and up to 4kW and 45km/h).

7. Glossary

European Type Approval

Most two and three wheel motor vehicles are type approved before they can be sold and registered. Type approval is the process of a government appointed body (e.g. the UK government has appointed the Vehicle Certification Agency, VCA) certifying that a range of vehicles complies with relevant safety and environmental laws. It is normally obtained by the manufacturer, as only he can guarantee the conformity of every vehicle he produces. Once a vehicle range is type approved, a manufacturer issues an EC Certificate of Conformity (EC CoC) with each vehicle to declare that it complies with the approved specification.

Motorcycle Single Approval

Two and three wheel motor vehicles, including in-scope electric cycles that have not been type approved by the manufacturer must undergo an SVA inspection before they can be registered, to ensure they meet relevant safety and environmental standards. DVSA carry out MSVA testing in Great Britain, with DVA responsible in Northern Ireland.

8. Exports and Sales in other EU member states

Other member states may have completely different domestic rules, although as a matter of principle they will be required to accept a vehicle with a full EU type approval. You may find that EAPC of a class subject to type approval will be subject to registration, driver licensing and so on as if it were a moped – albeit some member states have a less onerous regime for mopeds. You will need to contact the vehicle or

transport authority in those states, or a bicycle or motorcycle trade association, for more information

9. Useful Links

MSVA from DVSA (GB) -<https://www.gov.uk/vehicle-approval/motorcycle-single-vehicle-approval>

MSVA from DVA (Northern Ireland) –

<http://www.nidirect.gov.uk/the-motorcycle-single-vehicle-approval-msva-scheme>

Vehicle Certification Agency (VCA) - <http://www.dft.gov.uk/vca/>

EU Regulations on motorcycles –

http://ec.europa.eu/growth/sectors/automotive/legislation/motorbikes-trikes-quads/index_en.htm

Motor Cycle Industry Association (MCIA) – <http://www.mcia.co.uk/>

Bicycle Association of Great Britain (BAGB) - <http://www.bicycleassociation.org.uk/>

The information in this document is a summary of the Department's understanding of what the law requires. However, ultimately the interpretation of the law is a matter for the courts based on individual facts of any particular case. You are therefore advised to consult the relevant legislation and, if necessary, seek independent advice.

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