



EPACs that do not comply with the spirit of the EU standards and regulations

POSITION PAPER

Pedal cycles with assistance, also called electrically power assisted cycles (EPACs), are equipped with an auxiliary electric motor having a maximum continuous rated power of 250 W, where the output of the motor is cut off when the cyclist stops pedalling and is otherwise progressively reduced and finally cut off before the vehicle speed reaches 25 km/h. EPACs are also permitted to be fitted with a start-up assistance mode for motor propulsion up to 6km/h, for which no pedalling is required.

If EPACs comply with these requirements as defined in both Regulation (EU) 168/2013 and harmonised EU standard EN 15194:2017, they are considered bicycles in terms of the road traffic law in Member States of the EU. As a result, EPAC owners do not require any mandatory motor vehicle insurance, registration number or driving licence and are permitted to use cycle paths – a considerable advantage. It is in everyone's best interest to maintain this status if EPAC riders are to enjoy the same rights and freedoms as other cyclists. Unauthorised modification of EPACs is illegal and puts this situation at risk – and that concerns the whole Bicycle Industry.

Raising the power output and/or the maximum design speed beyond these limits with the help of tampering kits, manipulating the settings of the motor or providing an off-road mode for the motor (allowing the assisted vehicle speed to be increased above 25 km/h) will result in the EPAC becoming a motor vehicle according to Regulation (EU) 168/2013.¹

If the EPAC becomes a motor vehicle, different requirements apply. In the majority of EU Member States, the following rules or guidelines apply:

- Subject to European type approval²
- Subject to compulsory operating licence (registration of the vehicle)
- Subject to compulsory driving licence and thus also minimum riding age (class depends on maximum speed)³
- Subject to compulsory insurance and insurance plate

¹ EPACs fitted with start-up assistance mode above 6km/h or Pedal Assist E-Bikes fitted with equipment that could propel the vehicle above 6 km/h without pedalling, will become a motor vehicle.

² [Regulation \(EU\) No 168/2013 of the European Parliament and of the Council of 15 January 2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles](#)

³ [EU driving license directive 2006/126](#)

- Compulsory helmet (motorcycle type)
- Using cycle lanes is not permissible
- Proof of fatigue strength for all safety-relevant components (such as frame, front form, seat-post, handlebar and stem) must be submitted

Possible legal consequences for users of EPACs which have been subject to unauthorised modification vary from country to country but generally include:

- Administrative offences and fines
- Criminal offences, cautions: in the event of repetition, the user's criminal record certificate may no longer be clean (criminal record)
- Infringement of obligatory insurance⁴
- Consequences of criminal offence may include withdrawal of driving licence
- Loss of insurance cover (private liability)
- Loss of materials defect liability by the manufacturer
- Loss of warranty claims
- Usually, partial responsibility in case of accident⁵

Possible legal consequences for retailers who supply EPACs with unauthorized modifications, or kits which do not respect the EPAC power or speed limits, include:

- Aiding and abetting of an offence, participating in an administrative offence
- Retailer liable for personal and material damage
- Loss of business liability insurance cover
- Bike dealers must also be aware that by offering unauthorised modification ("tuning") solutions, they are playing fast and loose with the regulations governing EPACs and their use, and are contributing to the spread of unauthorised tampering. In other words, they are putting the EPAC market at risk.

Moreover, tampering with an EPAC endangers the safety of the vehicle, because an EPAC and its components, including the brakes and frame, are not designed technically for permanent higher speeds. This puts the user of the "tuned" EPAC, as well as others, at risk. Another danger is posed by the fact that "tuning" kits and other types of manipulation can damage the drive system and the bike itself.

Therefore, CONEBI calls for responsible cycling in line with the regulations and takes a strong stance against the unauthorised modification of EPACs which disregards the relevant regulatory requirements. It is important that EPACs – such as pedelecs with maximum speed for motor support of 25 km/h - continue to be classified as bicycles in the future, with all the associated rights and obligations. The whole cycling ecosystem must protect and preserve this status so that cyclists can continue to enjoy an electric tailwind.

CONEBI and its members contributed to the explicit inclusion of anti-tuning requirements in the European standard for EPACs (EN 15194: 2017) and is glad to see that battery and system manufacturers are working continuously to update anti-tampering measures.

⁴ [EU Motor Insurance Directive \(2009/103/EC\)](#)

⁵ [Feel free to complement the general legal consequences with your national laws](#)