

BUSINESS PLAN

CEN/TC 354

NON-TYPE APPROVED LIGHT MOTORIZED VEHICLES FOR THE TRANSPORTATION OF PERSONS AND GOODS AND RELATED FACILITIES

EXECUTIVE SUMMARY

Business environment

- The motorcycle industry business in Europe is worth Euro 10 billion to the European economy and employs 200,000 people covering all member states.
- The all-terrain industry business in Europe is worth over Euro 1 billion to the European economy.
- The annual market of ride-on, off-road motorized vehicles represents an estimated volume of more than 2 million units

The parties involved are:

- Manufacturers and their representative organizations,
- Public authorities,
- Users organizations,
- Testing houses.

Benefits expected (for all vehicles covered by this TC work)

- In the field of the machinery safety, to elaborate harmonized standards, to be referenced in OJEU, giving presumption of conformity with regard to the Machinery Directive for the benefits of manufacturers and consumers in providing added values to the essential health and safety requirements of the Machinery Directive.
- Increase the safety of all the European citizens, and especially that of children.
- Support market surveillance activities in checking the compliance to the Machinery Directive and in minimizing interpretation differences.
- Improved consumer information in particular in terms of vehicle operation and correct use.
- Harmonization of the minimum technical requirements and opening of markets throughout Europe by drafting documents recognized and applicable in all CEN member's countries, giving advice to manufacturers, importers and distributors.
- Facilitate access to public space for light electric vehicles and self-balancing vehicles

Priorities

- Confidence and safety of consumers
- Improve confidence of regulators
- Increase adoption of green and efficient vehicles
- Give a support to the market surveillance
- Ensure that the standards are applied throughout Europe through similar sampling and testing.

1 BUSINESS ENVIRONMENT OF THE CEN/TC

1.1 Description of the Business Environment

The following political, economic, technical, regulatory, legal, societal and/or international dynamics describe the business environment of the industry sector, products, materials, disciplines or practices related to the scope of this CEN/Technical Committee, and they may significantly influence how the relevant standards development processes are conducted and the content of the resulting standards:

Besides on-road (public road) type-approved motorized vehicles regulated by the EU directive 2002/24/EC¹, manufacturers have developed a wide range of recreational and utility motorized vehicles (motorcycles, all-terrain vehicles, karts, side-by-side vehicles, light electric vehicles and self-balancing vehicles, snowmobiles etc.) when product falls under machinery directive. These products are used for leisure activities (often exercised in motor sports clubs), for urban motorized transport of person by youngsters and adults and by adults only for utility works (such as agricultural, forestry or rescue).

The European Commission has determined that off-road vehicles, with combustion engines, fall within the scope of the revised Machinery Directive 2006/42/EC (with the exception of those exclusively intended for competition) since they are not covered by Directive 2002/24/EC² relating to the type-approval of two or three-wheel motor vehicles (as they are not intended to travel on roads).

Due to massive extra-European imports of so-called "mini-motorbikes" and "mini-quads/ATVs" of low cost and quality, which fall within the scope of the Machinery directive, there has been an increase in the number of accidents due to their poor design and construction and the lack of information given to the users. This situation has led the European Commission to encourage an increase in market surveillance activities concerning these products.

Light electric vehicles and self-balancing vehicles, as a non-stop growing market, have shown cases of accidents due to poor design and dangerously misused of products by consumers that led manufacturers and consumers association to work on having safer products and promote a safe use of these articles.

Social and safety factors

The sudden expansion of the market of mini-vehicles was realized outside the traditional motorcycle and quad/ATVs distribution channels. In various European Member States, the public authorities were rightly concerned that the places and manner in which the off-road motorized vehicles were used cause nuisance and in some cases intimidation and accidents. Consumers received often not the correct information on the usage limitations and were seldom adequately instructed and trained once the product was sold. (in many cases internet-sales).

The reduction of the risks which can result from using off-road motorized vehicles and light electric vehicles and self-balancing vehicles is of particular importance because some of these products are used by youngsters and children or intended for the latter. Children and youngsters constitute a vulnerable group within society, which requires, among other aspects such as adequate information and training, a high level of protection identical in all CEN member countries.

¹ DIRECTIVE 2002/24/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 March 2002 relating to the type-approval of two or three-wheel motor vehicles and repealing Council Directive 92/61/EEC (OJ L 124, 9.5.2002, p. 1)

² Article 1d of Directive 2002/24/EC excludes: "vehicles intended for use in competition, on roads or in off-road conditions";

Industry initiative and economical factors

Since decades, the European industry players (and traditional US and Japan manufacturers) are involved in the production and distribution of these off-road motorized vehicles and light electric vehicles and self-balancing vehicles, which are distributed mainly in Europe and in the United States without safety related problems reported either by public authorities or by consumer organizations. The members of ACEM (the *European Motorcycle Manufacturers' Association* – www.acembike.org) and ATVEA (the *All Terrain Vehicle Industry European Association* – www.atvea.org) develop and produce vehicles according to a long-established experience acquired with on-road type-approved products. This know-how has been gathered and reported in an internal industry standard followed by members of ACEM and ATVEA. The extra-European imports of low-cost and low-quality off-road motorized vehicles create a situation of severe safety and environmental concerns for consumers in addition to the unfair competition they generate for manufacturers investing heavily in proper distribution channels and instructions/training mechanisms.

Legal factors

In the previous Machinery Directive 98/37/EC³ certain categories of “means of transport”⁴ were excluded from the scope. After a number of accidents with mini-motorbikes in 2005 and 2006 the European Commission communicated⁵ to the Member States that off-road vehicles like mini-motorbikes and quads are subject to the Machinery Directive and made an end to the general opinion that these vehicles are excluded from the Machinery Directive. The establishment of TC 354 was a direct result of that communication by the EC.

Directive 98/37/EC was replaced by Directive 2006/46/EC⁶ on 29 December 2009. Also in the scope of this Directive an exemption for certain categories of “means of transport” was made, but stricter defined than before:

- agricultural and forestry tractors for the risks covered by Directive 2003/37/EC, with the exclusion of machinery mounted on these vehicles,
- motor vehicles and their trailers covered by Council Directive 70/156/EEC of 6 February 1970 on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers (13), with the exclusion of machinery mounted on these vehicles,
- vehicles covered by Directive 2002/24/EC of the European Parliament and of the Council of 18 March 2002 relating to the type-approval of two or three-wheel motor vehicles (14), with the exclusion of machinery mounted on these vehicles,
- motor vehicles exclusively intended for competition, and
- means of transport by air, on water and on rail networks with the exclusion of machinery mounted on these means of transport;

³ Directive 98/37/EC of the European Parliament and of the Council of 22 June 1998 on the approximation of the laws of the Member States relating to machinery

⁴ Means of transport, i.e. vehicles and their trailers intended solely for transporting passengers by air or on road, rail or water networks, as well as means of transport in so far as such means are designed for transporting goods by air, on public road or rail networks or on water. Vehicles used in the mineral extraction industry shall not be excluded,

⁵ Press release IP/06/965 Brussels, 10th July 2006 Commission urges Member States to take action on mini-motorbikes

⁶ Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC (recast) (Text with EEA relevance)

This means that since 2010 all means of land transport that don't satisfy one of the motor-vehicle Directives, are subject to the Machinery Directive 2006/46/EC

Directive 2002/24/EC, mentioned under the exemptions from the scope of the current Machinery Directive will be replaced by Regulation (EU) No 168/2013⁷ on 1 January 2016. Explicitly excluded from the scope of this regulation and thus subject to the Machinery Directive are (amongst others):

- vehicles with a maximum design speed not exceeding 6 km/h;
- vehicles exclusively intended for use by the physically handicapped;
- vehicles exclusively intended for pedestrian control;
- vehicles primarily intended for off-road use and designed to travel on unpaved surfaces;
- pedal cycles with pedal assistance which are equipped with an auxiliary electric motor having a maximum continuous rated power of less than or equal to 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;
- self-balancing vehicles;
- vehicles not equipped with at least one seating position;
- vehicles equipped with any seating position of the driver or rider having an R-point height \leq 540 mm in case of categories L1e, L3e and L4e or \leq 400 mm in case of categories L2e, L5e, L6e and L7e.

Product bans

Concerns have been expressed by various stakeholders (public authorities, consumers and manufacturers) regarding the safety of all ride-on, off-road and light electric vehicles and self-balancing vehicles which are put on the European market. A significant number of notifications on RAPEX were reported in 2005, 2006 and 2007.

It is felt that European Standards dealing with such products will increase safety levels, allow manufacturers to comply with European legislation, facilitate the work of market surveillance authorities, as well as ensure fair competition in the European marketplace.

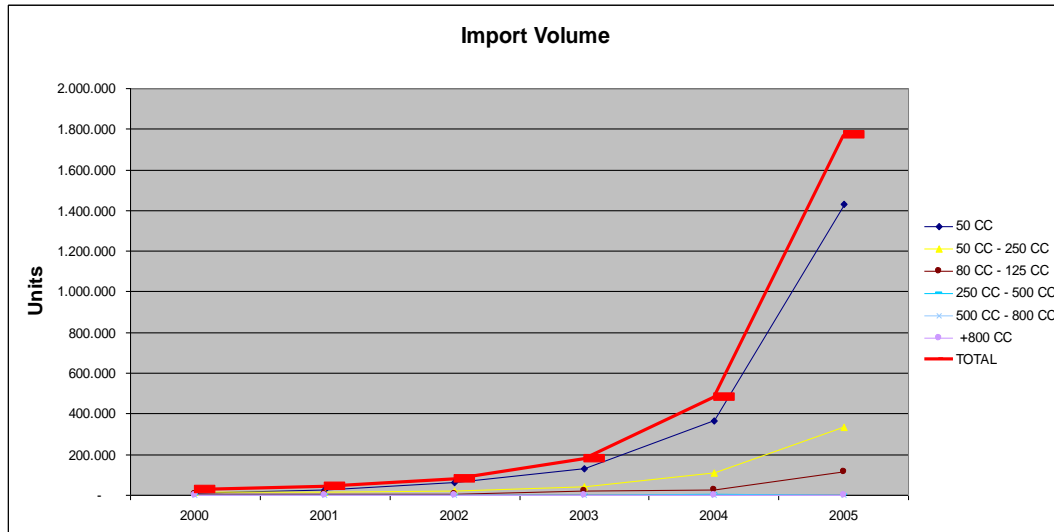
1.2 Quantitative Indicators of the Business Environment

The following list of quantitative indicators describes the business environment in order to provide adequate information to support actions of the CEN/TC:

Ride-on, Off-road vehicles and light electric vehicles and self-balancing vehicles are not registered so that there does not exist official statistics at Community level. However both Industry Associations ACEM and ATVEA have estimated the overall volumes of the products distributed by their members in Europe. For what concerns the PTWs, they represent a steadily growing volume of about 100.000 units yearly. As regards ATVs, this has represented approximately a market of 35 000 units sold/year in 2005. The overall ATV market has expanded over the past few years and is now stable. Several other product categories might reach a annual volume of about 30.000 units all together.

⁷ 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 Text with EEA relevance

The extra-EU imports of ride-on, mini-off-road vehicles have been estimated through Eurostat database. In terms of volumes one can estimate the current volume in the range of 1,5 million units (15 times more than in 2002).



Overall, the annual market of ride-on, off-road motorized vehicles represents an estimated volume of more than 2 million units. However, extra-Community trade is important and in deficit. Indeed the EU imports more ride-on off road vehicles than it does export. These imports stem principally from Southeast Asia and North America.

Offer

In 2010, major Powered Two-Wheeler manufacturers operating in the European Union are members of ACEM and represent 20 different very popular commercial brands. The motorcycle industry business in Europe is worth Euro 10 billion to the European economy and employs 200,000 people covering all member states. The current production volume in Europe (mainly in Italy, Spain, France, Germany and the United Kingdom) amounts 1.5 million PTWs yearly. For comparison purpose the annual market and the circulating park of registered and type-approved PTWs in the EU 27 represent 2,3 million and 30 million vehicles respectively.

All major all-terrain vehicle manufacturers operating in the European Union are members of ATVEA and represent 10 different very popular commercial brands. The all-terrain vehicle industry business in Europe is worth over Euro 1 billion to the European economy. For comparison purpose the annual market of registered/type-approved and non-registered ATVs in Europe represented 90.000 and 35.000 vehicles respectively in 2005.

It should be mentioned that ATVEA members are also involved in power two-wheeler business.

The industry of other ride on, off-road motorized vehicles and other off-road motorized vehicles and light electric vehicles and self-balancing vehicles is more fractioned and the profile of the market more difficult to establish.

Demand

The demand of off-road motorized vehicles steadily grows since many years pushed by their increased popularity as urban mobility tools (especially for the powered two and tree-wheelers) and fashionable recreational vehicles.

Contrary to type-approved motorized vehicles whose access is regulated through European and national licensing provisions, the access to off-road vehicles is subject of consumer guidance provided by the manufacturers and their commercial networks, by the sport clubs and federations and public and private consumer organizations.

2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC

In 2000, under the impulse of the Consumer Safety Commission, France started a standardization process of ATVs at national level with the aims to better define the products and provide the different categories of end users with the appropriate advice to use the product safely.

Since 2005, the Spanish Consumer Affairs authorities place mini-ride-on, off-road vehicles under particular scrutiny and requested the *Laboratorio Maquinas y Mecanismo* to perform technical tests to check their compliance to the Machinery directive. "Thanks to this country's experience with mini-vehicles failing to comply, and because of the initiatives taken by Spain in this sector, the Spanish commission in ADCO raise the possibility, and offer to set themselves up to promote a European C type harmonized standard to regulate the requirements to be met by mini vehicles marketed in the EU under CE marking.

The CEN/TC 354 has gathered these initiatives and experiences with the aim to set the first European standards for each single category of off-road motorized vehicles such as:

- Motorbikes (motocross, dirt-bikes, pit-bikes, play-crossers, pocket bikes, mini-motorbikes, ...),
- Quads (All Terrain Vehicles, ATVs, Mini-quads)
- Go-karts,

To which, new products will have to be added such as:

- Side-by-Side vehicles,
- light electric vehicles and self-balancing vehicles (e.g.: two-wheeled self-balancing battery-powered electric vehicle, electrically-powered scooters, motorized three-wheeled cambering vehicle, etc...)
- Snow-mobiles,
- etc.

Other categories of vehicles are also to be covered by standard as they are used as personal vehicles for urban transportation but other CEN committees may be more appropriate to cover such products: CEN/TC 333 "Cycles" and CEN/TC 301 "Roads vehicles" Standardization of these products will have to be considered with close cooperation between TCs:

- electric recumbent velomobiles,
- electric cycles primarily intended for off-road use and designed to travel on unpaved surfaces

The whole standardization work will not be performed for the benefit of one regional industry but with a view to increase the safety of all the European citizens, and especially youngsters and children by setting the minimum safety requirements of the products and by improving the consumer information.

By drafting documents recognized and applicable in all CEN members' countries, giving advice to manufacturers, importers and distributors, the standardization work will minimize the different interpretations in case of market surveillance by the public authorities and create a fair competition environment among worldwide manufacturers who operate on the European market including the EEA countries.

3 PARTICIPATION IN THE CEN/TC 354

All the CEN national members are entitled to nominate delegates to CEN Technical Committees and experts to Working Groups, ensuring a balance of all interested parties. Participation as observers of recognized European or international organizations is also possible under certain conditions. To participate in the activities of this CEN/TC, please contact the national standards organization in your country.

4 OBJECTIVES OF THE CEN/TC 354 AND STRATEGIES FOR THEIR ACHIEVEMENT

4.1 Defined objectives of the CEN/TC 354

The objectives of CEN TC 354 are:

- To reduce the risks which can result from using off-road motorized vehicles and light electric vehicles and self-balancing vehicles thanks to the setting of minimum technical safety requirements;
- To offer the consumers the necessary harmonized information via standards of the specifications relating to the marking of the vehicles and the detailed instructions such as:
 - Usage of the products (riding skills and behaviour, riding place and environmental recommendations),
 - Access to them (age and training recommendations),
 - Protective personal equipments to wear,
 - The final assembly and adjustment of the products (if relevant),
 - The checks and maintenance program
 - Noise and vibration levels
 - Respect to Machinery and EMC Directive
 - Minimum quality and safety requirements
 - Respect of patented IPs
- To set a fair competition environment among worldwide manufacturers who operate on the European market including the EEA countries, thanks to the harmonization of the technical requirements and information given to the consumers.

4.2 Identified strategies to achieve the CEN/TC.s defined objectives

It has been decided to initiate work immediately on standardization in the field of "Motorbikes", because of some accidents and a study carried out by Spain public authorities. This work was carried out in "Working Group 1 – "Motorbikes". Starting such work immediately was to allow the adoption of a European Standard in support to the revised Machinery directive 2006/42/EC prior to its enforcement in Europe (29th December 2009). The published standard was approved by national representatives and by CEN consultant with provision that experts start immediately its revision to sort out pending issues such as speed limit related to age of users.

- EN 16029:2012 "Ride-on, motorized vehicles intended for the transportation of persons and not intended for use on public roads - Single-track two-wheel motor vehicles - Safety requirements and test methods "

A "Working Group 2 – "All-terrain vehicles and side-by-side" benefiting from the standardization works already developed at national level in France has immediately follow due to the same needs

for consumers, and manufacturers. Standard on ATVS (EN 15597:2011) was published on 2012 and working group 2 started working on standard to cover side-by-side vehicles on 2012.

- EN 15597:2011 "All terrain vehicles (ATVs - Quads) - Safety requirements and test methods "
- WI 00354004 "Utility Vehicles - Safety requirements and test methods"

The existing similarities among both categories of products (Powered Two-Wheelers and ATVs) in terms of product technology, manufacturing companies, essential safety requirements, common deadlines and potential customers, will require the development of consistent and converging parts of the standards through regular coordination activities/checks to be set up among WG1 and WG2 under the monitoring of TC 354.

Go-kart's and tracks was handed up to "Working Group 3 – Go-karts", which has published its first standard in 2013 and will start working on safety requirements for tracks.

- EN 16230-1 "Leisure karts - Part 1: Safety requirements and test methods for karts "
- prEN 16230-2 "Leisure karts - Part 2: Safety requirements for tracks "

Other working groups will have to be set up according to the needs of the concerned industries and could be:

"Working Group 4 – light electric vehicles and self-balancing vehicles", which will have to work is intended for standardization of light motorized vehicle enterly or partly powered by electricity.

"Working Group 5 – Snowmobiles",

Etc.

4.3 Environmental aspects

Considering the environmental aspects associated with the work of the CEN/TC, the specific relationship has not been defined yet.

For each work item, the relevance of environmental issues will be checked and addressed according to CEN Guide 4 (available in BOSS). Key environmental issues associated with the scope of the work covered by the CEN/TC are "man-made destabilizing or disruptive events", safety related (e.g. Seveso II) or security related (e.g. chemical and bio-chemical terrorism).

In all New Work Item Proposals (NWIPs) and related resolutions, these issues will be taken into account in cooperation with CEN/EHD.

5 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE CEN/TC 354 WORK PROGRAMME

The following factors might influence the proper execution of the work program.

Positive impact

- The capitalized experience of manufacturers with on-road type-approved vehicles;
- The long-established tradition of use of ride-on, off-road motorized vehicles by thousand of customers, particularly in the case of powered two-wheelers;
- The experience acquired on non-European market places such as North-America, especially for ATVs, on light electric vehicles and self-balancing vehicles (e.g. self-balancing vehicle)s and snowmobiles;

Negative impact

- The lack of statistical data on accidents and information on the circumstances under which these have happened;
- In the field of safety, there is a risk that specific standards are not enough known or sufficiently recognized by national inspection authorities which often go on using conflicting national systems which they are used to apply, in some cases because they consider that the harmonized standards do not completely fulfill the essential requirements of the Machinery directive.