Input to revision Outdoor Noise Directive 2000/14/EC

3 May 2019

As CEMA, the European agricultural machinery association, we are glad to receive the opportunity to provide input as part of the revision of the Outdoor Noise Directive 2000/14/EC. The only agricultural machinery covered are the wood chippers and shredders which are currently part of article 13 and therefore face mandatory labelling. It needs to be stressed that CEMA only represents the manufacturers of professional chippers and shredders. These shredders have separate combustion engines or are mounted on a truck or tractor with an engine power up to 300 – 400 kW. Seldomly, they are used in private gardens and shredders used in gardens are completely different products.

Mandatory label only

CEMA strongly believes that article 13 with mandatory labelling only is the right place and that the optimal way to deal with outdoor noise emissions from chippers and shredders. Several reasons in favour of this position and against mandatory noise limits can be found below:

- There is a large variety of wood chippers and shredders using different chipping technologies which all have specific characteristics and advantages. All different types of chippers and shredders serve different purposes. A label provides end-users the opportunity to compare machines with similar characteristics. However, setting general noise limits could make it possible that systems that emit more noise are excluded from the market, while these systems can have major other advantages for end-users such as being suitable for bigger input materials or being faster.
  - One example is systems with worms which are slow rotating systems. These types of systems make less noise than faster rotating systems. However, the speed of those systems is significantly lower, which makes worm systems not suitable for many applications and the more professional ones in particular.

- Next to differences in chipping technologies there are also differences in material input that makes it difficult to set uniform noise limits. Certain chippers and shredders are suitable for smaller and softer materials and can meet certain noise limits. Other systems with a similar power range could possibly emit more noise, but are also suitable for larger and tougher branches. Similar differences exist for the power source where certain machines are propelled by a tractor, where others are powered by their own engine. Noise emissions by machines propelled by tractors differ also significantly depending on the tractor used. It is therefore very difficult to set limits being feasible for all different machines and not excluding certain options regarding power sources or limiting the size of the input material.
The last years there has been an increased attention to the safety of chippers and shredders. New requirements are being introduced to increase safety which meant a longer distance needs to be overcome by the input materials. This required increased air power or longer funnels. These new systems are safer, but also emit more noise. Introducing noise limits would force manufacturers to combine safety and noise requirement resulting in significant problems and possibly a trade-off involving safety.

For smaller chippers and shredders reducing the noise emissions is very costly considering the low price of the product and might not be proportional to the reduction in noise. This would harm manufacturer and end-users.

Chippers and shredders covered by this directive are mobile machines that will be used at different places outdoors. This will mostly be done for a short period at each place where it is operated and often these places are far from residential areas. The annoyance of the products is therefore limited in time. Introducing limits which only allows for less noisy, but slower systems will only increase the time of annoyance.

A mandatory label provides the opportunity for customers to compare similar chippers and shredders based on noise limits. It also provides an incentive for manufacturers to provide less noise emitting machines. Therefore, CEMA believes it is the right solution to address noise emissions from chippers and shredders.

Authorities already have the opportunity to limit the annoyance of chippers and shredders by setting use requirements. For example, municipalities can set limits with respect to the hours the machines can be used or what type of machines can be used. This is more effective than setting limits on all machines on the EU market.

Next to the general position there are several other points regarding the possible revision that CEMA wants to stress.

The market for professional wood chippers and shredders is mainly served by small and medium sized European companies. These manufacturers have a limited engineering capacity and face more problems complying with European legislation.

The most relevant emission of noise by chippers and shredders is coming as process noise. The machines itself don’t emit a lot of noise, but noise levels increase when material is put in the machines. Process noise differs greatly depending on the input in the chippers and shredders. Therefore, CEMA is convinced that the optimal solution is to keep only the mandatory noise labelling for chippers and shredders. CEMA also supports the removal of shredders and chippers with an inlet >250 mm from the directive as they are only for forestry and industrial use and therefore cause less annoyance in residential areas.
Change of test code necessary

The ODELIA report suggest the use of the test code from EN 13683. However, this test code is more appropriate for smaller equipment. It is also confirmed in a position paper from the European Commission from 2001\(^1\), that the noise test code in the current Outdoor Noise Directive should only apply to garden shredders/chippers. Consequently, CEMA believes that for professional equipment there should be a reference to EN 13525 which is currently being revised. Considering this revision it is recommended to coordinate actions with the CEN working group revising EN 13525.

Comments on ODELIA limits

In the ODELIA report certain limits for chippers and shredders are proposed. These are 109 dB for <5kW and 119 dB for >5kW. Odelia did not take into account the differentiation between electric and petrol engine driven shredders below 5 kW. The proposed limit of 109 dB is not considered feasible for combustion engine powered machines. It also makes no sense to limit the larger machines (>25 kW) because they should not be mentioned in the scope as mentioned before. These machines are often used by professionals in for example forestry applications. These locations are far from residential areas and robust, safe and fast machines are essential. Therefore, the noise limits for these machines should be higher. Moreover, the proposed limits are only realistic when the existing test method of EN13525 is used.

Conclusions

In short, a mandatory noise label will be the most optimal measure to reduce noise emissions from wood chippers and shredders according to CEMA. Noise limits have severe drawbacks as it can exclude certain types of machine with necessary characteristics for the end-user from the market and can result in significant problems considering safety requirements. A label still allows for end-users to compare the noise emissions of similar products and gives manufacturers incentives to produce machines that emit less noise. Additionally, the test code from EN 13525 should be allowed for professional equipment.

CEMA

CEMA is the European association representing the agricultural machinery industry. For 50 years CEMA has acted as a network of national associations and provides services, advice and a common European industry view on relevant topics. The industry represented by CEMA includes 4,500 manufacturers of agricultural equipment employing directly 135,000 persons and indirectly in the distribution and service network another 125,000 persons. The companies are mainly small and medium-sized manufacturers according to the EU definition and in 2011 had a total turnover of 26 billion euro.

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