**REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND TO THE COUNCIL**

**on the implementation and administration of Directive 2000/14/EC of the European Parliament and of the Council of 8 May 2000 on the approximation of the laws of the Member States relating to the noise emission in the environment by equipment for use outdoors**

1. **Introduction**

Directive 2000/14/EC on outdoor noise emission[[1]](#footnote-2) (“the Directive”) was adopted on 8 May 2000 and became applicable on 3 January 2002. The EU legal framework relating to noise emission by outdoor equipment was introduced by merging seven specific product directives and two directives on test procedures[[2]](#footnote-3).

Article 20 of the Directive requires the Commission to submit a report to the European Parliament and to the Council concerning the Commission’s experience in the implementation and administration of the Directive. After having held all the necessary consultations, in particular with the Committee established by Article 18 of the Directive, the Commission is required to present its conclusions and, where appropriate, any amendment to this Directive.

On this basis, the Commission has evaluated the Directive during its operational time. The evaluation has assessed the performance of the Directive on the basis of its effectiveness in meeting its objectives, its efficiency (with a focus on examining the regulatory – including administrative – costs and benefits) and potential for simplification and improvement, its coherence with other EU legislation, its relevance versus stakeholders’ needs and its EU added value.

In support of the evaluation, different data sources were used, various Member States and stakeholders’ consultations in the relevant working parties were carried out, as well as several studies were undertaken, to collect updated information on the performance of equipment in the scope and to explore the need and possibility for revision:

* the “*Study on the experience in the implementation and administration of Directive 2000/14/EC relating to the noise emission in the environment by equipment for use outdoors*” (the “NOMEVAL” study)[[3]](#footnote-4) in 2007;
* the “*Impact assessment on possible policy options for reviewing the Outdoor Equipment Noise Directive*” (the “ARCADIS” study)[[4]](#footnote-5) in 2009;
* the “*Study on the merger of the Directive on noise from outdoor equipment, 2000/14/EC, with the Machinery Directive, 2006/42/EC*” (the “CEPS study”)[[5]](#footnote-6) in 2013;
* the “*Study on the suitability of the current scope and limit values of Directive 2000/14/EC relating to the noise emission in the environment by equipment for use outdoors*” (the “ODELIA” study)[[6]](#footnote-7) in 2015-2016;
* the “*Supporting study for an evaluation*[[7]](#footnote-8) *and impact assessment*[[8]](#footnote-9) *of Directive 2000/14/EC on noise emission by outdoor equipment*” (the “VVA study”) in 2017-2018.

The results of the evaluation are drawn up in a specific Staff Working Document (“SWD”) that accompanies this Report.

1. **The Directive’s aim and main provisions**

The Directive establishes the legal framework to harmonise rules and procedures related to noise emission in the environment by equipment for use outdoors placed in the EU market. It aims to protect human health and well-being of citizens as well as to protect the environment, by reducing noise emission by equipment for use outdoors, and to contribute to the smooth functioning of the internal market, by harmonising requirements for outdoor equipment with respect to noise emission in order to prevent obstacles to the free movement of such equipment.

The main objectives of the Directive are:

* ensuring the free movement of outdoor equipment in the scope within the EU internal market;
* reducing permissible noise levels for such equipment in order to protect the health and well-being of citizens as well as to protect the environment;
* providing information to the public on the noise emitted by such equipment, thereby promoting less noisy equipment and improving customer choice.

The Directive sets out detailed noise measurement methods and test codes (by referring to European and international standards); harmonised noise limits for a definite list of equipment; conformity assessment procedures; and marking requirements.

The Directive covers 57 types of equipment used outdoors defined in Annex I, out of which it establishes noise limits for 22 types (Article 12) and requires a specific noise marking for all equipment types (Article 13). Such equipment can be grouped into eight clusters:

I. Cleaning equipment

II. Construction equipment

III. Gardening equipment

IV. Loading and lifting equipment

V. Power generators and cooling equipment

VI. Pumping and suction equipment

VII. Snowmobiles and snow groomers

VIII. Waste collection, processing and recycling

The Directive covers equipment used by both professional and private users. In the cleaning, construction, loading and lifting equipment, power generators and cooling equipment, and waste collection, processing and recycling categories, the majority of equipment is used by professional users. In gardening and pumping and suction equipment categories all types are used by both professional and private users. Typically, larger and more expensive equipment is used by professionals.

1. **Transposition and implementation**

In order to enable achieving the objectives, the Directive harmonised certain aspects of Member States’ laws, regulations and administrative provisions relating to noise emissions by outdoor equipment. Thus, the provisions of the Directive, after the adoption on 8 May 2000, had to be transposed and implemented by Member States: the necessary national legal provisions were due on 3 July 2001, to be applied from 3 January 2002.

The Directive has been fully and consistently transposed and implemented across the Member States. No significant problems have been detected in the transposition of the legal provisions of the Directive into national legislations, nor in its implementation. This is in particular the case with respect to the provisions on placing on the market and the related obligations for manufacturers and authorised representatives; Member States’ role and responsibilities; conformity assessment procedures and bodies; and collection of noise data.

On the contrary, some differences have been found with respect to market surveillance, particularly the extent of and monitoring of activities across Member States. This situation mostly depends on the lack of sufficient resources allocated to this specific area as compared to other regulated areas by EU harmonisation legislation in the internal market.

Yet, no infringement cases against Member States have been opened. The procedure to deal with non-compliance of equipment laid down in Article 9 of the Directive was not applied either.

The implementation and management of the Directive is supported by well-established sectorial working parties, involving representatives of all the relevant actors at EU level: Member States, notified bodies, standardisers and organisations of stakeholders from industry, consumers, environmental associations, etc.:

* the Outdoor Noise Directive Committee established in Article 18 of the Directive (the “OND Committee”);
* the Outdoor Noise Directive Working Group of the Committee (the “OND WG”), now converted into the Commission’s expert group on outdoor noise emission[[9]](#footnote-10);
* the Administrative Co-operation Group of market surveillance authorities in the field of the Outdoor Noise Directive (the “OND AdCo”); and
* the European Co-ordination Group of Notified Bodies in the field of the Outdoor Noise Directive (the “OND NB” or “Noise Body”).

In order to help manufacturers and other relevant actors to comply with the obligations of Article 16 of the Directive concerning collection of noise data, the Commission built-up and manages the “NOISE Application”, a database with information on the EC declarations of conformity of equipment placed on the market.

1. **Key results of the evaluation**

The report reflects the main findings of the evaluation of the Outdoor Noise Directive 2000/14/EC. The detail of the evaluation is presented in the Staff Working Document (“SWD”) that accompanies this Report.

* 1. ***Effectiveness of the Directive***

In terms of the effectiveness of the Directive to meet its objectives, especially the reduction of noise emission levels of outdoor equipment in the scope, the evaluation found that such levels have dropped over the last 20 years. Nevertheless, several concerned equipment are still above the sound power level considered dangerous to hearing and general health (estimated at 90 dB), which indicates that there is room for improvement.

Consumer behaviour also impacted the effectiveness of the Directive. A proactive attitude and more awareness could have led consumers to prefer quieter equipment pushing the market to dismiss more noisy versions. The legal provisions on their own proved insufficient to motivate consumers to buy less noisy equipment. Non-professional purchasers and users of the equipment under the scope of the Directive still lack knowledge and awareness about noise emissions, and the noise marking alone is not enough to drive consumer choice.

Given the low market demand for quieter equipment, in the absence of the Directive, manufacturers would direct R&D investment towards those product characteristics that are more attractive to customers (e.g. performance, safety, energy efficiency). Even if technological developments could have driven improvements in noise emissions in any case (as for example for electric engines), the Directive forced manufacturers to invest resources in the research and development of special designs, mechanisms and strategies to reduce noise emissions of outdoor equipment. This is in particular the case of equipment subject to mandatory noise limits (Article 12), while for equipment subject to noise marking only (Article 13), the Directive was not sufficient to encourage manufacturers to develop less noisy products to the same degree.

In addition, shortcomings in market surveillance, mostly dependent on the lack of sufficient resources allocated to this specific area, also undermined the ability of the Directive to comply with its objectives. Nevertheless, although the Directive did not reach its full potential, citizens exposed to noise emission from outdoor equipment are still better protected as compared to how they would have been without the Directive.

With respect to ensuring an internal market for outdoor equipment by preventing obstacles to the free movement of such equipment, the Directive simplified the pre-existing legal framework. This brought greater clarity and improved the activity of all stakeholders. In addition, the Directive prevented the emergence of different regulations at national level that may have hindered the intra-EU circulation of the concerned equipment.

* 1. ***Efficiency of the Directive***

As regards efficiency in the implementation of the Directive, different types of costs and benefits have been identified in the evaluation. Among the benefits brought by the Directive, the health and environmental benefits are the most obvious and significant. On the contrary, while the stakeholders observe the positive impact of ensuring harmonised regulation within the EU and express some concern over the effect of stricter noise limits inside than outside the EU, they do not perceive significant impact on their business in terms of internal or external trade.

Covering many different types of equipment and versions of the same type, the classification and grouping of products currently applied might cause difficulties for manufacturers in understanding whether a product is actually covered by the Directive.

The conformity assessment procedures foreseen by the Directive address adequately the different needs of the manufacturers, although the lack of a possibility of an internal control procedure for certification (“self-assessment”) for equipment under Article 12 is seen as a constraint by manufacturers, and as a guarantee by consumers and market surveillance authorities. Notified bodies that are competent to perform the requested procedures are not established in some countries, which represents a barrier for manufacturers that have to seek the needed expertise in the other Member States.

Conformity assessment costs are identified as one of the most significant costs to the manufacturers. In particular, such costs are increased for companies that have to test separately for both the Directive and other EU legislation, more commonly the Machinery Directive. Nevertheless, the need to have adequate conformity assessment procedures must be related to the still insufficient market surveillance, in the OND sector as in others as a horizontal issue, as identified in the “Supporting Study” and other sources.

The current test codes and measurement methods for the majority of the equipment covered by the Directive are not in line with technological development and would need to be revised. Moreover, the lack of a clear and uniform procedure to determine the uncertainty of measurements in the Directive may cause inconsistency between guaranteed power levels depending on the subject performing the measurement.

The “NOISE Application” database, while not particularly costly in terms of monetary spending, presents significant operational limitations (incorrect or incomplete data registered, different types of equipment not clearly defined, missing technical parameters for equipment on the market, etc.). Consequently, the majority of the stakeholders considered the tool as burdensome and not entirely reliable in inputs and outputs.

Research and development is another expensive element of the Directive, with the estimated annual costs of approximately EUR 40 million to EUR 120 million. However, it should be noted that while undoubtedly a consequence of the Directive, increased R&D cost should not be seen as a purely negative element, for the objective benefits in terms of more performant equipment.

* 1. ***Relevance of the Directive***

About the relevance of the Directive, the evaluation confirmed that its original objectives are as valid today as when it was first proposed. In particular, the objectives of ensuring the free movement of outdoor equipment, reducing permissible noise levels to protect the health and well-being of citizens as well as to protect the environment, and to provide information to the public on such noise emissions, continue to be fully relevant. When the Directive came into force, it filled an existing gap concerning the protection of citizens exposed to noise emissions produced by outdoor equipment operated by other users, private or professional.

According to the information collected through different sources during the years of operation of the Directive – including the studies carried out, the stakeholder consultations and the “NOISE Application” database – it is estimated that for equipment under Article 12, the Directive produced a reduction in noise emission levels expressed in sound power level between 2 and 3 dB[[10]](#footnote-11).

Twenty years after the introduction of the Directive, the growing urbanisation and the subsequent increase in construction of road and building infrastructures has led to the use of more outdoor equipment and therefore also increased noise production. Especially consumer equipment has undergone a massive increase in numbers thanks to low-cost products available on the internet and in supermarkets.

This increase in the number of equipment on the market and in use has had a counterbalancing impact on the positive effect of the Directive in reducing noise emission levels, renewing the need for pressure on the manufacturers to produce less noisy equipment. Such pressure could come from two sources: the market or the legislation. In the absence of market demand for quieter equipment, it is still up to the legislator to set limits to noise emissions for the outdoor equipment safeguarding wellbeing and health of citizens.

With regard to the industry, while the Directive addressed the need for harmonisation and legal certainty across the EU, from an international trade perspective, the Directive and the stricter limits imposed did not bring significant advantages nor helped to comply with foreign legislation. However, almost none of the stakeholders would be in favour of repealing the Directive, given the potential risk of the development of multiple national standards.

An aspect that some stakeholders considered not fully in line with the current needs of the industry is the third-party conformity assessment. They argue that, when the Directive came into force companies were missing the specific knowledge required to measure noise emissions, and the task of performing the conformity assessment was entrusted to notified bodies. Today, many manufacturers have the skills to perform the measurements themselves and could rely on a self-assessment instead of the third-party conformity assessment.

* 1. ***Coherence of the Directive***

In terms of coherence and complementarity of the Directive with other EU legislation, some problems were identified for manufacturers, stemming from differing requirements with other legislative acts applying to the same machinery. In particular, differences in requirements with the Machinery Directive 2006/42/EC mean that some equipment must be tested twice, while the requirements of the Non-Road Mobile Machinery Regulation (EU) 2016/1628 on emissions make it difficult for some equipment to comply with both. The lack of uncertainty measurement in the Directive leaves a variability of guaranteed power levels, depending on the subject performing the measurement.

Nonetheless, the evaluation recognised that the Directive is a coherent part of a wider, comprehensive network of environmental noise legislation in the EU.

In certain Member States, the Directive is supported by voluntary national incentive schemes addressed to increase awareness of noise levels and the value of producing and buying quieter equipment.

In terms of external coherence and complementarity of the Directive with non-EU national or international legislation, no major difficulties were identified in regard to the relationship between the OND and extra-EU legislation.

* 1. ***EU added value of the Directive***

Concerning the EU added value of the Directive and the results achieved in relation to the strategic objectives, despite its limitations, the Directive achieved a number of key results that would not have happened without it. Therefore, an EU approach remains the most appropriate response and is more likely to achieve the objectives set by the Directive than the national approaches.

In fact, the Directive prevented the proliferation of different national regulations, and there is the perception that without it, new national regulations might have emerged. Due to the Directive’s requirements, noise levels decreased in the past twenty years despite the lack of market demand.

Even though current noise limits and measuring methods may not be in line with state of the art, the Directive still obliges manufacturers to balance the research on higher performance equipment with the Directive’s requirement regarding noise emissions. Without the Directive, given the absence of market pressure by consumers, it is likely that producers of outdoor equipment would neglect this aspect in favour of other features. For all these reasons, none of the stakeholders consulted was in favour of repealing the Directive.

1. **Conclusions and way forward**

Taking into account all the above, the outcome of the evaluation is positive: the overall conclusion is that the Directive is generally considered as effective, efficient, relevant and coherent, and has EU added value. In fact, the Directive simplified the existing legislative framework, thus bringing more clarity for all stakeholders. The Directive effectively contributed to reduce noise emission by outdoor equipment, and ensured that manufacturers invest resources in the research and development of special designs, mechanisms and strategies to reduce noise emissions of outdoor equipment. Given the lack of market demand for quieter equipment and the scarcity of national incentives, the Directive was and still is the primary force driving noise reduction for this type of equipment.

Nevertheless, there are a number of critical aspects that affected the operation of the Directive, which may lead to the possible enactement of the empowerments for delegated acts foreseen in the Directive or a need for a possible revision. This concerns in particular the lack of adaptation to the technical progress of core elements of the Directive:

* the scope and in particular the lists of outdoor equipment covered and their definitions, as well as the extent of the requirements for each type of equipment (subject to noise limits or to noise marking only).
* the noise limits for specific types of outdoor equipment, on the basis of the available information on their technical and economic feasibility, within the overall objective of continued reduction of noise emission at source.
* the current test codes and measurement methods for the majority of the equipment covered by the Directive are not in line with technological development and would need to be revised. According to Article 18 (a) of the OND (amended by Regulation 2019/1243) the Commission is empowered to adopt delegated acts in accordance with Article 18b amending Annex III to adapt to technical progress the methods of measurement of airborne noise that shall be used for the determination of the sound power levels of equipment covered by the Directive. The Commission has not yet exercised its right  to amend Annex III and an adaptation to the technological development is needed[[11]](#footnote-12).
* the relevant conformity assessment procedures, adapting them to possible changes in the scope and in noise limits, considering also the relevance and impact of different solutions based on “self-assessment” (procedures based on internal control) and “third party” intervention (procedures requiring the participation of a notified body), as well as the relationship with the still current gaps in market surveillance.
* the obligation of collection of noise data and the related tool to manage such obligation, taking into account the problems raised from the operation and effectiveness of the “NOISE Application” database; and
* the alignment to the New Legislative Framework, with the relevant provisions from Decision No 768/2008/EC on economic operators, market surveillance, notified bodies, conformity assessment etc.

Also, insufficient market surveillance is a factor undermining the effectiveness of the Directive in its main objectives, especially in terms of legal and technical compliance of products placed on the EU market, as well as competitiveness of EU economic operators.

With respect to this latter concern, the Commission will intensify its coordination efforts through the different sectorial working parties (Committee and expert group) in support of the operation of the Directive, in order to ensure agreed and harmonised approaches in implementing and enforcing the legislation, and to provide adequate guidance to stakeholders. In particular, the Commission will continue to carefully monitor the enforcement of the Directive across all Member States and the activities of the sectorial Administrative Co-operation Group, also suggesting and supporting concerted actions in the framework of cooperation of competent market surveillance authorities. The Commission also notes that the recently issued Regulation (EU) 2019/1020 on market surveillance and compliance of products[[12]](#footnote-13) aims, among other aspects, to strengthen controls by national authorities and customs officers to prevent unsafe products from being placed on the Union market.

1. Directive 2000/14/EC of the European Parliament and of the Council of 8 May 2000 on the approximation of the laws of the Member States relating to the noise emission in the environment by equipment for use outdoors (OJ L 162, 3.7.2000, p. 1), amended by Directive 2005/88/EC (OJ L 344, 27.12.2005, p. 44), by Regulation (EC) No 219/2009 (OJ L 87, 31.3.2009, p. 109), and by Regulation (EU) 2019/1243 (OJ L 198, 25.7.2019); corrected by Corrigendum (OJ L 165, 17.6.2006, p. 35 (2005/88/EC)). Original text: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32005L0088>; consolidated text: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02000L0014-20190726>. Commission’s sectoral webpage on Noise Emission by Outdoor Equipment: <https://ec.europa.eu/growth/sectors/mechanical-engineering/noise-emissions_en> . [↑](#footnote-ref-2)
2. Council Directive 79/113/EEC of 19 December 1978 on the approximation of the laws of the Member States relating to the determination of the noise emission of construction plant and equipment (OJ L 33, 8.2.1979, p. 15;
Council Directive 84/532/EEC of 17 September 1984 on the approximation of the laws of the Member States relating to common provisions for construction plant and equipment (OJ L 300, 19.11.1984, p. 111);
Council Directive 84/533/EEC of 17 September 1984 on the approximation of the laws of the Member States relating to the permissible sound power level of compressors (OJ L 300, 19.11.1984, p. 123);
Council Directive 84/534/EEC of 17 September 1984 on the approximation of the laws of the Member States relating to the permissible sound power level of tower cranes (OJ L 300, 19.11.1984, p. 130);
Council Directive 84/535/EEC of 17 September 1984 on the approximation of the laws of the Member States relating to the permissible sound power level of welding generators (OJ L 300, 19.11.1984, p. 142);
Council Directive 84/536/EEC of 17 September 1984 on the approximation of the laws of the Member States relating to the permissible sound power level of power generators (OJ L 300, 19.11.1984, p. 149);
Council Directive 84/537/EEC of 17 September 1984 on the approximation of the laws of the Member States relating to the permissible sound power level of powered hand-held concrete-breakers and picks (OJ L 300, 19.11.1984, p. 156);
Council Directive 84/538/EEC of 17 September 1984 on the approximation of the laws of the Member States relating to the permissible sound power level of lawnmowers (OJ L 300, 19.11.1984, p. 171);
Council Directive 86/662/EEC of 22 December 1986 on the limitation of noise emitted by hydraulic excavators, rope-operated excavators, dozers, loaders and excavator-loaders (OJ L 384, 31.12.1986, p. 1). [↑](#footnote-ref-3)
3. <http://ec.europa.eu/DocsRoom/documents/1639/attachments/1/translations/en/renditions/pdf>. [↑](#footnote-ref-4)
4. <https://ec.europa.eu/docsroom/documents/1635/attachments/1/translations/en/renditions/pdf>. [↑](#footnote-ref-5)
5. <http://ec.europa.eu/DocsRoom/documents/4985/attachments/1/translations/>. [↑](#footnote-ref-6)
6. <http://ec.europa.eu/DocsRoom/documents/18281/attachments/1/translations/>. [↑](#footnote-ref-7)
7. <https://publications.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/90f4d795-e192-11e8-b690-01aa75ed71a1>. [↑](#footnote-ref-8)
8. <https://publications.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/69de2e48-e17d-11e8-b690-01aa75ed71a1>. [↑](#footnote-ref-9)
9. Commission Expert Group on Outdoor Noise Emission (E03673): <https://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=3673>. [↑](#footnote-ref-10)
10. The “decibel” (dB) is a unit of measurement that expresses the logarithmic (to base 10) ratio of two physical quantities of the same dimensions, in this case sound powers. Being the decibel scale logarithmic and not linear, a reduction of 1 dB of sound power level corresponds to a reduction of about 21% of the noise emission, and a reduction of 3 dB corresponds to a reduction of about 50% of the noise emission. [↑](#footnote-ref-11)
11. Regulation (EU) 2019/1243 of the European Parliament and of the Council of 20 June 2019 adapting a number of legal acts providing for the use of the regulatory procedure with scrutiny to Articles 290 and 291 of the Treaty on the Functioning of the European Union (OJ L 198, 25.7.2019, p. 241–344) [↑](#footnote-ref-12)
12. Regulation (EU) 2019/1020 of the European Parliament and of the Council of 20 June 2019 on market surveillance and compliance of products and amending Directive 2004/42/EC and Regulations (EC) No 765/2008 and (EU) No 305/2011 (OJ L 169, 25.6.2019, p. 1). [↑](#footnote-ref-13)