

The Ecodesign Directive

Ten core messages of the mechanical engineering industry

- The legal framework of Directive 2009/125/EC is suitable for practice – no revision necessary
- Improve market surveillance
- Product registration – questionable benefits for market surveillance and manufacturers
- Material efficiency – thoroughness before speed
- Work programme 2015-2017: consolidate!
- Greater flexibility in implementation – the right mix of instruments is the key!
- More efficient organisation of preparatory study process
- Labelling in mechanical engineering is linked to demanding requirements
- Consideration of user behaviour – raising user awareness as an alternative or supplement to product requirements
- Prevention of duplicate regulations

Registration number
in register of lobbyists:
976536291-45

March 2015

Executive Summary

1. The legal framework of Directive 2009/125/EC is suitable for practice – no revision necessary

Europe-wide minimum requirements that weigh up environmental effects against one another and consider them in light of the entire product life cycle are appropriate and useful insofar as the criteria of Article 15 of 2009/125/EC apply. In such cases, acceptance of the Directive in the industry essentially comes down to the balance between ambitious environmental requirements and economic compatibility.

2. Improve market surveillance

As soon as new requirements come into effect, industry needs fast and pragmatic solutions in order to avoid distortions in competition caused by non-compliant products. That is why VDMA calls for the feasibility of market surveillance to be thoroughly examined before the regulation of new product groups.

3. Product registration – questionable benefits for market surveillance and manufacturers

VDMA does not see any additional benefits for market surveillance from product registration. Simply checking the entries does not provide sufficient indication that a rule has been violated. Formal checking of database entries is no substitute for physical, on-site checks.

4. Material efficiency – thoroughness before speed

VDMA advocates for consistent regulation instead of a ragbag of different laws. The material efficiency of products should therefore be subjected to holistic consideration under the Ecodesign Directive. However, there is a lack of regulatory approaches that are mature enough for practice – VDMA warns against acting too hastily.

5. Work programme 2015-2017: consolidate!

VDMA calls for ongoing proceedings to be prioritised in the new work programme before the time-consuming regulation process for the next product groups is opened. On the other hand, taking new criteria such as the density of regulation and the impact on competitiveness into account in the development of the work programme 2015-2017 is important progress in order to recognise possible stumbling blocks in the regulation process in good time.

6. Greater flexibility in implementation – the mix of instruments is the key!

Experience in mechanical and plant engineering has shown the limits of the regulation concept when it comes to complex goods. Mechanical engineering suggests alternative regulatory approaches both within and outside the ecodesign framework.

7. More efficient organisation of preparatory study process

In the experience of the machine manufacturers, only a high-quality preparatory study can lead to the development of useful ecodesign requirements. VDMA calls for the tendering process for preparatory studies to be made more open and flexible. At the very least, technical expertise should be given a higher weighting in the selection of criteria.

8. Labelling in mechanical engineering is linked to demanding requirements

Capital goods are significantly different from consumer goods when it comes to the steering effect of labels. Experts select complex goods in a user-orientated way – their purchase decision is not guided by a one-dimensional label about energy consumption.

9. Consideration of user behaviour – raising user awareness as an alternative or supplement to product requirements

In the capital goods industry, energy savings depend substantially on user behaviour – the manufacturer-orientated Ecodesign Directive does not take this fact into account. VDMA calls for users (consumers) to be better sensitised to the effective use of regulated products as an alternative to new product requirements or to their supplementation.

10. Prevention of duplicate regulations

In some cases, multiple components of a machine and the machine as a whole are subject to Ecodesign implementing measures. This can lead to inefficiency, especially in the case of capital goods.

Introduction

VDMA (German Engineering Association) represents over 3,100 predominantly medium-sized member companies in the capital goods industry, making it one of the largest and most important industrial associations in Europe. Mechanical and plant engineering is a key technology and the engine that drives the economy. With 1,008,000 employees (August 2014) in Germany, the sector is the largest industrial employer. Around 77 per cent of goods produced in Germany are exported.

As a manufacturer of products relevant to energy consumption, mechanical and plant engineering is increasingly affected by the Ecodesign Directive 2009/125/EC. Building on the experience of the first ten years under the Ecodesign Directive, this position paper formulates core messages of the capital goods industry to European legislators for the further development of the Ecodesign Directive, with an eye both to the implementation process and to the current evaluation of the Directive.

1. The legal framework of 2009/125/EC is suitable for practice – no revision necessary

VDMA supports the EU's ambitious targets in energy and climate policy. Although VDMA always advocates market-based regulation in principle, we acknowledge the political will to move forward, including in the individual regulation of energy and resource efficiency on product level. With regard to this, however, particular attention must be paid to ensure that market intervention is limited and organised in an economically compatible way. The regulation concept of the Ecodesign Directive, which is based on close involvement on the part of industry and also includes standardisation as a component of regulation, is definite progress compared to conventional environmental legislation.

Ecofys evaluation study

The Directorate General for Energy commissioned a study by the consultancy institute Ecofys in June 2013 to evaluate certain aspects of the Ecodesign Directive. The result does not consider it necessary to expand the legal framework (to include products that are not relevant to energy consumption). VDMA welcomes this recommendation – challenges in the ongoing implementation first need to be addressed before the scope of application is extended to further products. The legal framework is suitable for practice under the current application requirements and does not need revision.

Retain Article 15

Acceptance of the Directive in the capital goods industry essentially comes down to the balance between ambitious environmental requirements and economic compatibility. This may not be endangered by any revision of the Directive. The Directive states that the entire product life cycle must be used to determine minimum requirements that offer a significant sale and trading volume, a significant impact on the environment and significant potential for improvement in terms of its environmental impact, without entailing excessive costs. In addition, product requirements must remain technology-neutral, without negative effects on the product function or the competitiveness of the industry.

Adherence to these criteria is essential for successful regulation. Problems in the regulation process often occurred when these criteria were not taken into account sufficiently or at all.¹ The criterion of “significant sale and trading volume” in the EU is particularly significant for mechanical engineering. In the capital goods industry in particular, small series production or machines produced in line with individual customer requirements in special mechanical

¹ See also preparatory studies on machine tools and industrial washing machines, where completely different machine types were treated together in order to achieve the threshold of 200,000 units.

engineering are common. Regulating products like this, with quantities of well under 200,000, would be disproportionate.

2. Market surveillance: considering early whether requirements are measurable and verifiable

Market surveillance is responsible for checking ecodesign requirements. Not surveilling the market would result in competitive advantages for manufacturers who unlawfully put non-compliant products into circulation. Some manufacturers gain an advantage by saving on development and production costs for implementing the minimum requirements, in contrast to their competitors. However, the necessary market surveillance activities are still being set up. At its current level, market surveillance is insufficient. Yet, as soon as new requirements come into effect, the industry needs fast and pragmatic solutions that allow market surveillance to remove products that do not meet the minimum requirements from circulation. That is why VDMA calls for the feasibility of market surveillance to be thoroughly examined before the regulation of new product groups. In addition, mechanical and plant engineering considers it important that the technical solutions on which the regulation approaches are based cannot only be implemented by companies with an acceptable level of effort and expense, but also be surveilled with a tolerable level of effort. This should be noted when developing regulatory approaches.

Market surveillance is the role of the state

Market surveillance is the role of the state and cannot be conducted by private providers of external inspection services. In the view of mechanical and plant engineering, providing the market surveillance authorities with more staff and financing is essential. In mechanical and plant engineering, where checking complex devices is particularly time-consuming and cost-intensive, information and capacity is provided to support the market surveillance authorities². One suggestion is to make the existing infrastructure of test benches, which are particularly cost-intensive to procure, at universities and in companies, available to market surveillance – objectivity would be ensured by certifying the test benches.

Maintaining the coherence of the legal provisions

A coherent legal framework for market surveillance is essential for effective market surveillance across Europe. The Ecodesign Directive is a CE Directive and part of the new legislative framework. There are uniform provisions on market surveillance for all technical harmonisation provisions in the internal market. That is why it is important to improve the horizontal provisions, which also apply to the Ecodesign Directive, at this point. The COM(2013)74 proposal for a market surveillance regulation is a further development of the regulation 765/2008/EC, which already provides a sufficient legal basis for efficient market surveillance. No special amendment of market surveillance provisions is needed in the Ecodesign Directive. Any change would endanger the cohesion of the horizontal provisions and create confusion among economic stakeholders.

3. Product registration – questionable benefits for market surveillance and manufacturers

Whether the efficiency of market surveillance can be improved by the option of electronic access to product data is currently under discussion. Electronic documents can serve as a first 'filter' for checking product compliance.

VDMA supports measures that prevent excessive reporting obligations, aid fast and non-bureaucratic exchange of information and strengthen market surveillance. In this case,

² Vacuum cleaners: guidelines; training. Pumps and ventilators: provision of test benches; cooperation with universities.

however, VDMA sees no additional benefit, as simply checking the entries does not provide sufficient indication that a rule has been violated. Checking database entries electronically is no substitute for physical, on-site checks. On the contrary: companies which did not report would save on financial and administrative costs, which would have the effect of distorting competition on the market. The actual benefits and the exact objective of a database therefore need to be discussed critically in a broad-based stakeholder dialogue.

If the legislator really does propose a central data system, the following conditions need to be met:

- Guarantee of data security and protection of intellectual property
- Reduction in bureaucracy for manufacturers
- Additional benefits over and above existing databases such as ICSMS
- Proven benefits for the effectiveness of market surveillance:
 - Checking the validity of the database entries saves more capacity than it ties up
 - Electronic checking is no substitute for physical, on-site product checks
- Retention of role allocation between economic stakeholders and market surveillance authorities – no access to documents before a product is placed on the market!
- Exclusively use of data that the manufacturer already has to publish on its own website
- Access to technical documentation still only to be provided upon specific request from market surveillance authorities
- No third-party certification

4. Challenges in material efficiency – thoroughness before speed!

The Ecodesign Directive already allows ecodesign requirements to be defined with regard to all significant environmental properties of a product; it is not limited to energy efficiency. VDMA would prefer legislation that takes the significant environmental effects into account in a coherent way, considering the entire life cycle of a product, rather than a ragbag of laws and regulations. This ragbag is the reality at the moment, and it will be further extended by allowing the Ecodesign Directive and directives that only consider one aspect of the product life cycle, such as the 2012/19/EU Directive on waste electrical and electronic equipment (also known as the WEEE Directive), to run in parallel.

However, VDMA also warns against acting too hastily in defining product requirements in order to increase resource efficiency. Many conflicting objectives need to be reconciled:

- **The danger of design control**

There is a particular danger of design control, which impedes innovation. For example, it may be impossible to reconcile a strict requirement to use a certain proportion of recycled material with the use of new, innovative composite materials, which are used due to their low weight and contribute to reducing energy consumption.

- **Guaranteeing regulatory stability**

Regulatory stability is especially important for rules that intervene to a large extent in the product design and could result in adaptations in production. As part of the ongoing implementation of the Ecodesign Directive, the focus was placed on energy efficiency. This sent a strong signal to business. Production processes and long-term planning were orientated towards optimising energy consumption. Tighter requirements for material efficiency can lead to conflicting objectives, especially given the fact that increasing energy efficiency almost always involves greater input of materials. Manufacturers require clear indication as to the long-term political objectives.

- **It must be possible to measure and verify requirements**

VDMA doubts that specifications for the use of a minimum quantity of secondary raw materials or a minimum recovery quota for raw materials can be measured or verified. Market surveillance should be involved in the regulation process early with regard to this.

- **Taking cost efficiency into account**

One of the key specifications of the Ecodesign Directive is to keep the costs for the manufacturer and consumer in relation to the environmental potential. It will be especially important to take this into account for material efficiency specifications, as no cost savings are generated for the consumer during the use phase.

End-of-life

With respect to the European Commission's focus on the end-of-life of products, mechanical and plant engineering sees only a limited need for regulation in the capital goods industry.

- Mechanical and plant engineering products are long-lasting goods that often have a lifespan of ten to forty years. Alongside functionality, precision, product safety and reliability, longevity is one of the crucial features of a high-quality machine.
- Metallic materials account for the vast majority of material consumption in production. Metal is a valuable, recyclable raw material that is usually returned to the cycle of materials.
- The use phase of machines and plants is regularly extended by existing concepts for multiple use (leasing) or reparability (maintenance/remote maintenance) or by contractually-defined availability of spare parts.

Regulation in this product phase would have a limiting effect in the design phase, even though no benefit of regulation is seen.

One innovation-friendly solution could be to refrain from making strict specifications and instead formulate specifications for resource efficiency via product-specific general ecodesign requirements that do not define any specific requirements (see Article 15 Para. 6 and Annex I to the Directive) and that are specified in more detail through harmonised, product-related standards (see Chapter 6 "The third way").

Focusing on the use phase

As long as there are no practicable approaches for material efficiency requirements, VDMA advocates requirements in the use phase for already-regulated product groups to be developed further. This would allow remaining potential in the system to be increased by taking consumables into account. In turn, the users of the efficient devices should be taken more into account when new product requirements are developed (see Chapter 9). Individual approaches and the optimum orientation of a machine can allow a significant reduction in the use of consumables in the system. That is why, particularly for more complex goods, VDMA is championing the consideration of greater sensitisation of users and consumers for the effective use of such goods through relevant manufacturer information as an alternative to new product requirements and supplements thereto.

- **Example from practice: significantly reducing fresh water consumption**

In the paper industry, lime traps are used to prevent limescale deposits from the circulation water. This significantly reduces fresh water consumption and improves process reliability in a sustainable way. In addition, it reduces the costs for maintaining and repairing the system. The use of efficient multi-phase pumps allowed annual energy costs of around EUR 39,600 to be saved and the total drive performance to be reduced by 65.6%³.

³ See success story at www.bluecompetence.net: http://bit.ly/18gK1p9.

5. Work programme 2015-2017: consolidate!

Mechanical and plant engineering has been pursuing the implementation of the Ecodesign Directive for ten years. 51 products have entered the regulation process so far, of which 24 product groups are still in the pre-legislative stages. The preparatory study on the third work programme makes it clear that the greatest energy efficiency potential at the product level has been covered. At the same time, a lack of market surveillance leads to an estimated ten per cent of possible savings being lost.⁴ It is too early for a systematic expansion to material efficiency criteria (see Chapter 4). That is why VDMA is advocating consolidation before the time-consuming regulation process for the next product groups is opened. First, upcoming revisions to existing regulations and processes that have not yet been concluded should be treated as a priority.

The work programme's new multidimensional approach is useful and appropriate. Possible stumbling blocks in the rest of the regulation process should be recognised early on. It is therefore right that the ability of the requirements to be checked, the density of regulation and the effects on competitiveness are taken into account even in the preparatory study on the work programme.

6. Greater flexibility in the implementation of the Ecodesign Directive

VDMA recognises the regulation approach of the Ecodesign Directive in principle. However, in the opinion of VDMA, the Directive should concentrate predominantly on products in the field of consumer goods, i.e. that serve a mass market. Experience in mechanical and plant engineering has shown the limits of the Ecodesign Directive's regulation concept when it comes to complex goods.

When it comes to capital goods, the Directive's regulatory approach is only suitable to a limited extent due to the particular properties of mechanical engineering products. The capital goods industry is appealing to legislators to consider the options for implementing the Directive described below. In addition, the sector expects the decision-makers to have the openness to take a step back from regulation of a product in line with the Ecodesign Directive if the Directive proves not to be the right instrument based on the particular product properties described.

There are five approaches to be differentiated. The correct approach must be decided depending on the product properties in question, in cooperation with the industry.

- **Implementing measure in line with Ecodesign: product approach**

Depending on the product properties, the 'classic' Ecodesign approach can be selected. However, this is only an option for products with a constant and therefore standardised load profile. All products that are designed for inconsistent, changing applications and orientated at specific customers are therefore eliminated.

- **Implementing measure in line with Ecodesign: extended product approach**

The real gains in efficiency can only be achieved with an 'enhanced product consideration' that focuses on the usable product as a whole. This is usually a defined unit comprising the actual product, a drive and a control unit. This unit is placed on the market by one manufacturer as the entity with "overall responsibility". Examples of units of this kind can include both refrigerators and complex storage systems. Legislators should limit themselves to only regulating products that are put into circulation as a unit and for which a single entity is responsible. This arises from Article 1 of the Directive,

⁴ Robert Nuij, European Commission, horizontal consultation forum on 5th May 2014

which is linked to placing products onto the market.

Regulation through Ecodesign can be implemented under the condition that the operation-related limits of this unit can be clearly defined and its energy consumption can be calculated. This is the case if standard operating cycles/load profiles can be defined. For the product group, it must be possible to define typical application cases (base cases) and to use these as the basis for defining reference processes.

- **Implementing measure in line with Ecodesign: “the third way”**

Detailed regulation in the sense of a classic Ecodesign measure often has the effect of hindering innovation, especially in sectors with a high proportion of SMEs. However, SMEs often drive innovation in their specific niches, and strict specifications rob them of the flexibility they need.

Complex products with varying application profiles therefore need a flexible approach, which is not provided by the classic Ecodesign implementing measure or the preparatory study⁵. If the objective of recording more complex products under the Ecodesign Directive is pursued, the option of “generic requirements”, which already exists in the Directive, should be developed further. In doing so, the general requirements of Annex I could be specified more precisely, in a product-independent and non-technology-specific way, as part of a horizontal implementing regulation (example: essential requirements in the Machinery Directive). Such generic requirements should be precise enough to offer manufacturers sufficient guidelines.

The development of the horizontal implementing regulation should be accompanied by the development of a non-product-specific standardisation mandate. Product-specific standards would be developed on this basis, taking the specified generic requirements into account. The products could continue to be selected via the European Commission's work programme. In order to be added to the work programme, the product groups need to be classified as worthy of regulation in accordance with the criteria in Article 15 of the Directive. The question of whether the application of this 'third' way really is (more) appropriate for the product group addressed in each case should be discussed in consultation with the stakeholders affected. VDMA is happy to provide support in developing this approach, as no experience in this direction has yet been gathered as part of the Ecodesign Directive. One application case would be the lot for machine tools.

- **Implementing measure in line with Ecodesign: self-regulation**

Self-regulation is a useful option for implementing the Directive. It should remain up to the industry affected whether self-regulation is considered more expedient than a binding implementing regulation. However, the European Commission's draft new guidelines for self-regulation include requirements that are unrealistic and make the self-regulation option unattractive. Market coverage of up to 90% cannot be achieved in markets with many hundreds or thousands of market participants and/or a high import quota. The conditions should be considered and defined on a case-by-case basis.

- **Limits of Ecodesign – the right mix of instruments is the key**

The majority of products in mechanical engineering cannot be usefully regulated under the Ecodesign Directive. Legislators should examine carefully whether other instruments could also be used, provided a need for regulation exists at all.

⁵ The Technical Committee CEN/TC 406 has developed a method that maps the particular requirements of products of the machines. Using the concept for self-regulation with the help of a checklist, CECIMO has also tried to show which adjustment options can be used for improvement.

Example: Industrial Emissions Directive (IED) and industrial ovens

With regard to industrial ovens, the sector affected doubts that the Ecodesign Directive is the right approach for this product group. The industry believes that only categorisation by application areas and processes would lead to useful results. A process-orientated Directive such as the aforementioned Industrial Emissions Directive 2010/75/EU is therefore more likely to come into question as a regulation instrument. Its implementation includes the development of BREF documents in which the state of the art (BAT) is recorded.

Example: Energy Performance of Buildings Directive (EPBD) and lifts

For certain product groups, it is worth considering whether ecodesign measures are the most efficient way to achieve energy savings. Because of their longevity, the greatest potential savings in lifts is found in existing equipment. That is why the sector prefers for lifts to be regulated through the Energy Performance of Buildings Directive 2010/31/EU, which includes both new and old products. Regulation such as ecodesign, related to placing new products on the market, would cause a significant delay in delivering the desired regulatory effects.

Voluntary instruments

VDMA calls for the preparatory study for the work programme to include a thorough examination of the sector affected and, if applicable, the development of less detailed specifications (see proposals on the “third way”) in connection with the development of voluntary approaches, such as sector-specific design checklists.

7. Organising the preparatory study process more efficiently – revising the MEErP

Where a product is intended for regulation as part of 'classic' regulation, VDMA would like to provide information on how the preparatory study can be organised more efficiently. In the field of capital goods, in multiple studies from the first work programme from 2009⁶, the direction of the process was only changed after the preparatory study was concluded, despite repeated advice from the industry.

The process of selecting Ecodesign-capable products should identify possible stumbling blocks in the downstream process early in order to prevent resources from being wasted:

- The first step in doing this is to continue the multi-dimensional approach of the third work programme (cf. proposals under Chapter 5) and orientate it strictly in line with the criteria in Article 15 of the Ecodesign Directive.
- Secondly, in the experience of the mechanical engineering manufacturers, only a high-quality preparatory study leads to the development of useful ecodesign requirements. That is why the selection of the contractor for the study is highly significant, especially in the field of complex machines. Because of the complex application process, institutes equipped with sufficient specialist expertise are only rarely the most successful applicants to bid. VDMA therefore calls for the tendering process to be made more open and flexible. At the very least, technical expertise should be given a higher weighting in the selection of criteria.
- Thirdly, products in which industry, standardisation organisations or market surveillance authorities indicated possible problems in the preparatory study for the work programme should be postponed and subjected to a short feasibility study lasting six to twelve months.
- Fourthly, once the preparatory study is completed, the European Commission should

⁶ This applies to the machine tools, industrial ovens and industrial washing machines product groups.

create a schedule for the next steps in the regulation process, so that all the stakeholders involved can plan better and, in the case of the industrial sectors affected, communicate more clearly and transparently.

A revision of the MEErP method may be necessary in order to put these steps into practice.

8. Labelling in mechanical engineering is linked to demanding requirements

Consumer and capital goods differ significantly from one another in terms of their complexity, their purpose and their customers, i.e. the people to whom any product labelling is addressed. Consumer goods, such as televisions or toasters, are usually designed for a single purpose. Capital goods are often one-off productions tailored to the customer's requirements, and can therefore only be evaluated based on their application.

Because of the complexity of capital goods described, the following technical requirements must be met when developing a label:

- Typical application cases for the products in this group can be defined.
- Reference processes can be determined based on the typical application cases.
- The reference processes allow comparable measurements of all relevant key figures and can thus form the basis for the development of a key figure system on which every concept for a new label must be based.
- The necessary measurement provisions (international or European standards) are available.

In addition, certain evaluation criteria with regard to the benefits of a label for capital goods must be considered:

- The laborious development of the labelling concept is economically acceptable in proportion to the potential for environmental improvement (cost-benefit ratio). The additional strain on small and medium-sized companies needs to be taken into particular consideration here.
- VDMA rejects mandatory use if the aim of a labelling concept is to create trust in the addressee, even though the label is awarded by an external inspection body rather than the manufacturer. Labels can be counterfeited, but responsibility for the product remains with the manufacturer – no support for cost-intensive duplicate inspection by third parties.
- If the label is aimed not at end consumers but an industrial purchaser, one-dimensional labels that provide information on only a single product property do not offer added value for the operator. In the functional specification, the customer defines for the purchaser the requirements a product is obligated to fulfil over a defined period. Where amortisation times are too long, not even an efficient machine will be chosen.

9. Consideration of user behaviour – user sensitisation as an alternative or supplement to product requirements

In the case of manufacturer-orientated regulation, such as ecodesign, the behaviour of the user or consumer is not considered sufficiently. In reality, the energy saving often depends crucially on user behaviour. This particularly applies to products in mechanical and plant engineering, which are often embedded in a wider system and are not stand-alone products. Yet, the effective use of efficiency products improves cost efficiency and improves the competitiveness of the user. That is why, particularly for more complex goods, VDMA is advocating the greater sensitisation of users and consumers for the effective use of such

goods through relevant manufacturer information as an alternative to new product requirements and supplements thereto.

- **Example from practice: sewage pumps and overview with functional units**
In the preparatory study on sewage pumps, a matrix was developed in which indications were given on the conditions under which the use of more efficient pumps really does make the system more efficient and for which uses the use of the efficiency pump is unsuitable.

In addition, practical usage cases and effects for the user should be taken into account early in the development of new product requirements. Products that are used only rarely, such as high-pressure cleaners, do not produce any energy-saving effects in total, even if the end device is efficient.

10. Prevention of duplicate regulations

In the implementation process so far, implementing measures have been enacted or are in planning for both products and their components (example: regulation on electric motors). This is accompanied by the danger of duplicate regulation, which may be counter-productive. For each product and component, legislators must therefore carefully examine the interplay between the two and the consequences for the manufacturer being addressed.

- **Example from practice: electric motors in mobile battery-operated handling equipment**
Electric motors that are tailored to very specific requirements for mobile battery-operated handling equipment have been developed. These motors can therefore be distinguished from the electric motors used in other types of machines in many ways. As well as the limited space for installation, the speed range and other parameters, these specific requirements also include the impact on the energy efficiency of the machine as a whole in particular. This requirement from the market-driven trend has led to ever-higher handling performance at a consistent battery life. The specific usage conditions of these motors means that any attempt to define the ecodesign requirements for special electric motors like this usefully as part of an implementing regulation for electrical motors in other application fields is doomed to fail and would even be detrimental to the energy efficiency of the machine as a whole. The component types affected should therefore be exempt from the 'component regulations' here. This is the only way to ensure that implementing measures do not have any counter-productive effects in practice.

Contact:
Hanna Blankemeyer
VDMA European Office
Tel.: (+32 2) 706 82 17
Email: hanna.blankemeyer@vdma.org

Naemi Denz
VDMA Technical and Environmental Affairs
Tel.: (+49 69) 66 03 12 26
Email: naemi.denz@vdma.org