



INTAS

Deliverable 4.4: Final Policy Recommendations for Future Legislation on Industrial Products

Document published: 26.11.2018

Organisation name of lead author of this document: ECOS

Project coordinator: WIP



Co-funded by the Horizon 2020 programme
Programme of the European Union

This deliverable is still pending approval from the European Commission

Horizon 2020 programme

Project acronym: INTAS

Project full name:

Industrial and tertiary product Testing and Application of Standard



Co-funded by the Horizon 2020 programme
Programme of the European Union

TRANSFORMERS



FANS



Project Title	Industrial and tertiary product Testing and Application of Standards
Deliverable Title	Final policy recommendations for future legislation on industrial products
Due Date for Deliverable:	31.10.2018
Actual Submission date:	26.11.2018
Lead Beneficiary	ECOS
Author(s)	Francisco Zuloaga, Nerea Ruiz
Dissemination level	PU
Keywords	Transformers, Fans, Industrial Products, Market Surveillance, Testing, Europe, Energy, Ecodesign Directive, Policy
Contract n.	Grant Agreement Number 695943
Project duration	March 2016 – February 2019



Table of Contents

About the INTAS project	4
1. Executive summary	5
2. Introduction	6
3. Policy Recommendations	7
3.1 Fans	7
3.1.1 Set up a dedicated European market surveillance Task Force for fans	7
3.1.2 Include a definition of “large fans” in Commission Regulation (EU) No 327/2011.....	9
3.1.3 Establish a mandatory notification to MSAs.....	9
3.1.4 Foster cooperation with national market actors	11
3.1.5 Allow MSAs to conduct market surveillance actions at manufacturers’ and to witness-test FATs	12
3.1.6 Allow and clarify alternatives to full-size, full-load testing as verification options	14
3.1.7 Improve fans standards for Ecodesign.....	15
3.1.8 Insert clauses to deter circumvention in 327/2011	16
3.2 Power Transformers.....	16
3.2.1 Set up a dedicated European market surveillance task force for transformers	17
3.2.2 Establish a mandatory notification to MSAs.....	19
3.2.3 Foster cooperation with national stakeholders.....	20
3.2.4 Allow MSAs to witness-test FATs	22
3.2.5 Improve standards for in-situ and witness testing.....	23
3.2.6 Insert clauses to deter circumvention.....	23
3.3 Other Large Industrial Products	25
3.3.1 Set up dedicated European market surveillance task forces for large industrial products	25
3.3.2 Establish a mandatory notification to MSAs.....	27
3.3.3 Foster cooperation with national stakeholders.....	28
3.3.4 Allow MSAs to conduct market surveillance actions at manufacturers’ and to witness-test FATs	30
3.3.5 Allow and clarify alternatives to full-size, full-load testing as verification options	31
3.3.6 Ensure that standards covers all testing options	32
3.3.7 Insert clauses to deter circumvention.....	32
4. Conclusions.....	34
References	35
Abbreviations List	37

About the INTAS project

The aim of the INTAS project is to provide technical and cooperative support, as well as capacity building activities, to Market Surveillance Authorities (MSAs). The need for the INTAS project arises from the difficulty that MSAs and market actors face in establishing and verifying compliance with energy performance requirements for large industrial products subject to requirements of the Ecodesign Directive, specifically transformers and industrial fans. Therefore, the project aims to:

- Support European Member State MSAs deliver compliance for large products (specifically for transformers and large fans);
- Support industry to be sure of what their obligations are under the Ecodesign Directive and to deliver compliance in a manner that will be broadly accepted by MSAs;
- Foster a common European approach to the delivery and verification of compliance for these products.

List of project partners:

WIP Renewable Energies	Europe
European Environmental Citizens' Organisation for Standardisation	Europe
European Copper Institute	Europe
Engineering Consulting and Design	Europe
Waide Strategic Efficiency	Europe
Austrian Energy Agency	Austria
Federal Public Service Health, Foodchain, Safety and Environment	Belgium
SEVEN Energy Efficiency Center	Czech Republic
Danish Technological Institute	Denmark
Finnish Safety and Chemicals Agency	Finland
The Polish Foundation for Energy	Poland
Directorate General of Energy and Geology	Portugal
Romanian Regulatory Authority for Energy	Romania
Foundation for the Promotion of Industrial Innovation	Spain
Italian National Agency for New Technologies, Energy and Sustainable Economic Development	Italy
Food and Economic Safety Authority	Portugal



1. Executive summary

The current deliverable is part of INTAS **Task 4.4 – Policy recommendations for future regulation on large and industrial products of the INTAS project**, which aims at “*informing policy makers at both national and European level of the current challenges with market surveillance of large and industrial products falling under the Ecodesign directive*”.

This document develops a number of concrete, pragmatic policy recommendations which aim to provide MSAs with the full suite of verification options needed to adequately tackle non-compliance of large industrial products. While INTAS focus is mainly on fans (section 3.1) and power transformers (section 3.2), the challenges and regulatory framework for these two product categories are shared with other large industrial products (section 3.3).

“Carrots and sticks”

A large part of the report is dedicated to making the least disruptive verification options viable. That is the spirit of the suggested “**Mandatory Notifications**”, and “**Cooperation the national and international level**”; and of the requirements to explicitly allow “**witness testing of FATs and testing at manufacturers**” as verification procedures for market surveillance. These are what we may call “**the carrots**” of INTAS proposed policy strategy.

Some other recommendations aim at ensuring that, should it not be possible to use non-disruptive options, MSAs still have the ability to conduct verification procedures. This is the why INTAS recommends clarifying the use of “**alternative verification options**” and their related “**standards**”. These recommendations are what we may call “**the sticks**” of the INTAS proposed policy strategy. INTAS fully acknowledges that some of these verification options (e.g. in-situ testing) are much more disruptive/challenging/costly than others and should therefore only be used as a last resort option.

An alternative way of looking at INTAS policy recommendations is by the concrete outcomes that they suggest, which can be categorised in three main groups:

1. **Capacity building and information exchange.** These have been identified in previous INTAS analysis as a main challenge in ensuring market surveillance of large industrial products and therefore INTAS puts them at the heart of its recommendations. For each product group, INTAS recommendations outline a series of tools (platforms for data exchange; education and awareness raising among MSAs and market actors, etc. both at the European and national level).
2. **Legal issues.** Most of the recommendations in the report suggest concrete regulatory changes and/or new regulations and standards that provide legal clarity for all economic operators, including the MSAs.
3. **Resources.** Market surveillance will not happen without dedicated financial and human resources. INTAS recommends: a) making the best use of existing tools (e.g. databases), but also increasing resources not only from MSAs but also from the European Commission.

Whether one decides to see these recommendations as “carrots and sticks”, or through the lens of “capacity building - legal issues - resources”, the recommendations in this report aim at ensuring that MSAs count on all the necessary tools to effectively undertake an effective market surveillance of large industrial products.

Next steps

INTAS partners will be glad to build on these proposals to support the European Commission, EU MSs and other relevant stakeholders to ensure that the revision of the relevant Ecodesign regulations and associated standards allows MSAs to properly carry out market surveillance of large industrial products.



2. Introduction

Non-compliant products placed on the EU market distort competition and create damages to society, the environment and the end-users of products. Expert estimates that 10 to 25% of product non-compliance and some 10% of energy being lost due to non-compliance¹.

Large industrial products are no exception. Actually, market surveillance of large industrial products covered by the Ecodesign Directive is particularly challenging due to the size and power of the products, the costs of transport and testing, but also the fact that they are mostly sold Business-to-Business (B2B), and therefore largely “invisible” to Market Surveillance Authorities (MSAs).

With Ecodesign requirements in place, the performance of large industrial products’ energy performance is no longer just a private contractual matter between the supplier and the purchaser. Market Surveillance Authorities (MSAs) must have all the tools needed to undertake the verification procedures of large industrial products.

Over the last months, INTAS has explored a number of ideas that would facilitate the job of MSAs in conducting market surveillance of large industrial products. The policy recommendations in this document build as much as possible on previous INTAS research, analysis and consultations, but also on existing regulations and proposals. The underlying logic is one of pragmatism and of avoiding ‘reinventing the wheel’².

What follows is therefore a short report that highlights INTAS proposed changes to existing regulations. These concrete proposals aim at providing legal clarity and a level playing field for all involved actors. The policy recommendations below attempt to provide MSAs with a full suite of verification procedures options that they may be able to use, depending on the particular circumstances. While INTAS supports MSAs counting on a full range of viable verification options, it is acknowledged that some of them are much more disruptive/challenging/costly than others and should therefore only be used as a last resort option.

The policy recommendations are structured in three main, separate sections: 3.1. Fans; 3.2. Power Transformers; and 3.3. Other Large Industrial Products. For each section, INTAS suggests a number of recommendations regarding regulatory texts; standardisation mandates; and the coordination of market surveillance strategies.

¹ [Evaluation of the Energy Labelling Directive and specific aspects of the Ecodesign Directive. Background report I: Literature review](#)

² The reader will notice for example, that many of the specific recommendations start by stating INTAS’s support to some general provisions of the Commission proposal for a Regulation on Enforcement and Compliance COM(2017)795, published by the Commission under the “Goods Package”, and currently under discussion by the European legislative bodies.

3. Policy Recommendations

3.1 Fans

According to Commission Regulation (EU) No 327/2011³, fans placed on the EU market must fulfil energy efficiency requirements in place as of January 2013. Thanks to these measures and the tougher requirements requirements in tier 2 of the regulations which are applied from 2015, it is estimated that the EU will save 28 TWh electricity per year.

Commission Regulation (EU) No 327/2011 has been reviewed and is in the process of being revised. The revised regulation, which was expected for 2018 but is now more likely to be adopted in 2019, is an opportunity to address some issues for large fans and ensure that additional energy savings potential is materialised. The proposals below support those objectives.

3.1.1 Set up a dedicated European market surveillance Task Force for fans

Justification

Whereas businesses are often active both within the EU and worldwide, market surveillance authorities are often underfunded and constrained by national boundaries. In order to be effective, market surveillance efforts must be uniform across the Union and between EU and non-EU products, otherwise weak spots are created which threaten the public interest and encourage unfair competition.

According to analysis by the European Commission⁴, regulation (EC) No 765/2008 on market surveillance⁵ is not yet uniformly applied: sub-optimal cross-border exchange of information and cooperation, inconsistent implementation of the market surveillance framework at national level, and lack of resources hinder the uniform application of market surveillance activities across Europe.

INTAS analysis and consultations confirm these conclusions: according to responses from consulted stakeholders, lack of awareness, capacity, resources and expertise are the key issues jeopardising market surveillance of large industrial products⁶.

To ensure consistent enforcement and to efficiently tackle non-compliance spanning over several Member States, it is necessary to better coordinate activities across the Union. Improving cooperation among market surveillance authorities (MSAs) will improve the overview of their own market, and the understanding of regulations, which will in turn help them share information and create awareness among national market actors.

³ [COMMISSION REGULATION \(EU\) No 327/2011 of 30 March 2011 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for fans driven by motors with an electric input power between 125 W and 500 kW](#)

⁴ [COM\(2017\)795 - Proposal for a Regulation laying down rules and procedures for compliance with and enforcement of Union harmonisation legislation on products and amending Regulations and Directives](#)

⁵ [Regulation \(EC\) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products and repealing Regulation \(EEC\) No 339/93 \(Text with EEA relevance\)](#)

⁶ See INTAS "Deliverable 6.3. National and EU stakeholders views" on the INTAS website: www.intas-testing.eu

Explanation

INTAS supports the key principles of the Commission proposal for a Regulation on Enforcement and Compliance COM(2017)795, in particular the establishment of an Union Product Compliance Network (the “Network”) whose main task would be coordinating enforcement across the Union, and whose financing and reporting would also be addressed at Union level. The Network would be hosted by the European Commission, and aim at coordinating and facilitating the implementation of joint enforcement activities by Member States, such as joint investigations. In addition, this administrative support structure should allow the pooling of resources and maintain a communication and information system between Member States and the Commission, thereby helping to strengthen enforcement of Union harmonisation legislation on products and deter infringements.

Proposal COM(2017)795 also sets out the framework for international cooperation with third countries or international organisations to ensure Union harmonisation legislation on products is enforced. It also provides for a system for product related pre-export controls carried out by a third country on products, before they are exported to the Union, the details of which will be established by implementing acts.

Within this general framework, INTAS suggests the creation of a dedicated Task Force on industrial fans, with a dedicated budget and responsibilities. Such a Task Force would:

- Be made up of national MSA representatives and, if appropriate, representatives of the single liaison offices⁷, and representatives of the relevant business associations and of consumer associations. The Commission may also attend the meetings of the Task Force.
- Count on a dedicated budget. INTAS estimates that €0,5-2 million per year would be an adequate amount.
- Provide dedicated technical and legal trainings for MSA, and support MSAs in identifying and adapting procedures for national MSAs legislative and practical situations. The support could also include evaluation of tests and technical support for enforcement actions. To that end, the Task Force should also include independent technology experts to provide specialized support, as most MSA representatives are rather market experts than technology experts.
- Make the best possible use of the information and communication system of the above described “Network” for collecting and storing information on the enforcement of Commission Regulation (EU) No 327/2011. In particular, notify large fans imported or manufactured in the Single market for transit to another Member State than the point of entry. The MSA of the receiving country should then decide whether any market surveillance action is needed.
- Ensure that any information exchanged is subject to the strictest guarantees of confidentiality and of professional and commercial secrecy.
- Undertake a number of document inspections and verification tests across Europe. This could be document inspection of some 20 manufacturers per year; and testing and verifying some 10-20 fans (10-50kW) to show that market surveillance is actually taking place. These market surveillance activities will create the necessary demand for a network of recognised/accredited laboratories to exist. All such laboratories should follow well-defined criteria (accreditation, independence). This will ensure the consistency and reliability of testing across Europe, and facilitate the use of results from one country in another country.

INTAS partners believe that this dedicated Task Force, together with other key provisions in proposal COM(2017)795 (chiefly the appointment of a “person responsible for compliance information within the Union”, and the improvement of the principle of mutual recognition of non-compliant product) are a very good

⁷ According to proposal COM(2017)795, “the single liaison office of a Member State shall be responsible for coordinating the enforcement and market surveillance activities of the market surveillance authorities designated by that Member State.”

starting point for the improvement of market surveillance of products in general, and of fans in particular, in Europe.

3.1.2 Include a definition of “large fans” in Commission Regulation (EU) No 327/2011

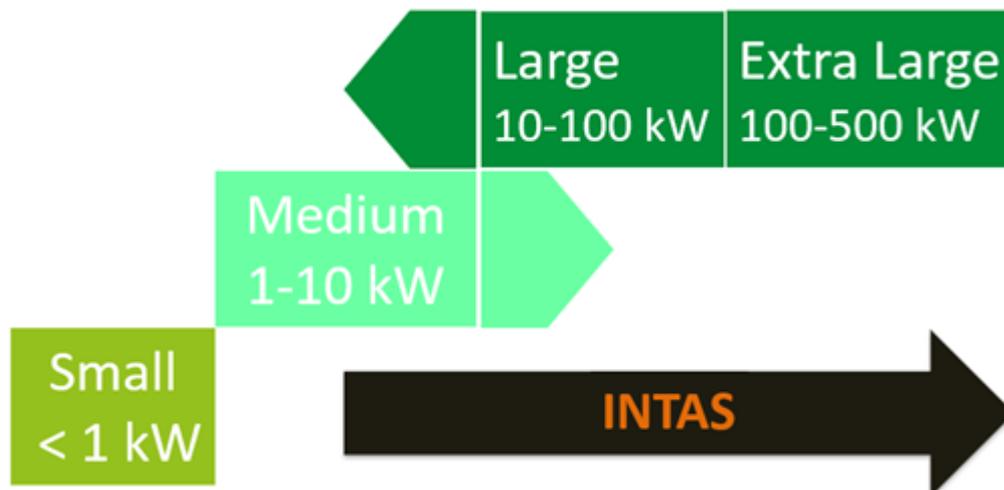
Justification

Regulation (EU) No 327/2011 does not differentiate between small, medium, large and extra-large fans. In order to address some of the specificities of large fans and improve their market surveillance (see e.g. point 3.1.3 below), it would be necessary to define such boundaries.

Explanation

INTAS suggests including Under “Article 2: Definitions” of Regulation (EU) No 327/2011, definitions for “small fans”, “medium fans”, “large fans” and “extra-large fans”. These could be based on the size of the fans, their power, or a combination of the two. All along the project, INTAS used power as the defining criterium:

- Small fans: <1kW
- Medium fans: 1-10kW
- Large fans: 10-100kW
- Extra-large fans: 100-500kW



3.1.3 Establish a mandatory notification to MSAs

Justification

In order to conduct effective market surveillance, MSAs must be able to have a clear picture of the products that plan to be placed on the market or put into service in their jurisdiction. Large industrial products such as fans are mostly sold business-to-business (B2B), which make them largely “invisible” to MSAs. A solution is needed to ensure that market surveillance authorities are made aware of such products being placed on the market or put into service in their jurisdiction.

The sooner an MSA knows about a large fan that will be placed on the market/put into service in its jurisdiction, the easier it becomes that any eventual verification procedure for market surveillance checks can avoid delays and additional costs for the economic operators involved in the transaction. Indeed, the logic of INTAS is to make viable the least disrupting verification procedures (e.g. witness testing of a Factory Acceptance Testing (FAT) if it exists; verifications at manufacturer's premises⁸). This will help avoid testing in-situ, once the fan is already functioning, as this would cause disruptions, delays and additional costs.

A timely notification to the relevant MSAs would help meet those objectives.

Explanation

As a first step to help MSAs have a clearer picture of their fans market, INTAS supports the Commission proposal COM(2017)795, whereby a product can only be made available on the market if a 'person responsible for compliance information' is established in the Union and can be a direct interlocutor for market surveillance authorities. This person could be the manufacturer, the importer or any other economic operator mandated by the manufacturer. The tasks of the person responsible for compliance information would essentially be to provide information on the product to market surveillance authorities and to cooperate with the authorities.

In addition to that general requirement, INTAS partners consider that an additional, fans-specific, mandatory notification would be needed in order to ensure that MSAs have a complete picture of what fans will be placed on the market or put into service in their jurisdiction; and to be able to effectively carry out verification procedure on products for which traditional verification procedures is impossible or challenging.

The request for a "Mandatory notification to MSAs" could therefore be inserted in Regulation (EU) No 327/2011, under "Article 3: Ecodesign requirements". The new provision would specify that, for fans for which "traditional verification procedures" are impossible, or extremely difficult and/or costly, then the 'person responsible for compliance information within the Union' shall inform the MSA of the country where the fan will be put into service, or the MSA of the country where the product will be placed on the market if the place of putting into service is unknown, of the expected sale of the fan. This notification should include all the necessary documents for verifying the compliance with Ecodesign requirements, making use as much as possible of the "communication and information system between Member States and the Commission" suggested by the Commission under proposal COM(2017)795, which INTAS partners imagine as an improved version of the existing ICSMS⁹ and/or the EPREL¹⁰ database. The notification would remain within the protected area of the database, and would not contain any commercially sensitive information. Finally, the notification should happen "as early as possible, and in any case no later than six weeks prior to the conformity assessment".¹¹

⁸ Factory acceptance testing (FAT) are not very common in the industrial fan business – at least not for fans in scope of Regulation (EU) No. 327. However, for those manufacturers doing FATs on a regular basis, there is the option that the MSA can participate in a witness test, where the performance of the fan is demonstrated along with the customer of just before/after the customers FAT. In this case the MSA and fan manufacturer should agree on the conditions of the test which could be based on commercial practice e.g. with reference to EN ISO 13348 but with tolerances according to Regulation (EU) No. 327.

⁹ ICSMS is "the internet-supported information and communication system for the pan-European market surveillance."

<https://webgate.ec.europa.eu/icsms/>

¹⁰ EU Product Database for Energy Labelling

¹¹ An alternative, stepwise notification discussed within INTAS could look like this:

1. *Manufacturer/importer must notify company if placing on the market fans according to Reg. No. 327/2011*
2. *"In the moment notification" of fans placed on the market for the first time*
3. *"In advance notification" – An option MSAs can require/demand in a limited period in case they want to use "verification at the manufacturers premises"*



Encouraging the “person responsible for compliance information” to notify the MSAs as early as possible of the planned placing on the market/putting into service of a fan will ensure that delays and disturbances can be minimised in the event that verification procedures take place.

It is in the manufacturer’s own interest to notify the MSA, and to do it as early as possible. Indeed, if the MSA were to conduct verification procedures once the product is placed on the market, it would be very costly for the client in terms of lost operational time or delays. Manufacturers will not wish to develop a reputation of putting their clients at risk due to their failing to cooperate with MSAs

EU vs non-EU manufacturers

The “mutual assistance” provisions of proposal COM(2017)795 make it possible for an MSA from an EU country to request information and enforcement to another MSA of an EU country, but not to non-EU MSAs. It also provides for a system for product related pre-export controls carried out by a third country on products, before they are exported to the Union. Such pre-exports controls will however depend on the ability of the European Commission and the third country to conclude appropriate agreements.

In other words, it seems likely that the standard approach for doing inspection campaigns, and even the new mandatory notification proposed in the paragraphs above, will miss large fans that are imported. Requesting information from customs and other national stakeholders should thus complement the MSA approach to the market surveillance of large fans. See section 3.1.4. just below for more information on this.

3.1.4 Foster cooperation with national market actors

Justification

In order to complete the market picture provided by the European task force on fans (section 3.1.1) and the mandatory notification by manufacturers (section 3.1.3), market surveillance authorities should establish cooperation agreements with national market actors such as the end-users of fans and the customs authorities. Collaboration with these stakeholders will allow to spot products that would have otherwise been “invisible” to market surveillance authorities, e.g. products sold by manufacturers that were not aware of the mandatory product notification.

An evaluation of Regulation (EC) No 765/2008 shows that border controls on imported products are insufficient, and that compliance controls need to be enforced in a more uniform manner. However, and despite the trend towards more European integration and exchange of information, market surveillance activities still fall and will continue to fall within competence of Member States. This means that better border and compliance controls can only be achieved through systematic cooperation between national MSAs and the authorities in charge of checking products at the EU’s external borders (i.e. customs). Effective cooperation of MSAs with customs in all European countries is therefore essential to ensure a level playing field and avoid “soft spots” along the Union’s borders.

In addition, establishing collaboration with national market actors will allow the MSAs to share information and make these stakeholders aware of Ecodesign requirements. INTAS consultations with national stakeholders show indeed that lack of basic information on Ecodesign is a key enforcement problem¹².

¹² INTAS activities on fans “engineered to order” show that:

- Nameplate do not necessarily include the requested ED/ErP-data, but always the CE-mark;
- Declarations of Conformity typically exists for the fans with reference to the Machinery Directive, but typically no ED/ErP-reference



Explanation

Regulation (EC) No 765/2008 already foresees the obligation for cooperation between customs officers and market surveillance officers. Obligations for cooperation are also included in Article 13 of the Community Customs Code¹³ which establishes that controls performed with customs and other authorities are undertaken in close cooperation between each other. In addition, the principles of cooperation between the Member States and the Commission established in Article 24 of the Regulation are extended to authorities in charge of external controls, when relevant (Article 27(5)). This should be enough of a legal basis for MSAs and customs to exchange the necessary information to identify large fans coming into their jurisdiction. In particular, it should allow MSAs to collaborate with customs to develop a method to identify large fans (>10kW) starting from available freight information (e.g. TARIC codes fans, weight and TARIC codes electric motors).

In addition to the collaboration between MSAs and customs, Article 3 of proposal COM(2017)795 encourages “compliance partnerships arrangements” with economic operators, as well as “memoranda of understanding with stakeholders”:

“A market surveillance authority may enter into a partnership arrangement with an economic operator established in its territory under which the authority agrees to provide the economic operator with advice and guidance in relation to the Union harmonisation legislation applicable to the products for which the economic operator is responsible.”

and

“MSAs should be able to build on the existing cooperation with stakeholders and be permitted to conclude memoranda of understanding with stakeholders, with a view to promoting compliance or identifying non-compliance with regard to categories of product within a given geographical area.”

INTAS supports these proposals, as its application to the fans market will allow MSAs to both increase awareness and understanding of Ecodesign requirements, and allow a better market picture and ultimately better market surveillance of fans.

In more concrete terms, MSAs could, under the partnership arrangements described above, work with end-users to help them include in their procurement documents the necessary tests and specifications which will follow the Ecodesign requirements. All manufacturers, including non-EU ones, are reminded of the obligation to comply with Ecodesign rules if they wish to sell in the EU. This would provide an additional layer of guarantee to protect EU companies from unfair competition.

3.1.5 Allow MSAs to conduct market surveillance actions at manufacturers’ and to witness-test FATs

Justification

Conducting verification procedures at manufacturers’, and in particular the witness-testing of any eventual

- Basic ErP-data (as requested on nameplate) are typically not included in the data sheet for the customer unless they ask (and they do not). Product selection/design software may include a check-box to include the ED/ErP-data in the data sheet if requested.

¹³ [Regulation \(EU\) No 952/2013 of the European Parliament and of the Council of 9 October 2013 laying down the Union Customs Code](#)



FAT, is considered the least disruptive option for both manufacturers and end-users. Market surveillance authorities should count explicit powers to undertake such verification procedures.

Explanation

As a first step, INTAS supports recital 23 of the proposal COM(2017)795, which reads:

“Market surveillance authorities should be able to carry out the necessary on-site inspections, and should have the power to enter any premises, land or means of transport, that the economic operator uses for purposes relating to his trade, business, craft or profession.”

While recitals have no independent legal value, they state the rationale for the legislation that they precede.

In addition, INTAS partners suggest that ‘Annex III: Verification procedures’ of Regulation 327/2011 should be amended to include the following text:

“Given the weight and size limitations in the transportation of medium, large, and extra-large fans, Member States authorities may decide to undertake the verification procedure at the premises of manufacturers, before they are put into service in their final destination.”

Annex III should also ensure that in-situ verification procedures at the end-user premises are fully viable. While INTAS fully acknowledges that this is the least desirable option for all economic operators, it still needs to be legally possible as a last resort option, and to deter unethical behaviour from unscrupulous manufacturers.

In addition, and despite FATs not being commonplace for fans, Annex III should also include a clause for MSAs to witness FATs:

“If Factory Acceptance Tests (FATs) are planned, which test minimum requirements set out in Annex I of this Regulation, the competent authorities in may decide to use witnessed testing during these FATs to assess compliance of the fan under investigation or have an independent test house carry out such assessment on their behalf. The authorities may request a manufacturer to disclose information on any planned FATs relevant for witnessed testing.”

The following definitions will also need to be added in ‘Article 2: Definitions’ of 327/2011:

“‘Witnessed testing’ means conducting a product verification test by examining all product and testing documentation, and actively observing the physical testing of the product under investigation by another party, to independently draw up conclusions on the validity of the parameters being tested. This may include conclusions on the compliance of testing and calculations methods used with applicable standards and legislation;”

and

“‘Factory acceptance test’ means a test on an ordered product where the customer uses witnessed testing to verify the product’s full accordance with contractual requirements at the premises of the manufacturers, before they are accepted or put into service in their final destination;”

and

“Test house’ means a governmental or non-governmental third-party organisation independent from the manufacturer, possessing the necessary competence and responsibility to carry out product verification in accordance with this Regulation;”

3.1.6 Allow and clarify alternatives to full-size, full-load testing as verification options

Justification

Full-size, full-load testing of fans might not always be possible due to lack of suitable testing facilities, in particular for the largest fans. Manufacturers use a number of alternative techniques to evaluate the performance of their products without having to test full-size and/or full-load: scale-modelling testing, part-load or reduced speed testing, computational fluid dynamics, calculations of performance and other “calculations and extrapolations”.

Tests are typically carried out in the development phase of e.g. a new impeller wheel or fan model and often only on relatively small fans. The test results of the smaller fans are used to document the basic design that is afterwards scaled-up to establish a complete fan series. So in many cases no test data available for the larger fans. Even, if test results are available for a smaller fan, the test results may not be for exactly the final fan design as the tests were carried out in the R&D phase and Computational Fluid Dynamics may have been used to fine tune the design or changes were made in the process of making the design ready for production.

Market surveillance authorities should be able to know what techniques, calculations and extrapolations have been used. They should also be able to use the same techniques, in particular when full-size, full-load testing is impossible or extremely difficult/expensive. Market surveillance authorities should be able to evaluate whole product series if they are based on the same set of tests and extrapolations and/or scale up calculations

Explanation

Ecodesign regulation should therefore be amended to permit part-load and scale-model testing, as well as computational fluid dynamics and other “calculations and extrapolations” as legally enforceable compliance verification options for very large fans. INTAS suggests the following regulatory changes:

- Article 4 of Regulation (EU) No 327/2011 should include a requirement to provide, in the technical documentation, details of the calculations and extrapolations carried out:

“Where the information included in the technical documentation for a particular fan model has been obtained by calculation on the basis of design, or extrapolation from other fans, or both, the technical documentation shall include the following information:

- (a) details of such calculations or extrapolations, or both, including references to standards or other documents on which they are based.*
- (b) details of tests undertaken by manufacturers to verify the accuracy of the calculations and extrapolations;*
- (c) a list of any other fan models where the information included in the technical documentation was obtained on the same basis;*
- (d) a list of equivalent fan models.*
- (e) details of the certifications of the person/body who performed the calculations and/or extrapolations“*

- *'Annex III: Verification procedure for market surveillance purposes' of Regulation 327/2011 should also include a process for MSAs to be able to decide what testing option to use, a sort of "hierarchy" of testing options.*

3.1.7 Improve fans standards for Ecodesign

Justification

There are no EU-harmonised standards yet for measuring energy efficiency of fans and no transitional methods specified by the European Commission. However, internationally widely accepted test standards exist:

- **EN ISO 5801:2017 Fans – Performance testing using standardised airways**
- **EN ISO 5802:2009 Industrial fans – Performance testing in-situ**

In addition, based on mandate M/500 from 2012 from the European Commission to CEN, CENELEC and ETSI, a harmonised standard should be developed to cover essential requirements related to Ecodesign Directive 2009/125/EC and the implementing measure for fans. A candidate standard is being developed and is currently in a draft version (Final Vote is expected for early 2019) by CEN/TC 156.

- **prEN 17166 Fans – Procedures and methods to determine the energy efficiency for the electrical input power range of 125 W up to 500 kW**

This standard is referring to the test standards EN ISO 5801 and EN ISO 5802. In case of scale testing/scaling the standard referred to is:

- **ISO 13348:2007 Industrial fans - Tolerances, methods of conversion and technical data presentation**

More generally, there is a need to improve consistency between the development of Ecodesign measures and the standardisation agenda, in order to ensure availability of unequivocal and appropriate measurement and assessment methods.

Explanation

The Commission should urgently adopt a transitional method to support Commission regulation (EU) No 327/2011 with regard to Ecodesign requirements for fans driven by motors with an electric input power between 125 W and 500 kW (based on prEN 17166 if appropriate), and eventually a harmonised standard covering test methods for all of the possible testing options described in previous sections (witness testing; in-situ testing; scale testing, part-load and other calculations and extrapolations, etc.).

The verification tolerances for each of the testing options should be specified in Commission regulation (EU) No 327/2011.

3.1.8 Insert clauses to deter circumvention in 327/2011

Justification

Last but not least, circumvention of Ecodesign regulations should be avoided as it results in an uneven playing field and loss of energy savings and money for society.

The relevant provisions on circumvention and defeat devices included in the revised energy labelling Regulation (EU) 2017/1369¹⁴ have prompted debates and led to initiatives with the view to address it. However, moving from the provisions in the horizontal regulation to their implementation in product-specific regulations and standards merits systematic consideration.

Following the latest developments within the revision of Ecodesign measures for other products (e.g. fridges, washing machines, dishwashers, etc.), the upcoming regulations on industrial products should also include an article on circumvention.

Explanation

A new article should be included in Commission Regulation (EU) No 327/2011 which mirrors that included in other Ecodesign regulations:

*“Article X
Circumvention*

The manufacturer or importer shall not place on the market products designed in such a way that a model's performance is automatically altered under test conditions with the aim of reaching a more favourable level for any of the parameters declared by the manufacturer in the technical documentation or included in any of the documentation provided with the product.”

¹⁴ [Regulation \(EU\) 2017/1369 of the European Parliament and of the Council of 4 July 2017 setting a framework for energy labelling and repealing Directive 2010/30/EU \(Text with EEA relevance.\)](#)

3.2 Power Transformers

During the course of the INTAS project, a set of available methodologies were assessed with the help of MSAs, manufacturers of transformers, end-users like utilities and testing experts from independent laboratories. Documentation inspection of nameplates and technical documentation; testing transformers at independent laboratory; testing transformers at manufacturer's premises or in-situ at the end user's premises, with support from staff and equipment from independent laboratories; witness testing at manufacturer's premises in combination with Factory Acceptance Testing (FAT) assessment, using the test facility and equipment of the manufacturer¹⁵.

Although for transformers all options have been verified in general as applicable, reliable and cost-effective, depending on the product size, it was found that witness of factory acceptance tests (FATs) was the most affordable and the least disruptive and costly to suppliers. The recommendations below aim at making the least disruptive options fully viable for MSAs, while keeping the less desirable options (e.g. in-situ testing) open as a last resort.

3.2.1 Set up a dedicated European market surveillance task force for transformers

Justification

Whereas businesses are often active both within the EU and worldwide, market surveillance authorities are often underfunded and constrained by national boundaries. In order to be effective, market surveillance efforts must be uniform across the Union, otherwise weak spots are created which threaten the public interest and encourage unfair competition.

According to analysis by the European Commission¹⁶, regulation (EC) No 765/2008 on market surveillance¹⁷ is not yet uniformly applied: sub-optimal cross-border exchange of information and cooperation, inconsistent implementation of the market surveillance framework at national level, and lack of resources hinder the uniform application of market surveillance activities across Europe.

INTAS analysis confirms these conclusions: according to responses from consulted stakeholders, lack of awareness, capacity, resources and expertise are the key issues jeopardising market surveillance of large industrial products¹⁸.

To ensure consistent enforcement and to efficiently tackle non-compliance spanning over several Member States, it is necessary to better coordinate activities across the Union. Improving cooperation among market surveillance authorities (MSAs) will improve the overview of their own market, and the understanding of regulations, which will in turn help them share information and create awareness among national market actors.

¹⁵ See INTAS deliverable "4.2. Final Methodology for Market Surveillance of Transformers" on INTAS website www.intas-testing.eu

¹⁶ [COM\(2017\)795 - Proposal for a Regulation laying down rules and procedures for compliance with and enforcement of Union harmonisation legislation on products and amending Regulations and Directives](#)

¹⁷ [Regulation \(EC\) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products and repealing Regulation \(EEC\) No 339/93 \(Text with EEA relevance\)](#)

¹⁸ See INTAS "Deliverable 6.3. National and EU stakeholders views" on the INTAS website: www.intas-testing.eu



Explanation

INTAS supports the key principles of the Commission proposal for a Regulation on Enforcement and Compliance COM(2017)795, in particular the establishment of an Union Product Compliance Network (the “Network”) whose main task would be coordinating enforcement across the Union, and whose financing and reporting would also be addressed at Union level. The Network would be hosted by the European Commission, and aim at coordinating and facilitating the implementation of joint enforcement activities by Member States, such as joint investigations. In addition, this administrative support structure should allow the pooling of resources and maintain a communication and information system between Member States and the Commission, thereby helping to strengthen enforcement of Union harmonisation legislation on products and deter infringements.

Proposal COM(2017)795 also sets out the framework for international cooperation with third countries or international organisations to ensure Union harmonisation legislation on products is enforced. It also provides for a system for product related pre-export controls carried out by a third country on products, before they are exported to the Union, the details of which will be established by implementing acts.

Within this general framework, INTAS suggests the creation of a dedicated Task Force on transformers, with a dedicated budget and responsibilities. Such a Task Force would:

- Be made up of national MSA representatives and, if appropriate, representatives of the single liaison offices¹⁹, and representatives of the relevant business associations and of consumer associations. The Commission may also attend the meetings of the Task Force.
- Count on a dedicated budget. INTAS estimates that €0,5-2 million per year would be an adequate amount.
- Provide dedicated technical and legal trainings for MSA, and support MSAs in identifying and adapting procedures for national MSAs legislative and practical situations. The support could also include evaluation of tests and technical support for enforcement actions. To that end, the Task Force should also include independent technology experts to provide specialized support, as most MSA representatives are rather market experts than technology experts.
- Make the best possible use of the information and communication system of the above described “Network” for collecting and storing information on the enforcement of Commission Regulation (EU) No 548/2014²⁰. In particular, notify power transformers imported or manufactured in the Single market for transit to another Member State than the point of entry. The MSA of the receiving country should then decide whether any market surveillance action is needed.
- Ensure that any information exchanged is subject to the strictest guarantees of confidentiality and of professional and commercial secrecy.
- Undertake a number of document inspections and verification tests across Europe. This could be document inspection of some 2-3 manufacturers per year; and testing and verifying some medium-sized transformers to show that market surveillance is actually taking place. These market surveillance activities will create the necessary demand for a network of recognised/accredited laboratories to exist. All such laboratories should follow well-defined criteria (accreditation, independence). This will ensure the consistency and reliability of testing across Europe, and facilitate the use of results from one country in another country.

¹⁹ According to proposal COM(2017)795, “the single liaison office of a Member State shall be responsible for coordinating the enforcement and market surveillance activities of the market surveillance authorities designated by that Member State.”

²⁰ [Commission Regulation \(EU\) No 548/2014 of 21 May 2014 on implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to small, medium and large power transformers](#)



INTAS partners believe that this dedicated Task Force, together with other key provisions in proposal COM(2017)795 (chiefly the appointment of a “person responsible for compliance information within the Union”, and the improvement of the principle of mutual recognition of non-compliant product)²¹ are a very good starting point for the improvement of market surveillance of products in general, and of transformers in particular, in Europe.

3.2.2 Establish a mandatory notification to MSAs

Justification

In order to conduct effective market surveillance, MSAs must be able to have a clear picture of the products that plan to be placed on the market or put into service in their jurisdiction. Large industrial products such as transformers are mostly sold business-to-business (B2B), which make them largely “invisible” to MSAs. A solution is needed to ensure that market surveillance authorities are made aware of such products being placed on the market or put into service in their jurisdiction.

The sooner an MSA knows about a transformer that will be placed on the market/put into service in its jurisdiction, the easier it becomes that any eventual verification procedure for market surveillance can avoid delays and additional costs for the economic operators involved in the transaction. Indeed, the logic of INTAS is to make viable the least disrupting verification procedures (e.g. witness testing of a Factory Acceptance Testing (FAT); verifications at manufacturer’s premises²²). This will help avoid testing in-situ, once the transformer is already functioning, as this would cause enormous disruptions, delays and additional costs at best, and impossible at worst.

A timely notification to the relevant MSAs would help meet those objectives.

Explanation

As a first step to help MSAs have a clearer picture of their fans market, INTAS supports the Commission proposal COM(2017)795, whereby a product can only be made available on the market if a ‘person responsible for compliance information’ is established in the Union and can be a direct interlocutor for market surveillance authorities. This person could be the manufacturer, the importer or any other economic operator mandated by the manufacturer. The tasks of the person responsible for compliance information would essentially be to provide information on the product to market surveillance authorities and to cooperate with the authorities.

In addition to that general requirement, INTAS partners consider that an additional, transformers-specific, mandatory notification would be needed in order to ensure that MSAs have a complete picture of what medium and large transformers will be placed on the market or put into service in their jurisdiction; and to be able to effectively carry out verification procedure on products for which traditional verification procedures is impossible or challenging.

The request for a “Mandatory notification to MSAs” could therefore be inserted in Regulation (EU) No 548/2014, under “*Article 3: Ecodesign requirements*”. The new provision would specify that, for transformers for which “traditional verification procedures” are impossible, or extremely difficult and/or costly, then the ‘person responsible for compliance information within the Union’ shall inform the MSA of the country where the transformer will be put into service, or the MSA of the country where the product will be placed on the

²¹ <http://www.europarl.europa.eu/news/en/press-room/20180903IPR11612/safer-products-stepping-up-checks-and-inspections-to-protect-consumers>

²² Factory acceptance testing (FAT) is common in the transformers industry.

market if the place of putting into service is unknown, of the expected sale of the transformer. This notification should include all the necessary documents for verifying the compliance with Ecodesign requirements, making use as much as possible of the “communication and information system between Member States and the Commission” suggested by the Commission under proposal COM(2017)795, which INTAS partners imagine as an improved version of the existing ICSMS²³ and/or the EPREL²⁴ database. The notification would remain within the protected area of the database, and would not contain any commercially sensitive information. Finally, the notification should happen “as early as possible, and in any case no later than six weeks prior to the conformity assessment”.

The ‘person responsible for compliance information’ should be encouraged to notify the MSAs as early as possible of the planned placing on the market/putting into service of a transformer. This will ensure that delays and disturbances can be minimised in the event verification procedures take place.

It is in the manufacturer’s own interest to notify the MSA, and to do it as early as possible. Indeed, if the MSA were to conduct verification procedures once the product is placed on the market, it would be very costly for the client in terms of lost operational time or delays. Manufacturers will not wish to develop a reputation of putting their clients at risk due to their failing to cooperate with MSAs.

EU vs non-EU manufacturers

The “mutual assistance” provisions of proposal COM(2017)795 make it possible for an MSA from an EU country to request information and enforcement to another MSA of an EU country, but not to non-EU MSAs. It also provides for a system for product related pre-export controls carried out by a third country on products, before they are exported to the Union. Such pre-exports controls will however depend on the ability of the European Commission and the third country to conclude appropriate agreements.

In other words, it seems likely that the standard approach for doing inspection campaigns, and even the new mandatory notification proposed in the paragraphs above, will miss medium and large transformers that are imported. Requesting information from customs and other national stakeholders should thus complement the MSA approach to the market surveillance of medium and large transformers. See section 3.2.3. just below for more information on this.

3.2.3 Foster cooperation with national stakeholders

Justification

In order to complete the market picture provided by the European task force on transformers (section 3.2.1) and the mandatory notification by manufacturers (section 3.2.2), market surveillance authorities should establish cooperation agreements with national market actors such as the end-users of transformers and the customs authorities. Collaboration with these stakeholders will allow to spot products that would have otherwise been “invisible” to market surveillance authorities, e.g. products sold by manufacturers that were not aware of the mandatory product notification.

An evaluation of Regulation (EC) No 765/2008 shows that border controls on imported products are insufficient, and that compliance controls need to be enforced in a more uniform manner. However, and despite the trend towards more European integration and exchange of information, market surveillance activities still fall and will continue to fall within competence of Member States. This means that better border and compliance controls can only be achieved through systematic cooperation between national MSAs and

²³ ICSMS is “the internet-supported information and communication system for the pan-European market surveillance.”
<https://webgate.ec.europa.eu/icsms/>

²⁴ EU Product Database for Energy Labelling



the authorities in charge of checking products at the EU's external borders (i.e. customs). Effective cooperation of MSAs with customs in all European countries is therefore essential to ensure a level playing field and avoid "soft spots" along the Union's borders.

In addition, establishing collaboration with national market actors will allow the MSAs to share information and make these stakeholders aware of Ecodesign requirements. INTAS consultations with national stakeholders show indeed that lack of basic information on Ecodesign is a key enforcement problem.

Explanation

Regulation (EC) No 765/2008 already foresees the obligation for cooperation between customs officers and market surveillance officers. Obligations for cooperation are also included in Article 13 of the Community Customs Code²⁵ which establishes that controls performed with customs and other authorities are undertaken in close cooperation between each other. In addition, the principles of cooperation between the Member States and the Commission established in Article 24 of the Regulation are extended to authorities in charge of external controls, when relevant (Article 27(5)). This should be enough of a legal basis for MSAs and customs to exchange the necessary information to identify medium and large transformers coming into their jurisdiction. In particular, it should allow MSAs to collaborate with customs to develop a method to identify medium and large transformers starting from available freight information (e.g. TARIC codes transformers and weight).

In addition to the collaboration between MSAs and customs, Article 3 of proposal COM(2017)795 encourages "compliance partnerships arrangements" with economic operators, as well as "memoranda of understanding with stakeholders":

"A market surveillance authority may enter into a partnership arrangement with an economic operator established in its territory under which the authority agrees to provide the economic operator with advice and guidance in relation to the Union harmonisation legislation applicable to the products for which the economic operator is responsible."

and

"MSAs should be able to build on the existing cooperation with stakeholders and be permitted to conclude memoranda of understanding with stakeholders, with a view to promoting compliance or identifying non-compliance with regard to categories of product within a given geographical area."

INTAS supports these proposals, as its application to the transformers market will allow MSAs to both increase awareness and understanding of Ecodesign requirements, and allow a better market picture and ultimately better market surveillance of transformers.

In more concrete terms, MSAs could, under the partnership arrangements described above, work with end-users to help them include in their procurement documents the necessary tests and specifications which will follow the Ecodesign requirements. All manufacturers, including non-EU ones, are reminded of the obligation to comply with Ecodesign rules if they wish to sell in the EU. This would provide an additional layer of guarantee to protect EU companies from unfair competition.

²⁵ [Regulation \(EU\) No 952/2013 of the European Parliament and of the Council of 9 October 2013 laying down the Union Customs Code](#)

3.2.4 Allow MSAs to witness-test FATs

Justification:

Conducting verification procedures at manufacturers', and in particular the witness-testing of any eventual FAT, is considered the least disruptive option for both manufacturers and end-users. Market surveillance authorities should count explicit powers to undertake such verification procedures.

Explanation

As a first step, INTAS supports recital 23 of the proposal COM(2017)795, which reads:

“Market surveillance authorities should be able to carry out the necessary on-site inspections, and should have the power to enter any premises, land or means of transport, that the economic operator uses for purposes relating to his trade, business, craft or profession.”

While recitals have no independent legal value, they state the rationale for the legislation that they precede.

Unlike for fans, ‘Annex III: Verification procedures’ of Regulation 548/2014 already includes the following text:

“Given the weight and size limitations in the transportation of medium and large power transformers, Member States authorities may decide to undertake the verification procedure at the premises of manufacturers, before they are put into service in their final destination.”

Annex III should also ensure that in-situ verification procedures at the end-user premises are fully viable. While INTAS fully acknowledges that this is the least desirable option for all economic operators, it still needs to be legally possible as a last resort option, and to deter unethical behaviour from unscrupulous manufacturers.

INTAS partners recommend that Annex III should also include a clause for MSAs to witness FATs:

“If Factory Acceptance Tests (FATs) are planned, which test minimum requirements set out in Annex I of this Regulation, the competent authorities may decide to use witnessed testing during these FATs to assess compliance of the transformer under investigation or have an independent test house carry out such assessment on their behalf. The authorities may request a manufacturer to disclose information on any planned FATs relevant for witnessed testing.”

The following definitions will therefore need to be added in ‘Article 2: Definitions’ of Regulation 548/2014:

“Witnessed testing’ means conducting a product verification test by examining all product and testing documentation, and actively observing the physical testing of the product under investigation by another party, to independently draw up conclusions on the validity of the parameters being tested. This may include conclusions on the compliance of testing and calculations methods used with applicable standards and legislation;”

and

“Factory acceptance test’ means a test on an ordered product where the customer uses witnessed testing to verify the product’s full accordance with contractual requirements at the premises of the manufacturers, before they are accepted or put into service in their final destination;”

and

“Test house’ means a governmental or non-governmental third-party organisation independent from the manufacturer, possessing the necessary competence and responsibility to carry out product verification in accordance with this Regulation;”

3.2.5 Improve standards for in-situ and witness testing

Justification

There is currently lack of clarity as to the standard to be followed for testing in-situ. While there is an existing mandate from the European commission to develop a standard for evaluating the power performance of transformers, such mandate does not include an explicit mention of in-situ testing.

Indeed, a testing standard is needed for those cases that cannot be solved with the manufacturer collaboration, or when manufacturer facilities and other laboratories are not a possible option.

More generally, there is a need to improve consistency between the development of Ecodesign measures and the standardisation agenda, in order to ensure availability of unequivocal and appropriate measurement and assessment methods.

Explanation

INTAS recommendations with regards to standards for transformers is twofold:

- The Commission should issue a mandate for standardisation bodies to develop the methodology to recognize the validity of the in-situ tests for the evaluation of product compliance.
- The Commission should include in the Regulation 548/2014 specific verification tolerances for verification procedures for this particular test method.

In addition, the European surveillance task force on transformers described on point 3.2.1. should produce, with the help of technical experts, a reference guide for MSAs which compiles all of the existing standards and other relevant documents regarding the verification procedures for transformers.

3.2.6 Insert clauses to deter circumvention

Justification

Last but not least, circumvention of Ecodesign regulations should be avoided as it results in an uneven playing field and loss of energy savings and money for society.

The relevant provisions on circumvention and defeat devices included in the revised energy labelling Regulation (EU) 2017/1369²⁶ have prompted debates and led to initiatives with the view to address it. However, moving from the provisions in the horizontal regulation to their implementation in product-specific regulations and standards merits systematic consideration.

²⁶ [Regulation \(EU\) 2017/1369 of the European Parliament and of the Council of 4 July 2017 setting a framework for energy labelling and repealing Directive 2010/30/EU \(Text with EEA relevance.\)](#)

Following the latest developments within the revision of Ecodesign measures for other products (e.g. fridges, washing machines, dishwashers, etc.), the upcoming regulations on industrial products should also include an article on circumvention.

Explanation

A new article should be included in Commission Regulation (EU) No 548/2014 which mirrors that included in other Ecodesign regulations:

“Article X
Circumvention

The manufacturer or importer shall not place on the market products designed in such a way that a model’s performance is automatically altered under test conditions with the aim of reaching a more favourable level for any of the parameters declared by the manufacturer in the technical documentation or included in any of the documentation provided with the product.”



3.3 Other Large Industrial Products

Many of the recommendations above are relevant to other large, industrial products covered by Ecodesign regulations:

- Electric motors²⁷
- Water pumps²⁸
- Condensing units and low and medium temperature liquid chillers²⁹
- Air heating products and high temperature liquid chillers³⁰
- Non-residential ventilation units³¹
- Boilers³²
- Water heaters³³

They could also be helpful for the developments of future regulation on large and industrial products.

The recommendations below are general and do not enter into the detail of each specific products, which would be beyond the scope of INTAS.

3.3.1 Set up dedicated European market surveillance task forces for large industrial products

Justification

Whereas businesses are often active both within the EU and worldwide, market surveillance authorities are often underfunded and constrained by national boundaries. In order to be effective, market surveillance efforts must be uniform across the Union, otherwise weak spots are created which threaten the public interest and encourage unfair competition.

According to analysis by the European Commission³⁴, regulation (EC) No 765/2008 on market surveillance³⁵ is not yet uniformly applied: sub-optimal cross-border exchange of information and cooperation, inconsistent

²⁷ [Commission Regulation \(EC\) No 640/2009 of 22 July 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for electric motors \(Text with EEA relevance\)](#)

²⁸ [Commission Regulation \(EU\) No 547/2012 of 25 June 2012 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for water pumps Text with EEA relevance](#)

²⁹ [Commission Regulation \(EU\) 2015/1095 of 5 May 2015 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers \(Text with EEA relevance\)](#)

³⁰ [Commission Regulation \(EU\) 2016/2281 of 30 November 2016 implementing Directive 2009/125/EC of the European Parliament and of the Council establishing a framework for the setting of ecodesign requirements for energy-related products, with regard to ecodesign requirements for air heating products, cooling products, high temperature process chillers and fan coil units \(Text with EEA relevance\)](#)

³¹ [COMMISSION REGULATION \(EU\) No 1253/2014 of 7 July 2014 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for ventilation units](#)

³² [Commission Regulation \(EU\) No 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters Text with EEA relevance](#)

³³ [Commission Regulation \(EU\) No 814/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for water heaters and hot water storage tanks Text with EEA relevance](#)

³⁴ [COM\(2017\)795 - Proposal for a Regulation laying down rules and procedures for compliance with and enforcement of Union harmonisation legislation on products and amending Regulations and Directives](#)

³⁵ [Regulation \(EC\) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products and repealing Regulation \(EEC\) No 339/93 \(Text with EEA relevance\)](#)



implementation of the market surveillance framework at national level, and lack of resources hinder the uniform application of market surveillance activities across Europe.

INTAS analysis confirms these conclusions: according to responses from consulted stakeholders, lack of awareness, capacity, resources and expertise are the key issues jeopardising market surveillance of large industrial products³⁶.

To ensure consistent enforcement and to efficiently tackle non-compliance spanning over several Member States, it is necessary to better coordinate activities across the Union. Improving cooperation among market surveillance authorities (MSAs) will improve the overview of their own market, and the understanding of regulations, which will in turn help them share information and create awareness among national market actors.

Explanation

INTAS supports the key principles of the Commission proposal for a Regulation on Enforcement and Compliance COM(2017)795, in particular the establishment of an Union Product Compliance Network (the “Network”) whose main task would be coordinating enforcement across the Union, and whose financing and reporting would also be addressed at Union level. The Network would be hosted by the European Commission, and aim at coordinating and facilitating the implementation of joint enforcement activities by Member States, such as joint investigations. In addition, this administrative support structure should allow the pooling of resources and maintain a communication and information system between Member States and the Commission, thereby helping to strengthen enforcement of Union harmonisation legislation on products and deter infringements.

Proposal COM(2017)795 also sets out the framework for international cooperation with third countries or international organisations to ensure Union harmonisation legislation on products is enforced. It also provides for a system for product related pre-export controls carried out by a third country on products, before they are exported to the Union, the details of which will be established by implementing acts.

Within this general framework, INTAS suggests the creation of dedicated Task Forces on large industrial products, with a dedicated budget and responsibilities. Such Task Forces would:

- Be made up of national MSA representatives and, if appropriate, representatives of the single liaison offices³⁷, and representatives of the relevant business associations and of consumer associations. The Commission may also attend the meetings of the Task Forces.
- Count on a dedicated budget, enough to undertake the activities described below.
- Provide dedicated technical and legal trainings for MSA, and support MSAs in identifying and adapting procedures for national MSAs legislative and practical situations. The support could also include evaluation of tests and technical support for enforcement actions. To that end, the Task Forces should also include independent technology experts to provide specialized support, as most MSA representatives are rather market experts than technology experts.
- Make the best possible use of the information and communication system of the above described “Network” for collecting and storing information on the enforcement of Ecodesign Regulations on large industrial products. In particular, notify products imported or manufactured in the Single market for transit to another Member State than the point of entry. The MSA of the receiving country should then decide whether any market surveillance action is needed.

³⁶ See INTAS “Deliverable 6.3. National and EU stakeholders views” on the INTAS website: www.intas-testing.eu

³⁷ According to proposal COM(2017)795, “the single liaison office of a Member State shall be responsible for coordinating the enforcement and market surveillance activities of the market surveillance authorities designated by that Member State.”

- Ensure that any information exchanged is subject to the strictest guarantees of confidentiality and of professional and commercial secrecy.
- Undertake a number of document inspections and verification tests across Europe. This could be document inspection of a number of manufacturers per year; and testing and verifying enough products to show that market surveillance is actually taking place. These market surveillance activities will create the necessary demand for a network of recognised/accredited laboratories to exist. All such laboratories should follow well-defined criteria (accreditation, independence). This will ensure the consistency and reliability of testing across Europe, and facilitate the use of results from one country in another country.

INTAS partners believe that these dedicated Task Forces, together with other key provisions in proposal COM(2017)795 (chiefly the appointment of a “person responsible for compliance information within the Union”, and the improvement of the principle of mutual recognition of non-compliant product) are a very good starting point for the improvement of market surveillance of products in general, and of large industrial products in particular, in Europe.

3.3.2 Establish a mandatory notification to MSAs

Justification

In order to conduct effective market surveillance, MSAs must be able to have a clear picture of the products that plan to be placed on the market or put into service in their jurisdiction. Large industrial products are mostly sold business-to-business (B2B), which make them largely “invisible” to MSAs. A solution is needed to ensure that market surveillance authorities are made aware of such products being placed on the market or put into service in their jurisdiction.

The sooner an MSA knows about a product that will be placed on the market/put into service in its jurisdiction, the easier it becomes that any eventual verification procedure for market surveillance checks can avoid delays and additional costs for the economic operators involved in the transaction. Indeed, the logic of INTAS is to make viable the least disrupting verification procedures (e.g. witness testing of a Factory Acceptance Testing if it exists; verifications at manufacturer’s premises). This will help avoid testing in-situ, once the product is already functioning, as this would cause enormous disruptions, delays and additional costs.

A timely notification to the relevant MSAs would help meet those objectives.

Explanation

As a first step to help MSAs have a clearer picture of their fans market, INTAS supports the Commission proposal COM(2017)795, whereby a product can only be made available on the market if a ‘person responsible for compliance information’ is established in the Union and can be a direct interlocutor for market surveillance authorities. This person could be the manufacturer, the importer or any other economic operator mandated by the manufacturer. The tasks of the person responsible for compliance information would essentially be to provide information on the product to market surveillance authorities and to cooperate with the authorities.

In addition to that general requirement, INTAS partners consider that an additional, product-specific, mandatory notification would be needed in order to ensure that MSAs have a complete picture of what products will be placed on the market or put into service in their jurisdiction; and to be able to effectively



carry out verification procedure on products for which traditional verification procedures is impossible or challenging.

The request for a “Mandatory notification to MSAs” could therefore be inserted in Ecodesign Regulations for large industrial products, under “*Article 3: Ecodesign requirements*”. The new provisions would specify that, for products for which “traditional verification procedures” are impossible, or extremely difficult and/or costly, then the ‘person responsible for compliance information within the Union’ shall inform the MSA of the country where the product will be put into service, or the MSA of the country where the product will be placed on the market if the place of putting into service is unknown, of the expected sale of the product. This notification should include all the necessary documents for verifying the compliance with Ecodesign requirements, making use as much as possible of the “communication and information system between Member States and the Commission” suggested by the Commission under proposal COM(2017)795, which INTAS partners imagine as an improved version of the existing ICSMS³⁸ and/or the EPREL³⁹ database. The notification would remain within the protected area of the database, and would not contain any commercially sensitive information. Finally, the notification should happen “as early as possible, and in any case no later than six weeks prior to the conformity assessment”.

The ‘person responsible for compliance information’ should be encouraged to notify the MSAs as early as possible of the planned placing on the market/putting into service of a product. This will ensure that delays and disturbances can be minimised in the event verification procedures take place.

It is in the manufacturer’s own interest to notify the MSA, and to do it as early as possible. Indeed, if the MSA were to conduct verification procedures once the product is placed on the market, it would be very costly for the client in terms of lost operational time or delays. Manufacturers will not wish to develop a reputation of putting their clients at risk due to their failing to cooperate with MSAs.

EU vs non-EU manufacturers

The “mutual assistance” provisions of proposal COM(2017)795 make it possible for an MSA from an EU country to request information and enforcement to another MSA of an EU country, but not to non-EU MSAs. It also provides for a system for product related pre-export controls carried out by a third country on products, before they are exported to the Union. Such pre-exports controls will however depend on the ability of the European Commission and the third country to conclude appropriate agreements.

In other words, it seems likely that the standard approach for doing inspection campaigns, and even the new mandatory notification proposed in the paragraphs above, will miss large industrial products that are imported. Requesting information from customs and other national stakeholders should thus complement the MSA approach to the market surveillance of large industrial products. See section 3.3.3. just below for more information on this.

3.3.3 Foster cooperation with national stakeholders

Justification

In order to complete the market picture provided by the European task forces (section 3.3.1) and the mandatory notification by manufacturers (section 3.3.2), market surveillance authorities should establish cooperation agreements with national market actors such as the end-users of large industrial products and

³⁸ ICSMS is “the internet-supported information and communication system for the pan-European market surveillance.”

<https://webgate.ec.europa.eu/icsms/>

³⁹ EU Product Database for Energy Labelling



the customs authorities. Collaboration with these stakeholders will allow to spot products that would have otherwise been “invisible” to market surveillance authorities, e.g. products sold by manufacturers that were not aware of the mandatory product notification.

An evaluation of Regulation (EC) No 765/2008 shows that border controls on imported products are insufficient, and that compliance controls need to be enforced in a more uniform manner. However, and despite the trend towards more European integration and exchange of information, market surveillance activities still fall and will continue to fall within competence of Member States. This means that better border and compliance controls can only be achieved through systematic cooperation between national MSAs and the authorities in charge of checking products at the EU’s external borders (i.e. customs). Effective cooperation of MSAs with customs in all European countries is therefore essential to ensure a level playing field and avoid “soft spots” along the Union’s borders.

In addition, establishing collaboration with national market actors will allow the MSAs to share information and make these stakeholders aware of Ecodesign requirements. INTAS consultations with national stakeholders show indeed that lack of basic information on Ecodesign is a key enforcement problem.

Explanation

Regulation (EC) No 765/2008 already foresees the obligation for cooperation between customs officers and market surveillance officers. Obligations for cooperation are also included in Article 13 of the Community Customs Code which establishes that controls performed with customs and other authorities are undertaken in close cooperation between each other. In addition, the principles of cooperation between the Member States and the Commission established in Article 24 of the Regulation are extended to authorities in charge of external controls, when relevant (Article 27(5)). This should be enough of a legal basis for MSAs and customs to exchange the necessary information to identify large industrial products coming into their jurisdiction. In particular, it should allow MSAs to collaborate with customs to develop a method to identify large industrial products starting from available freight information (e.g. TARIC codes and weight).

In addition to the collaboration between MSAs and customs, Article 3 of proposal COM(2017)795 encourages “compliance partnerships arrangements” with economic operators, as well as “memoranda of understanding with stakeholders”:

“A market surveillance authority may enter into a partnership arrangement with an economic operator established in its territory under which the authority agrees to provide the economic operator with advice and guidance in relation to the Union harmonisation legislation applicable to the products for which the economic operator is responsible.”

and

“MSAs should be able to build on the existing cooperation with stakeholders and be permitted to conclude memoranda of understanding with stakeholders, with a view to promoting compliance or identifying non-compliance with regard to categories of product within a given geographical area.”

INTAS supports these proposals, as its application to the large industrial products markets will allow MSAs to both increase awareness and understanding of Ecodesign requirements, and allow a better market picture and ultimately better market surveillance of large industrial products.

In more concrete terms, MSAs could, under the partnership arrangements described above, work with end-users to help them include in their procurement documents the necessary tests and specifications which will follow the Ecodesign requirements. All manufacturers, including non-EU ones, are reminded of the obligation



to comply with Ecodesign rules if they wish to sell in the EU. This would provide an additional layer of guarantee to protect EU companies from unfair competition.

3.3.4 Allow MSAs to conduct market surveillance actions at manufacturers' and to witness-test FATs

Justification

Conducting verification procedures at manufacturers', and in particular the witness-testing of any eventual FAT, is considered the least disruptive option for both manufacturers and end-users. Market surveillance authorities should count explicit powers to undertake such verification procedures.

Explanation

As a first step, INTAS supports recital 23 of the proposal COM(2017)795, which reads:

"Market surveillance authorities should be able to carry out the necessary on-site inspections, and should have the power to enter any premises, land or means of transport, that the economic operator uses for purposes relating to his trade, business, craft or profession."

While recitals have no independent legal value, they state the rationale for the legislation that they precede.

In addition, INTAS partners suggest that *the annex on 'Verification procedures'* of the relevant Ecodesign regulations include the following text:

"Given the weight and size limitations in the transportation of [insert name of product], Member States authorities may decide to undertake the verification procedure at the premises of manufacturers, before they are put into service in their final destination."

Annex III should also ensure that in-situ verification procedures at the end-user premises are fully viable. While INTAS fully acknowledges that this is the least desirable option for all economic operators, it still needs to be legally possible as a last resort option, and to deter unethical behaviour from unscrupulous manufacturers.

Finally, Annex III should also include a clause for MSAs to witness FATs, in case they are used for the product:

"If Factory Acceptance Tests (FATs) are planned, which test minimum requirements set out in Annex I of this Regulation, the competent authorities in may decide to use witnessed testing during these FATs to assess compliance of the [insert name of product] under investigation or have an independent test house carry out such assessment on their behalf. The authorities may request a manufacturer to disclose information on any planned FATs relevant for witnessed testing."

The following definitions will also need to be added in 'Article 2: Definitions' of the relevant Ecodesign regulation:

"Witnessed testing' means conducting a product verification test by examining all product and testing documentation, and actively observing the physical testing of the product under investigation by another party, to independently draw up conclusions on the validity of the parameters being tested. This may include



conclusions on the compliance of testing and calculations methods used with applicable standards and legislation;”

and

“Factory acceptance test’ means a test on an ordered product where the customer uses witnessed testing to verify the product’s full accordance with contractual requirements at the premises of the manufacturers, before they are accepted or put into service in their final destination;”

and

“Test house’ means a governmental or non-governmental third-party organisation independent from the manufacturer, possessing the necessary competence and responsibility to carry out product verification in accordance with this Regulation;”

3.3.5 Allow and clarify alternatives to full-size, full-load testing as verification options

Justification

Full-size, full-load testing of fans might not always be possible due to lack of suitable testing facilities, in particular for the largest fans. Manufacturers use a number of alternative techniques to evaluate the performance of their products without having to test full-size and/or full-load: scale-modelling testing, part-load or reduced speed testing, computational fluid dynamics, calculations of performance and other “calculations and extrapolations”.

Market surveillance authorities should be able to know what techniques, calculations and extrapolations have been used for the compliance assessment of a given product. They should also be able to use the same techniques, in particular when full-size, full-load testing is impossible or extremely difficult/expensive.

Explanation

The relevant Ecodesign regulations should therefore be amended to permit part-load and scale-model testing, as well as computational fluid dynamics and other “calculations and extrapolations” as legally enforceable compliance verification options for large industrial products. INTAS suggests the following regulatory changes:

- The Article on “Conformity Assessment” of the relevant Ecodesign regulations should include a requirement to provide, in the technical documentation, details of the calculations and extrapolations carried out:

“Where the information included in the technical documentation for a particular [insert product name] model has been obtained by calculation on the basis of design, or extrapolation from other fans, or both, the technical documentation shall include the following information:

- (a) details of such calculations or extrapolations, or both, including references to standards or other documents on which they are based.*
- (b) details of tests undertaken by manufacturers to verify the accuracy of the calculations and extrapolations;*
- (c) a list of any other fan models where the information included in the technical documentation was obtained on the same basis;*
- (d) a list of equivalent [insert product name] models.*
- (e) details of the certifications of the person/body who performed the calculations and/or extrapolations“*

- ‘Annex III: Verification procedure for market surveillance purposes’ of Regulation 327/2011 should also include a process for MSAs to be able to decide what testing option to use, a sort of “hierarchy” of testing options.

3.3.6 Ensure that standards covers all testing options

Justification

The alternative testing techniques for market surveillance purposes that INTAS suggests to clarify and make fully viable in the preceding policy recommendations are only valid if there are standards that define how to undertake the testing.

More generally, there is a need to improve consistency between the development of Ecodesign measures and the standardisation agenda, in order to ensure availability of unequivocal and appropriate measurement and assessment methods.

Explanation

The Commission should therefore:

- Issue mandates for the development of methods to evaluate the power performance of large industrial products for market surveillance purposes, where those do not yet exist. The mandates should explicitly cover test methods for all of the possible testing options (including but not limited to: witness testing; in-situ testing; scale testing, part-load and other calculations and extrapolations, etc.).
- Specify in the relevant Ecodesign regulations the tolerances to be applied for each of the testing options covered in the standard.
- Adopt transitional methods as necessary while the harmonised standard is being developed.

3.3.7 Insert clauses to deter circumvention

Justification

Last but not least, circumvention of Ecodesign regulations should be avoided as it results in an uneven playing field and loss of energy savings and money for society.

The relevant provisions on circumvention and defeat devices included in the revised energy labelling Regulation (EU) 2017/1369⁴⁰ have prompted debates and led to initiatives with the view to address it. However, moving from the provisions in the horizontal regulation to their implementation in product-specific regulations and standards merits systematic consideration.

Following the latest developments within the revision of Ecodesign measures for other products (e.g. fridges, washing machines, dishwashers, etc.), the upcoming regulations on industrial products should also include an article on circumvention.

Explanation

⁴⁰ [Regulation \(EU\) 2017/1369 of the European Parliament and of the Council of 4 July 2017 setting a framework for energy labelling and repealing Directive 2010/30/EU \(Text with EEA relevance.\)](#)

A new article should be included in the relevant Ecodesign regulations which mirror that included in other Ecodesign regulations:

*“Article X
Circumvention*

The manufacturer or importer shall not place on the market products designed in such a way that a model's performance is automatically altered under test conditions with the aim of reaching a more favourable level for any of the parameters declared by the manufacturer in the technical documentation or included in any of the documentation provided with the product.”



4. Conclusions

Market surveillance of large industrial products covered by the Ecodesign Directive is a particularly challenging endeavour. This is due to the size and power of the products, the costs of transport and testing, but also the fact that they are mostly sold Business-to-Business (B2B), and therefore largely “invisible” to Market Surveillance Authorities (MSAs).

In the previous pages, INTAS provided a number of concrete, pragmatic policy recommendations which aim to provide MSAs with the full suite of verification options needed to adequately tackle non-compliance of large industrial products. While INTAS focus is mainly on fans (section 3.1.) and power transformers (section 3.2.), the issues to be addressed, as well as the regulatory framework is shared with other large industrial products (section 3.3.).

A large part of the report was dedicated to making the least disruptive verification options viable. That is for example the spirit of the recommendations on a “Mandatory Notification”; and of the “cooperation at the national and international levels”; it is also why INTAS suggests requirements to explicitly allow “witness testing of FATs and testing at manufacturers” as verification procedures for market surveillance. These are “the carrots” of INTAS proposed policy strategy.

Some of the other recommendations described above aim at ensuring that, should it not be possible to use non-disruptive options, MSAs still have the ability to conduct verification procedures. This is the why INTAS recommends clarifying the use of “**alternative verification options**” and their related “**standards**”. These recommendations are what we may call “**the sticks**” of the INTAS proposed policy strategy. INTAS fully acknowledges that some of these verification options (e.g. in-situ testing) are much more disruptive/challenging/costly than others and should therefore only be used as a last resort option.

The remainder of the recommendations complete the necessary regulatory framework to ensure that MSAs count on all the necessary tools to effectively undertake an effective market surveillance of large industrial products.

INTAS partners will be glad to build on these proposals to support the European Commission, EU MSs and other relevant stakeholders to ensure that the revision of the relevant Ecodesign regulations and associated standards allows MSAs to properly carry out market surveillance of large industrial products.



References

[Evaluation of the Energy Labelling Directive and specific aspects of the Ecodesign Directive. Background report I: Literature review](#)

[Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products \(Text with EEA relevance\)](#)

[COMMISSION REGULATION \(EU\) No 327/2011 of 30 March 2011 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for fans driven by motors with an electric input power between 125 W and 500 kW](#)

[COM\(2017\)795 - Proposal for a Regulation laying down rules and procedures for compliance with and enforcement of Union harmonisation legislation on products and amending Regulations and Directives](#)

[Regulation \(EU\) No 952/2013 of the European Parliament and of the Council of 9 October 2013 laying down the Union Customs Code](#)

[Regulation \(EC\) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products and repealing Regulation \(EEC\) No 339/93 \(Text with EEA relevance\)](#)

[Regulation \(EU\) 2017/1369 of the European Parliament and of the Council of 4 July 2017 setting a framework for energy labelling and repealing Directive 2010/30/EU \(Text with EEA relevance.\)](#)

[Commission Regulation \(EU\) No 548/2014 of 21 May 2014 on implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to small, medium and large power transformers](#)

[Commission Regulation \(EC\) No 640/2009 of 22 July 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for electric motors \(Text with EEA relevance\)](#)

[Commission Regulation \(EU\) No 547/2012 of 25 June 2012 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for water pumps Text with EEA relevance](#)

[Commission Regulation \(EU\) 2015/1095 of 5 May 2015 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers \(Text with EEA relevance\)](#)

[Commission Regulation \(EU\) 2016/2281 of 30 November 2016 implementing Directive 2009/125/EC of the European Parliament and of the Council establishing a framework for the setting of ecodesign requirements for energy-related products, with regard to ecodesign requirements for air heating products, cooling products, high temperature process chillers and fan coil units \(Text with EEA relevance\)](#)

[COMMISSION REGULATION \(EU\) No 1253/2014 of 7 July 2014 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for ventilation units](#)

[Commission Regulation \(EU\) No 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters Text with EEA relevance](#)



[Commission Regulation \(EU\) No 814/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for water heaters and hot water storage tanks Text with EEA relevance](#)

Background references (not directly cited in the report)

[Commission Regulation \(EU\) 2016/2282 of 30 November 2016 amending Regulations \(EC\) No 1275/2008, \(EC\) No 107/2009, \(EC\) No 278/2009, \(EC\) No 640/2009, \(EC\) No 641/2009, \(EC\) No 642/2009, \(EC\) No 643/2009, \(EU\) No 1015/2010, \(EU\) No 1016/2010, \(EU\) No 327/2011, \(EU\) No 206/2012, \(EU\) No 547/2012, \(EU\) No 932/2012, \(EU\) No 617/2013, \(EU\) No 666/2013, \(EU\) No 813/2013, \(EU\) No 814/2013, \(EU\) No 66/2014, \(EU\) No 548/2014, \(EU\) No 1253/2014, \(EU\) 2015/1095, \(EU\) 2015/1185, \(EU\) 2015/1188, \(EU\) 2015/1189 and \(EU\) 2016/2281 with regard to the use of tolerances in verification procedures \(Text with EEA relevance \)](#)

[European Commission. Good practice for market surveillance](#)

[Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC \(recast\)](#)

[European Commission. 'Blue Guide' on the implementation of EU product rules](#)



Abbreviations List

B2B = Business to Business

CEN = European Committee for Standardisation

CENELEC = European Committee for Electrotechnical Standardisation

EC = European Commission

EU = European Union

EN = European Norm

ETSI = European Telecommunications Standards Institute

Factory Acceptance Tests (FATs)

ISO = International Organisation for Standardisation

kW = kiloWatt

MSA = Market Surveillance Authority

prEN = Provisional European Norm

R&D = Research and Development

TARIC = Integrated Tariff of the European Community

TC = Technical Committee

W = Watt



More information
about the INTAS project activities
and all of its results
are published on:

www.INTAS-testing.eu

Contact to the project coordinator:
Ingrid Weiss
Ingrid.Weiss@wip-munich.de

The sole responsibility for the content of this document lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither the EASME nor the European Commission are responsible for any use that may be made of the information contained therein.



Co-funded by the Horizon 2020 programme
Programme of the European Union

