INTAS Project
5th Half-yearly progress summary:
April 2018 – October 2018

Document published: 29.01.2019
Organisation name of lead author of this document: WSE
Project coordinator: WIP

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

Horizon 2020 programme
Project acronym: INTAS
Project full name:
Industrial and Tertiary Product Testing and Application of Standards

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Executive Summary

The Industrial and Tertiary Product Testing and Application of Standards (INTAS) project is funded by the EU's Horizon 2020 programme and aims to provide technical and cooperative support and capacity building activities to Market Surveillance Authorities (MSAs) concerned with the enforcement of Ecodesign Directive requirements for very large products. The need for INTAS 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 under the Ecodesign Directive. It is specifically focused on transformers and industrial fans.

The project aims to:

- support European Member State MSAs to deliver Ecodesign compliance for transformers and large fans
- support industry to fully understand their obligations 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.

The project started in March 2016 and will conclude in February 2019. It involves 16 European partners, among which 11 are national MSAs or cooperating organisations and the remainder are technical partners.

This document is the fifth half-yearly status report of the INTAS project. It is intended to provide external stakeholders with a summary of the project and progress made by the project consortium within the fifth six monthly period of the project.

Within the fifth six-monthly project period the project partners have:

- Held a face to face working meeting in Rome and numerous teleconferences.
- Held a set of national focal point meetings national stakeholders concerned with the industrial fan and power transformer sectors
- Maintained and extended contacts with a wide variety of relevant stakeholders (Market Surveillance Agencies, testing laboratories, accreditation authorities, standardisation bodies, product regulators, industrial and commercial actors, technical experts and NGOs)
- Continued to foster contacts with key EU market surveillance processes and related projects including making preparations to present the latest findings to the members of the Ecodesign ADCO
- Advanced the project technical work (Work Package 4) on the evaluation of the INTAS Eocdesign compliance assessment methodology, including:
    - Conducting a practical evaluation of the complete INTAS market surveillance methodology for industrial fans and drafting the final version (Task 4.1)
    - Conducting a practical evaluation of the complete INTAS market surveillance methodology for industrial power transformers and drafting the final version (Task 4.2)

- Conducting an evaluation of the costs, benefits and new methods of testing, and common issues found in large product testing (Task 4.3)

- Drafting of policy recommendations for future regulation of large and industrial products (Task 4.4)

This work has led the way towards the issuance of the final reports on the INTAS methodology and policy recommendations which are expected in November 2018.

The evaluations of the draft INTAS methodologies for fans and power transformers conducted by a set of MSAs in Work Package 4 has largely confirmed the viability of the proposed methodologies as developed in the earlier Work Package 3 and therefore only minor refinements are expected in the final drafts. It has also clearly identified the challenges which are faced which has led to a provisional set of policy recommendations being drafted which can help to ameliorate the difficulties in conducting effective market surveillance for large industrial products and specifically fans and power transformers.

The biggest issues to be overcome are:

- Establishment of an effective system of notification so that MSA's are informed of when a large industrial product is placed on the market in time to be able to conduct market surveillance actions including conformity verification, in a manner that is least costly and disruptive to the market

- Establishment of viable conformity verification pathways that cover the full range of products and not just smaller products – this is a particularly acute issue for large industrial fans (due to a lack of available 3rd party testing facilities capable of testing such fans at full load) and very large power transformers (due to the practical problems of sending such transformers to 3rd party testing facilities)

Strategies have been advanced that address both of these issues and will be reported in the final deliverables for work package 4 and summarised in the next 6 monthly project report.

In addition, the draft cost-benefits indicates that the conduct of Ecodesign market surveillance for these products is cost-effective when the costs of the market surveillance action are compared to the value of the energy savings. More details on these aspects are reported in the main body of this progress report.

Final project conference

The INTAS project is set to present the final project findings at a public conference to be held in Brussels on February 12th 2019.

Project description, participants and advisory board

Details of the INTAS project workplan, participants and advisory board are reported in Appendix A.

1. Project progress: April 2018 – October 2018

1.1 Progress with Work Package 1: Management and coordination

1.1.1 Project meetings

Following the 4th Technical Progress meeting held in Madrid on April 9th & 10th, 2018 a fifth meeting was held on 29-30th October in Rome. This meeting focused on the findings from Work Package 4 that involved pilot programme testing of the INTAS methodologies for market surveillance for large industrial fans and large power transformers developed in Work Package 3 and the progress made and planning for Work Packages 5 and 6.

1.2 Progress with Work Package 2: Landscape of testing avenues

Work Package 2 was the first technical task to get underway. The activities were described in detail in the 2nd 6-monthly report and the work package deliverables were completed in the 3rd 6-monthly period.

The following public deliverables are available on the project website:

- Database and report on EN/IEC/ISO technical standards - Report (ZIP file, with spreadsheets)
- Database and report on EN/IEC/ISO technical standards - Annex A: Power transformers
- Database and report on EN/IEC/ISO technical standards - Annex B: Large fans
- Worldwide and EU current practices in market surveillance (D2.6 WP 2.5) - INTAS / ENEA report

In addition, the following confidential deliverables have been produced for the use of the project consortium:

- Data base of EU laboratories
- Report on laboratory selection process
- Report on accreditation possibilities
- Report on commercial practices.

1.3 Progress with Work Package 3: Defining an effective compliance framework for MSAs and manufacturers

Work Package 3 establishes the elements to define an effective market surveillance approach for large industrial fans and large transformers and builds strongly on the work undertaken in WP 2. It began in December 2016 and

concluded in April 2018. The activities were described in detail in the 4th 6-monthly report and the work package deliverables were completed in the same period.

The following public deliverables from Work Package 3 are available on the project website:

- Analysis and report on other applicable regulations on fans - ECD report
- Analysis and report on other applicable regulations on transformers - ECD report
- Best practice and experiences of both MSAs and industry regarding testing of fans - WSE report
- Best practice and experiences of both MSAs and industry regarding testing of transformers - WSE report
- Report about the screening techniques available for product/supplier targeting - WSE report
- Graphical flow chart of the methodological process, taking into account all tasks - ECOS document

In addition, the following confidential deliverables have been produced for the use of the project consortium:

- Report on information and additional requirements related to inspection of fans
- Report on information and additional requirements related to inspection of transformers
- Report on Evaluation of products in each testing type and unit category.

1.4 Progress with Work Package 4: Evaluation of compliance assessment methodology

1.4.1 Summary of work package

The purpose Work Package 4 is to conduct a practical evaluation of the theoretical assessment methodology that was developed in Work Packages 2 and 3 with the intention of deriving lessons that may be used to refine the methodology as needed and translate the findings into core recommendations for both policy makers and national authorities.

The tasks under this work package began in February 2018.

1.4.2 Progress with task activities and deliverables

1.4.2.1 Task 4.1: Practical evaluation and complete methodology on fans

Task 4.1 concerns the development of a “Practical evaluation and complete methodology on fans”. It entails validation of the Work Package 3 methodologies by a group of market surveillance agencies and industry and then using the findings to propose any amendments that may be needed. To this end industry feedback on the provisional methodology was gathered at a 2nd set of national focal point meetings (see Work Package 6). In addition, pilot actions were conducted by the INTAS partners ASAE, ENEA, ANRE, BHTC and TUKES to test the methodology and report on their experience.

By the time of the Rome project meeting a draft of the Task 4.1 report had been prepared by the task leaders (DTI) and circulated for comment. This report was divided into two parts:

- A step-by step-guide for the compliance verification methodology (to be issued as a public report).
- Explanation of the piloting phase (to be held as a confidential report for internal circulation among INTAS partners and the EC).

The final report is expected in November.

While still awaiting finalisation this work highlighted the importance of the pilot testing which for the most part found that the proposed methodologies were viable with minor adjustments. However, in the case of fans that work also highlighted the current limitatations in 3rd party testing capability as illustrated in Table 1. This illustrates the limits for testing among independent laboratories as a function of the fan pressure, flow rate and/or electric power (shown in the figures shaded from white (meaning widely available at that power level) to dark grey (unlikely to be available).

Table 1: Availability of independent laboratories.

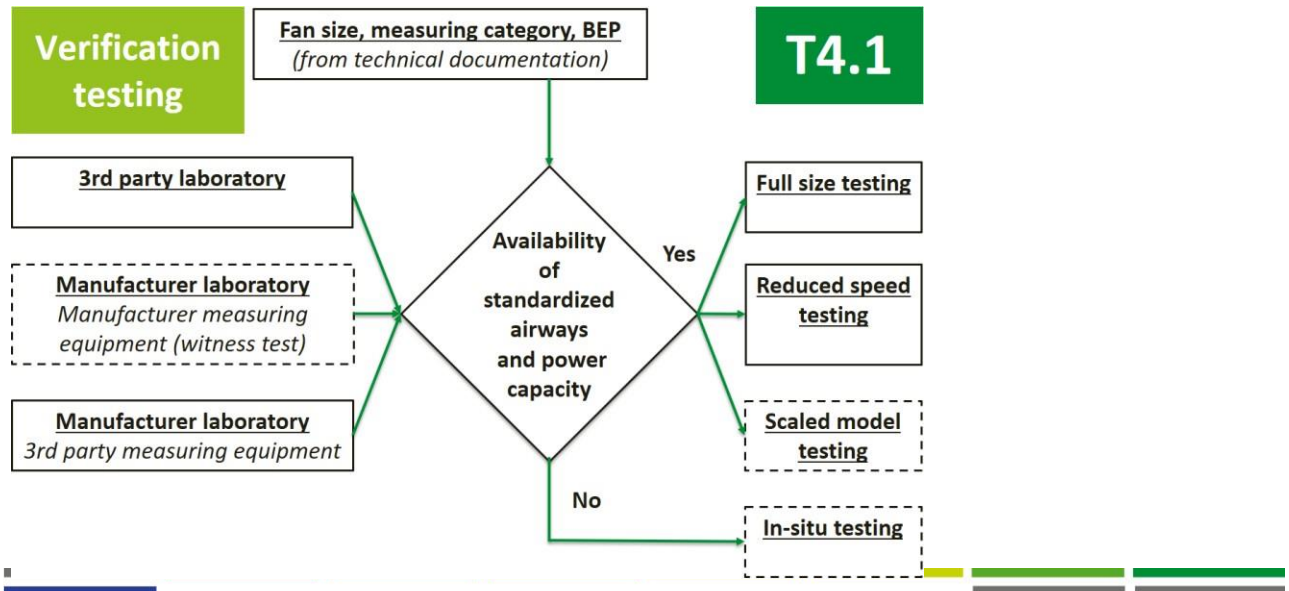
Electric power [kW]	Flow rate, [m3/h]					
Pressure, [Pa]	5,000	15,000	25,000	35,000	50,000	75,000
2,500	3.9	11.6	19.3	27.0	38.6	57.9
5,000	7.7	23.1	38.6	54.0	77.2	115.7
7,500	11.6	34.7	57.9	81.0	115.7	171.6
10,000	15.4	46.3	77.2	108.0	154.3	231.5

Widely available
Available
Less available
Unlikely

Drive system efficiency = 0.9

A flow chart showing the different possibilities for testing has also bee developed (Figure 1). Although some of the options are considered more feasible than others, it was agreed among the project partners that it is necessary to leave open the entire range of possibilities due to the limitations in conducting 3rd party testing for large fans at full power.

Figure 1: Different possibilities for testing fans.



1.4.2.2 Task 4.2: Practical evaluation and complete methodology on transformers

Task 4.2 concerns the development of a "Practical evaluation and complete methodology on transformers". It entails validation of the Work Package 3 methodologies by a group of market surveillance agencies and industry and then using the findings to propose any amendments that may be needed. To this end industry feedback on the provisional methodology was gathered at a 2nd set of national focal point meetings (see WP 6). In addition, pilot actions were conducted by the INTAS partners ASAE, ENEA, ANRE, BHTC and TUKES to test the methodology and report on their experience.

By the time of the Rome project meeting a draft of the Task 4.2 report had been prepared by the task leaders (FFII-LCOE) and circulated for comment. As was the case for fans, this report was divided into two parts:

- A step-by step-guide for the compliance verification methodology (to be issued as a public report).
- Explanation of the piloting phase (to be held as a confidential report for internal circulation among INTAS partners and the EC).

The final report is expected in November.

While still awaiting finalisation the pilot testing and stakeholder feedback found that the proposed methodologies were fully applicable and include all the elements necessary for a successful verification of conformity. It also supported the finding that mandatory notification of the placing on the market of large power transformers would be feasible and necessary if market surveillance is to be effective.

Other findings are that:

- the approach put forward for screening and selecting samples seems appropriate for the circumstances applicable to most MSAs
- the check list developed is useful for the documentation inspection
- the selection of the most appropriate compliance verification method should take into consideration the type and dimension of transformers and the cost of the verification
- as expected, there are some difficulties concerning in-situ tests for large transformers and these should only be considered as a last option. Principally, there is a need to develop a standard for in-situ testing
- verification testing within independent 3rd party testing laboratories is usually not practical for large power transformers.

1.4.2.3 Task 4.3: Evaluation of costs, benefits and new methods of testing, and common issues found in large product testing

This task, led by WSE, concerns the evaluation of the costs and benefits of the various methods to verify compliance for large fans and power transformers. It includes an assessment of the currently legally applicable methods (documentation inspection, testing at 3rd party labs, witness testing) with risk assessment methods (plausibility checks, simulation modelling etc.) and other approaches such as in-situ testing; and has the aim of determining the applicability, costs and reliability of each and as a compliance verification pathway or assessment indicator.

The full report is expected in November 2018 but the provisional findings presented in the Rome meeting show:

- documentation checks and rating plate inspections are highly cost effective at producing legally

enforceable compliance verification outcomes; however, they cannot fully verify the accuracy of declared energy performance

- if there is a correlation between supplier non-compliance rates in documentation or rating plate inspections and the non-compliance of the supplier's products with energy-performance requirements then such checks would also provide a cost-effective means of determining product energy-performance non-compliance risk for screening
- energy performance verification testing in 3rd party labs is viable and societally cost-effective for all products small enough to be tested in existing facilities providing an MSA can receive notification of a product being placed on the market
- witness testing of factory acceptance tests (FATs) is a cheaper option than 3rd party lab energy performance verification testing whenever such testing was already going to be undertaken for commercial reasons
- expert checks of manufacturers product energy performance simulations would be likely to provide a cost-effective means of determining non-compliance risk if the practical limitations on arranging such checks could be overcome
- for very large industrial fans, it would probably be cost-effective to conduct energy performance verification via part-load or scale-model testing if the accepted test methods and Ecodesign regulations were amended to permit this as a legally enforceable compliance verification option.

1.4.2.4 Task 4.4: Policy recommendations for future regulation on large and industrial products

This task, led by ECOS, concerns the development of policy recommendations to help improve the viability and effectiveness of Ecodesign market surveillance evaluation for large and industrial products and specifically large fans and power transformers. The intention is to inform 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 and give clear and precise policy recommendations based on the outcomes of the project.

The final report is due in November but at the Rome INTAS meeting ECOS outlined the following options:

- Fans
  - Set up a dedicated European market surveillance task force for fans
  - Include a definition of "large fans" in 327/2011
  - Establish a mandatory notification to MSAs
  - Foster cooperation with national stakeholders
  - Allow MSAs to conduct market surveillance actions at manufacturers' and to witness-test FATs
  - Allow and clarify alternatives to full-size, full-load testing as verification options
  - Improve Fans Standards
  - Insert clauses to deter circumvention
- Transformers
  - Set up a dedicated European market surveillance task force for transformers

- Establish a mandatory notification to MSAs
- Foster cooperation with national stakeholders.
- Allow MSAs to witness-test FATs
- Improve standards for in-situ and witness testing
- Insert clauses to deter circumvention

- Other Large Industrial Products
  - Set up a European dedicated market surveillance task force for each product
  - Establish a mandatory notification to MSAs
  - Foster cooperation with national stakeholders
  - Allow MSAs to conduct market surveillance actions at manufacturers' and to witness-test FATs
  - Allow and clarify alternatives to full-size, full-load testing as verification options
  - Improve standards
  - Insert clauses to deter circumvention.

After a final review by all INTAS partners, WIP will send the final version to the Advisory Board members.

1.5 Progress with Work Package 5: MSA collaboration and strategic capacity building

1.5.1 Summary of approach to the activities to be conducted

Work Package 5 comprises three main activities:

- Task 5.1 – Awareness raising among MSAs and facilitation of information exchange
- Task 5.2 –Strategic capacity building and awareness raising at the pan-European level
- Task 5.3: Collation of outputs and final reports

1.5.2 Progress with task activities and deliverables

1.5.2.1 Task 5.1 – Awareness raising among MSAs and facilitation of information exchange

Engagement of MSAs through the ADCO, with both Paul Waide (WSE) and Teemu Hartikainen (TUKES) as contact points, has continued to be fruitful. Continuing this process INTAS has been granted a slot to present its findings to the Malta meeting of the ADCO scheduled for November 21st to 22nd.

In addition and critically the project has shared findings of all the work packages, including those concerned with the development of methodologies, conformity verification testing, costs and benefits and pilot project testing the proposed methodologies with all the MSAs engaged in the proejct.

1.5.2.2 Task 5.2: Strategic capacity building and awareness raising at the pan-European level

This task considers the broader macro-economic cost-benefits from MSA conformity verification actions for power transformers and large industrial fans and related capacity buildings needs .It is due to be relased in the next 6 monthly project period.

1.5.2.3 Task 5.3: Collation of outputs and final reports

This task culminates in the deliverables D5.3 *"Report on the overall methodology for the targeting and compliance verification for fans and transformers"* and D5.4 *"Final reports summarising findings from fans and transformers".* These will follow on from the issuing of the Work Package 4 reports and hence will be developed in the next 6 monthly period.

1.6 Progress with Work Package 6: Dissemination and Communication

1.6.1 Summary of approach to the activities to be conducted

Work Package 6 comprises a number of dissemination and communication activities. The full website, FAQs and visual identity of the project (i.e. logo, project leaflet, templates, etc.) have been completed to a high standard and are currently in use throughout the many areas of work within the project.

1.6.2 Progress with task activities and deliverables

1.6.2.1 Task 6.1

The collection of the interested parties (e.g. stakeholders at national level and stakeholders with a pan-European area of influence) materialised in the form of a stakeholder database, and even though this was initially completed in June 2016, it continues to be regularly updated to mirror the new interests in the project.

1.6.2.2 2nd NFP meetings and Tasks 6.2 and 6.3

The second round of National Focal Point (NFP) meetings was successfully organised in spring/summer 2018 with the active involvement of project partners. A total of 10 meetings were held during this period as shown in Table 2.

Six questions where discussed during these meetings:

- Q1: Looking at the draft methodologies in the flowcharts (D3.9), what are the main obstacles?
- Q2: Looking at the draft methodologies in the flowcharts (D3.9), what are the main opportunities?
- Q3: Would it be feasible in your view to set a mandatory notification to MSA when the product has been placed on the market or it is ready to be placed on the market, or it has been installed?
- Q4: Would it be feasible in your view to set a voluntary agreement with client/supplier for testing at their premises?
- Q5: Looking at the supporting toolbox for the compliance assessments proposed under WP4, are any of the documents listed challenging to find? Which ones?

- Q6: Are you using other documents for compliance verification?

Table 2: List of NFP meetings organised in the spring/summer 2018

Organising NFP	Country	Date	Participants	Additional Remarks
Danish Technological institute	DK-SE-NO-IC	21-Aug-18	9	Webinar
Italian National Agency for new technologies, energy and sustainable economic development	Italy	11-May-18	25	Physical meeting
Foundation for the Promotion of industrial innovation	Spain	09-May-18	18	Physical meeting
Romanian regulatory authority for energy	Romania	19-Jun-18	71	Physical meeting Two days meeting
Directorate General of Energy and Geology	Portugal	07-Jun-18	18	Physical meeting
Austrian Energy Agency	Austria	20-Jun-18	4	Physical meeting Only on fans
SEVEn Energy Efficiency Center	Czech Republic	May–Jun '18	24	Several meetings and phone interviews
Finnish Safety and Chemicals Agency*	Finland	Jun-18	2	-
The Polish Foundation for Energy	Poland	8-Jun-18	17	Meeting + phone/email consultancy
Belgian Federal Public Service Health, Food chain Safety and Environment - BHTC	Belgium	21-Jun-18	8	Meeting + bilateral contacts by phone/email

** Not presented at the 5th Project Progress Meeting*

Although the replies and the discussions sometimes differed significantly for the different NFP meetings (understandable considering the particularities of the MSAs, the diverse participants in the meetings, the distinctive features of fans and transformers, etc.), ECOS summarized the main issues that arose regarding the mentioned questions as shown in Table 3:

Table 3: Summary of main issues that arose at the 2nd round of the NFP regarding the questions Q1-Q6.

	Question	Summary of replies/discussions
Q1	Looking at the draft methodologies in the flowcharts (D3.9), what are the main obstacles?	Costs; risk of delays; lack of expertise/interest/procedures; lack of labs; in-situ testing.
Q2	Looking at the draft methodologies in the flowcharts (D3.9), what are the main opportunities?	Capacity building; cost reductions; level playing field; clearer procedures; some stakeholders also see opportunities in the testing phase of the INTAS methodology.
Q3	Would it be feasible in your view to set a mandatory notification to MSA when the product has been placed on the market or it is ready to be placed on the market, or it has been installed?	Stakeholders were largely in favour of the proposed notification to MSA when the product has been placed on the market or it is ready to be placed on the market, or it has been installed (35 vs 16).
Q4	Would it be feasible in your view to set a voluntary agreement with client/supplier for testing at their premises?	Stakeholders were largely in favour of the proposed voluntary agreement (30 vs 10).
Q5	Looking at the supporting toolbox for the compliance assessments proposed under WP4, are any of the documents listed challenging to find? Which ones?	In general, stakeholders considered that the documents were not difficult to find (19 vs15).
Q6	Are you using other documents for compliance verification?	Although there were more stakeholders confirming the use of additional tools (21 vs 17), the answers were unclear. In general some documents were mentioned but without giving further details.

Complementing the NFP meeting, an online questionnaire was sent by ECOS with the same questions to European stakeholders. Eight replies were received that mostly mirrored the ideas stated above for the NFP meetings.

The answers were used as inputs for the assessment of policy recommendations conducted in Task 4.4.

1.6.2.3 Task 6.4: Dissemination of final outcomes and methodologies (Final Conference)

Work Package 6 foresees the dissemination of final outcomes and methodologies towards the end of the project, and for this purpose, a final conference will be organised in Brussels in 2019.

This final conference of the INTAS project will take place in Brussels, on the 12th of February 2018 and will be public event open to all interested parties.

1.6.2.4 Task 6.5: International events and Task 6.6: Project website & other communications materials

Task 6.5 foresees INTAS' participation at international events. During the 5th project period partners presented the project activities related to large fans at the FAN2018 conference held in Darmstadt (Germany) on 18-20 April 2018, while INTAS was also presented in Brussels at the European Sustainable Energy Week (EUSEW) on 6 June 2018.

Appendix A: Introduction to the INTAS project

Project description

The INTAS project comprises six work packages as set out below.

Work Package 1 – Management and coordination

Lead = WIP, Contributing parties = all project partners (see Section 2.2).

The main objectives of the management and coordination are the following:

1) Efficient management and co-ordination of the project ensuring progress in line with the budget and the schedule of milestones and deliverables.

2) Risk management and overall strategic project guidance.

3) Building and maintaining effective communication channels within the consortium.

The work package deliverables:

- D1.1 Minutes of 7 project meetings
- D1.2 Internal communication platform
- D1.3 First progress report.

Work Package 2 – Landscape of testing avenues

Lead = ECD, Contributing parties = WIP, ECOS, ECI, WSE, AEA, BHTC, SEVEn, DTI, TUKES, FEWE, DGEG, ANRE, FFII-LCOE, ENEA, ASAE (see Section 2.2).

This work package aims to analyse in depth the existing testing avenues in Europe and the rest of the world, and to explore test standards, facilities, procedures and methods already in place to help, including:

1) EU (and worldwide) MSAs to set up a sustainable and effective market verification of energy performance compliance and information requirements for large products with a specific focus on power transformers and fans.

2) EU (and worldwide) standardisation bodies to amend actual standards for energy performance compliance and information requirements for large products with a specific focus on power transformers and fans.

3) EC to enhance Eco-design policy measures on energy performance of large products with a specific focus on power transformers and fans.

This work package also aims to define a common approach at European level with respect to MSA methods and convergence in testing approaches as well as exploiting synergies by mutualizing the means of testing at EU scale.

The work package deliverables (with delivery dates in brackets) are as follows:

- D2.1 Database and report on EN/IEC/ISO technical standards and National laws/decrees of interest for testing energy performances of A and B product groups separately (October 2016)
- D2.2 Database (non-exhaustive) about test labs suitable for energy performance test of A and B product groups providing for each lab and each product range for in lab testing & in-situ testing (February 2017)
- D2.3 Report for A and B product groups on (February 2017)
- D2.4 Report on accreditation possibilities for labs/procedures (if any) for A and B product groups (February 2017)
- D2.5 Report for A and B product groups on the degree of compliance which is likely to be produced through normal commercial practices including specifically (February 2017)
- D2.6 Report on worldwide and EU practices/plans on energy performance market verification including, for A and B product groups (February 2017).

Work Package 3 – Defining an effective compliance framework for MSAs and manufacturers

Lead = AEA, Contributing parties = WIP, ECOS, ECI, ECD, WSE, BHTC, SEVEn, DTI, TUKES, FEWE, DGEG, ANRE, FFII-LCOE, ENEA, ASAE (see Section 2.2).

The overall objective of this work package is to clearly define the process and methodology by which market surveillance authorities (MSAs) can identify, select, and evaluate large, industrial products. The work package is divided into interconnected Tasks that are each essential for effective testing and evaluation of compliance. These Tasks form a workflow that simplifies and streamlines market surveillance activities. These Tasks can generally be categorised as:

- Identification and classification of product types, and the related document requirements (Task 3.1).
- Evaluation and testing – the best strategy based on product classification (Task 3.2).
- Links with other legislation – can other legislation be enforced simultaneously to further reduce costs? Assessment of Member State and EU-level legislation (Task 3.3).

- Building collaboration with MSAs and manufacturers – understanding how and when fans and transformers are produced, particularly looking how customised and unique products are procured and delivered (Task 3.4).

- Derivation of screening methodologies for targeting products for compliance assessment (Task 3.5).

A further Task, Task 3.6, works throughout the project to ensure the availability and accessibility of manufacturing and laboratory facilities. Several manufacturers have expressed an interest in working with the project a priori willing to provide further data and input and opening their facilities to allow for on-site/in-situ testing. The role of Task 3.6 is to formalise and agree on specific terms and dates for such activities to take place. In terms of the project's overall objectives, this WP will:

- Help MSA's to develop an effective compliance framework based on the documentation and analysis of available information and including MSA cooperative activities.

- Produce guidelines to help industry deliver compliance and help manufacturers to establish compliance assessment strategies that minimise disruption of market entry.

- Derive alternative compliance measures for very large products (or others unviable to test).

Finally, this work package aims to foster a common approach at European level, which addresses MSA methods and tests convergence as well as synergies by mutualizing the means of testing at EU scale. The overall methodology will be expressed in a graphical work-flow diagram that highlights the importance of each step of market surveillance actions.

The work package deliverables (with delivery date in brackets) are as follows:

- D3.1 Report including template checklist on information and additional requirements related to inspection of fans (April 2017)

- D3.2 Report including template checklist on information and additional requirements related to inspection of Transformers (April 2017)

- D3.3 Evaluation of products in each testing type and unit category (January 2018)

- D3.4 Analysis and report on other applicable regulations, including at the national level, to be considered when undertaking inspection on fans (January 2018)

- D3.5 Analysis and report on other applicable regulations, including at the national level, to be considered when undertaking inspection on transformers (January 2018)

- D3.6 Report highlighting the best practice and experiences of both MSAs and industry regarding testing of fans (February 2018)

- D3.7 Report highlighting the best practice and experiences of both MSAs and industry regarding testing of transformers (February 2018)
- D3.8 Report about the screening techniques available for product/supplier targeting (January 2018)
- D3.9 Graphical flow chart of the methodological process, taking into account all Tasks within WP3 (February 2018).

Work Package 4 – Evaluation of compliance assessment methodology

Lead = ECOS, Contributing parties = WIP, ECI, ECD, WSE, AEA, BHTC, SEVEn, DTI, TUKES, FEWE, DGEG, ANRE, FFII-LCOE, ENEA, ASAE (see Section 2.2).

The theoretical compliance assessment methodology at this stage will have been planned and tested in practice in accordance with the tasks and deliverables of work packages 2 and 3. It is vital at this stage to analyse the results of this assessment and ensure that the proposed methodology is valid and reliable, particularly in accordance with the regulations. In addition, it is necessary to help clarify all the options and trade-offs that could be applied in a practical approach (such as for example screening techniques for products targeting) to compliance assessment in order to support the most effective allocation of MSA resources. Further, it is at this stage that the second national focal point meeting (details of which are outlined in WP6) will take place, allowing for national interests, including the concerns of market surveillance authorities, to provide feedback and input. Aside from the evaluation, this work package is responsible for drafting final recommendations and guidelines.

The work package deliverables (with delivery date in brackets) are as follows:

- D4.1: Final Methodology on market surveillance of Fans (September 2018)
- D4.2: Final Methodology on market surveillance of Transformers (September 2018)
- D4.3: Evaluation of costs, benefits, and new methods of compliance verification (September 2018)
- D4.4: Final policy recommendations for future legislation on industrial products (October 2018).

Work Package 5 – MSA collaboration and strategic capacity building

Lead = WSE, Contributing parties = WIP, ECOS, ECI, AEA, BHTC, SEVEn, DTI, TUKES, FEWE, DGEG, ANRE, FFII-LCOE, ENEA, ASAE (see Section 2.2).

The objective of this work package is support strategic capacity building through:

- Awareness raising and information exchange.

- Development of compliance verification screening tools.
- Fostering market surveillance collaboration between MSAs.
- Raising awareness of the value proposition of product energy performance market surveillance among key funders, decision makers and budgetary resource allocators.

The work package deliverables (with delivery date in brackets) are as follows:

- D5.1: electronic leaflet/report - Project summary (May 2016)
- D5.2: electronic report - Report on strategic capacity building and awareness raising at the pan-European level (July 2018)
- D5.3: electronic report - Report on the overall methodology for the targeting and compliance verification for fans and transformers (November 2018)
- D5.4: electronic report - Final report summarising findings from fans and transformers (November 2018).

Work Package 6 – Dissemination and Communication

Lead = ECOS, Contributing parties = WIP, ECI, ECD, AEA, BHTC, SEVEn, DTI, TUKES, FEWE, DGEG, ANRE, FFII-LCOE, ENEA, ASAE (see Section 1.3).

The highly technical nature of this project requires a specific, targeted dissemination strategy. This work package will outline such a strategy using a national focal-point approach that shall be adopted throughout this project in order to ensure that dissemination of the project outcomes reaches the largest number of stakeholders. It is planned that the dissemination of this work package will allow for input to the project from the various stakeholders this WP intends to reach including, but not limited to; manufacturers, trade associations, retailers, importers, consumer and environmental organisations, and relevant national government departments.

Further, the work package uses a similar ‘focal point’ system to disseminate to European level trade and manufacturer associations, and EU-level consumer and environmental NGOs.

The work package deliverables (with delivery date in brackets) are as follows:

- D6.1: Database of collection of interested national parties + EU-level stakeholders (June 2016)
- D6.2: Database of minutes, including detailed input of national stakeholders, of all physical and virtual/teleconference meetings (August 2018)

- D6.3: Collection of minutes from project meetings, or written evidence of consideration of national input and 2 excel tables listing comments and questions with their answers and replies. Electronic format (August 2018)
- D6.4: Final reports translated (if appropriate) and printed (December 2018)
- D6.5: Coordination of final conference (February 2019)
- D6.6: Participation in 2 international events (February 2019)
- D6.7: Creation of project website and FAQs in English language (August 2016).

Project partners

The INTAS project comprises the following partners.

N°	Participant name, role in the project and area of activities implementation	Country	Role
1	WIP – Renewable Energies (WIP) Coordinator – Europe and worldwide	Germany	Coordinator
2	European Environmental Citizens' Organisation for Standardisation (ECOS) Technical expert – Europe	Belgium	Beneficiary
3	European Copper Institute (ECI) Technical expert – Europe	United Kingdom	Beneficiary
4	Engineering Consulting and Design (ECD) Technical expert – Europe	Italy	Beneficiary
5	Waide Strategic Efficiency Ltd. (WSE) Technical expert – Europe	United Kingdom	Beneficiary
6	Austrian Energy Agency (AEA) National focal point – Austria	Austria	Beneficiary
7	Federal Public Service Health, Food chain Safety and Environment (BHTC)	Belgium	Beneficiary

	National focal point – Belgium		
8	SEVEn, The Energy Efficiency Center (SEVEn) National focal point – Czech Republic	Czech Republic	Beneficiary
9	Danish Technological Institute (DTI) National focal point – Denmark	Denmark	Beneficiary
10	Finnish Safety and Chemicals Agency (TUKES) National focal point – Finland	Finland	Beneficiary
11	Polish Foundation for Energy Efficiency (FEWE) National focal point – Poland	Poland	Beneficiary
12	Direção-Geral de Energia e Geologia (DGEG) National focal point – Portugal	Portugal	Beneficiary
13	Regulatory Authority for Energy (ANRE) National focal point – Romania	Romania	Beneficiary
14	Fundación para el Fomento de la Innovación Industrial Laboratorio Central Oficial de Electrotecnia (FFII-LCOE) National focal point – Spain	Spain	Beneficiary
15	Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA) National focal point – Italy	Italy	Beneficiary
16	Food and Economic Safety Authority (ASAE) National focal point – Portugal	Portugal	Beneficiary

Project advisory board

One of the first tasks of the project was to formulate a project advisory board to ensure guidance and advice is provided to the project by leading relevant stakeholders. The advisory board was formally inaugurated at the 1st Technical Progress meeting held in Brussels on September 19th & 20th, 2016. The members include leading Ecodesign and H2020 desk officers from the Commission, representatives of MSAs that were not formally partners within the project, representatives of the leading European associations representing the

fan and transformer industrial sectors. The INTAS partners are therefore confident that all pertinent information will be brought to the attention of the project team and that the findings of the project will be disseminated among the key stakeholders who are best able to make use of this work. The INTAS Advisory Board held its first meeting in Lisbon on 28th March 2017 and its most recent meeting in Madrid April 2018.

Advisory Board of the INTAS project		
Stakeholder group	**Organisation**	**Name**
MSA – DE	BAM	Floris Akkerman
MSA – DE	MUKE BW	Tamara Janke
MSA – CZ	SEI	Marcela Juračková
MSA – DK	DEA	Bjarke Hansen
MSA – SE	SEA	Lina Kinning
MSA – NO	NVE	Ingvill Sjøvold Nilsen
Industry Association – Transformers	T&D Europe	Michel Sacotte
Industry Association – Fans	EVIA	Karsten Witt
Policy maker	EC DG Growth	Cesar Santos
Policy maker	EC DG Energy	Ronald Piers de Raveschoot
Standardization – Fans	ISO fans	Tony Breen
Transmission System Operators	ENTSO-E	Jean-Christophe Riboud

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

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