Assessment of the results and impacts of energy efficiency related market surveillance projects

Publishable Executive Summary

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July 2022

European Climate, Infrastructure and Environment Executive Agency

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The European Climate, Infrastructure and Environment Executive Agency (CINEA)
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Study contract number EASME/2020/SC/0003

The European Climate, Infrastructure and Environment Executive Agency (CINEA)
Horizon 2020

Manuscript completed in July 2022

1st edition

LEGAL NOTICE

PDF	ISBN 978-92-9208-136-2	doi: 10.2840/633832	EF-09-22-316-EN-N

Luxembourg: Publications Office of the European Union, 2022

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Abstract

The European Climate, Infrastructure and Environment Executive Agency (CINEA) have commissioned Ricardo to collect evidence on Horizon 2020 and IEE-II-funded energy efficiency related market surveillance projects to assess their impacts and effectiveness.

The study identified three main impact areas of the EU-funded projects; increased market surveillance and enforcement activities carried out by MSAs, increased cooperation between MSAs and addressing the root causes of non-compliance. Specific problem drivers and barriers within these impact areas were identified and project impacts and activities in these areas have been highlighted, including notable success stories.

Our study found widespread agreement that these EU-funded projects had facilitated practical experience of product testing, with less experienced MSAs benefiting the most. However, the majority of survey respondents indicated that projects had limited impact on the quantity of product testing performed outside of EU-funded projects. Recommendations have been provided to improve the longevity of EU-funded market surveillance project impacts.

Study context

Ecodesign and energy labelling provides a key policy framework to deliver the European Green Deal and the circular economy as regards energy-related products, contributing to the achievement of EU energy saving and greenhouse gas emissions reduction targets by 2030 and 2050. Its implementation improves the European Union's security of supply by reducing primary energy consumption and decreasing energy imports. It reduces energy bills of citizens and businesses, while it helps reduce greenhouse gas emissions in a cost-effective way, thereby mitigating climate change.

The European Climate, Infrastructure and Environment Executive Agency (CINEA) has commissioned Ricardo to collect evidence on H2020 and IEE-II-funded energy efficiency related **market surveillance projects** to assess their impacts and effectiveness.

Methodology

In the initial **data collection** phase, the study team assessed the provided **project reporting documents,** collected and organised all available data and evidence on projects' activities, outputs and impacts, as well as more general project information and qualitative aspects. The study team launched a targeted **stakeholder survey** which collected additional evidence from market surveillance authorities (MSAs) (29), expert consultants (4), laboratories (4), end users (1), suppliers (1) and others (7). The survey posed questions on the project impacts on stakeholders' activities and the prioritisation of possible topics to include in future LIFE calls for proposals. The team also carried out **interviews** with 20 stakeholders (some of which had also answered the stakeholder survey) who had participated in EU-funded market surveillance projects, which enabled more nuanced discussions of project approaches and impacts and allowed the study team to ask follow-up questions on survey responses.

Following the collection of data, the study team analysed the collected information. This cross-project review of KPIs and project data enabled the study team to present a full picture of **projects' characteristics, activities and outputs**. The study team reviewed all projects' impact calculations, selected three examples to illustrate the varying degree of detail and conclusions were drawn on the role of quantitative impact estimates for the selected market surveillance actions.

Impacts of projects on specific problem areas were identified based on projects' activities and outputs. This was followed by reviewing and analysing the collected data, survey inputs and interview transcripts to provide a coherent and detailed overview of related problem descriptions, project approaches and impacts, barriers, lessons learnt and recommendations. The study team concluded

the analysis by extracting **key takeaways** and providing **action points** based on the preceding analysis and recommendations.

Project characteristics

The evaluation focused on **11 projects spanning 14 years**, from ATLETE (2009-2011) to EEPLIANT 3, scheduled to finish in 2023. A full timeline of the 11 projects is provided below. Among these 11 projects there are two **series of projects** (ATLETE and EEPLIANT), in which successive projects have built upon the work of previous projects, for example by expanding activities to new product groups or geographical locations or by further developing a methodology. In total, some **€24.1 million of EU funding** has been allocated for the 11 projects. The majority of this funding has been provided for more recent projects, with over a quarter of this amount provided for the Concerted Action on Market Surveillance (EEPLIANT 3) alone.

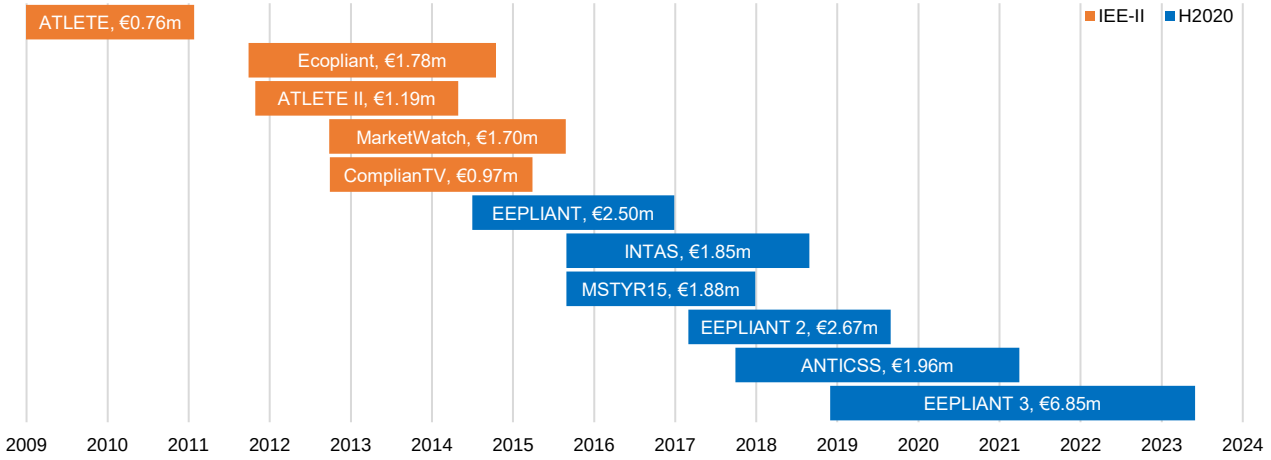


Figure 1. Timeline of the 11 projects assessed in this study, with funding programme and amount of EU funding received by each project highlighted

A range of institutions from across Europe have participated in the 11 projects. In total, project participants from **27 countries** have taken part in the projects, with Belgium and Germany the most common location of project partners.

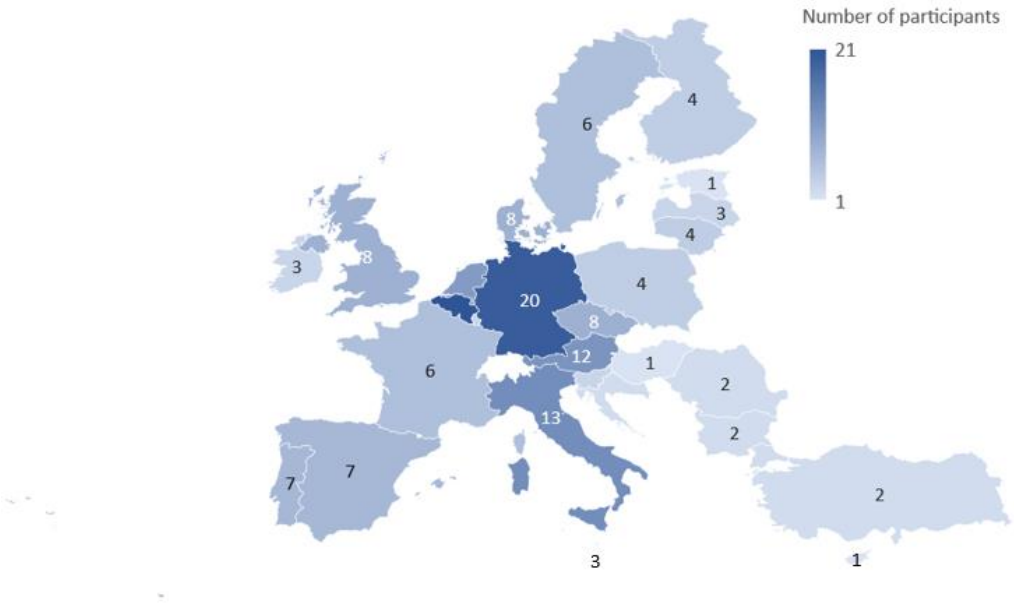


Figure 2. Geographical spread of project participants[1]

All 11 projects targeted MSAs in their activities. The majority of projects also aimed to address at least one more category of market stakeholder. Suppliers and end users were targeted by a similar number of projects. Other market stakeholders were also targeted by four projects, for example NGOs which were a key target of the MarketWatch project.

The 11 projects carried out activities across **28 product categories**. Domestic refrigerators and freezers were the most frequently targeted product groups; the subject of five projects' activities, while domestic washing machines, room air conditioning appliances and televisions were each the focus of four projects.

Project activities and outputs

Our collection of data relating to **project activities** largely focused on market surveillance activities performed by MSAs, with information relating to training and dissemination activities also collected, where available.

According to our assessment of the project documentation, **1,189 tests and 134,245 inspections** were performed during the projects. This figure is dominated by the MarketWatch project, during which 103,141 label inspections were performed, mainly by environmental NGOs. In terms of testing, a total of 1,189 laboratory tests have been performed, which have been fairly evenly spread across the 11 projects[2].

Furthermore, product testing and inspecting has led to **323 changes in technical documentation**, **76 product withdrawals from the market** and **86 penalty fines** being imposed.

In terms of dissemination activities, **264 events** have been held across the 11 projects with **2,974 reported attendees**, although this is likely to be an underestimation as the number of attendees at events was not always reported by projects.

[1] Note: This is the number of times an institution from each country has participated in one of the 11 projects. Some institutions participated in multiple projects so may be counted multiple times within these figures.

[2] EEPLIANT 3 activities are ongoing so these figures (as well as some of those reported further on) could increase.

The number of trainings provided does not appear to be a well-reported metric, although it was stated that a label inspection training video was developed by MSTyr15.

The **level of compliance** observed during project activities was also captured from project documentation, where reported. All projects, besides INTAS, reported levels of compliance observed after carrying out inspections and tests. These compliance levels were generally associated with specific product groups, although in some cases the figures represent a number of products that were tested and so levels of compliance were deemed as being reported at 'Project-level'.

Best practice guidelines are by far the most commonly produced **project output** (16 guidelines from 10 projects). Networks of MSAs, experts and suppliers, triggering new standardisation work and voluntary protocols have also been produced by projects (2 each).

Quantitative impact assessment

The calculation of impact estimates was found to be challenging in these market surveillance-related projects. However, **insights have been gained into the scale of energy and related cost savings that market surveillance** and specifically market surveillance projects can have. The presentation of literature and three project approaches to calculating the impact of market surveillance measures has shown that there are varying degrees of calculation reliability. The EEPLIANT 2 project produced very detailed workbooks elaborating their assumptions, calculations and estimates for the energy savings expected from the project's actions based on stock turnover and compliance rates. This could be used as a template going forward. However, all calculation attempts suffer from an uncertainty around the total market change in compliance levels as a result of market surveillance actions.

All calculations have demonstrated that the projects' value to the EU outweighs their cost, thus indicating that the funding of these projects has a positive impact on the EU and the single market and should therefore be maintained.

Impact calculations attempted to estimate the direct impact of market surveillance actions only. Therefore, they do not consider any indirect impacts, which are not quantifiable. These indirect impacts are mainly the deterrence effect on suppliers as a result of market surveillance activities, but also the valuable impacts on the MSAs participating in the projects and industry becoming more aware of relevant regulations as a direct result of the projects. These indirect effects can be assessed in a more qualitative manner, focusing more on the impacts on MSAs but also considering the ways projects aimed to address the root causes of non-compliance.

Project impacts on problem areas

A **survey of key stakeholder groups** (MSAs, suppliers, laboratories, expert consultants, end users and others) and project participants was undertaken to collect their views on the impacts of their EU market surveillance projects supported through IEE II and H2020 as well as on possible priorities under future LIFE calls for proposals. A total of 46 respondents completed the survey sufficiently for their responses to be included in this analysis, with 43 of those having fully completed the survey. The majority of respondents were from national MSAs (29 individuals).

Furthermore, **interviews** with MSAs (13), expert consultants (6) and other industry stakeholders (1) were carried out to clarify project activities, understand the sustainability of the project outcomes after their completion, collect stakeholder experiences of lessons learnt, problems and barriers to delivery of the projects, and to clarify answers already provided in the survey (if appropriate).

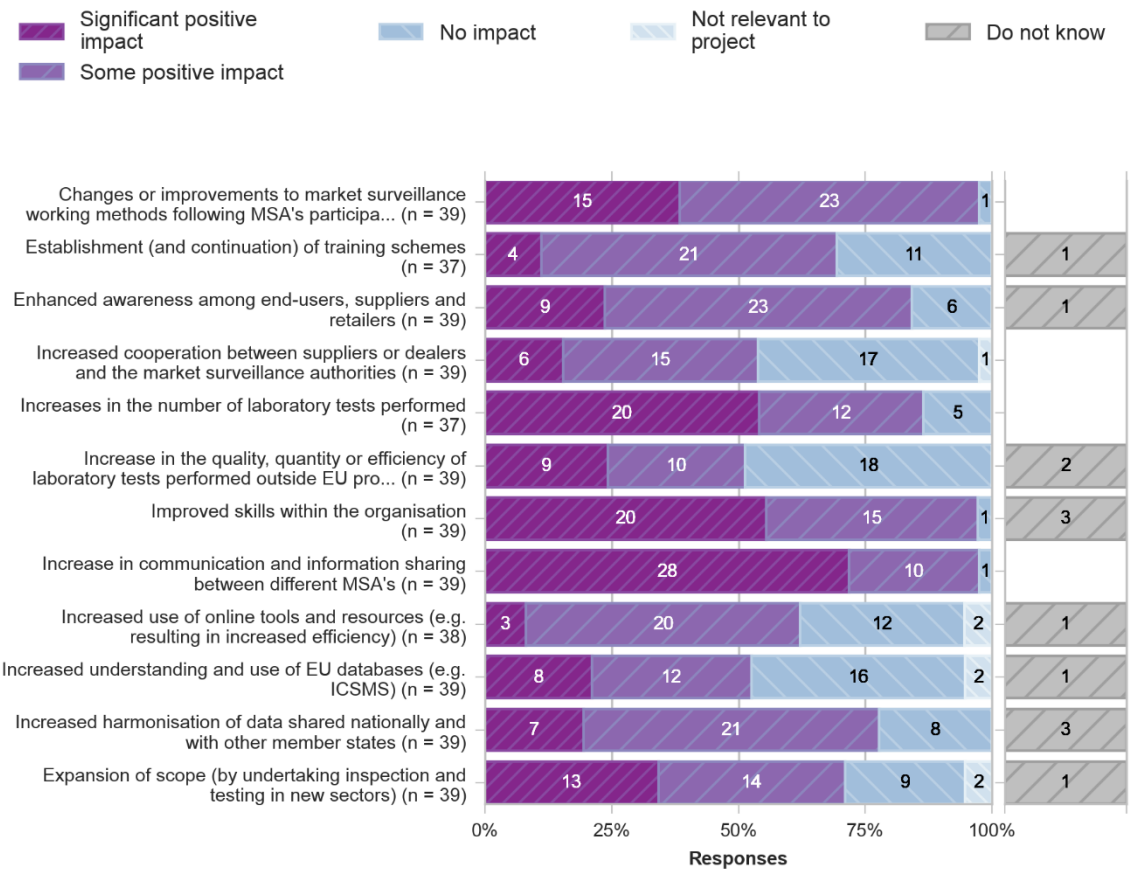


Figure 3. Project impact responses for outcomes not usually included in the official IEE or H2020 project reporting (MSAs only)

The survey results indicate that project participation generally had a positive impact. More than half of the responses from MSAs for each of the 12 outcomes presented, expressed that project participation either had significant or some positive impact.

The most commonly cited positive impact from project participation was an **increase in communication and information sharing between different MSAs** (28 out of 39), followed by **increases in the number of laboratory tests performed** (20 out of 37 responses) and **improved skills within the organisation** (20 out of 36 responses).

On the priority ranking of potential activities under future LIFE calls for proposals (Figure 4), the highest priority was given by MSAs to '**Finance for specific testing campaigns for product groups that are more challenging to test**' with 10 out of 25 indicating it was an 'essential priority' and 11 out of 25 indicating it was a 'high priority'. Following this, three quarters of respondents indicated three other activities that were 'essential' or 'high' priority. These were: '**support laboratory testing**' (14 'essential priority' and three 'high priority' out of 23), '**facilitating networking among MSAs to share experience and knowledge**' (7 'essential priority' and 10 'high priority' out of 23), '**Issue consolidated FAQs to common issues encountered by MSAs for specific products**' (nine 'essential priority' and nine 'high priority' out of 24).

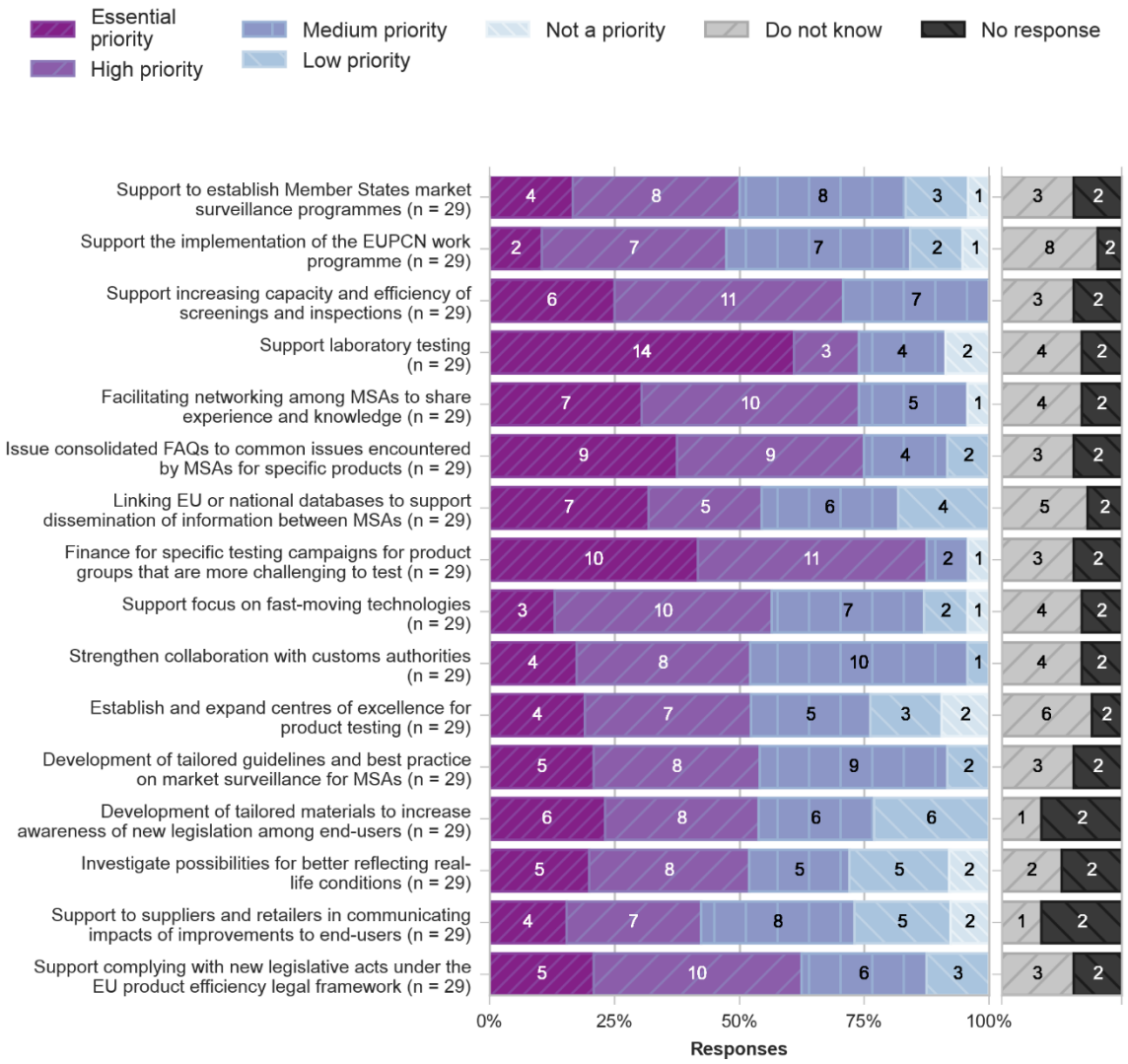


Figure 4. Priority ranking of potential future activities (MSAs only)

To provide a comprehensive analysis of the project impacts, the study team assessed the projects' aims and activities to identify the key action areas and problem drivers targeted. This provided a framework for the study team to assess each action area individually to identify successes, barriers and recommendations for future work.

The study identified three main impact areas that the EU-funded projects targeted. The first identified impact area was **increased market surveillance and enforcement activities carried out by MSAs**. The drivers of the increased activities in this area include increased experience carrying out monitoring, verification and enforcement (MVE) activities, more guidance and uptake of MVE activities best practices, improved efficiency of MSA operations, greater access to cost-effective and adequate testing facilities and testing skills and support for MSAs carrying out more enforcement activities.

The second impact area is **improved cooperation between MSAs**. This impact area explores how increased knowledge sharing and coordination between MSAs and increased uptake of provided coordination tools has improved how MSAs cooperate and thus improved the effectiveness of their market surveillance activities.

The third and final impact area explores how projects **addressed some of the root causes of non-compliance**. The drivers identified were improving industry awareness and developed guidance for industry, defining and addressing circumvention and identifying shortcomings of legislation and harmonised standards.

For each of these impact drivers, the study team outlines the problem definition, the project approaches to address the underlying problem, the impacts of project activities and outputs, the barriers faced, the lessons learnt, the recommendations provided, and actions points to improve future initiatives.

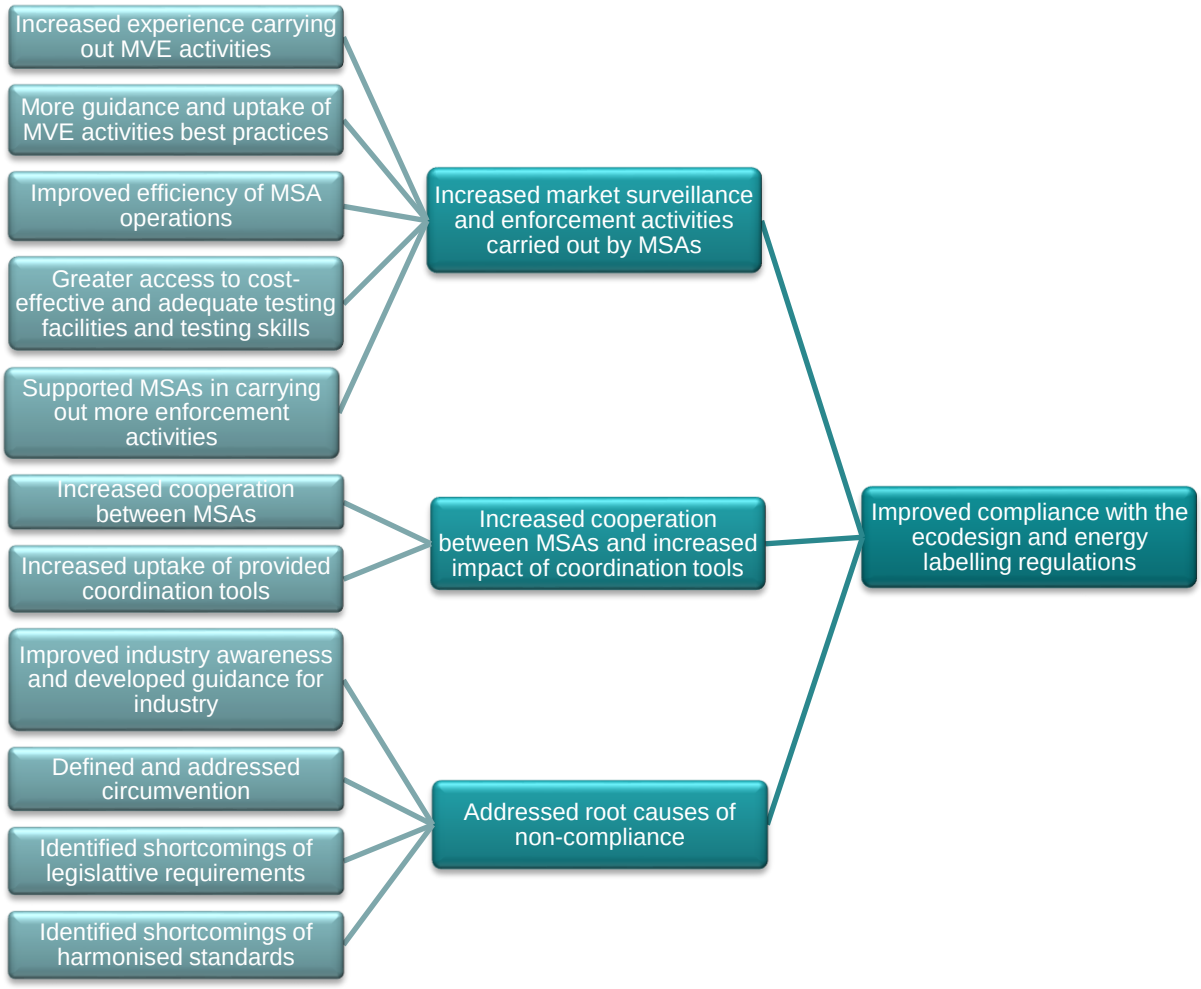


Figure 5. Identified impacts of projects leading to improved compliance

The three main impact areas in Figure 5 are discussed in further detail below.

Increased market surveillance and enforcement activities carried out by MSAs

It is evident that many MSAs have limited financial resources, and this can be linked to the amount of funding that Member States provide to their MSAs. Time and human resources are also limited. Acknowledging this, it can be understood that limited resources for MVE activities limits MSA effectiveness.

Many MSAs have a broad remit, and MVE activities in ecodesign and energy labelling regulations can be complex and expensive, limiting the surveillance that MSAs with small budgets can do. Many stakeholders repeatedly highlighted this issue, and it was suggested that **poorly resourced** MSAs could not carry out any laboratory testing at all, but only document checks or label inspections instead.

EU funded projects have led to **improvements in market surveillance work** in the following areas:

- Increased experience carrying out MVE activities
- More guidance and uptake of MVE activity best practices

- Improved efficiency of MSA operations
- Greater access to cost-effective and adequate testing facilities and testing skills
- Supporting MSAs in carrying out more enforcement actions

The **exposure and experience** developed through projects have given MSAs more confidence in carrying out tests both inside and outside of these projects, with 38 out of 39 MSAs indicating a positive impact. Moreover, the development of best practice guidance and tools, including IT tools, have increased MSAs' efficiency. Involvement of the respective Administrative Cooperation Groups (ADCOs) has resulted in wider project result sharing, along with common templates for data gathering and shared approaches. Increased communication channels, established as a result of these projects, have reduced time spent solving problems, as solutions can be easily shared in informal professional communications.

Uptake of best practices developed within projects was supported by:

- The continual **development and use of guidelines** produced in projects, particularly throughout the successive EEPLIANT projects
- Use of tools reducing time on manual tasks, with **IT tools** developed by projects said to be most useful in reducing time spent on manual tasks, particularly when using ICSMS
- **Workshops and training events** aimed at giving practical guidance to MSAs and other stakeholders and advice on how best to interpret and comply with regulations.

It is undoubtable that these EU-funded projects have carried out a large number of tests (1,189), enabling testing for products that MSAs would not have had the technical capability for and would not normally have been able to afford. However, as multiple stakeholders suggested, **some MSAs rely solely on laboratory tests within projects**, so the projects have simply provided funding for those MSAs who would otherwise have no testing budget. This allows them only to **ensure a minimal level of testing** via EU-funded projects, and not expand the number of tests outside of these projects.

Key actions suggested to address this barrier include:

- Maintenance of **IT tools** and **knowledge banks** with a central organisation, to maintain and possibly improve them beyond the completion of projects
- Consider increased **support for MSAs**, which often have limited resources, in their enforcement activities
- Investigate further the **changes in testing outside of projects** by comparing regularly participating and non-participating organisations, combined with before and after the project's end comparisons
- Consider **engaging with the Member States on the resources they allocate** to market surveillance
- Consider **end-project surveys of beneficiaries for systematic qualitative assessment** of project benefits.

Increased cooperation between MSAs and increased impact of coordination tools

Systematic cooperation among MSAs, as well as with related economic operators, has proved challenging. Several articles within the new Market Surveillance Regulation (EU) 2019/1020[3], which apply after the completion of most of these projects and specify requirements for cooperation

[3] REGULATION (EU) 2019/1020 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R1020&from=EN

between MSAs ((Article 22), the PCN (Article 29), and ADCOs (Article 30(2), (Article 32 2(b)), could increase this cooperation.

Many of the projects identified **shortcomings in coordination actions** across MSAs, and in the tools used to facilitate this coordination. Stakeholders generally shared the opinion that limited coordination limits the efficiency of MSA work, and that they valued the interactions that were facilitated by EU-funded projects. These would not have occurred without these projects, and lead to individual level, long-term informal relationships, meaning that MSA staff can simply contact each other to solve problems, instead of formally contacting national representatives.

Most projects had aspects of **training** or **knowledge sharing**, which involved communication between MSAs and other stakeholders, for example on the implementation of the Ecodesign and Energy Labelling Regulations on professional refrigerated storage cabinets in EEPLIANT 2. These often led to harmonised approaches, addressing various aspects of non-compliance with ecodesign and energy labelling regulations and therefore an overall strengthened single market as a result. Some coordination tools developed in earlier projects were built on in successive projects, ensuring work was improved and not lost. However, often tools are not maintained or further developed outside of projects, as they are not supported with funding or a central facilitator.

Key actions suggested in this area include:

- Establishing an **EU-level agency** to **support and coordinate MSA tasks**, including
    - Ownership, **maintenance and management of IT tools**
    - **Joint procurement** of products and testing for MSAs
- Adding **additional functionalities to ICSMS and EPREL** to improve effectiveness of MSA work (e.g. advanced searching and analytics).

Addressing root causes of non-compliance

The projects have contributed to addressing the following main causes of non-compliance:

- A **lack of awareness and guidance** for industry
- **Unclear definitions of circumvention**, and therefore confusion on how to address it
- **Other shortcomings of legislative requirements** and **harmonised standards**

The interaction of these causes leads e.g. to exploitation of legal loopholes and lack of compliance by suppliers, and reduced efficiency of MSAs carrying out market surveillance. Stakeholders throughout this sector highlighted the complexity of legislation, harmonised standards and technical circumvention, combined with high product turnover and a long enforcement process as main aspects of this problem driver. Unclear harmonised standards and legislation compound a **lack of industry awareness** to lead to non-compliance.

The inclusion of industry stakeholders in project activities has led to **increased engagement** with market surveillance strategic planning, and an **increased general awareness** of ecodesign and energy labelling issues. This can be attributed to the number of workshops and guidance documents prepared for non-MSA stakeholders throughout the projects. Through these activities, it was highlighted that SMEs are most likely to have limited resources to understand regulations and harmonised standards in this area, and most likely to require additional guidance.

Prior to these projects, there was a lack of awareness on **circumvention**. The ANTICSS project addressed this and increased industry awareness, creating new definitions for circumvention and "jeopardy effects"[4], and creating tools to identify cases of circumvention in a variety of different products.

[4] As defined by ANTICSS project, "jeopardy effects encompass all aspects of products or test instructions, or interpretation of test results, which do not follow the goal of the EU Ecodesign and/or Energy Labelling legislation of setting Ecodesign requirements and providing

In general, projects did not aim to address shortcomings in legislation or harmonised standards but were able to identify them as a result of continued MVE activities. This allowed stakeholders to routinely identify weaknesses, and feedback where relevant. The 64 policy recommendations developed by these EU-funded projects indicate this was frequently done, however the process to implementing suggested changes is slow, and multiple stakeholders described these types of impacts as limited. However, feedback has led so far to documented changes in related LEDs and motors legislation, possibly on network standby, fans and tumble dryers in the future. Furthermore, the ANTISCS project's policy recommendations on circumvention aspects may also be taken up in future legislation.

Key actions suggested to address these issues include:

- Improving the **clarity of regulations** (e.g. definitions), and provide further **guidance** on how to interpret them
- Provide specific **support for SMEs** in their awareness of ecodesign and energy labelling legislation
- **Increase dissemination activities,** to increase compliance by economic operators
- Pursue **further engagement with industry stakeholders**
- Consider **pursuing a 'name and shame' approach to non-compliance.**

Success stories

Four major success stories were identified across the 11 projects (full details provided in Annex 1):

- **Actionable policy feedback supporting the development and implementation of ecodesign and energy labelling legislation**
    - EU-funded projects enabled the provision of relevant input to policy makers and standardisation organisations by Market Surveillance Authorities and other stakeholders.
    - EEPLIANT 2 recommendations to close loopholes regarding scope and legislative requirements in the network standby legislation (Regulation (EU) No 801/2013), have led to changes in the draft proposal for the revision of this regulation.
    - Recommendations from the INTAS project on the testing of large products were taken on board in the new motors Regulation (EU) 2019/1781) and are also being considered for the revision of the fans Regulation (EU) No 327/2011.
- **EU-funded projects supported Market Surveillance Authorities in expanding their testing scope and capabilities**
    - Many projects were ground-breaking in testing specific products– for example, products featuring network standby in EEPLIANT 2, and large ventilation equipment in the INTAS project.
    - The EU funding lifted cost barriers to testing in new areas; without these projects, some MSAs would not have expanded their activities.
    - An MSA representative who had participated in multiple H2020 projects described how these led to an increased testing regime. Testing in this MSA had increased from 15 products in 2017 to 31 products in 2019.
- **Collaboration between Market Surveillance Authorities across EU Member States aided enforcement practices**

reliable information about the resource consumption and/or performance of a product. These effects may be not classified as circumvention but become possible due to loopholes or other weaknesses in standards or regulations."

  - EU-funded projects enabled knowledge transfers on specific products or issues, such as testing and enforcement. The INTAS project provides a good example of such an initiative, by establishing an MSA network for addressing challenging and less common products, which encouraged MSAs to work together. These new communication channels spread the burden of compliance verification across national and regional boundaries, synergising MSA operations.
  - In the Ecopliant project, Denmark, Sweden and the UK collaboratively organised the testing of fifty electric motors. This was the first time the UK had sent products to another Member State for testing, ensuring that a large sample of the market was assessed without duplicated testing.
  - The EEPLIANT projects were noted as examples of effective collaboration by interviewed stakeholders. Participating MSAs stored, accessed and exchanged information on non-compliant products, both through existing tools such as the ICSMS and EPREL databases, and newly developed tools such as the EEPLIANT 3 Wiki Confluence platform. This practice has helped to avoid duplication of testing, saving resources for MSAs and increasing efficiency of market surveillance activities.

- **Workshops with industry stakeholders increased regulatory awareness and helped to build capacity**
  - The EEPLIANT 2 Brainstorming Workshop helped bring together significant project partner organisations and related stakeholders to explore non-compliance and remedies, including barriers and good practices.
  - National and international workshops in the ComplianTV project were a success in terms of stakeholder involvement and the gathering of expertise. Workshops were held to discuss standardised testing and surveying, and policy recommendations. Guidelines for the standardised product testing and market surveillance of TVs were developed as a result of these workshops.

Conclusions & recommended actions

The 11 projects carried out a significant number of activities, including:

- **1,189 tests and 134,245 inspections** across **28 product categories**
- **323 changes in technical documentation**, **76 product withdrawals** and **86 penalty fines**
- **264 events** with at least **2,974 reported attendees**
- A range of useful outputs, including **16 best practice guidelines.**

Our study found wide agreement that these EU-funded projects had facilitated **practical experience** of product testing, with less experienced MSAs benefiting the most. As a result, more MSAs now have the confidence and skills to cost-effectively inspect and test a wider range of products than they had previously. 45 out of 46 responses from MSAs and expert consultants indicated a **positive impact or improvements to market surveillance working methods** following MSAs' participation in EU projects. Examples cited include uptake of best practice guidelines, testing checklists and direct communication channels with other inspectors in the EU, which MSAs have taken into their work outside of projects, including for the training of new inspectors.

However, the impact on product **testing work performed outside of EU projects** remains unclear. The majority of survey respondents thought projects had no significant impact on the quantity of tests outside of these projects, with the notable exception of one MSA, whose testing increased significantly[5]. Comments from project participants generally agreed on the European Court of

[5] See Annex 1, p.A-3

Auditors report findings suggesting a reliance of MVE work on EU funding.[6] The cost of testing, combined with restricted MSA resources has resulted in some dependence on EU projects to lift cost barriers, create economies of scale and make it easier for MSAs to participate in testing activities. Without this funding, some MSAs are restricted to documents inspection and simple desktop work. In this way, EU projects do provide a **temporary solution** to an ongoing lack of national funding issue.

Through a meta-analysis, the study found that project activities in **knowledge sharing, increasing industry awareness and capacity building** to be highly impactful, valued by participants, and beneficial to MSA efficiency. However, these are **unlikely to be sustained by the market** as non-income generating activities, and requiring some form of central organisation. Supported experience in carrying out laboratory tests were equally as impactful, and particularly important to MSAs with low budgets. The study team believe there may be potential for laboratory tests to be sustained by the market, if income from administered fines can be used to support laboratories, and support is maintained for a high number of tests.

Recommended actions to address the identified issues include:

- **Ensure sufficient resources for MSAs** to accomplish their basic tasks. This would allow MSAs to reduce dependence on EU funding and concentrate on issues with a real EU added value with lasting impacts (e.g. development of common IT tools, training, joint testing of complex products).
- **Increasing access to a central knowledge library as a means of disseminating project knowledge, outputs, tools and experiences at the end of a project's lifetime.** Integration of a knowledge library, such as the EEPLIANT 3 Wiki Confluence, into the training of MSAs and relevant staff can ensure that project outputs are shared and reused, with MSAs continuing to benefit from these even when there is staff turnover and projects have concluded. Expanding such a library with strong search and visualisation features to increase data clarity and user friendliness would improve knowledge transfer.
- **Continue to seek improvements in training, awareness raising and guidance material in future projects.** This will benefit all stakeholders but will be particularly helpful for those businesses without technical experts, such as SME manufacturers and retailers. Providing support directly to them will level the playing field in terms of resources that they can utilise to increase their compliance.
- **Enhanced policy feedback to the European Commission, and maintain collaboration of other stakeholders in continuation of actions after project completion.** Resources should be allocated to host workshops at the end of each project as a standardised approach, to assess the impacts of policy recommendations, when possible, and project outputs. This will provide useful guidance and direction for new funded projects as well as building pre-requisite understanding of project successes and failures among stakeholder participants.
- **Modern IT tools for a more structured approach to screening, documentation inspection and uploads should be prioritised**. This would help MSAs to keep pace with increased levels of e-commerce through the use of tools such as the web-crawler under development in EEPLIANT 3. In addition, advanced analytics can be used to exploit data (e.g. from ICSMS and EPREL) to inform future activity, regarding concentration of surveillance activities, for certain product groups with higher potential for non-compliance.
- **Update and improve the clarity of ecodesign and energy labelling regulations.** This would reduce the need for legal disputes relating to instances of non-compliance. Involvement of MSAs and ADCOs in policy and test assessment harmonised standard design could ensure greater enforceability for cases of non-compliance under surveillance activities.

[6] ECA Special Report 01/2020: EU action on Ecodesign and Energy Labelling: important contribution to greater energy efficiency reduced by significant delays and non-compliance; https://www.eca.europa.eu/en/Pages/DocItem.aspx?did=52828

- **Centralised IT tool maintenance and management should be a key focus going forward.** Increased investment to maintain IT tools will increase the efficiency and effectiveness of market surveillance. Maintenance and long-term management of IT tools developed within projects need a central organiser. Project end-dates create uncertainty for users of the IT tools developed within the project and while these tools are typically managed by the project coordinator during the project, they are left un-managed, as there is no funding available at the end of the project's lifetime. This reduces the availability of the tools and prevents further development.
- **Promoting engagement with suppliers to ensure increased awareness of harmonised standards and regulations and to increase the compliance levels.** While MSA's have an important role it is also key that other actors such as suppliers and retailers are aware of legislative requirements. The Commission could facilitate awareness campaigns for economic operators or other capacity building activities, which will increase industry cooperation in complying with the related regulations.
- **Address barriers hampering monitoring and testing coordination.** Coordination efforts are limited by the differing market surveillance aims and procedures across the EU. Aspects to focus on include:
    - **Harmonised product identifiers** under ecodesign legislation
    - Lack of suitable **testing facilities**
    - **Increasing visibility** of market surveillance
    - Efforts to **shorten inspection and enforcement processes**, maintaining pace with the fast turnover of products on the market
    - **Geographical issues**, for example linked to the clearly delineated coverage of MSAs' enforcement jurisdiction.
- **Consider increased involvement of energy agencies or creating a central agency for supporting market surveillance activities to increase efficiency and reduce burdens on MSAs.** A key impact of coordinated action is leveraging synergies between MSAs and to achieve impacts that individual MSAs could not have achieved. A central agency that carries out administrative (e.g. joint procurement) and coordination tasks for MSAs could help them focus more on the technical work on which they are experts. National MSAs would still be needed for fieldwork but a central agency that facilitates more collaboration could enable more efficient market surveillance in the EU.

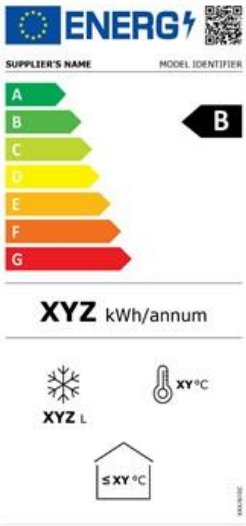
  Examples of actions which could be taken on centrally include:
    - **Procurement of products for MSAs** - This practice was successful in multiple projects, where this was carried out by a central coordinator, and was highlighted as a useful practice by MSAs
    - **Joint procurement of testing** would generate economies of scale and reduce administrative burden for MSAs
    - **Training** - A central agency could offer certified training for market surveillance professionals as well as links to continued professional development, portable skills certification and recognised courses
    - **Ownership, maintenance and management of tools developed by projects** - The long-term maintenance, ownership and information sharing of coordination or other tools by a central agency would be a solution for the lack of continuation of project work after their lifetimes
    - **IT capacity** - A central agency with dedicated IT capacity could provide support to all MSAs, developing existing IT tools to help increase their use and encourage further cooperation.

Annex 1: Success stories

Actionable policy feedback supporting the development and implementation of ecodesign and energy labelling legislation

EU funded projects enabled the provision of relevant input to policy makers and standardisation organisations by Market Surveillance Authorities (MSAs) and other stakeholders.

EEPLIANT2 recommendations to close loopholes regarding scope and legislative requirements in the network standby legislation (**Regulation (EU) No 801/2013**), have **led to changes in the draft proposal for the revision of this regulation.**



The EEPLIANT 2 project also **investigated differences between standards EN 16825:2016 and ISO 22041:2019** on measuring energy consumption of professional refrigeration cabinets, with the results fed into the related legislative review.

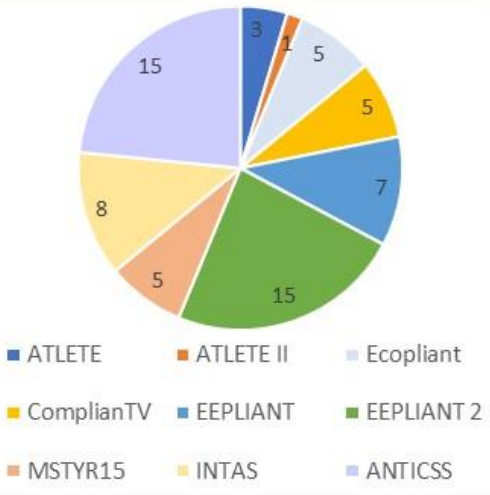
The EEPLIANT project **contributed to changes in the Regulation (EU) 2019/2020 for LED products.** The lifetime period for testing has been shortened to 3000 hours following a project recommendation, as products would often sell out before testing was complete.

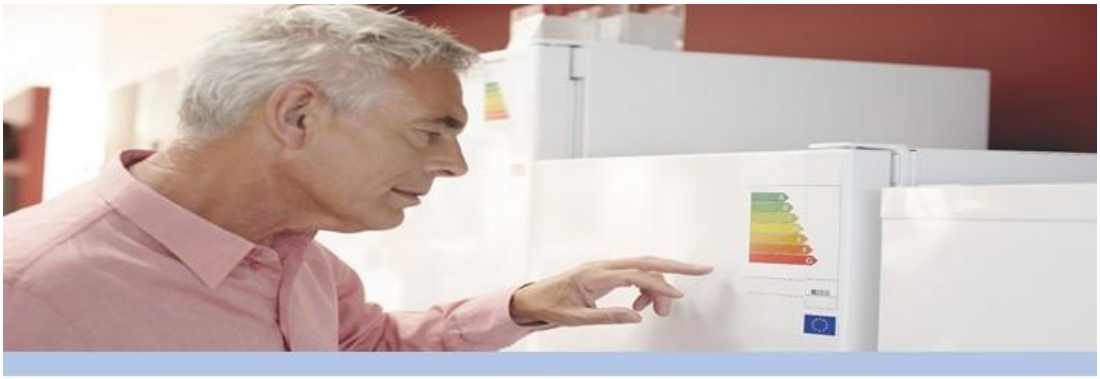
Feedback has been provided from EEPLIANT3 on tumble dryers testing results, not meeting the final moisture content requirements. This aspect will need to be clarified in the next **amendment to the Regulation (EU) No 392/2012,** so that MSAs know how to interpret an invalid test.

Recommendations from the INTAS project on the testing of large products were taken on board in the new motors **Regulation (EU) 2019/1781** and are also being considered for the revision of the fans **Regulation (EU) No 327/2011.**

Results of the ANTICSS project laboratory tests on ovens formed the basis for an amendment of the volume measurement in the revision of the current European standard.

Policy feedback outputs





EU funded projects supported Market Surveillance Authorities in expanding their testing scope and capabilities

Extending scope of activities

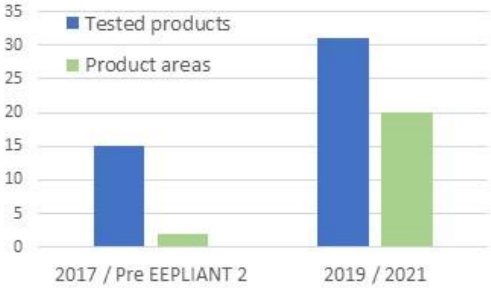
Many projects were ground-breaking in testing specific products – for example, products featuring network standby in EEPLIANT2, large ventilation equipment in the INTAS project and tyres in MSTyr15. The **EU funding lifted cost barriers to testing in new areas; without these projects**, some MSAs would not have expanded their activities. Funding also allowed some MSAs to reallocate part of their budget to ecodesign and energy labelling legislation, which for those MSAs had been generally allocated to product safety legislation. This has given MSAs increased testing confidence, and allowed them to adapt their surveillance techniques.

Category A and D methods of fan testing used in the INTAS project

Testing products with network standby options

Increased testing

Tim Stokes, from the Sustainable Energy Authority of Ireland, described the impact of participation in EEPLIANT 2 on their product testing: "Prior to involvement in EEPLIANT2 we were undertaking inspections in only 2 product areas - in 2021 we are covering 20".



"Our testing programme increased from 15 products in 2017 to 31 products in 2019. We now routinely test 35 to 40 products per annum and this will increase next year".

Collaboration between Market Surveillance Authorities across EU Member States aided enforcement practices

Enforcement and Testing

EU funded projects enabled knowledge transfers on specific products or issues, such as testing and enforcement. The INTAS project provides a good example of such an initiative. INTAS established an MSA network for addressing challenging and less common products, which encouraged MSAs to work together. INTAS also developed guidelines for setting up cross EU MSA working groups related to distribution and power transformers and ventilation fans. **These new communication channels spread the burden of compliance verification across national and regional boundaries, synergising MSA operations.**

In the Ecopliant project, Denmark, Sweden and the UK collaboratively organised the testing of fifty electric motors. **This was the first time the UK had sent products to another Member State for testing**, ensuring that a large sample of the market was assessed without duplicated testing.

Improved coordination tools

The EEPLIANT projects were noted as examples of effective collaboration, enabling MSAs to store, access and exchange information on non-compliant products through tools such as the ICSMS database and the EEPLIANT 3 Wiki Confluence platform. **This practice has helped to avoid duplication of testing, saving resources for MSAs and increasing efficiency of market surveillance activities.**

EU countries involved in EEPLIANT 2

These tools have led to increased cooperation in market surveillance in Europe and further, James Spiteri, from the Malta Competition and Consumer Affairs Authority, underlined that **"harmonisation of enforcement practices helped strengthen the European Single Market."**

Workshops with industry stakeholders increased regulatory awareness and helped to build capacity

EEPLIANT 2

Enhancing industry awareness on how to apply EU rules was a key objective of EEPLIANT 2. In the work package on professional refrigeration, a technical brochure on supplier obligations was produced with the EU industry association and disseminated to its members. Alongside this, two webinars with suppliers (with over 50 attendees) were held to explain the details.

An EEPLIANT 2 workshop

Brainstorming Workshop

The EEPLIANT 2 Brainstorming Workshop helped bring together project partner organisations to explore non-compliance and remedies, including barriers, good practice etc.

ComplianTV

National and international workshops in the ComplianTV project were a success in terms of stakeholder involvement and the gathering of expertise. Workshops were held to discuss standardised testing and surveying, and policy recommendations. **Guidelines for the standardised product testing and surveys of TVs were developed as a result of these workshops.**

ComplianTV workshop presentation

These guidelines were drafted based on experiences from laboratories and in discussion with industry and MSAs, resulting in more clarity on how to apply and verify related requirements. A brochure was also made available online. **Throughout the project, 1,370 copies of guidance documents were circulated to retailers and suppliers.**

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EF-09-22-316-EN-N

Publications Office
of the European Union

ISBN 978-92-9208-136-2