Alliance for Internet of Things Innovation

Brussels, 21 June 2022

AIOTI Response to public consultation on (SPI)

I. INTRODUCTION

The European Commission published on 31 March 2022 **proposal for a Regulation on Ecodesign for Sustainable Products** (the Regulation).

The proposal addresses product design, which determines up to 80% of a product's lifecycle environmental impact. It sets new requirements to make products more **durable, reliable, reusable, upgradable, reparable, easier to maintain, refurbish and recycle, and energy and resource efficient**. In addition, product-specific information requirements will ensure consumers know the environmental impacts of their purchases. All regulated products will have **Digital Product Passports (DPP)**.

The Alliance for Internet of Things Innovation (AIOTI) welcomes the initiative and wishes to provide additional comments from the European IoT and Edge Computing ecosystem perspective.

II. MAIN OBSERVATIONS

A harmonised approach to support the Single Market

The move from a Directive to a Regulation for Ecodesign could ensure obligations will be implemented in a more harmonised way across the EU Member States and secure the functioning of the Single Market. This is something we strongly support. The EU Single Market is a key asset for industry and consumers alike. It is critical to implement the Regulation in a way that focuses on keeping markets open and cross-border trade for products flowing. In this respect, we welcome the safeguards foreseen in Article 3 on Free Movement. It is imperative that technical requirements on products should also be harmonised at EU level. This lack of harmonisation not only increases the burden on industry but jeopardises EU competitiveness.

A consistent approach with other EU legislation & policies

If implemented correctly, the Regulation has the potential to establish a win-win scenario for both the environment and European manufacturers. We support the Commission's aim to propose a "clear and harmonised regulatory framework on product environmental sustainability designed to be coherent and aligned with existing and future sectoral legislation and policies and that the Regulation will not come into play where environmental sustainability requirements are already set at a satisfactory level in EU legislation."[1]

[1] Introduction of COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS - On making sustainable products the norm

The proposed Regulation seems a kind of catch-all, bringing together an all-encompassing ecodesign, energy efficiency, labelling, waste, chemical and market surveillance legislation. Policy objectives, choices and incentives across all policy areas must be implemented in a clear and consistent fashion to create a market for sustainable circular business models.

We call for full consistency between all existing environmental legislation. The requirements for products stemming from the Regulation need be fully harmonised with existing/upcoming EU legislation and existing measures to ensure complementary, consistent, and non-contradictory application and avoid double or cascading product requirements. In addition, we recommend that the principles and definitions set in the Regulation should be cross-checked for consistency with relevant legislation, standards, and the EU Taxonomy criteria.

Moreover, we recommend to avoid double regulation with existing instruments. There are already recycling-related regulations for specific products, such as the Waste Electrical and Electronic Equipment Directive (WEEE Directive) (2012/19/EU) for waste electrical and electronic equipment and the Directive on End-of-life Vehicles (ELV Directive) (2000/53/EC) for automotive products. It is recommended that the criteria on recycled content in products, products' recycling and expected generation of waste materials in this regulation to be aligned with existing ones.

Regarding substances of concern in products, the EU-level SCIP system has already been established to collect information on Substances of Very High Concern (SVHC) in objects in response to the Waste Framework Directive (WFD Directive) (2008/98/EC). It is suggested that the EU centrally manages information of substances of concerns in products through the authorizations of WFD or the REACH regulations.

It is moreover, suggested that the SPI should be consistent with existing instruments when available. Therefore, the regulation should be applied to finished/completed Electrical and Electronic Equipment (EEE) product (i.e., for direct use by an end user) placed on the market rather than as a component for further production or integration into a finished EEE product. RoHS 2 FAQ6.5 indicated whether the product should comply to RoHS depends on if it is a finished product when it is placed on the market. Article 7(c) in RoHS also mentions that "where compliance of EEE with the applicable requirements has been demonstrated by the procedure referred to in point (b), manufacturers draw up an EU declaration of conformity and affix the CE marking on the finished product".

Furthermore, resource efficiency is frequently mentioned in this regulation, of which the definition is lacking. We recommend to specify the definition of resource efficiency in Article 2.

In Article 5 paragraph (2), the information required allows flexibility among sectors. Regarding Article 7 paragraph 2-(b) (ii), for the EEE products, "the installation, disassembly, and recycling shall be performed by professional organizations to ensure the efficiency and effect of recycling products and minimize the impact on the environment". Therefore, providing information on product disassembly and recycling to general consumers may result in unprofessional disposal or secondary pollution or disposal that is ineffective for environmental protection. Information that reminds consumers how to install, disassemble, and recycle and other information attached to electronic and electrical products may mislead consumers. It is recommended not to disclose professional information applicable to installation, disassemble, recycle or scrap disposal by professional organizations to consumers. The following existing instruments have given instruction on management of waste EEE:

- According to Treaty on European Union (Article 130r 2), that "environmental damage should as a priority be rectified at source, and that the polluter should pay", EU environmental policies should be based on the Polluter Pays Principle and producer responsibility is an extension of the Polluter Pays Principle.

- In WFD(2008/98/EC), the European Union clarified, ""the extended producer responsibility scheme means a set of measures taken by Member States to ensure that producers of products bear financial responsibility or financial and organisational responsibility for the management of the waste stage of a product's life cycle. Therefore, producers is responsible for recycling at end-of-life of the product.

- According to Article 21(9), "manufacturers shall, further to a reasoned request from a competent national authority, provide all the information and documentation necessary to demonstrate the conformity of the product, including the technical documentation in a language that can be easily understood by that authority. That information and documentation shall be provided in either paper or electronic form. The relevant documents shall be made available within 10 days of receipt of a request by a competent national authority". While consumers will likely by interested to get informed about the use phase of the product, treatment facilities will be interested in information to facilitate recycling of waste products. Hence, we welcome the differentiation made in Article 7, 2 (b). Nevertheless, we want to point out that, depending on the product to be addressed, information on the installation and potentially on some repairs should be restricted to professionals, to avoid endangering consumers and/or reducing the lifetime of a product. In addition, we would like to recommend to restrict information for consumers on waste products to the correct way of discarding the product. Further information related to disassembly and treatment should be restricted to treatment facilities, to ensure that waste treatment is done by professionals only to maximise the recycled materials generated. As an example for the latter, improper recycling of F-Gas containing products could have a significant negative effect to the environment.

- In WEEE(2012/19/EU), Article 8 specifies that WEEE requires proper treatment. Article 14 clarifies that, ""Member States shall ensure that users of EEE in private households are given the necessary information about: the requirement not to dispose of WEEE as unsorted municipal waste and to collect such WEEE separately"". Article 15 stated ""Member States shall take the necessary measures to ensure that producers provide information free of charge about preparation for re-use and treatment in respect of each type of new EEE placed for the first time on the Union market within one year after the equipment is placed on the market"", indicating that disassembly information should be provided within a year to recycling organizations after the product is placed on the market. In order to facilitate the preparation for re-use and the correct and environmentally sound treatment of WEEE, including maintenance, upgrade, refurbishment and recycling, Member States shall take the necessary measures to ensure that producers provide information free of charge about preparation for re-use and treatment in respect of each type of new EEE placed for the first time on the Union market within one year after the equipment is placed on the market. This information shall identify, as far as it is needed by centres which prepare for re-use and treatment and recycling facilities in order to comply with the provisions of this Directive. Take consumer-oriented air conditioners as an example. The EU F-Gas Regulation (REGULATION (EU) No 517/2014) specifies that professional installation is required, and the WEEE Directive (2012/19/EU) specifies that consumers are not allowed to discard WEEE at will. Instead, it should be sent to a designated collection point for professional recycling by a professional organization.

Build on the experiences of the Ecodesign instrument

The current Ecodesign Directive has been successful in delivering environmental and energy efficiency objectives for energy-related products, regulating measurable, verifiable parameters of the product based on a clear and transparent methodology. Any requirement, whether it be performance or information, must be measurable on the product and designed so that they can be efficiently enforced by Market Surveillance Authorities (MSAs). Unless tested in a cost-efficient manner and within a short enough time span, MSAs will never be able to catch non-compliant products before they disappear from the market. Additionally, measurements must be supported by harmonised standards listed in the Official Journal of the EU[2], developed by appropriate standardisation bodies.

Only a solid standardisation base can secure reliable, accurate, reproducible checks of product requirements which are enforceable at a reasonable cost.

We support that the Regulation continues the good practice of setting product-specific Ecodesign requirements via implementing legislation, on a product group-specific basis, to take into account individual characteristics and specificities of products. Even within individual categories of equipment in our sector, the products and their environmental impacts differ significantly. Product sustainability requirements must be evaluated to ensure they will ultimately lead to more sustainable products. The right balance needs to be found in relation to environmental impact and circularity thus the scope of the impact assessment should be as broad as possible to evaluate all possible impacts.

Requirements set at horizontal, or component level pose the risk of setting double regulation at product level. Such double legislation impedes the ability of industry players to innovate while increasing the cost of products without creating additional environmental benefit.

Nevertheless, there may be some requirements that could be appropriate to be set at a horizontal level by the Regulation, such as information requirements linked to the Digital Product Passport (DPP) that are relevant for numerous product groups. These could be effective if there is no risk of double, multiple, or cascading regulation for products also subject to product specific information requirements under the Regulation.

Differentiation between B2C and B2B products and services

As general comment, we would like to stress that it is important that the Regulation and DPP distinguishes between products meant to be applied in Business to Consumer (B2C) markets, i.e., consumer products, and products meant to be applied in the Business to Business (B2B) markets, i.e., industrial products.

Similar differentiation can be applied to vertical sectors by vertical sector products and on a product group by product group basis. This differentiation should apply to the whole Regulation, and DPP including articles and annexes, including the ecodesing requirements.

[2] Official Journal of the European Union

- The same B2C versus B2B market relevance distinction and (vertical) sector products and on a product group by product group basis, applies to:
    - component, i.e., consumer component versus industrial component;
    - intermediate product, i.e., consumer intermediate product versus industrial intermediate product;
    - product group, i.e. consumer product group versus industrial product group.

The reason for such differentiation is that there are component types that can be considered as small products, or small intermediate products, or small product groups) such as chips or communication modules that have many deployed type variations and/or type versions and/or modes (with probably less stringent eco-design requirements) compared to other components types that are larger products such as cars or base stations, where less type variations and/or type versions and/or models are deployed.

For example, chips have many type variations and/or type versions and/or modes. In particular, the compliance SPI requirements that are imposed on companies should be proportionate, fair and should not impose any negative impact on the industry competitiveness. Any additional efforts for companies should be kept as minimal as possible and must be manageable and affordable by SMEs.

Appropriate Methodologies fit for purpose and that consider the trade-offs between the different sustainability goals

The Regulation proposal lacks a clear methodology to assess ecodesign requirements, but it hints that a mix of Life Cycle Analysis (LCA) and circularity concepts should be used when assessing future product requirements.

The methodology must take into account several environmental dimensions of a product and should assess the variables that consider the individual aspects across the whole lifecycle of a product, from material extraction until the end of its life. Not all the material-efficiency variables will have the same relevancy for all the product groups, and this will be an important aspect when it comes to future product regulations within the Regulation, where an assessment will need to be performed for the different individual product groups. For these reasons, when it comes to specific requirements, future regulations within the Regulation establishing ecodesign requirements for products should consider the life cycle of the product and identify the most appropriate variables to improve sustainability, while considering that parameters can be interdependent and impact each other (e.g. repairability can affect reliability etc.). Therefore, we recommend considering the possibility to assess these parameters in the future product regulations not individually, but in *combination*.

Finally, the methodology must take into consideration the trade-offs between different political objectives on how to address circularity and sustainability in products, resulting in different design choices and environmental impacts. Multiple ways are possible when it comes to increasing circularity and sustainability of products, which makes the assessment and quantification for methodologies a complex issue. Such a complex situation cannot be tackled by using one single mandatory methodology, such as the Product Environmental Footprint method suggested by the European Commission. This methodology should only be used where appropriate and there cannot be a one size fits all approach.

On Article 35: Common specifications, we think that since there is envisaged the obligation about test, measurement or calculation methods and actions (for carbon footprint and energy usage) that need to be supported by manufacturers located outside Europe that import these products into Europe, it will be useful and effective to consider internationally defined/global standards and certifications.

A relevant, verifiable & enforceable Digital Product Passport

We are in favour of a relevant, verifiable, and enforceable Digital Product Passport (DPP), which relies on already existing databases such as SCIP and EPREL to avoid unnecessary and burdensome replication and where all stakeholders contribute to delivering relevant information to the DPP.

We support that the information requirements of the DPP should be limited to that which is essentially relevant for key stakeholders over the lifetime of a product and where they can contribute correct and relevant information. It is crucial to ensure that information collected in the DPP will ultimately add value and be available only on a need-to-know basis. The burden put on companies must be proportionate, and data must be of added value for the different actors in the value chain, including economic operators.

Not all information is relevant or appropriate to be shared with all stakeholders. It must be thoroughly assessed on a sector by sector, product by product level with a cost/benefit analysis to ensure effective application and that the efforts and impacts of having a DPP positively contribute to a significant increase in the sustainability of products. This should also include assessment of the potential impacts of an increased digital and environmental footprint of the DPP and of the registry of such DPPs.

We recommend industry plays an active role in the development of the DPP, given its considerable knowledge about information in value chains, existing systems and what is relevant to be included to each potential user. Given the complexities of the supply chain, suppliers of components in products placed on the market in the EU should be obliged to provide information to the DPP. The information collected and stored in the system should also be of benefit to producers.

While there are potential benefits of the DPP, such as better transparency in the value chain and easier access to data, the information in the DPP needs to be correct and trustworthy for the DPP to be a success. This is also important to ensure that competition is not distorted by companies/importers that provide no, incomplete, or incorrect information. If this has no practical negative consequence, such actors gain a competitive advantage over companies who try to provide correct and complete information. Therefore, to prevent a scenario that would promote incorrect behaviour, effective enforcement of the content in the DPP is essential. We therefore recommend that the criteria for the type of information to be included in the DPP must be legally and strictly defined by the European Commission, in a centralised manner and applicable to all relevant supply chain actors as well. Data security and access rights should be a priority to ensure any confidential, business sensitive information is protected from unauthorised access and liability for data loss and other technical damage must be clarified.

There should not only be coherency and consistency between energy labelling, performance labelling and DPP information requirements but also compatibility with other information systems at international level to avoid any trade restrictions.

In terms of granularity of the information, to ensure a more manageable system, the DPP should, at least initially, be applicable at product model level rather for each, and every individual unit placed on the market. A stepwise approach to the implementation of the DPP, based on selected pilot product cases, could test its technical and regulatory functionality.

Use the DPP as a further opportunity to digitalise product information

To reduce waste and enable consumers to play a more active role in the green and digital transitions, we would see a key opportunity of the DPP to allow producers to provide relevant product information via digitally generated information/labels instead of paper versions. This would also be an alternative to having to affix a label on the packaging of the product, which is subject to complexities due to different languages and the limited space on packaging for very small products.

We believe that IoT and Edge Computing can play an important role on supporting the following articles in the Regulation:

- Article 8: Product passport
- Article 9: General requirements
- Article 10: Technical design and operation of the product passport
- Article 11 Unique operator identifier and unique facility identifier
- Article 12: Product passport registry
- Article 14: Labels

In particular:

1. **Focus on reducing the compliance burden to enterprises**

It is recommended that the product passport be provided based on the model level to more effectively trace the product management information as the product model is used as the product identification information. Batch or item-level requirements may incur significant data management costs, especially for SMEs.

2. **Include requirements for internationally/globally standardized and interoperable approach**

In order to access, distribute and store the digital product passport several ICT related building blocks, such as data models, access and distribution communication protocols need to be applied and use standardised methods and protocols.

In this context we recommend to add in the content of **Article 8,9,10**, the following:

- Requirement for internationally/globally standardized and interoperable Data Models to include the digital Product Passport information, since the regulation applies to any (within or outside EU) product entering the EU market.

- Requirement for internationally/globally standardized and interoperable access and distribution of the Product Passport Data Models, since the regulation applies to any (within or outside EU) product entering the EU market.

In this context we recommend to add in the content of **Article 11**, the following:

- Requirement for internationally/globally standardized and interoperable "Unique operator identifier and unique facility identifier", since the regulation applies to any (within or outside EU) product entering the EU market.

In this context we recommend to add in the content of **Article 12**, the following:

- Requirement for internationally/globally standardized and interoperable "Product passport registry", since the regulation applies to any (within or outside EU) product entering the EU market.

In this context we recommend to add in the content of **Article 14**, the following:

- Requirement for internationally/globally standardized and interoperable "Product passport label", since the regulation applies to any (within or outside EU) product entering the EU market.

Enabling the implementation with sufficient transition times

Given the impacts on production and innovation of products, we strongly recommend that a sufficient lead-time should be granted between the publication of legislation and the application of new product requirements, particularly in view of the need for developing harmonised standards. Industry needs to adapt their processes for implementing new or updated legal requirements, through complex supply chains. Therefore, sufficient transition periods should be allowed by legislation. For new technologies to be developed and brought to the market they need a proper, predictable framework to unleash their potential.

Harmonised standards are the best tool to provide presumption of conformity of products

Harmonised standards remain the best tool to provide presumption of conformity and accommodate state-of-the-art. We would recommend that the Commission refrain from issuing its own technical/ common specifications and including them in the regulations. Requirements must be based on scientific assessment methods through recognised European or ISO /IEC/ITU international standards and must be reliable and ensure reproducible results. Standardisation bodies and global standards, which also rely on technical expertise from industry and relevant stakeholders, should be used in the design of the new requirements. Definitions must be clear and comprehensible and if possible, based on related standards to avoid misunderstandings.

Ecodesign is a CE marking legislation with a clearly defined conformity assessment procedure which allows manufacturers the choice between internal design control (Annex IV) and the management system (Annex V), referring to the modules described in Annex II of Decision 768/2008/EC. For home appliances this implies Module A. CE marking ensures the principle of presumption of conformity (i.e., when a manufacturer uses harmonised standards which references are listed under respective legislation in the Official Journal of the European Union, then its products are considered to be compliant until proved to the contrary by the authorities). For these reasons, we support this demonstrated practice of self-assessment rather than mandatory third-party assessment as it makes the whole system more complex with unnecessary bottlenecks and costs, without contributing to overall higher levels of compliance.

About AIOTI

AIOTI is the multi-stakeholder platform for stimulating IoT Innovation in Europe, bringing together small and large companies, start-ups and scale-ups, academia, policy makers and end-users and representatives of society in an end-to-end approach. We work with partners in a global context. We strive to leverage, share and promote best practices in the IoT ecosystems, be a one-stop point of information on all relevant aspects of IoT Innovation to its members while proactively addressing key issues and roadblocks for economic growth, acceptance and adoption of IoT Innovation in society.

AIOTI's contribution goes beyond technology and addresses horizontal elements across application domains, such as matchmaking and stimulating cooperation in IoT ecosystems, creating joint research roadmaps, driving convergence of standards and interoperability and defining policies. We also put them in practice in vertical application domains with societal and economic relevance.