

**QUESTIONNAIRE ON POINTS SYSTEMS APPROACHES
FOR ESTABLISHING ECODESIGN REQUIREMENTS OF
COMPLEX PRODUCTS**

**Prepared by Waide Strategic Efficiency, VITO, Fraunhofer ISI,
VMAS and VHK for the use of DG GROW**

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Project summary

The European Commission has instigated a technical assistance project to evaluate and derive a "points-system" methodology that could be applied to the development of Ecodesign requirements for complex products and/ or product systems. This need arises due to the increasingly common investigation of more complex energy-related products and systems for prospective Ecodesign and Energy Labelling implementing measures within the Ecodesign work plan, most notably since the advent of the 2012-2014 Ecodesign work plan. Examples of such products include machine tools, data storage devices and professional washing machines/ driers, which are complex in that:

- they may have more than one functional unit (i.e. the quantified performance of a product system for use as a reference unit in a life cycle assessment study), due to the variety of functions the product is capable of performing.
- the functional units may be inherently difficult to assess due to measurement or methodological difficulties.

It is also common for the product groups concerned to have varying degrees of heterogeneity that complicate their assessment against common metrics and measurement methods. However, as savings potentials from the adoption of appropriate Ecodesign technologies can be significant, and these technologies are theoretically capable of being assessed on a modular basis, the European Commission is interested in evaluating whether it is feasible to devise an assessment methodology for product systems comprised of technology/design modules that considers the ensemble of modular technologies deployed.

This notion was first explored within the Ecodesign process in the case of machine tools within a working document put forward by the Commission at the May 2014 Consultation Forum which proposed one potential option based around a points systems approach. The resulting discussion highlighted the potential of this notion but also the need to explore options in greater depth and to produce a rationale that would allow the viable approaches to be identified and their strengths and limitations to be assessed. The present technical support services contract aims to elucidate this issue via the conduct of analyses that will clarify the options, identify the most promising method(s) and then demonstrate their viability via some worked case studies.

To be able to fulfil the specific objectives of the project, our approach and methodology is structured into six tasks as follows:

Task 1 - Stakeholder consultation, including the compilation of a stakeholder list and a stakeholder survey.

Task 2 - Review of state-of-the-art methods, in which all relevant existing methodologies will be catalogued and reviewed, followed by a comparative analysis.

Task 3 - Method development, which entails the derivation of a prospective method for establishing Ecodesign requirements for complex products. This is to be derived from consideration of at least: a) the fit with MEErP, b) the fit with the provisions of the Ecodesign Directive, c) suitability for addressing energy-related

and resource efficiency aspects, d) modular build on existing Ecodesign implementing measures, e) measurability via standards.

Task 4 - Case studies, where at least two product groups will be evaluated using the method proposed in Task 3. The Task 3 method may be iteratively revised and applied, as appropriate.

Task 5 - Reporting

The study is being carried out by a consortium that spans a broad spectrum of expertise including technological know-how and environmental engineering, economic and environmental assessment, market and consumer analysis. Waide Strategic Efficiency is technical leader of the study. Other involved project partners are VITO, Fraunhofer, Viegand Maagøe and VHK.

Notes on completing the questionnaire

Soliciting Member States' views of is of central importance to the study and we would like to invite you to support this effort by completing the attached questionnaire, and arranging a short follow-up interview. By 27 May we will send you a draft version of the first (Task 2) report, which provides a review of the state-of-the art of "points system" methods. We invite you to look at this before completing the questionnaire

This questionnaire is the survey of Member States referred to in Task 1 of the project summary above.

In total there are 19 questions. Most of these are multiple-choice questions wherein you will be invited to add an X against the choice you opt for. In each case you are also invited to add a text explanation for your response.

The questionnaire may appear to be lengthy in terms of the number of pages; however, this is mostly because respondents are asked to add explanations of their choices in the text boxes provided.

When processing the questionnaires received the responses will be treated by the project team as if they were given under Chatham House rules, i.e. we may choose to quote a response in our Task 1 report but we will not attribute the quote to your organisation or any of the other respondents to the questionnaires. Nor will we indicate which Member States were invited to complete the questionnaire.

The consortium partners would like to thank you for taking the time to complete this questionnaire and would be very grateful if you could return the questionnaire by 6 June, and propose one or two dates/ times when you would be available for a 1-hour follow-up interview between 7-17 June inclusive

About you and your organisation

Please enter your name in the box below

Your name	
Your organisation	

Questionnaire – on points-system approaches for complex products

Q1. Do you think it is necessary to establish a strict definition of what a complex product is in Ecodesign regulatory terms?

	Response		
Options	Yes	No	Unsure
Response (add X)			

Please explain your answer

Explanation	

Q2. How would you define a complex product from an Ecodesign regulatory development perspective?

Please enter your response in the cell below

Response	

Q3. Assuming such a definition were in existence do you think points-based Ecodesign assessment methodologies should only be applied to such products?

	Response		
Options	Yes	No	Unsure
Response (add X)			

Please explain your answer

Explanation	
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Q4. In principle do you agree that the Ecodesign characteristics of complex products can be assessed in a modular manner (i.e. individually for each module that performs a specific function)?

	Response		
Options	Yes	No	Unsure
Response (add X)			

Please explain your answer

Explanation	
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Q5. What issues do you think would be encountered were the Ecodesign characteristics of complex products to be assessed in a modular manner (i.e. individually for each module that performs a specific function)?

Please add your response in the cell below

Response	
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Please explain your answer

Explanation	
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Q6. Within an Ecodesign context do you think that, at least for some products, it is viable to apportion functional units among modules that perform more than one function, as is done for example in the ISO 14955-1 standard for machine tools or in the "installer" energy labelling requirements for space and water heaters?

	Response		
Options	Yes	No	Unsure
Response (add X)			

Please explain your answer

Explanation	
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Q7. Multi-criteria points systems methodologies usually begin by establishing the set of (environmental) impact criteria to be assessed. Do you think any prospective points scheme to be applied to Ecodesign assessment of complex products should focus on key impact criteria first or should it analyse all impact criteria?

	Response		
Options	Key criteria	All criteria	Unsure
Response (add X)			

If you answered *Key Criteria* please explain which criteria should be focused upon and why

Explanation	
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If you answered *All Criteria* please explain your answer and should it dedicate equal effort to all criteria? (If not, which should it focus most effort on?)

Explanation	
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If you answered *Unsure* please explain your answer

Explanation	
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Q8. Multi-criteria points systems approaches often use grouping and weighting of impact (assessment) criteria to derive an overall score: do you think this would be a helpful approach for assessing the Ecodesign of complex products?

Options	Response		
	Yes	No	Unsure
Response (add X)			

Please explain your answer

Explanation	
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Q9. If weightings were to be applied, which method for determining the weightings do you think would be most appropriate?

	Response			
Options	Panel method	Monetisation	Distance to target	Other
Response (add X)				

Please explain why and how you think this could work in an Ecodesign regulatory environment

Explanation	
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Q10. Do you think it might be appropriate to only apply a weighted-points systems approach for the Ecodesign assessment of complex products to purely energy-related assessments, where the weighting is applied between the various modules that make up the device?

	Response		
Options	Yes	No	Unsure
Response (add X)			

Please explain your answer

Explanation	
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As explained in Section 3.2 of the Task 2 draft report, the Analytical Hierarchy Process (AHP) is a structured technique for organising and analysing complex decisions, developed by Saaty in the 1970s, and subsequently extensively used, studied and refined. AHP provides a comprehensive and rational framework for structuring a decision problem, for representing and quantifying its elements, and for relating those elements to overall goals. Alternative solutions are evaluated, resulting in a ranked and weighted order of preferences.

Q11. Multi-criteria assessment processes often use an Analytical Hierarchy Process methodological approach to establish a hierarchy between the criteria. Do you think this could be a viable tool for the Ecodesign assessment of complex products?

	Response		
Options	Yes	No	Unsure
Response (add X)			

Please explain your answer

Explanation	
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Q12. Do you think that a points systems approach has the potential to form a viable methodology for the development of Ecodesign requirements for complex products?

	Response		
Options	Yes	No	Unsure
Response (add X)			

If yes, please explain in what way?

Explanation	
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If no, please explain why not?

Explanation	
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If unsure, please explain your answer

Explanation	
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Q13. Do you think a points systems approach might be suited to setting **generic** Ecodesign requirements?

	Response		
Options	Yes	No	Unsure
Response (add X)			

Please explain your answer

Explanation	
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Q14. Do you think a points systems approach might be suited to setting **specific** Ecodesign requirements?

	Response		
Options	Yes	No	Unsure
Response (add X)			

Please explain your answer

Explanation	
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Q15. Do you think a points systems approach applied to setting **generic** Ecodesign requirements for complex products might pose any specific challenges for market surveillance?

Options	Response		
	Yes	No	Unsure
Response (add X)			

If yes, please explain in what way?

Explanation	
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If no, please explain why not?

Explanation	
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If unsure, please explain your answer

Explanation	
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Q16. Do you think a points systems approach applied to setting **specific** Ecodesign requirements for complex products might pose any specific challenges for market surveillance?

Options	Response		
	Yes	No	Unsure
Response (add X)			

If yes, please explain in what way?

Explanation	
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If no, please explain why not?

Explanation	
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If unsure, please explain your answer

Explanation	
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*Q17. Which other possible issues do you foresee that could pose a problem to the application of a points-systems methodological approach to the setting of **generic** Ecodesign requirements?*

Please enter your response in the cell below

Response	
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*Q18. Which other possible issues do you foresee that could pose a problem to the application of a points-systems methodological approach to the setting of **specific** Ecodesign requirements?*

Please enter your response in the cell below

Response	
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Q19. What guidance, advice or possible alternative approaches would you offer for the continuation of this research exercise?

Please enter your response in the cell below

Response	
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The project team would like to contact you for further discussion and/or clarification of your answers. We would be very grateful were you able to propose some dates and times when we could call you between 7-17 June inclusive in the cell below

Please enter your response in the cell below

Response	
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Please enter the telephone number we should call you on in the cell below

Response	
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Thank you for taking the time to complete this questionnaire.

***Please now send it to Paul Waide by June 6th at paul@waide.co.uk
Thank you!***