

# Setting verifiable environmental requirements

- or "on our honour"

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<b>Title and subtitle of the report</b> Setting verifiable environmental requirements - or "on our honour"	
<b>Summary</b> <p>A fundamental principle is that all environmental requirements must be objectively verifiable. A requirement is ineffective if it cannot be verified and followed up by the purchaser. Verifiable environmental requirements and their observance are prerequisites if procurement is to be a driving force towards sustainability. This is confirmed by the survey performed during this investigation. What we therefore need to know is: What requirements can be set and what evidence can the purchaser demand from suppliers?</p> <p>This report defines different categories of evidence, provides a general structure for how these should be used, and exemplifies their use with a case study. Further, it is established that the orderer must specify in the specification of requirement how verification is performed in order to uphold the principle of equal treatment. Fewer environmental requirements should be set but these must be followed up. Following up requirements raises the credibility of the procurement process and is an important part of contract fulfilment.</p> <p>Finally, it is concluded that if public procurement is to be a driving force, the environmental requirements must be relevant (i.e. concern proven significant environmental aspects) and whenever possible such requirements should be made award criteria that are given significant weight in tender assessment.</p>	
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## **Preface**

Ecologically sustainable procurement is instrumental in increasing the availability and range of environmentally friendly products and services on the market. For green purchasing to have an effect, the environmental requirements that are implemented must be relevant, verifiable and followed up. Environmental requirements are commonplace during procurement. However, far too often, the implementation and observance of the requirements during the period of contract are not properly followed up. This state of affairs can in the long run jeopardize the credibility of ecologically sustainable procurement. One way to tackle this problem is to supply procurers with information and guidelines as to what types of records can be requested during procurement and the contract period.

The question as to how to verify the proposed environmental requirements for various products and services has cropped up repeatedly in the Swedish Environmental Management Council's work on the EKU instrument for sustainable procurement. Central to this issue is the question of what types of record are suitable, since equal treatment is required during public procurement.

In conjunction with the development of the EKU instrument and the identification of product areas with scope for effectual environmental requirements, the Swedish Environmental Management Council investigated the issue of records for ecologically sustainable procurement. Verva, part of the Swedish Administrative Development Agency, was contacted at an early stage and showed an interest in actively participating in and funding the project. The investigation has been performed in collaboration between the Swedish Environmental Management Council, Verva and the Swedish Environmental Protection Agency, who have also financed the project.

We hope that this report from IVL Swedish Environmental Research Institute can form a basis for discussion and improvement work of not only the EKU instrument but generally for ecologically sustainable procurement in the public and private sector.

Stockholm, 14 August 2006

Sven-Olof Ryding  
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## Summary

Consideration for the environment during public procurement is essential, not only to avoid unnecessary environmental impact but also to reward green products and services. It is therefore essential that the environmental criteria are handled in a serious manner, i.e. a fundamental principle is that all environmental requirements must be objectively verifiable. A requirement is ineffective if it cannot be verified and followed up by the purchaser. Verifiable environmental requirements and their observance are prerequisites if procurement is to be a driving force towards sustainability. This is confirmed by the survey performed during this investigation (see Appendix 1 and 2).

What we therefore need to know is: What requirements can be set and what evidence can the purchaser demand from suppliers? This investigation has resulted in proposed procedures for the selection of suitable evidence and methods of follow-up. The report defines different categories of evidence, provides a general structure for how these should be used, and exemplifies their use with a case study.

Legislation is vague regarding the choice of evidence and therefore leaves the procurer great freedom to set the requirements of evidence to verify environmental performance. Evidence may span from 'on our honour', that is confirmation from the company, to certification from an accredited independent body. Requiring certification from an independent body is not an obstacle so long as equivalent certificates from other member states are accepted. Considering the vagueness of legislation, the problem is rather *what is equivalent evidence?* to ensure that the principle of equal treatment is upheld.

The investigation establishes that verification can be handled separately but must be put in relation to *how* the requirement is formulated. In practice, this may mean that other, often simpler, environmental requirements must be set to evaluate the same environmental aspect, but in a way that makes it verifiable.

The investigation proposes definitions and a ranking of evidence to ensure the applicability of different equivalent forms of evidence to verify fulfilment of a specified environmental requirement. These definitions are described in a separate annex which can be referred to during procurement. Several significant differences are illustrated in Table 1. Simplified, these means of proof are (in order of ascending stringency):

- Confirmation – *we testify on our honour...*
- Self-declaration – *a public document that provides evidence...*
- Second-party declaration – *another company that provides evidence...*
- Third-party certificate – *an external, independent party that provides evidence...*
- Accredited third-party certificate – *an accredited external, independent party that provides evidence...*

There is often a conflict of interests when increasing environmental relevance must be weighed against a simpler indicator that is cost effective to verify. Cost efficiency steers towards simpler verifiable indicators while environmental relevance steers towards indicators close to the anticipated environmental effects. If indicators close to an environmental effect are justified, and these also require special qualifications and/or equipment, independent evidence and a verification system whereby the necessary skills are also evaluated are necessary, i.e. accreditation. This is often costly.

The challenge is therefore to find identifiable significant environmental aspects that have cost-effective, practical indicators and evidence. This must be guaranteed for every requirement.

The investigation suggests a step-by-step procedure (Table 2) that results in a recommended form of evidence and verifies that the combination of the environmental requirement and the recommended evidence are realistic. The procedure provides an answer to *what is 'sufficient' evidence?*, which has been validated with a questionnaire.

The validation process means that it may be necessary to produce a different indicator that is simpler to verify for the same environmental aspect. If no economically and practically realistic indicator can be identified, the requirement of that environmental aspect must be questioned, i.e. whether the requirement should be stipulated at all since it cannot be verified satisfactorily. The results of the questionnaire recommend that such requirements are not set at all (see Appendix 1).

The investigation proposes that the follow-up phase should be seen as a significant part of the verification process. Accordingly, follow-up guidelines must be provided to the contracting entity for each individual requirement. Recommended follow-up methods have been established and can be found in Figure 6. These recommendations are influenced by the type of requirement that is set, i.e. if the requirement is linked to checking an individual product, product series, range or management function. Following up requirements raises the credibility of the procurement process and is an important part of contract fulfilment. The follow-up process is costly but is today seldom performed at all. The investigator believes that a rational way to tackle this problem is to set fewer environmental requirements and start to follow them up!

Further, the report ascertains that if public procurement is to be a driving force, the environmental requirements must be verifiable and relevant (i.e. cover proven significant environmental aspects). An important view that has been raised in both the questionnaire and the workshop is that requirements should, as far as possible, be set as award criteria that are given significant weight in tender evaluation.

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# 1 Investigation

## 1.1 Commissioner

The Swedish Environmental Management Council has commissioned IVL Swedish Environmental Research Institute, working in collaboration with Verva and the Swedish Environmental Protection Agency, to investigate verification in public procurement.

The preliminary results<sup>1</sup> of this investigation and resulting proposals were discussed at an open workshop held by the Swedish Environmental Protection Agency on 7 June 2006.

IVL is solely responsible for the views and proposals that are put forward.

## 1.2 Aims and purpose

The aim of this investigation is to propose how the verification of environmental requirements in public procurement can be improved, with particular attention to records fulfilling the principles of equal treatment.

The purpose is therefore to raise the credibility of the procurement process and ensure this plays its much claimed roll, that is a cornerstone in the process of continual improvement as a forerunner and instigator of environmental work.

## 1.3 Interpretation of the assignment

The question as to what constitutes sufficient evidence or records cannot generally be answered unless all the specific information about the environmental requirement is known. There are however grounds to establish a general procedure that proposes the highest level of ambition that is judged reasonable. Accordingly, this investigation endeavours to establish a procedure for selecting appropriate evidence. The instigator of the requirement may in a specific case be forced to lower their level of ambition due to the practical and economic consequences.

To establish what is considered to be sufficient evidence or records, a questionnaire has been issued to trade and industry representatives and procurers. Another important aspect in setting the upper limit of what is considered reasonable is to study the methods and procedures used for ecolabelling. Above all, information from Nordic Ecolabelling (the Swan) and TCO (TCO-labelling) has been studied.

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<sup>1</sup> Erlandsson, M: *Ställ verifierbara miljökrav!* IVL Swedish Environmental Research Institute, document number A26019, 2006-06-02.



## **1.4 Scope and limitations**

The scope of this investigation is to clarify the definition of various levels of evidence that may be required from a supplier to ascertain fulfilment of environmental requirements. The investigation is limited to environmental requirements, which, for example, means that social aspects are not considered. The project commissioner and industry are in agreement that these aspects should be based on existing established standards.

The proposal of follow-up procedures, suitable fines in case of obvious shortcomings and general contractual terms are not covered by this investigation.

## 2 Legislation on public procurement

Unlike purchasing in the private sector, public procurement is strictly regulated with harmonised legislation across the EU. This means that Swedish law must pay regard to and implement the directives of the European Parliament and Council, i.e. Directive 2004/18/EC on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts and Directive 2004/17/EC on coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors.

New legislation is in preparation and the government submitted in May 2006 a draft to the Council on Legislation proposing a new law on the award of public works contracts, public supply contracts and public service contracts (classic sectors), and a new law regarding the procurement procedures in the water, energy, transport and postal services sectors. The two new laws replace Act (1992:1528) on public procurement (LOU). The new directives to a large extent agree with the previous versions that they replace.

### 2.1 What does legislation say about evidence?

Neither the European procurement directives nor the Swedish act on public procurement (LOU) prescribe any particular requirements of evidence that can be applied to suppliers of public contracts to verify fulfilment of the stipulated environmental requirements.

An initial, decisive question is whether it is possible to stipulate requirements that cannot be verified. Case C-448/01 'Wienstrom' tried in the European Court of Justice gives some guidance. It established that criterion for evaluation must be susceptible of control<sup>2</sup>. Failure to control the information submitted in a tender conflicts with the requirements of equal treatment. This principle probably applies to all stipulated requirements.

Regarding requirements of verification and follow-up, the draft from the Swedish Council on Legislation contains a similar clause (page 199, Ministry of Finance 2006).

*'A condition that is stipulated in the procurement contract must also be susceptible of control and actually verified by the contracting authority or procuring entity.'*

The procurement directives do not contain this unambiguous wording but approach the matter indirectly or only apply it to certain types of requirement (for example, refer to the extract from Article 48.2). However, by a process of reasoning, requirements on control can be traced back to the general judicial principles of the EC Treaty such as the principle of equal treatment. The lack of clear stipulations regarding verification and follow-up (which is not regulated by law) makes today's praxis legitimate, i.e. that only few environmental requirements are followed up and verified.

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<sup>2</sup> "In order for the criterion to be acceptable, it should be expressly linked to the object of the purchase contract and should be susceptible of control, which would imply that the contracting authority requires - through the production of certificates for example - elements enabling him to control the information forwarded by the bidders in relation to the award criteria."

The new procurement directives provide more detailed guidance as to the forms and level of evidence that can be required in public procurement to verify the fulfilment of stipulated requirements. Article 23.5 (second and third paragraphs) in Directive 2004/18/EC stipulates the following for all performance and functional requirements:

*'In his tender, the tenderer must prove to the satisfaction of the contracting authority and by any appropriate means that the work, product or service in compliance with the standard meets the performance or functional requirements of the contracting authority.'*

*'An appropriate means might be constituted by a technical dossier of the manufacturer or a test report from a recognised body.'*

The list of forms of evidence ('An appropriate means might be...') cannot be seen as exhaustive. Article 23.5 highlights the breadth of evidence permitted by legislation.

To require means of proof such as named in the directive, the specification of requirements must clearly refer to standards and other specifications, such as certain ecolabelling criteria.

Article 23.6 of Directive 2004/18/EC on procurement (cf. Article 34.6 of 2004/17/EC) lays down specifications that must be followed if functional or performance environmental requirements are set, and which can be used as general guidelines for environmental requirements in public procurement:

*'Where contracting authorities lay down environmental characteristics in terms of performance or functional requirements as referred to in paragraph 3(b) they may use the detailed specifications, or, if necessary, parts thereof, as defined by European or (multi-) national eco-labels, or by and any other eco-label, provided that:*

- those specifications are appropriate to define the characteristics of the supplies or services that are the object of the contract,*
- the requirements for the label are drawn up on the basis of scientific information,*
- the eco-labels are adopted using a procedure in which all stakeholders, such as government bodies, consumers, manufacturers, distributors and environmental organisations can participate, and*
- they are accessible to all interested parties.*

*Contracting authorities may indicate that the products and services bearing the eco-label are presumed to comply with the technical specifications laid down in the contract documents; they must accept any other appropriate means of proof, such as a technical dossier of the manufacturer or a test report from a recognised body.*

The general interpretation of Article 23.6 (above) must be that the two first requirements apply to all environmental functional and performance requirements, while the two latter requirements apply if specific reference is made to an ecolabel. One consequence of this legislation is thus that environmental requirements laid down by ecolabelling organisations are more strictly regulated than those produced by other organisations. Irrespective of these specified requirements, all requirements that are laid down in the contracting process shall, as a principal rule, fulfil the concepts of non-discrimination, equality and proportionality. One interpretation is that environmental requirements *should* generally be established *using a procedure in which all stakeholders can participate*.

Further, Article 23.6 of Directive 2004/18/EC on procurement states the following regarding evidence:

*'Contracting authorities may indicate that the products and services bearing the eco-label are presumed to comply with the technical specifications laid down in the contract documents; they must accept any other appropriate means of proof, such as a technical dossier of the manufacturer or a test report from a recognised body.'*

The list of forms of evidence (following 'such as...', cf. 23.5) cannot be seen as exhaustive. Article 23.6 highlights the breadth of evidence permitted by legislation. This is also highlighted by a comment to the new draft from the Swedish Council on Legislation: 'This only provides examples of documentation that may be approved and should therefore not be included in the article'<sup>3</sup> (page 335, Ministry of Finance 2006).

With regard to evidence, a comparison with evidence of *technical and/or professional abilities* may be of some interest since this is linked to requirements such as an environmental management system. Directive 2004/18/EC provides a list of means of proof for the classic sector<sup>4</sup> in Article 48.2 (item j). This list of permitted evidence is *only comprehensive* with regard to technical ability and capacity:

*'2. Evidence of the economic operators' technical abilities may be furnished by one or more of the following means according to the nature, quantity or importance, and use of the works, supplies or services:*

...  
*(j) with regard to the products to be supplied:*  
*(i) samples, descriptions and/or photographs, the authenticity of which must be certified if the contracting authority so requests;*  
*(ii) certificates drawn up by official quality control institutes or agencies of recognised competence attesting the conformity of products clearly identified by references to specifications or standards*  
...”

According to Article 48.2 of the procurement directive, it could be interpreted that – with regard to technical ability and capacity – evidence for products must be established by an independent third party. If technical capacity coincides with an environmental requirement on the products, evidence from an independent third party may be necessary<sup>5</sup>. The judicial interpretation in this regard is unclear. It should however be possible to exclude the use of confirmation from the company as evidence in this context.

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<sup>3</sup> For this reason, the draft does not propose that the text be introduced into Swedish law.

<sup>4</sup> Compare also the similarity with Article 48.2 item d, but which concerns checks to establish a supplier's production capacity or service provider's technical ability and refers to a 'competent official body'. According to Article 48.2 f, for public works contracts and public services contracts, environmental protection measures, such as the environmental management procedures that a supplier implements during the performance of the contract, may in some cases serve as evidence of the supplier's 'technical capacity'.

<sup>5</sup> Justification (44) of Directive 2004/18/EC on procurement specifies that an environmental management system is an example of evidence that could be applicable.

Legislation is vague regarding the choice of evidence and therefore leaves the procurer great freedom to set the requirements of evidence to verify environmental performance. Evidence may span from confirmation from the company, to certification from an accredited independent body. Requiring certification from an independent body is not an obstacle so long as equivalent certificates from other member states are accepted. Considering the vagueness of legislation, the problem is rather *what is equivalent evidence?* to ensure that the principle of equal treatment is upheld<sup>6</sup>.

## 2.2 General EU legislative principles

The legislation on public procurement is based on the European Community Treaty and follows its regulations, even though the treaty does not directly refer to public procurement. The provisions of the treaty, which are often cited in the European Court of Justice in cases pertaining to public procurement, are several core principles such as the principles of equal treatment, non-discrimination, mutual recognition, proportionality, transparency and predictability. These principles can be translated into consequences relevant to the verification of *environmental requirements and evidence*.

- ❑ *Equal treatment* means the conditions for suppliers must be as neutral as possible. In other words, environmental requirements and their verification must be unbiased so that all offerings and tenderers are treated equally. This means, for example, that equivalent evidence must be unambiguously defined and the information available to all.
- ❑ *The principle of proportionality* means that the contracting entity may not demand more taxing requirements from the supplier or deliverable than is necessary and deemed appropriate for the contract. Environmental requirements aim to reduce environmental impact. Accordingly, verification should relate to the potential environmental impact. The contracting entity has a duty to ensure this<sup>7</sup>. Increasing significance of the environmental impact justifies higher costs of evidence.
- ❑ *The principle of transparency* primarily concerns the obligation of the contracting entity to make available information about the contract and the practicalities of the tender procedure, as well as the right of the supplier to access this information so that they know in advance what conditions apply to the procurement process. The assessment of a requirement must in other words be predictable and repeatable, i.e. the results of verification should be the same irrespective of who performs the verification. Interpretation to determine whether a requirement is fulfilled may conflict with the principle of transparency.
- ❑ *The principle of mutual respect* means that records issued by a competent body in one member state shall also apply in other member states. The contracting entity must accept equivalent means of proof issued by a foreign competent body and not solely those issued by national control bodies, for example.

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<sup>6</sup> Articles 23.4 and 23.6 on equivalent evidence do not provide specific guidelines. This means that each contracting authority must establish what equivalent evidence is to ensure that the concept of equal treatment is observed.

<sup>7</sup> Cf. Article 23.6 of Directive 2004/18/EC on procurement and §12, second paragraph, of LOU. A contracting authority may refer to ecolabelling criteria if the criteria for the label are based on scientific information.

The principles listed above give rise to conflicts of interest. These are described in a statement to the administrative court of appeal by the National Board for Public Procurement (Diary number 2005/0088-29):

*'Praxis at the European Court of Justice in regard to the principle of proportionality is that an evaluation of whether proportionality is disregarded shall be conducted as a "structured balancing" between opposite interests. The evaluation comprises three steps, of which the second is most clearly established in court praxis. The first step is to evaluate whether the action is suitable and effective to achieve the aim. Secondly, an evaluation of whether the action is necessary to achieve the desired purpose shall be performed, so long as no less intrusive alternative exists. Thirdly, whether the negative effect that the action has on the interest or the right that the action impinges is disproportional or excessive compared to the aim must be assessed<sup>8</sup>. The European Court of Justice has on separate occasions stated that the regulations must be interpreted in "functional terms", i.e. the practical application and the action's effects in a specific contract that shall be assessed.'*

The investigation concludes that only environmental requirements that can be verified shall be stipulated, and that these must be followed up. This is a prerequisite for the procurement to be competitively neutral, to ensure equal treatment and to make sustainability efforts credible. The investigation's interpretation of the principle of proportionality means that the cost of providing evidence must stand in proportion to the potential environmental impact, since the purpose of the requirement must be to reduce environmental impact. If the contracting entity does not demonstrate the significance of the environmental requirement, a confirmation should be sufficient, if the requirement is set at all. Predictable requirements mean that the need for interpretation should be avoided. If interpretation is nonetheless required (due to the nature of the object of the contract), procedures must exist to ensure repeatability. If such procedures cannot be defined but reference is made to an expert panel, for example, the investigation considers that such requirements should not be set.

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<sup>8</sup> De Búrca, G., The Principle of Proportionality and its Application in EC Law, Yearbook of European Law vol. 13, 1993, p. 146.

### 3 The verification ladder

*Verification* refers to a multi-element process that is performed to ascertain (verify) that the set requirements are fulfilled<sup>9</sup>. The verification of environmental requirements therefore covers a number of elements from the clarification of the requirement to the review of the delivered product's environmental performance. Verification thus extends over a significant period of time and cannot be performed on one single occasion.

*How* a requirement is defined has consequences for how verification should be structured. Regarding the environmental performance stipulated by the requirement, the following initial questions can be asked:

- ❑ Which methods of follow-up, i.e. checks, assessments or system audits, are covered?
- ❑ Which methods of measurement, i.e. standard or equivalent methods, can be used?
- ❑ Which forms of evidence of compliance with the requirement are appropriate?

The verification process has in this investigation been divided into several stages that describe significant parts which must all be performed to complete the verification. This is called the *verification ladder* and is shown in Figure 1.

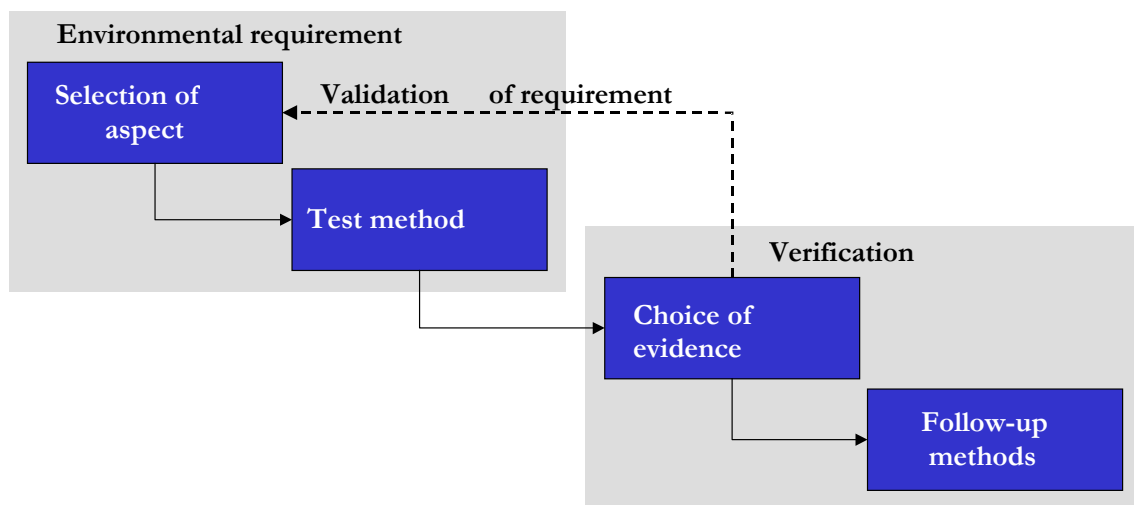


Figure 1 The verification ladder and its elements, which must be completed to perform the verification process. The verification ladder is divided into two parts: environmental requirement and verification. Several tools have been produced for the latter.

There follows a general description of the verification ladder based on the drafted proposal.

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<sup>9</sup> Verification results in an attestation (confirmation, document) or a record (receipt, certificate) that verifies fulfilment.

### 3.1 Environmental requirement

**Selection of aspect:** An initial analysis is performed to identify environmental aspects. The resulting list is then assessed to find which environmental aspects are significant. The significant environmental aspects<sup>10</sup> form the basis of the environmental requirements that are set. For each environmental aspect (such as emissions of toxic substances in an indoor environment) an indicator must be chosen (e.g. notable substances such as formaldehyde and benzene or unambiguous definitions of undesirable properties). See Figure 2. The environmental performance for each indicator is then chosen, corresponding to the stipulated requirement level(s). Performance limits may take the form of a performance threshold or graded (classified) performance classes (i.e. several performance levels used for award criteria). Further, the requirement must clearly state its scope regarding time and space (cf. requirements on origin or value chains).

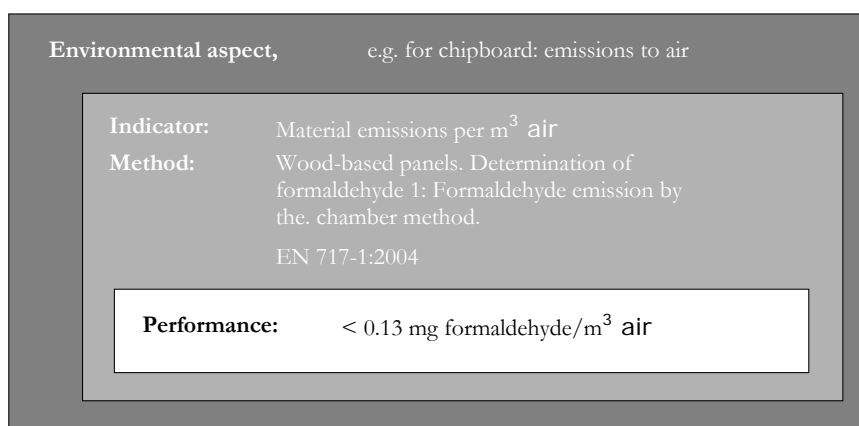


Figure 2 A specified environmental aspect is described by an indicator, test method and performance level.

**Test methods:** For the selected indicator for an environmental aspect (see Figure 2), a test method must be specified to assess performance. Preference is given to existing standards. As a secondary alternative, other normative documents may be used, such as methods developed by ecolabelling bodies. Failing the above, custom specifications can be developed, but this must be done in consultation with trade and other interested parties. Sometimes, a differentiation is made between product standards and test standards. A product standard contains both environmental requirements and methods to measure performance. A test standard only contains descriptions of the constituent tests.

<sup>10</sup> I.e. aspects that are judged to produce significant environmental benefits.



## 3.2 Verification

**Choice of evidence:** Evidence in this context is proof attesting compliance with the specified requirements. The level of independence and review of competence differs between forms of evidence, which means their potency varies. A step-by-step procedure has been developed to select an appropriate form of evidence. This procedure can mean that the environmental requirement must be re-evaluated and reformulated to enable effective verification. For example, if requirements have been set without regard for verifiability these may be difficult to demonstrate such as due to significant ambiguity or unnecessarily extensive testing and analysis. This validation is illustrated in Figure 1 (dashed line) and means that the requirement should be reformulated so that appropriate, effective verification is established. This validation checks whether the selected form of evidence is suitable.

**Follow-up methods:** Verification is incomplete until the requirement is followed up. This aspect is often overseen in public procurement. The first stage of follow-up can be performed on evaluation of the tenders, as far as this is possible for the contracted object and type of requirements. If so-called performance conditions are set, the requirement cannot be verified before a set point in time following the delivery of the contract. This also applies to follow-ups intended to ascertain compliance with the terms of contract. However, a qualification requirement can be set to demonstrate whether the tenderer has the capacity and ability to fulfil the subsequent terms of contract. The delivered product and product in use must also be assessed, if relevant. The investigation differentiates between *checks* (direct determination of conformity) and *evaluation* (indirect determination of conformity) as two distinct aspects of assessment.

The investigation establishes that verification can be handled separately but must be put in relation to *how* the requirement is formulated. In practice, this may mean that other, often simpler<sup>11</sup>, environmental indicators must be used to assess the same environmental aspect, but in a way that makes them verifiable. The investigation proposes procedures for the selection of suitable evidence and methods of follow-up. These are described in more detail later in the report.

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<sup>11</sup> 'Simpler' refers to an environmental indicator that is not as close to the environmental effects but rather a simplified indicator of the same. For example, rather than formulate the requirement as a concentration of the substance in the air of the in-use environment, choose a simpler indicator such as an emission factor (as per Table 2).

## 4 Equivalent evidence – definitions and ranking

A supplier must during the procurement process be able to submit *evidence* (certificate or confirmation). Evidence is in general<sup>12</sup> a written record that attests that a particular environmental requirement is fulfilled or will be fulfilled. The weight of different forms of evidence varies. The conditions influencing environmental performance and its interpretation, and the cost of producing evidence must therefore be carefully considered.

To facilitate an understanding of various means of proof, this report contains several definitions. There is, as already shown (see page 10), a need in public procurement to describe *equivalent evidence*, to clarify what is meant by wording such as 'or equivalent evidence'. Clear-cut definitions have therefore been established for different forms of evidence. These definitions are provided in a separate annex to allow inclusion with the procurement documents. The definitions are based on established standards with the key concepts:

- ❑ Declaration of conformity with the specified requirement
- ❑ Definition of independence, and
- ❑ Accreditation

The text in the annex highlights the underlying standards. However in case of ambiguity these standards must be consulted.

The terms used for different means of proof and a short description are listed below and ranked in order of ascending importance.

1. **Confirmation**, confirmation issued by the company or organisation.
2. **Self-declaration**, issued by the company or organisation.
3. **Second-party declaration**, usually issued by one of the company's customers.
4. **Third-party certificate**, issued by an independent, external company or organisation.
5. **Accredited third-party certificate**, issued by an accredited certification body.

1. **Confirmation** – the company confirms backed by its reputation (on its honour) that the requirement is fulfilled. Confirmation is a form of assurance defined in ISO/IEC 17000, i.e. a first-party attestation. General terms for such are given in EN ISO/IEC 17050-1.

**Note:** To avoid confusion with third-party documents, the term 'self-certification' shall not be used.

2. **Self-declaration** – Declaration from the manufacturer/supplier based on criteria and standards decided in advance or other public specifications. A self-declared environmental claim must be verifiable without access to confidential company information. The individual who supplies the declaration is responsible for the assessment and must therefore also provide the information required to verify the environmental claims, designated *supporting information* in EN ISO/IEC 17050-1. The general conditions for self-declaration are based on EN ISO/IEC 17050-1, which agrees with the intentions of ISO 14021 (1999), there called self-declared environmental claims.

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<sup>12</sup> Other forms of proof such as test results and photographs can be appropriate.

**Note:** The classification of evidence as a self-declaration does not necessarily mean that this record complies with all of ISO 14021. See also the Appendix.

3. **Second-party declaration** – as above, but where usually a company checks its suppliers against a list of requirements to ensure that the suppliers fulfil these. For a second-party declaration, supporting information shall be submitted on request. The general terms for a second-party declaration are based on EN ISO/IEC 17050-1. **Note:** The parties involved are usually the supplier ('first party') and purchaser ('second party').

4. **Third-party certificate** – A process in which an independent third party attests in writing that a product, process or service complies with the specified requirements. In this case, it is not necessary to make supporting information available since this has been reviewed by a competent, independent third party. The general conditions for a third-party declaration are based on EN ISO/IEC 17020<sup>13</sup>.

**Note:** An environmental management system can in this context be considered as a third-party certificate.

**Note:** A third party refers to a person or entity recognized as independent in relation to the parties involved in the matter in question, [EN ISO/IEC 17020]

**Note:** According to ISO 14025 there are two type III environmental declarations: 'independently verified' and 'third-party verified'. Only the latter is a third-party certificate as defined here.

5. **Accredited third-party certificate** – As above but assessed by an accredited third party. Accreditation means the continual assessment of the certification organisation's competence and independence. In this case, it is not necessary to make supporting information available since this has been reviewed by a competent, accredited, independent third party. An accredited third-party certificate may include testing, analyses, calibrations or inspections. The general conditions for an accredited third-party declaration are based on EN ISO/IEC 17011<sup>14</sup>.

Table 1 Characteristic differences between the various forms of evidence defined in this report.

Form of evidence	Does an independent assessment body exist?	Is the competence of the assessment body evaluated?	Are supporting documents available?
Confirmation	No	No	Yes, on request
Self-declaration	Yes, first party	No	Yes, published
Second-party declaration	Yes, second party	No	Yes, on request
Third-party certificate	Yes, third party	No	No
Accredited third party certificate	Yes, third party	Yes	No

<sup>13</sup> Identical to ISO/IEC Guide 2:1996/SS-EN 45020 (1998).

<sup>14</sup> Agrees in principle with ISO/IEC Guide 65:1996.

The investigation proposes definitions and a ranking of evidence to ensure the applicability of different equivalent forms of evidence to verify fulfilment of a specified environmental requirement. These definitions are described in a separate annex which can be referred to during procurement. Several significant differences are illustrated in Table 1. Simplified, these means of proof are (in order of ascending stringency):

- Confirmation – *we testify on our honour...*
- Self-declaration – *a public document that provides evidence...*
- Second-party declaration – *another company that provides evidence...*
- Third-party certificate – *an external, independent party that provides evidence...*
- Accredited third-party certificate – *an accredited external, independent party that provides evidence...*

## 5 Sufficient objective evidence

What constitutes sufficient objective evidence depends on the context in which the question is asked. We can, for simplicity's sake, analyse the concept with regard to individual aspects to establish the principles. In an integrated procedure, to select suitable records, all the principles described below must be observed.

### 5.1 Evidence controlled by environmental performance

With reference to the principle of proportionality it can be argued that if an environmental aspect has limited significance and the product has a small turnover, only simple evidence should be required. Likewise, if a significant environmental aspect of a product is identified, and large volumes are turned over, the principle justifies stronger evidence (see Box 1 in Figure 3). Such evidence is not appropriate for a product having limited environmental impact and a small turnover (see Box 4 in Figure 3).

<b>Environmental impact</b>	<b>Important</b> 2) Third-party certificate	<b>Significant</b> 1) Accredited third-party certificate
	<b>Uninteresting</b> 4) Confirmation	<b>Interesting</b> 3) Self-declaration
	<b>Turnover/volume</b>	

Figure 3 Model for the selection of evidence based on increasing environmental significance with regard to turnover and volume.

(Adapted from Swedish Environmental Management Council 2004<sup>15</sup>. Original idea by Kalle Krall, AffärsConcept)

The significance of the product's environmental impact is influenced by the product's performance and its turnover and volume in the contract or society at large. Hereafter, the term environmental aspect implies that turnover, volume and a social perspective have been taken into account.

<sup>15</sup> Miljödledning vid upphandling och inköp. Swedish Environmental Management Council, July 2004.

## 5.2 Evidence controlled by cost efficiency

By the same principle of proportionality, it could be argued with regard to cost efficiency that in an ideal case, accredited third-party certification should be required if this is economically viable (cheap enough) for the supplier. If this is not possible from an economic viewpoint, a less expensive form of verification can be chosen, i.e. a simpler indicator and an almost equally as strong form of evidence – third-party certification (see Box 2 in Figure 4). The next level is that it is not possible to find a simpler indicator but a lower cost is necessary. This compels a weaker form of evidence, i.e. self-declaration (see Box 3 in Figure 4).

<b>Cost efficiency</b>	<b>Medium</b> 2) if the indicator means expensive third-party certification	<b>High</b> 1) if the indicator entails inexpensive accredited third-party certification
	<b>Omit</b> 4) if the indicator means expensive confirmation	<b>Low</b> 3) if the indicator means expensive self-declaration
	<b>Simpler indicator</b>	<b>Same indicator</b>
	<b>Environmental aspect</b>	

Figure 4 Model for the selection of evidence based on increasing cost efficiency and environmental aspect. Note that it is usually possible to select different indicators for one and the same environmental aspect, and that these are relatively expensive and/or adequate.

Lastly, despite choosing a simple indicator and simple form of evidence (such as confirmation) it may still be expensive to verify an environmental requirement (see Box 4 in Figure 4). Such a requirement should not be set unless the environmental aspect is clearly significant.

## 5.3 Evidence controlled by interpretation

If an environmental aspect is simple to assess directly for the purchaser (the contracting entity), a weaker form of evidence may well be sufficient.

If however a requirement necessitates interpretation, such as measurement equipment or special skills, the need for an independent record increases. *Independent* refers to a record that is issued by a party not connected to the supplier or purchaser, i.e. a third party. The purchaser is the first party and the supplier the second party. It is also justified for this type of criteria to require accredited evidence. Accreditation entails for example continual assessment to ensure that the necessary competence exists.

If it is possible to reformulate the requirement to avoid ambiguity and the need for interpretation, it is often possible to find a simpler form of evidence. There is however a conflict of interests if a simple environmental indicator is chosen despite a significant environmental aspect (Box 1 in Figure 3) due to lower environmental significance and, to some extent, to produce a more cost efficient record for the supplier (Box 2 in Figure 4).

There is often a conflict of interests when increasing environmental relevance must be weighed against a simpler indicator that is cost effective to verify. Cost efficiency steers towards simpler verifiable indicators while environmental relevance steers towards indicators close to the anticipated environmental effects. If indicators close to an environmental effect are justified, and these also require special qualifications and/or equipment, independent evidence and a verification system whereby the necessary skills are also assessed are necessary, i.e. accreditation. This is often costly. The challenge is therefore to find identifiable significant environmental aspects that have cost-effective, practical indicators and evidence. This must be guaranteed for every requirement.

## 6 Verification tools

### 6.1 Choice of evidence

A procedure has been established to facilitate the selection of suitable evidence. This procedure is *iterative* and helps the user to choose a recommended record. The iterative nature of the procedure aims to improve verification as a whole, in which the requirement is validated in regard to the *economic and practical consequences* of the chosen record. The procedure assumes that the two first steps of the verification ladder (Figure 2) have been performed, i.e. Selection of aspect (including environmental indicator and performance level) and Test methods. Based on this information, the choice or recommended evidence is controlled by the following three questions:

- Is assessment necessary?
- Is the environmental aspect significant?
- Is the requirement cost efficient?

If the answer to the last question is 'no', the requirement must be reviewed and modified so that the supplier's costs for verification lie acceptably in proportion to the significance of the environmental aspect. This now establishes a strategy to determine a recommended form of evidence. See Figure 5.

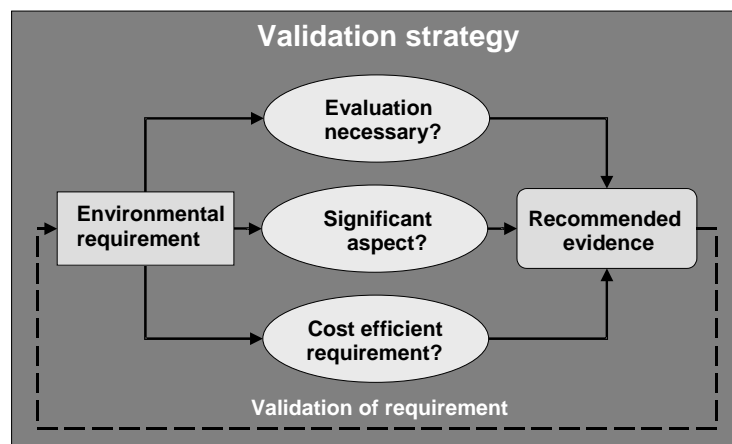


Figure 5 Basic validation strategy to establish an appropriate form of evidence for an individual environmental requirement. The dashed line indicates the possibility to reformulate the requirement based on the results of validation.

By combining the various strategies and means of prioritising a suitable form of evidence, as described in the previous section on sufficient objective evidence, we can now create an integrated, weighted matrix that provides a *procedure for evidence selection*, see Table 2.



Table 2 **Procedure for evidence selection** in matrix form with incremental choices, including the validation of the defined environmental requirement.

Is assessment necessary?	... and 'yes, the environmental aspect is significant', choose	... or 'no, the environmental aspect is not significant', choose	... and also the record is not cost efficient, choose	... but still unsuitable evidence:
'yes'				
	acc. 3 <sup>rd</sup> party cert.			
		3 <sup>rd</sup> party cert.		
			self-declaration	
				Reformulate requirement
'no'				
	self-declaration			
		confirmation		
				Reformulate requirement

The procedure for evidence selection described in Table 2 provides the user with a recommended form of evidence based on the aspects identified in development work and the level of ambition supported by the results of the questionnaire (see Appendix 1)<sup>16</sup>.

The questionnaire was sent to representatives in private and public sectors. The responses indicate that:

- self-declaration is sufficient evidence if the requirement is based on established test standards and/or product standards.
- if the environmental requirement necessitates interpretation, accredited third-party certification is demanded.

Both these aspects are implemented in Table 2.

Another result of the questionnaire (Appendix 1, question 4) is that the majority of respondents consider that confirmation could be an alternative to third-party certification if some form of penalty was introduced. This has however not been introduced into the procedure in Table 2 since it lies beyond the core focus of the investigation.

The incremental procedure in Table 2 describes an order of priority with the strongest form of evidence as the starting point, i.e. an accredited third-party certificate. The user can then lower the level of ambition due to the negative consequences of influential factors. An initial watershed is whether assessment (interpretation) is necessary to assess conformity with a requirement. If the requirement avoids interpretation, self-declaration is the recommended form of evidence. If from the matrix you conclude that even confirmation involves *practical or economic problems*, the *requirement must be reviewed*. Following the steps of the procedure *verifies* the practical and economic feasibility of the environmental requirement. Examples of practical factors that are important to consider (see last column of matrix):

<sup>16</sup> The preliminary matrix was modified following feedback at the open workshop, *Verifiering av miljökrav vid offentlig upphandling - 'På beder och samvete'*, organised by the Swedish Environmental Protection Agency on 7 June 2006. Following modification, the follow-up process is now considered separately and economic and environmental aspects are now included in the matrix.

- ❑ Transparency
- ❑ Repeatability
- ❑ Predictability
- ❑ Competitive neutrality (i.e. equal treatment)

If from Table 2 you find that the requirement is unrealistic, the first recommended step is to find a simpler indicator for that environmental aspect. Only if this is not sufficient should you continue by questioning the relevance of currently<sup>17</sup> setting a requirement for an environmental aspect that lacks a verifiable, cost-efficient and practically realistic environmental indicator.

Environmental requirement in the life cycle	Comments
<ul style="list-style-type: none"> <li>• Waste requirement</li> <li>• Performance requirement</li> </ul>	<ul style="list-style-type: none"> <li>• Should be limited to requirements verifiable during procurement.</li> <li>• Should be avoided if not part of the contracted service.</li> </ul>
<ul style="list-style-type: none"> <li>• Functional requirement</li> <li>• Inherent product characteristics</li> </ul>	<ul style="list-style-type: none"> <li>• Increases environmental relevance. Works if established product standards exist.</li> <li>• Often simple to verify. Indicator of other environmental requirements.</li> </ul>
<ul style="list-style-type: none"> <li>• Production unit</li> <li>• Upstream production</li> </ul>	<ul style="list-style-type: none"> <li>• Restricted applicability.</li> <li>• As above but greater environmental relevance, and applicable e.g. to origin of primary materials and social issues.</li> </ul>
<ul style="list-style-type: none"> <li>• Information requirement</li> </ul>	<ul style="list-style-type: none"> <li>• Can be an alternative if verification is difficult but the information is justified.</li> </ul>

Figure 5 Generalisations of the intent to identify environmental aspects and indicators that are simple to verify. This generally leads to the selection of inherent, product-related characteristics but often at the detriment of environmental relevance.

Verification in the *procedure for evidence selection* means that environmental requirements are reviewed, which can lead to the selection of simpler forms of evidence and environmental indicators, see Figure 5. A generalisation of what is required to achieve simpler evidence leads to the choice of inherent, product-related characteristics (see Figure 5). This is often to the detriment of environmental relevance, but produces a requirement specification with simpler methods of verification and fewer test methods (standards, etc.). This simplification of the specifications can be justified by the increase in credibility (e.g. from a confirmation to a third-party certificate) without an increase in the assessment costs for the contracting entity or the evidence costs for the supplier.

The investigation suggests a step-by-step procedure (Table 2) that results in a recommended form of evidence and verifies that the combination of the environmental requirement and the recommended evidence are realistic. The procedure answers the question as to what is 'sufficient evidence'. The levels of evidence selected in the procedure have been validated by a poll.

<sup>17</sup> If the problem is of interpretation rather than cost, the requirement could be set as an information requirement. With continued development, this could form the basis of an assessment of whether it is possible to introduce the requirement in full in the future.

The validation process in the procedure for evidence selection may necessitate a new requirement. Here, a different requirement means that it may be necessary to produce a different indicator that is simpler to verify for the same environmental aspect. If no economically and practically realistic indicator can be identified, the requirement of that environmental aspect must be questioned, i.e. whether the requirement should be stipulated at all since it cannot be verified satisfactorily. The results of the questionnaire recommend that such requirements are not set at all (see Appendix 1).

## 6.2 Follow-up methods

Follow-up (*inspection*) refers to the examination or checking of conformity during the procurement process and some form of subsequent control. The procuring entity that sets a requirement – irrespective of aspect – must also exercise control, i.e. check whether the requirement is fulfilled when assessing tenders and follow up the requirement during the subsequent period of contract. Random sampling or system audit can be used to ensure continual compliance. Follow-up is not simply a question of ensuring that what has been ordered is delivered, but also plays an important roll in demonstrating that the procurement process is serious, professional and unbiased. Control is a *matter of credibility* for the procurement. This view is confirmed by the answers to our questionnaire (see Appendix 1).

A robust procurement system must include barriers that make sure that a calculated risk is not worthwhile. The cost of such actions must exceed whatever might be gained from dishonesty or claims of fulfilment based on insufficient supporting data. In practice, this means that 'dropping a contract' is not a significant risk for a contractor that does not fulfil the set requirements in the first place. Since the company does not meet the requirements to start with, it cannot even be seen as a potential contractual partner. An agreement based on these conditions opens the door for irresponsible suppliers who in a worst case may just drop a contract.

It is not within the scope of this report to propose procedures and methods for follow-up, suitable penalties and general terms of contract. However, the necessity to include reviews or some form of auditing in the verification process is clear. Examples of a systematic process of following up can be found in TCO and Swan labelling systems. One important experience from these ecolabelling organisations is that the assessment and follow-up of performance is expensive, which must be considered by the contracting entity when allocating internal resources.

One way to make following up a specification of requirements cost efficient is to refer to established systems that include follow-up as part of the system. Examples of such systems include ecolabelling systems, environmental declarations and certified management systems, as well as accredited product control, which includes reconciliation with standards or other normative documents and/or general requirements for individual products.

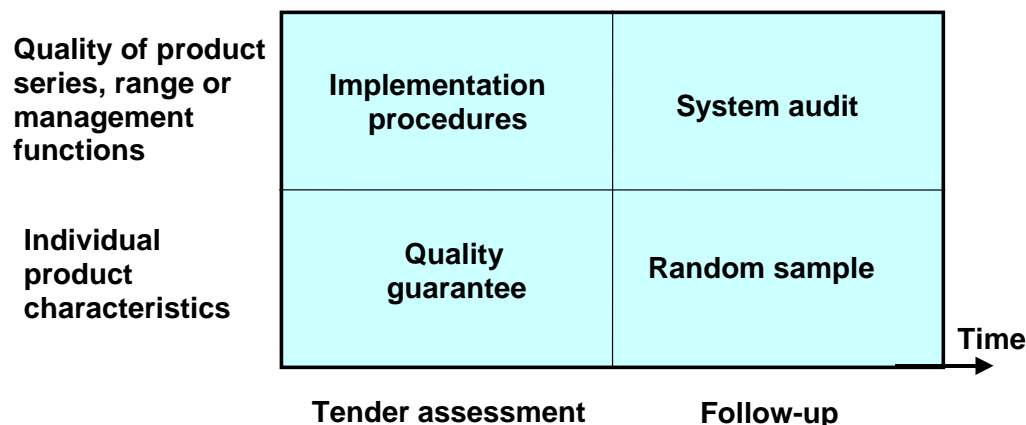


Figure 6 Recommended follow-up of compliance with requirements during tender assessment and follow-up methods as a function of the quality covered by the requirement.

The selection of suitable methods or follow-up depend upon the scope of the requirement. Figure 6 shows a summary of methods categorised by whether the requirement applies to an individual product or a product series, range or management function.

Individual products do not require third-party certification. A check is always a confirmation of the state at the time of the check. During tender assessment, a simple check can be to request a copy of a control report to ensure that this has been performed. This type of check is not necessary for all products covered by large contracts but can be limited to random samples.

Another, more pro-active method during tender assessment is to check whether quality guarantees are acceptable and applicable (in case deficiencies in quality should nonetheless arise). The check product characteristics, random sampling and subsequent analysis is a suitable method. Random samples can be taken by the orderer or other designated organisation. This allows the purchaser to:

- randomly select a product and send this for checking/analysis.
- as above and put the above control on a par with those included in other systems such as ecolabelling. This requires that a report be sent to the purchaser or the possibility for the purchaser to assess whether random sampling has been performed and its results<sup>18</sup>.
- request one or several control reports from checks performed after the signing of the contract.

An approved certificate concludes a check performed during the assessment of a product series or range, provided that product certification demonstrates continual compliance, which is normally the case. If, for the equivalent check during tender assessment, the requirement covers management system functions, the supplier's management system procedures also need to be checked. If, however, the check is linked to first or second-party certification, i.e. confirmation, self-declaration or second-party declaration, the purchaser's check must always include the procedures established to ensure fulfilment of the requirements. The check in such cases is more extensive and requires a higher level of skill at the purchasing organisation.

<sup>18</sup> No such transparent documentation is presently publicly available from the Swedish systems for ecolabelling, certified environmental declaration or certified management systems. Such documentation would significantly raise the benefit of the 'reuse' of these systems in public procurement.

Likewise, the contracting entity must, as part of the follow-up procedure for a first or second-party certificate, perform a system audit of the supplier's management system. Even random sampling is employed, this audit requires special skills. In other words, it is likely that the contracting entity is forced to subcontract this assignment to a third party. In background of this, it is advisable in product series, range and management function requirements to require third-party certification. Note that this third-party certification does not necessarily have to be performed by an *accredited* body.

Regarding management system requirements, these should stipulate implementation within one year, which is the normal cycle for a management system<sup>19</sup>. In particular, this provides *small and medium-sized companies* that do not have a management system the economic incentive to introduce such a system on commercial grounds after winning a contract. For more complex requirements that may necessitate several follow-ups, specifying a follow-up plan (in several sections) may be appropriate.

The investigation proposes that the follow-up phase should be seen as a significant part of the verification process. Accordingly, follow-up guidelines must be provided to the contracting entity for each individual requirement. Recommended follow-up methods have been established. These recommendations are influenced by the type of requirement that is set, i.e. if the requirement is linked to checking an individual product, product series, range or management function.

The follow-up process is costly but is today seldom performed at all. The investigator believes that a rational way to tackle this problem is to set fewer environmental requirements and start to follow them up!

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<sup>19</sup> Note that to set requirements on procedures that shall be implemented by the end of the tender period is judged to be directly discriminatory, unless the procedure corresponds to a lowest generally accepted level (e.g. adherence to legislation).

## 7 The use of existing tools in the verification process

Central to this investigation's proposal as to the verification of environmental requirements, is that verification is described as a process comprising several elements. This so-called verification ladder has 4 steps (see Figure 1) which each form an element that is based on previous elements from other systems such as product standards, ecolabelling systems, environmental declarations and environmental management systems.

- Environmental indicators and performance
- Verification methods
- Evidence
- Follow-up procedures

*Ecolabelling systems* normally contain all the elements listed above. But rather than write that a product must fulfil requirements in accordance with a certain labelling system or equivalent, the aim here is to copy the requirement from the ecolabelling system and divide it into the various elements of the verification ladder. This allows examples to be given for an environmental requirement of such systems that fulfil the requirement, including verification. Accordingly, the phrase '... or equivalent' is made redundant, which would not have been the case if direct reference had been made to an ecolabel. The problem with '...or equivalent' for the verification process established here has been discussed. At the same time, the opportunity to promote established ecolabelling systems is an integral part of the concept. The method described above allows certain elements of ecolabelling requirements to be relaxed, and for subrequirements that are problematic to public procurement to be omitted<sup>20</sup>.

Other systems, such as environmental declarations and environmental management systems, also have sections that can advantageously be used in the verification process. For example, when establishing *environmental declarations* based on life-cycle analyses, all types of requirement regarding environmental information can be set and controlled by laying down product specific regulations. Exploiting this possibility, such as the Swedish Environmental Management Council's EPD system, produces an accredited third-party certificate.

An *environmental management system* (or other management system) can play an important roll in future public procurement. Firstly, requirements can be formulated and then their inclusion in a management system stipulated. In addition to production related requirements, this enables the inclusion of product oriented (i.e. life cycle disregarding production) and social aspects. A review, normally performed annually, is also included. By designing environmental requirements so that they must be fully implemented within one year through a certified management system allows an audit of the environmental management system to also be used as a form of review. This can also provide tangible commercial benefits to implementing a management system.

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<sup>20</sup> For example, if the ecolabelling body makes its own assessments of chemical properties that are not made public.

## **8 Example of application**

The verification ladder (see Figure 1) is divided into environmental requirements and verification, for which the choice of evidence is central to the concept that has been developed. The incremental procedure is generally applicable and described in Table 2. There follows an example that outlines how this matrix is intended to be used to define suitable evidence and identify validation problems.

### **8.1 Chemical content**

Purchasers often wish to control the substances included in a product. Taking regard to environmental significance, it is desirable to set requirements that are related to impact on the environment and human health. Since this is seldom realistic or even possible, requirements can instead be laid down on the substances and levels emitted by the product into its surroundings. But often, the intended environment is unknown and concentrations depend on a number of factors. So, to make the assessment of emitted substances repeatable, standardised chamber tests can be conducted instead. An even simpler indicator is however to place requirements directly on the contents of the product (what's not in the product can't be emitted).

One clear limitation from the point of view of relevance is that requirements on product content focus on known substances, such as those in additives. One way for the manufacture to 'meet the requirement' is therefore to use substitutes. These may not necessarily be better and may even be worse. This is solved in practice by instead setting requirements on the properties of the constituent substances. For this requirement to be effective requires limit values and a method to determine 'toxicity'.

Many substances lack well-documented information in public databases that allow the simple and cheap retrieval of information about undesired characteristics. One way to tackle this could be to implement QSAR methods that, based on known information about analysed substances, predict whether the new substances can be expected to have undesirable characteristics. Theoretically, QSAR methods could be used to set requirements on undesirable characteristics for all substances, since the method is predictable, transparent and repeatable. However, even if QSAR methods are used in their intended ranges, their use to set requirements for public procurement is questionable unless more precise methods take precedence. Expensive, precise methods can be difficult to justify for low volumes and small quantities.

### **Alternative 1 – product content**

Let us assume that no more than a certain amount (wt%) of a substance is allowed in the product (or some part of it) and that the substance is well documented and recognised as undesirable. In addition, let us assume that there is a standardised method of analysis for determining the presence of this substance. We now implement the procedure for the choice of recommended evidence (see Table 2).

Is assessment necessary? No, no assessment is necessary.

Is the environmental aspect significant? Yes

Is the evidence practically or economically unviable? No

*We have therefore validated that a self-declaration is a suitable form of evidence.*

### **Alternative 2 – substance characteristics**

Let us use the same example as above but instead choose to enforce a requirement that the content of a certain substance with a certain characteristic may not exceed a specific percentage by weight. Further, we specify that the undesirable properties of the substance shall be assessed using information found in a number of named databases.

Is assessment necessary? Yes, assessment is necessary

Is the environmental aspect significant? Yes

Is the evidence cost effective? Yes, since the accredited laboratory can analyse the chemical content and check whether the undesirable characteristics are listed in the databases.

*We have therefore validated that accredited third-party certification is a suitable form of evidence.*

If the environmental aspect is not significant, but rather reference is made to a precautionary approach, third-party certification is recommended in accordance with Table 2.

If the evidence was not cost effective, a self-declaration could instead be requested as per Table 2.

If it should become apparent that third-party certification or self-declaration is not practical<sup>21</sup> or economic, another indicator must be chosen, for example the indicator used in Alternative 1.

If it turns out that this (i.e. the conditions outlined in Alternative 1) is still not practical or economic, it is very questionable as to whether such an environmental requirement should be set for public procurement.

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<sup>21</sup> For example, if the database lacks data about the substances known to be used in the product group.



The application of the matrix (Table 2) in our simple example above (environmental requirement based on product characteristics) leads to evidence in the form of self-declaration if assessment is not required, or a cost-effective accredited third-party certificate if assessment is required. This is an advantage in the evaluation of environmental requirements since it enables strong evidence from the supplier. It is however at the cost of the environmental relevance of the indicator used for the environmental requirement. For example, a requirement on the number of substance of which a product may only contain limited amounts is directly verifiable via test reports from an accredited analysis laboratory, while a requirement on the properties of chemicals can entail significant problems regarding verification but is obviously a better gauge of environmental relevance.

## 9 Conclusions

The following conclusions can be drawn from this investigation:

- Dividing the verification process into a number of stages – the verification ladder (Figure 1) – has established a work process in which the definition of the environmental requirement and the verification of performance constitute aspects that must be considered as parts of a whole.
- In practice, this relationship between the environmental requirement and verification can mean that alternative, often simpler indicators must be used to evaluate an environmental aspect, but in a way that makes the requirement verifiable in a practical and economic manner. Issues regarding verification are:
  - 1) What is equivalent evidence? and
  - 2) What is sufficient evidence?
- 1) Several definitions for equivalent evidence have been established based on existing standards. Simplified, these means of proof are (in order of ascending stringency):
  - Confirmation – *we testify on our honour...*
  - Self-declaration – *a public document that provides evidence...*
  - Second-party declaration – *another company that provides evidence...*
  - Third-party certificate – *an external, independent party that provides evidence...*
  - Accredited third-party certificate – *an accredited external, independent party that provides evidence...*
- 2) An incremental verification procedure for the choice of suitable evidence has been established (Table 2). This means that the environmental requirement may require modification if it is not possible to identify an indicator and form of evidence that is economically and practically viable. If an economically and practically viable indicator cannot be found, the requirement for this environmental aspect must be brought into question. The results of the questionnaire recommend that such economically unrealistic requirements are not set at all (see Appendix 1).
- Methods for systematic follow-up have been established and constitute a significant aspect of verification. The follow-up process is costly but is today seldom performed at all. Following up requirements raises the credibility of the procurement process and is an important part of contract fulfilment.
- The division of the verification process means that part of other systems, such as ecolabelling systems, management systems and environmental declarations, can be used and thus improve cost efficiency. This can also eliminate the need to specify '...or equivalent' for an environmental requirement that refers to an ecolabel if the proposed verification process is implemented. This benefits established systems as part of the concept.

A questionnaire survey was performed as part of the project. This laid the foundation for the strategic positions adopted in the development of the verification ladder. The results of this questionnaire provide unequivocal evidence that procurers in both private and public sectors consider that:

- Environmental requirements must be verifiable and must be followed up.
- Confirmation could be an alternative to third-party certification if linked to some form of penalty.
- Follow-ups such as random sampling are important to give the procurer and environmental requirement credibility and to ensure equal treatment.
- A self-declaration is sufficient if the requirement is based on established test standards and/or product standards, i.e. agrees with the procedure for the selection of suitable evidence (Table 2).
- If the environmental requirement requires interpretation, this necessitates an accredited third-party certificate, i.e. agrees with the procedure for the selection of suitable evidence (Table 2).

Finally, the investigator proposes that:

- If public procurement is to be a driving force, the environmental requirements must be relevant (i.e. concern proven significant environmental aspects) and whenever possible such requirements should be made award criteria that are given significant weight in tender assessment.
- Public procurers should reprioritise and set fewer environmental requirements and focus on the central environmental aspects. Further, follow-up must become significantly more extensive and systematic.

## **10 Continued development**

This investigation has identified that there are significant potential synergies if different environmental systems are integrated. Public procurement could be a driving factor. The report suggests the possibility to (re)use environmental management systems as a part of the verification process, partly in the implementation of requirements but also the follow-up of the same. This could also constitute a factor that strengthens small and medium-sized companies using environmental efforts as a competitive advantage. Of further interest in this area is for which type of environmental requirement this can be significant and how requirements need to be formulated to include social issues and product related characteristics to achieve a cost-effective total solution.

Likewise, work should continue in the areas of ecolabelling and environmental declaration to analyse shortcomings and opportunities so that these systems can provide better support in the verification process in public procurement.

## 11 Annex: Specification of forms of evidence

This document provides definitions of five forms of evidence used in public procurement to ascertain fulfilment of performance requirements. The definitions are based on established standards.

In order to implement these standards without access to the original documents and to provide further specifications, the definitions of the forms of evidence are written so that they can be employed solely from the text given here and without access to the quoted standards. However, to facilitate interpretation and gain a full understanding of what is taken from each standard and what has been added, the user must have access to originals of the standards.

To reduce repetition the forms of evidence are cross-referenced. This reduces the bulk of text and provides a better overview of the differences between the forms of evidence.

### 11.1 Specification of requirements for confirmation

*Confirmation* is an attestation from the company or organisation pledging compliance with the requirements in the specified document. Confirmation is an attestation that has *not* been assessed by an independent first, second or third party, and which is issued by the entity that introduced the product on the market. A confirmation means that supporting documentation shall always, on request, be made publicly available as described in ISO 17050-1. A confirmation must *not* give the impression that it has been assessed/certified by an independent first, second or third party.

#### 11.1.1 Order of requirement documents

Listed below in order of precedence are the requirement documents that at a minimum apply for confirmation.

1. This document (according to the appendix based on and consistent with ISO/IEC 17050-1)
2. ISO/IEC 17050-1, Conformity assessment - Supplier's declaration of conformity – Part 1: General requirements
3. ISO 17050-2 Conformity assessment - Supplier's declaration of conformity – Part 2: Supporting documentation
4. ISO/IEC 17000, Conformity assessment - Vocabulary and general principles

#### 11.1.2 Independence

A supplier's confirmation is a 'declaration of conformity' as defined in ISO/IEC 17000, i.e. a first-party declaration. Confirmation means that a product (supplies or service), process, management system, individual or body conforms with specified requirements that are attested by the supplier making supporting documentation publicly available in accordance with the requirements defined here for confirmation.

In its conformation, the supplier can also refer to the results of assessments performed by one or several first, second or third parties. Such reference must not be interpreted as reducing the supplier's liability in any way.

### 11.1.3 Contents

A confirmation shall at a minimum contain the following information:

- ❑ unique identification of the specific confirmation with letters, numbers or similar, as well as information regarding the possible supersession of earlier versions.\*
- ❑ supplier's name and address, i.e. issuer of the confirmation.
- ❑ name and function of the contact for issues regarding the confirmation.\*
- ❑ identification of object of the confirmation (e.g. name, type, production date or model designation of a product, description of a process, management system, person or organisation, and other relevant information).
- ❑ declaration regarding fulfilment of specified requirements (e.g. 'the named object conforms with the requirements in the following documents').
- ❑ a full and clear list of standards and other specifications, including chosen requirements if applicable. Requirement documents should be specified with their document ID, title and date of issue.
- ❑ the supplier's obligations in case performance does not meet the requirements covered by the confirmation.\*
- ❑ any additional information, i.e. all limits to the validity of conformity, and other relevant information such as references to product marking.\*
- ❑ location, date and signature of authorised signatory.\*

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\* Additional or more detailed information than in ISO/IEC 17050-1

### 11.1.4 Procedures for change

The supplier must fulfil the following requirements regarding procedures for change:

- ❑ the supplier must maintain procedures to ensure that delivered or accepted objects continually conform with the specified requirements of the confirmation.
- ❑ The supplier must have procedures to re-assess the validity of the conformity in the event of:
  - changes that notably affect the performance, production, design or specification of the product..
  - changes to the standards used for assessment.
  - changes in ownership or management structure, if relevant.
- ❑ once an agreement has been signed, the supplier must during the period of contract without delay notify the customer if 1) the specified requirements are no longer fulfilled, or 2) the confirmation has been updated and replaced by a new confirmation or other form of evidence.\*

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\* Additional or more detailed information than in ISO/IEC 17050-1

### 11.1.5 Supporting documentation

The supporting documentation shall include all information that demonstrates fulfilment of the specified requirements.

The following supporting documentation shall be made available to demonstrate fulfilment of the requirements named in the confirmation. The documentation shall include a description of the object (product, process, management system, person or organisation) and, if applicable, include the following results:

- ❑ description of implemented methods (e.g. auditing, audit procedures, batch testing, design reviews, verification of validation, inspection, sampling schedule, serial testing, test methods, and type testing) and reasons for their choice.
- ❑ results (e.g. audit reports, test reports) and the assessment of results, including non-conformities and exemptions.
- ❑ identification of relevant qualifications and technical competences held by the first, second and third-party bodies for conformity assessment and details of their accreditation status (e.g. extent and name of the accreditation body).
- ❑ if necessary to demonstrate conformity with specified requirements, the following should also be included:
  - description of the management system relevant to the object of attestation.
  - other relevant information (e.g. risk analysis, procedures and time schedules for reassessment).
- ❑ all changes to the supporting documentation named above that influence the validity of the confirmation must be documented.
- ❑ in case traceability in a value chain is part of the confirmation, the supplier who has established the final confirmation must also document the underlying confirmation covered by the specified requirement.

### **11.1.6 Traceability**

Supporting documentation must be designed, archived, controlled and maintained in such a way as to enable the traceability of the fulfilment of the requirements specified in the supplier's confirmation.

If the confirmation includes a requirement on traceability in a value chain, the subcontractors covered by the specified requirement(s) must also be available at the supplier who established the final confirmation.

### **11.1.7 Availability**

The issuer of a confirmation shall, on request, make the supporting documentation available to the customer to the extent necessary to demonstrate fulfilment of the specified requirements. There are no general requirements to make supporting documentation publicly available.

## **11.2 Specification of requirements for a self-declaration**

*Self-declaration* is an attestation from a company or organisation of fulfilment of the requirements in specified documents. The supporting documentation shall be publicly available (i.e. higher level of availability than required by ISO 17050-1). The self-declaration may also contain a so-called *self-declared environmental claim*. Self-declaration is an attestation that is issued by the entity that introduced

the product on the market (manufacturer, importer or distributor). A self-declaration has been reviewed by an *independent first party*.

### 11.2.1 Order of requirement documents

Listed below in order of precedence are the requirement documents that at a minimum apply for confirmation.

1. This document (according to the appendix based on and consistent with ISO/IEC 17050-1)
2. Section 6.1-6.2 and 6.4-6.5, ISO 14021, Environmental labels and declarations – Self-declared environmental claims (Type II environmental labelling)
3. ISO/IEC 17050-1, Conformity assessment - Supplier's declaration of conformity – Part 1: General requirements
4. ISO 17050-2 Conformity assessment - Supplier's declaration of conformity – Part 2: Supporting documentation
5. ISO/IEC 17000, Conformity assessment - Vocabulary and general principles
6. If the self-declaration contains 'self-declared environmental claims' ISO 14021, Environmental labels and declarations – Self-declared environmental claims, applies in its entirety.

### 11.2.2 Independence

A supplier's self-declaration is a 'declaration of conformity' that is assessed by an independent party within that company or organisation, i.e. an independent first-party attestation. A declaration means that a product (supplies or service), process, management system, individual or body conforms with specified requirements that are attested by the supplier on request making supporting documentation publicly available in accordance with the requirements defined here for declaration (see 'Availability'). The purpose of publishing supporting documentation is to furnish individuals with the necessary information to evaluate the declaration themselves.

In a self-declaration, the supplier can also refer to the results of assessments performed by one or several first, second or third parties. Such reference must not be interpreted as reducing the supplier's liability in any way.

ISO/IEC 17020 provides instructions that enable the grading of independence of a verification body. These are listed in descending order: verification body<sup>22</sup> type A, B and C<sup>23</sup>.

A type B attestation can, according to ISO 14020, be carried out by an independent part of the supplier's organisation (in-house). This means the review is performed by a *first-party* verification body. A first-party verification body has this level of independence, i.e. a type B body, which fulfils the requirements of independence for a self-declaration with regard to:

1. independence from other economic interests
2. non-participation in competing activities, and
3. non-discriminatory activities.

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<sup>22</sup> The term 'verification body' is used here instead of the less general term 'inspection body' used in the original text in ISO/IEC 14020.

<sup>23</sup> Note that these terms are not used in the equivalent international standard, ISO/EIC Guide 2.



For a *first-party* verification body to be approved type B for a self-declaration, the organisation must be:

- demonstrably separate and identified part of one and the same organisation that is directly involved in the production process.

A self-declaration, as defined here, therefore fulfils the requirements of ISO 14025 (see §8.2.1) for an environmental declaration<sup>24</sup> if its use is limited to *communication in the supply chain* (i.e. business-to-business).

### 11.2.3 Contents

The *contents* shall be the same for a self-declaration as for a conformation, with the optional addition of:

- additional environmental information (i.e. information equivalent to self-declared environmental claims according to ISO 14201).

If the self-declaration includes *additional environmental information*, this information shall follow the instructions regarding *self-declared environmental claims* laid down in ISO 14201. This means that evaluation methods must be employed that provide reliable and repeatable results for verifying the claim (see also Section 6 in ISO 14021). Additional environmental information that is provided in the self-declaration shall also be correct, relevant and not misleading.

**Comment:** Additional environmental information shall be referred to in the self-declaration by also stating that the self-declared environmental claim complies with ISO 14021 (for example 'The following self-declared environmental claim complies with the directions and requirements of ISO 14021').

### 11.2.4 Procedures for change

The requirements on *changes* shall be the same for a self-declaration as for a conformation.

### 11.2.5 Supporting documentation

The requirements on *supporting documentation* shall be the same for a self-declaration as for a conformation. If the supplier chooses to include *additional environmental information*, the same form of supporting documentation shall also be published for these self-declared environmental claims<sup>25</sup>. Additional environmental information shall be referred to in the self-declaration by also stating that the self-declared environmental claim complies with ISO 14021 (for example 'The following self-declared environmental claim complies with the directions and requirements of ISO 14021').

### 11.2.6 Traceability

The requirements on *traceability* shall be the same for a self-declaration as for a conformation.

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<sup>24</sup> Also called environmental product declaration type III.

<sup>25</sup> ISO 14021 does not give any concrete guidance as to what information is considered sufficient for verification. Consequently, the requirement here refers instead to supporting documentation in accordance with ISO/IEC 17050-1 and -2.

### 11.2.7 Availability

The issuer of the self-declaration shall ensure that the supporting documentation is publicly available for all who wish to take part of it, and to the extent necessary to demonstrate fulfilment of the specified requirements<sup>26</sup>. The supporting documentation is published to increase transparency and the possibility to assess verification.

**Note:** A self-declaration is considered verifiable primarily if the supporting documentation (as described previously) is made publicly available. This indirectly presupposes that the supporting documentation does not contain confidential information or business secrets<sup>27</sup>.

## 11.3 Specification of requirements for a second-party declaration

A *second-party declaration* is an attestation, with possible additional self-declared environmental claims, that has been reviewed by an *independent second party* to assess conformity with the specified requirements. A second-party declaration means that supporting documentation shall always, on request, be made publicly available as described in ISO 17050-1.

### 11.3.1 Order of requirement documents

Listed below in order of precedence are the requirement documents that at a minimum apply for second-party declaration.

1. This document (according to the appendix based on and consistent with ISO/IEC 17050-1)
2. Section 6.1-6.2 and 6.4-6.5, ISO 14021, Environmental labels and declarations – Self-declared environmental claims (Type II environmental labelling)
3. ISO/IEC 17050-1, Conformity assessment - Supplier's declaration of conformity – Part 1: General requirements
4. ISO 17050-2 Conformity assessment - Supplier's declaration of conformity – Part 2: Supporting documentation
5. ISO/IEC 17020, General criteria for the operation of various types of bodies performing inspection
6. ISO/IEC 17000, Conformity assessment - Vocabulary and general principles
7. If the second-party declaration contains 'self-declared environmental claims', ISO 14021, Environmental labels and declarations – Self-declared environmental claims, applies in its entirety.

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<sup>26</sup> Note that according to both ISO/IEC 17050-2 and ISO 14021, this information shall be provided on request, which means concurrent publication is a tightening of the requirement compared to these standards. This is justified since no independent verification is performed.

<sup>27</sup> If such a problem should arise, conformity assessment can be replaced by independent third-party certification, i.e. a more thorough certification procedure is required (and is no longer a self-declaration).

### 11.3.2 Independence

A second-party declaration is a 'declaration of conformity' that has been reviewed by an *independent second party*. This means that a product (supplies or service), process, management system, individual or body conforms with specified requirements. This is attested by the supplier *on request* making supporting documentation publicly available in accordance with the requirements defined here for second-party declaration. The purpose of publishing supporting documentation is to furnish individuals with the necessary information to evaluate the declaration themselves.

In a second-party declaration, the supplier can also refer to the results of assessments performed by one or several first, second or third parties. Such reference must not be interpreted as reducing the supplier's liability in any way.

A second-party declaration is normally performed by a purchaser checking a supplier. The purchaser is in this case a *second-party* verification body. A 'second party' includes and is equivalent to other second parties, which do not fulfil all requirements regarding full independence according to type A in ISO 17020. For a second-party declaration, verification body type B requirements on *independence* shall be fulfilled, as specified for a *second-party body*<sup>28</sup>. A type B verification body that is a second party is characterised by<sup>29</sup>:

- ❑ the verification body is part of a purchasing organisation or a supplier organisation that is independent of the manufacturing company's organisation.

### 11.3.3 Contents

The *contents* shall be the same for a second-party declaration as for a conformation, with the addition of:

- ❑ name and address of the involved assessment body
- ❑ location, date, signature of the individual at the assessment body who has performed verification.
- ❑ *additional information*, appended to report the results of the assessment performed by an independent party.

and optionally,

- ❑ *self-declared environmental claim* (i.e. information according to ISO 14021).

In a second-party declaration reference can also be made to the self-declared environmental claim, which thus follows the intentions of ISO 14021. This is done in the second-party declaration with, for example, the following text: 'The following self-declared environmental claim complies with the directions and requirements of ISO 14021'. Note that self-declared environmental claims shall be subject to second-party review.

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<sup>28</sup> According to ISO/IEC 17020, a type B body can be both a first and second party.

<sup>29</sup> ISO/IEC 17020 state that a Type B certification body is characterised by only performing checks for their own parent organisation. This limitation is not included in the application of second-party certification as defined here. The aim is to widen the range of the possible certification bodies. Municipalities and trade organisation, which exist on the market, are otherwise totally excluded.

*Additional information* to be included in the second-party declaration is connected to the assessment performed by the independent assessment body and can according to ISO/IEC 17050-1 include:

- ❑ reference to the management system.
- ❑ reference to the accreditation of the assessment body if the level of accreditation is relevant to the attestation.
- ❑ reference to relevant reports from the conformity assessment, such as:
  - description of methods employed, (e.g. auditing, audit procedures, batch testing, design reviews, verification of validation, inspection, sampling schedule, serial testing, test methods, and type testing) and reasons for their choice.
  - results (e.g. audit reports, test reports).
  - assessment of results, including non-conformities and exemptions.
- ❑ identification of relevant qualifications and technical competences held by the first, second and third-party bodies for conformity assessment and details of their accreditation status (e.g. extent and name of the accreditation body).
- ❑ reference to information on certificates or labels that have been awarded.  
other activities or programs from the assessment body (e.g. membership in a trade organisation).

### 11.3.4 Procedures for change

The requirements on *procedures for change* shall be the same for a second-party declaration as for a conformation.

### 11.3.5 Supporting documentation

The requirements on *supporting documentation* shall be the same for a second-party declaration as for a conformation with the addition of the requirements on *additional information* and *self-declared environmental claims*, as specified below.

If the supplier chooses to include *self-declared environmental claims*, the same form of supporting documentation shall also be published by the supplier as for the supporting documentation for a confirmation<sup>30</sup>.

If *self-declared environmental claims* are provided in the second-party declaration (i.e. performance not directly connected to the fulfilment of requirements) this shall follow the directions for environmental claims given in ISO 14021, to demonstrate that the additional environmental information is correct, relevant and not misleading. This means that evaluation methods must be employed that provide reliable and repeatable results for verifying the claim (see also Section 6 in ISO 14021) and the above requirements on additional information.

### 11.3.6 Traceability

The requirements on *traceability* shall be the same for a second-party declaration as for a conformation.

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<sup>30</sup> ISO 14021 does not give any concrete guidance as to what information is considered sufficient for verification. Consequently, the requirement here refers instead to supporting document in accordance with ISO/IEC 17050-1 and -2.

### 11.3.7 Availability

The issuer of the second-party declaration shall ensure that the supporting documentation is, on request, publicly available for all who wish to take part of it, and to the extent necessary to demonstrate fulfilment of the specified requirements. The supporting documentation is published to increase transparency and the possibility to assess verification.

Note: A second-party declaration is considered verifiable primarily if the supporting documentation (as described previously) is made publicly available. This indirectly presupposes that the supporting documentation does not contain confidential information or business secrets.

## 11.4 Specification of requirements for a third-party certificate

A *third-party certificate* is an attestation, with possible additional self-declared environmental claims, that has been reviewed by an *independent third party* to assess conformity with the specified requirements. Third-party certification means that supporting documentation is reviewed by an independent third party, which means it is not necessary to make this publicly available.

### 11.4.1 Order of requirement documents

Listed below in order of precedence are the requirement documents that at a minimum apply for third-party certification.

1. This document (according to the appendix based on and consistent with ISO/IEC 17050-1)
2. Section 6.1-6.2 and 6.4-6.5, ISO 14021, Environmental labels and declarations – Self-declared environmental claims (Type II environmental labelling)
3. ISO/IEC 17050-1, Conformity assessment - Supplier's declaration of conformity – Part 1: General requirements
4. ISO 17050-2 Conformity assessment - Supplier's declaration of conformity – Part 2: Supporting documentation
5. ISO/IEC 17020, General criteria for the operation of various types of bodies performing inspection
6. ISO/IEC 17000, Conformity assessment - Vocabulary and general principles
7. If the third-party declaration contains 'self-declared environmental claims', ISO 14021, Environmental labels and declarations – Self-declared environmental claims, applies in its entirety.

### 11.4.2 Independence, impartiality and integrity

A third-party declaration is a 'declaration of conformity' that has been reviewed by an *independent third party*. This means that a product (supplies or service), process, management system, individual or body conforms with specified requirements.

To fulfil the requirements of a third-party certificate, this must be reviewed by a type A verification body and be independent of the other parties, i.e. demonstrate that:

- the body has no connection with any party directly involved in the product realisation process (e.g. design, manufacture, delivery, installation, purchasing, ownership, use or maintenance of the units verified, or similar competing products) through:
  - common owners (except if the owner does not have any influence over the results of an inspection)
  - representatives of common owners on the board, or similar, in the organisation (except when these have functions that do not have any influence over the results of verification)
  - reporting directly to the same top management group
  - contractual conditions, informal agreements or other form of agreement that may enable influence over the results of inspection.

A third-party certificate, as defined here, also fulfils the requirements of ISO 14025 (see §8.2.1) for an environmental declaration<sup>31</sup> irrespective of the application area, i.e. *including* communication to the end user.

### 11.4.3 Contents

The requirements on *content* shall be the same for a third-party certificate as for a second-party declaration.

### 11.4.4 Procedures for change

The requirements on *procedures for change* shall be the same for a third-party certificate as for a conformation.

### 11.4.5 Supporting documentation

The requirements on *supporting documentation* shall be the same for a third-party certificate as for a second-party declaration.

### 11.4.6 Traceability

The requirements on *traceability* shall be the same for a third-party certificate as for a conformation.

### 11.4.7 Availability

Since the review is performed by an independent third party, supporting documents do not but may be made available.

**Note:** For some requirements, the supplier may choose a higher level of evidence than requested by the purchaser, e.g. a third party certificate, in order to avoid disclosing confidential information. Instead the information is reviewed by an independent third party.

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<sup>31</sup> Also called environmental product declaration type III.

## 11.5 Specification of requirements for an accredited third-party certificate

An *accredited third-party certificate* is an attestation, with possible additional self-declared environmental claims, that has been reviewed by an *independent third party* to assess conformity with the specified requirements. Accreditation means that requirements are set as to the quality system and competence of the assessment body, which in turn is assessed by an accreditation body, e.g. SWEDAC. Accredited third-party certification means that supporting documentation is reviewed by an independent third party, which means it is not necessary to make this publicly available.

### 11.5.1 Order of requirement documents

Listed below in order of precedence are the requirement documents that at a minimum apply for third-party certification.

1. This document (according to the appendix based on and consistent with ISO/IEC 17050-1)
2. EN 45011, General requirements for bodies operating product certification systems (ISO/IEC Guide 65:1996)
3. Section 6.1-6.2 and 6.4-6.5, ISO 14021, Environmental labels and declarations – Self-declared environmental claims (Type II environmental labelling)
4. ISO/IEC 17050-1, Conformity assessment - Supplier's declaration of conformity – Part 1: General requirements
5. ISO 17050-2 Conformity assessment - Supplier's declaration of conformity – Part 2: Supporting documentation
6. ISO/IEC 17020, General criteria for the operation of various types of bodies performing inspection
7. ISO/IEC 17000, Conformity assessment - Vocabulary and general principles
8. If the third-party declaration contains 'self-declared environmental claims', ISO 14021, Environmental labels and declarations – Self-declared environmental claims, applies in its entirety.

### 11.5.2 Independence and competence

An accredited third-party declaration is a 'declaration of conformity' that has been reviewed by a *third party*. This means that a product (supplies or service), process, management system, individual or body conforms with specified requirements. Accreditation is a test of competence that follows European and international standards. This means that an accreditation body continually checks the competence of the company to perform the testing, analysis, calibration, certification and inspection for which it is accredited.

To ensure that the body conducting certification and inspection fulfils the requirements of independence set of accredited third-party certification, the verification body must be type A according to ISO 17020. To fulfil the requirement on competence, the assessment body must fulfil all the requirements laid down in EN 45011 (ISO/IEC Guide 65:1996).

### 11.5.3 Contents

The *contents* shall be the same for an accredited third-party certificate as for a third-party certificate, with the addition of:

- Name and address of the involved accreditation body
- Reference to on which documents accreditation is based.
- Accreditation date and possible accreditation number.

#### **11.5.4 Procedures for change**

Requirements on *traceability* according to EN 45011 shall be fulfilled, which in general agrees with the requirements on third-party certification.

#### **11.5.5 Supporting documentation**

Requirements on *supporting documentation* according to EN 45011 shall be fulfilled, which in general agrees with the requirements on third-party certification.

#### **11.5.6 Traceability**

The requirements on *traceability* of documents at the supplying company shall conform with requirements on third-party certification. Further, an assessment body shall fulfil the requirements on documentation and document management laid down in §4.8 –4.9 in EN 45011.

#### **11.5.7 Availability**

Since the review is performed by an accredited, independent third party, supporting documents do not need to but may be published..

**Note:** For some requirements, the supplier may choose a higher level of evidence than requested by the purchaser, e.g. a third-party certificate or an accredited third-party certificate, in order to avoid disclosing confidential information. Instead the information is reviewed by an independent third party having a recognised quality system and competence.



## Appendix 1: Summary of questionnaire responses

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This appendix is a summary of the 15 responses to the questionnaire that was sent out to individuals. In addition to these, one further response was received: a collated response from a trade organisation. The answers from this latter response are not included in the summary below since the questionnaire was not completed correctly. However the answers to questions 1, 4, 5 and 10 agree with the other responses.

1) Do you agree that environmental requirements must be verifiable and be followed-up?

Yes	93%
No	0%
Don't know	7%
	100%

2) Do you consider that environmental requirements are generally set for products that you do not consider to be significant environmental aspects?

Yes	27%
No	33%
Don't know	40%
	100%

3) Rank the following aspects' potential to achieve actual environmental benefits. (1 for the highest potential and 6 for the least potential.)

18%	3.1	Set environmental requirements that are consistent with the requirements in environmental management systems.
14%	3.2	Set environmental requirements based on (international and national) legislation and ensure that these are actually observed.
14%	3.3	Set environmental requirements based on the best available technology.
19%	3.4	Set requirements that are verifiable and follow them up.
18%	3.5	Set award criteria, i.e. environmental requirements that cannot be mandatory but are points scoring during tender assessment.
17%	3.6	Set stringent mandatory requirements on the provision that at least two suppliers meet the requirements.
100%		

4) Do you consider that a confirmation can be used as an alternative to third-party certification, if this confirmation is linked to a predetermined consequence (fine or some other sanction that is levied on non-compliance/non-fulfilment of the requirement)?

Yes	73%	73%
No	27%	27%
Don't know	0%	0%
	100%	100%

5) In areas with established test standards and/or product standards, is it sufficient to simply refer to these test records in a self-declaration so long as it is made clear that these results must be achievable when followed up using, for example, random sampling?

Yes	80%
No	13%
Don't know	7%
	100%

6) Do you consider that a confirmation linked to a sanction promotes competition better than a third-party certificate?

Yes	27%
No	53%
No difference	20%
	100%

7) Do you consider that a confirmation linked to a sanction lowers costs compared to a third party certificate?

Yes	27%
No	40%
No difference	20%
	87%

8) The following question presupposes that the contracting organisation lacks sufficient internal competences or resources to assess the fulfilment of a requirement. If an environmental requirement requires qualified interpretation by an expert to allow assessment, e.g. the toxicity of a substance, which form of attestation do you consider most appropriate?

Accredited third-party certificate	60%
Conformation or self- declaration	27%
Don't know	13%
	100%

9) If problems arise in the interpretations of an environmental requirement (e.g. whether a substance is carcinogenic), shall this type of requirement be set in public procurement if the results of assessment are not made publicly available?

Yes	47%
No	33%
Don't know	20%
	100%

10) Is a follow-up using random sampling an important factor for equal treatment and the credibility of the procurement process and environmental requirements?

Yes	93%
No	0%
Don't know	7%
	100%

11) Should it be possible to use random sampling that is performed as an integrated part of a third-party certified management system as part of the follow-up in the procurement process?

Yes	53%
No	13%
Don't know	33%
	100%

12) Based on your experiences and views, do problems ever arise if the orderer conducts their own, unannounced spot checks (i.e. such as prescribed by Swan and TCO labelling)?

Yes	13%
No	47%
Don't know	40%
	100%

13) Rank the following aspects with regard to achieving credibility in the public procurement process. (1 for the most significant and 6 for the least significant.)

24%	13.1	Random sampling/follow-up conducted during the period of contract to ensure observance of requirements.
15%	13.2	Requirements that preclude ambiguity and problems with interpretation.
20%	13.3	Sanctions to encourage the observance of requirements.
22%	13.4	Generally accepted methods for verifying a requirement prior to setting it.
19%	13.5	A greater number of award criteria to reward the best products in the tender assessment and thus increase the driving force of the system.
100%		

## Appendix 2: Questionnaire

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### Influence the verification of environmental requirements set for public procurement — questions about records

2006-05-04, ME

## Introduction

Are the verification of requirements and their follow-up prerequisites in the procurement process to make environmental requirements a driving force? At present, many requirements make it difficult to assess whether a product's performance fulfils the set requirements<sup>32</sup>. Inadequate verification and a lack of follow-up are a general problem in public procurement.

The investigation 'Verification of environmental performance in public procurement' aims to establish guidelines for how environmental requirements can be verified and followed up. The investigation is being conducted by IVL Swedish Environmental Research Institute, an independent research institute, and is financed by the Swedish Environmental Protection Agency, the Swedish Environmental Management Council and Verva (www.verva.se, formerly part of IT procurement at the Swedish Agency for Administrative Development). A report regarding the investigation will be published in mid-2006.

You have received this questionnaire as a **representative in the private sector**. There is extensive experience in the private sector of setting environmental requirements and verifying these, as well as of participating in public procurement. The purpose of this questionnaire is to chart **how you consider the verification of environmental requirements should be performed**.

Your views as an individual/company will be kept confidential. However a summary of all results will be published. Please return your completed questionnaire via **e-mail** to [Martin.Erlandsson@IVL.se](mailto:Martin.Erlandsson@IVL.se) or **fax** to +46(0)8-598 563 90, **by 2006-05-15 at the latest**. Please also forward the questionnaire to anyone you feel should have it.

If any question is unclear or if you have any other queries, please contact Martin Erlandsson/IVL, +46 (0)8-598 563 30.

Thank you for your cooperation.



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<sup>32</sup> Information om produkters miljöbelastning. Swedish Environmental Protection Agency, report 5526, December 2005.

## Definitions

Several definitions are provided to facilitate an understanding of the various forms of evidence. These (preliminary) definitions, listed in ascending order of credibility, are:

1. **Confirmation**, confirmation issued by the company or organisation.
2. **Self-declaration**, issued by the company or organisation.
3. **Second-party revision**, usually issued by one of the company's customers.
4. **Third-party certificate**, issued by an independent, external company or organisation.
5. **Accredited third-party certificate**, issued by an accredited certification body.

1. **Confirmation** – the company confirms backed by its reputation (on its honour) that the requirement is fulfilled.

2. **Self-declaration** – Declaration from the manufacturer/supplier based on criteria and standards decided in advance or other public methods. A self-declared environmental claim must be verifiable without access to confidential company information. Whoever submits the claim is responsible for assessment and must be able to supply the information required to verify the environmental claim.

[As per ISO 14021 (1999), but there called *self-declared environmental claim*]

3. **Second-party revision** - as above, but where usually a company checks its suppliers against a list of requirements. The purpose is to ensure that the company's suppliers fulfil the stipulated requirements.

Note: The parties involved are usually the supplier ('first party') and purchaser ('second party').

4. **Third-party certificate** – A process in which an independent third party attests in writing that a product, process or service complies with the specified requirements.

[ISO/IEC Guide 2:1996/SS-EN 45020 (1998)]

Note: A third party refers to a person or entity recognized as independent in relation to the parties involved in the matter in question.

[ISO/IEC Guide 2:1996/SS-EN 45020 (1998)]

5. **Accredited third-party certificate** – as above but assessed by an accredited third party. Accreditation means the continual assessment of the certification organisation's competence and independence. An accredited third-party certificate may include testing, analyses, calibrations or inspections.

Please submit any views you may have regarding these definition.

▶ ...

## Questions

### General questions

1) Do you agree that environmental requirements must be verifiable and be followed-up?

- Yes  
 No  
 Don't know

2) Do you consider that environmental requirements are generally set for products that you do not consider to be significant environmental aspects?

- Yes  
 No  
 Don't know

If 'yes', please give an example:

▶ ...

3) Rank the following aspects' potential to achieve actual environmental benefits. (1 for the highest potential and 6 for the least potential.)<sup>33</sup>

- 3.1 No. ▶ : Set environmental requirements that are consistent with the requirements in environmental management systems.  
3.2 No. ▶ : Set environmental requirements based on (international and national) legislation and ensure that these are actually observed.  
3.3 No. ▶ : Set environmental requirements based on the best available technology.  
3.4 No. ▶ : Set requirements that are verifiable and follow them up.  
3.5 No. ▶ : Set award criteria, i.e. environmental requirements that cannot be mandatory but are points scoring during tender assessment.  
3.6 No. ▶ : Set stringent mandatory requirements on the provision that at least two suppliers meet the requirements.

### Alternative forms of evidence:

4) Do you consider that a confirmation can be used as an alternative to third-party certification, if this confirmation is linked to a predetermined consequence (fine or some other sanction that is levied on non-compliance/non-fulfilment of the requirement)?

- Yes  
 No  
 Don't know

Please give an example of reasonable sanctions.

▶ ...

5) In areas with established test standards and/or product standards, is it sufficient to simply refer to these test records in a self-declaration so long as it is made clear that these results must be achievable when followed up using, for example, random sampling?

- Yes  
 No  
 Don't know

If 'No', please propose what you consider is necessary for the record to be sufficient.

▶ ...

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<sup>33</sup> If you wish, you may use the same sequence number for more than one statement.

## Consequences:

6) Do you consider that a confirmation linked to a sanction promotes competition better than a third-party certificate?

- Yes  
 No  
 No difference

7) Do you consider that a confirmation linked to a sanction lowers costs compared to a third-party certificate?

- Yes  
 No  
 No difference

Do you partially agree? Please develop your answer.

▶ ...

## Interpretation problems:

8) The following question presupposes that the contracting organisation lacks sufficient internal competences or resources to assess the fulfilment of a requirement.

If an environmental requirement requires qualified interpretation by an expert to allow assessment, e.g. the toxicity of a substance, which form of attestation do you consider most appropriate?

- 8.1  Confirmation  
8.2  Self-declaration  
8.3  Second-party certificate  
8.4  Third-party certificate  
8.5  Accredited third-party certificate  
(These terms are defined in the introduction)

Please leave any other views on this issue:

▶ ...

9) If problems arise in the interpretations of an environmental requirement (e.g. whether a substance is carcinogenic), shall this type of requirement be set in public procurement if the results of assessment are not made publicly available?

- Yes  
 No  
 Don't know

Please develop your answer:

▶ ...

## Random sampling:

10) Is a follow-up using random sampling an important factor for equal treatment and the credibility of the procurement process and environmental requirements?

- Yes  
 No  
 Don't know



If 'No', please propose other actions that you consider increase credibility.

▶ ...

11) Should it be possible to use random sampling that is performed as an integrated part of a third-party certified management system as part of the follow-up in the procurement process?

- Yes  
 No  
 Don't know

If 'yes', please develop your answer:

▶ ...

12) Based on your experiences and views, do problems ever arise if the orderer conducts their own, unannounced spot checks (i.e. such as prescribed by Swan and TCO labelling)?

- Yes  
 No  
 Don't know

If 'yes', please develop your answer:

▶ ...

13) Rank the following aspects with regard to achieving credibility in the public procurement process. (1 for the most significant and 6 for the least significant.)<sup>34</sup>

- 13.1 No. ▶ : Random sampling/follow-up conducted during the period of contract to ensure observance of requirements.  
13.2 No. ▶ : Requirements that preclude ambiguity and problems with interpretation.  
13.3 No. ▶ : Sanctions to encourage the observance of requirements.  
13.4 No. ▶ : Generally accepted methods for verifying a requirement prior to setting it.  
13.5 No. ▶ : A greater number of award criteria to reward the best products in the tender assessment and thus increase the driving force of the system.

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<sup>34</sup> If you wish, you may use the same sequence number for more than one statement.

## **Respondent**

Your individual views will not be made public. However, to be able to identify who has completed this questionnaire and be able to pose further questions, please fill in your contact details below.

Name ▶  
Company ▶  
Phone ▶  
E-mail ▶

Your views and experiences are valuable to this investigation. The results will be published in a final report and discussed at a seminar on 25 April.

Thank your for your contribution.

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