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COMMISSION DECISION

of 4 March 2013

establishing the user's guide setting out the steps needed to participate in EMAS, under Regulation (EC) No 1221/2009 of the European Parliament and of the Council on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS)

(notified under document C(2013) 1114)

(Text with EEA relevance)

(2013/131/EU)

(OJ L 76, 19.3.2013, p. 1)

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Article 1

To provide additional information clarifying the steps needed to participate in EMAS, the Commission adopts this user guide.

Article 2

This Decision is addressed to the Member States.

*ANNEX I***I. INTRODUCTION**

It is an objective of EU environmental policy to encourage all kinds of organisations to use environmental management systems and reduce their environmental impacts. Environmental management systems are one of the possible tools for companies and other organisations to improve their environmental performance whilst saving energy and other resources. In particular, the EU would like to encourage organisations to participate in the Eco-Management and Audit Scheme (EMAS) which is a management tool for companies and other organisations to evaluate, report and improve their environmental performance.

EMAS was established in 1993 and evolved over time. The EMAS Regulation ⁽¹⁾ provides the legal basis for the scheme and the latest revision dates back to 2009.

This EMAS User Guide has been prepared according to the requirements of Article 46.5 of the EMAS Regulation. This document aims to deliver clear, simple advice for organisations interested in EMAS. It is intended to offer step-by-step instructions that are easy to follow. The guide outlines the main elements and steps to be undertaken by an organisation that intends to participate in the scheme. The document aims to increase the overall uptake of the EMAS management system by facilitating the entry of organisations into the scheme. It is also important to keep in mind the general objective of the European Regulation, which is to harmonise implementation across all Member States and create a common legislative framework. For specific EMAS Global related issues the reader is referred to the Commission Decision 2011/832/EU ⁽²⁾, of 7 December 2011 concerning a guide on EU corporate registration, third country and global registration under Regulation (EC) No 1221/2009.

II. WHAT IS THE ECO-MANAGEMENT AND AUDIT SCHEME (EMAS)?

EMAS is a voluntary tool available to any organisation operating in any economic sector within or outside the European Union that wants to:

- assume environmental and economic responsibility;
- improve its environmental performance;
- communicate its environmental results to society and stakeholders in general.

Below is a step-by-step outline on what needs to be done to register for the scheme and implement it.

Organisations that register with EMAS have to:

- prove compliance with environmental legislation;
- make a commitment to continually improving their environmental performance;

⁽¹⁾ Regulation (EC) No 1221/2009.

⁽²⁾ Commission Decision 2011/832/EU of 7 December 2011 concerning a guide on EU corporate registration, third country and global registration under Regulation (EC) No 1221/2009 of the European Parliament and of the Council on the voluntary participation by organisations in a Community ecomanagement and audit scheme (EMAS) (OJ L 330, 14.12.2011, p. 25).

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- show they have an open dialogue with all stakeholders;
- involve employees in improving the organisation's environmental performance;
- publish and update a validated EMAS environmental statement for external communication.

There are some further requirements. Organisations have to:

- conduct an environmental review (including the identification of all direct and indirect environmental aspects);
- register with a competent body after successful verification of their organisation.

Once registered, organisations are entitled to use the EMAS logo.

III. COSTS AND BENEFITS OF IMPLEMENTING EMAS

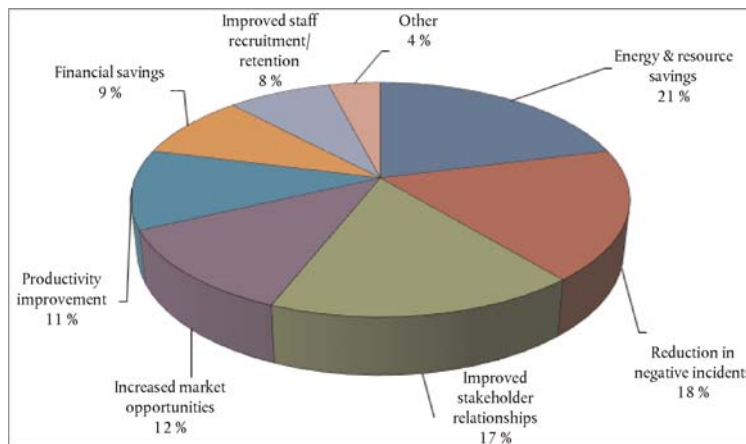
In general, environmental management systems such as EMAS help organisations to improve resource efficiency, reduce risks and set an example with their public declaration of good practice. The costs of implementing a scheme are outweighed by the savings.

Benefits

A study ⁽¹⁾ has been carried out on the costs and benefits of registering with EMAS. A survey was conducted where those taking part were asked to select the impacts that had been most positive from a given list. 'Energy & resource savings' ranked top (21 %), as shown in figure 1. This was followed by 'reduction in negative incidents' (18 %) and 'improved stakeholder relationships' (17 %).

Figure 1

Benefits of implementing EMAS (% all responses)



More efficiency savings

The benefit 'Energy and resource savings' ranked top. For organisations of all sizes, there was evidence that energy savings alone exceeded the annual costs of maintaining EMAS. This suggests that larger organisations should easily be able to recover the costs of implementing EMAS.

⁽¹⁾ [http://ec.europa.eu/environment/emas/emas_publications/publications_studies_en.htm#Study on the costs and benefits of EMAS to registered organisations](http://ec.europa.eu/environment/emas/emas_publications/publications_studies_en.htm#Study%20on%20the%20costs%20and%20benefits%20of%20EMAS%20to%20registered%20organisations)

▼ M1**Fewer negative incidents**

This benefit ranked second. Several factors, such as the lower incidence of breaches of environmental law, came into play. This obviously links up with benefits in terms of better relations with regulatory authorities.

Better relations with stakeholders

Organisations rated better relations with stakeholders as a key benefit, particularly in the case of public administration and service companies.

More market opportunities

Registering for EMAS can improve business. It can help retain existing customers and win new business. For public procurement, having an EMAS environmental management system can be an advantage. Though organisations involved in public procurement cannot explicitly require bidders to be EMAS-registered, companies that are registered can use this to show they have the technical means to fulfil contractual environmental management requirements.

Moreover, organisations may encourage their suppliers to have an environmental management system in place as part of their own environmental policy. Being EMAS-registered may make internal business-to-business procedures easier for both parties.

Regulatory relief

EMAS-registered organisations may be entitled to regulatory relief. There may be benefits for companies involved in manufacturing sectors, with advantages under Integrated Pollution Prevention and Control legislation⁽¹⁾.

Several Member States also offer advantages to EMAS-registered organisations regarding state and regional environmental laws and regulations. Such benefits may, for instance, involve simplified reporting obligations; fewer inspections, lower waste fees and longer periods between permit renewals.

Examples include: a 50 % reduction in waste fees; a 20-30 % reduction in fees for licensing procedures; a reduction of up to 100 % in fees for monitoring and enforcement under national law, a 30 % reduction in fees for public services performed by government agencies, a 30 % reduction in fees for surface water licensing procedures, groundwater extraction permits and for landfill licensing procedures. There are also advantages when it comes to administration of monitoring and handling of hazardous chemicals, waste disposal obligations (by not having to demonstrate technical supervision measures) and greenhouse gases monitoring.

⁽¹⁾ The 'Industrial Emissions Directive' (IED Directive), repealing the IPPC Directive with effect from 7 January 2013, provides Member States with detailed guidance on environmental inspections, where the frequency of site visits should be based on a systematic appraisal of environmental risks of the installations concerned, using a set of criteria including the participation of the operator in the EMAS scheme.

▼ **M1****Costs and benefits**

Businesses should regard registering for EMAS as an investment. Implementing EMAS involves internal and external costs, such as consultancy support, human resources to implement and follow up measures, inspections, registration fees, etc.

Actual costs and benefits vary widely, depending on, for example, the size and activities of the organisation, the current state of play on environmental management practices, the specific country, etc. But in general, EMAS does lead to significant savings. Various studies have shown that organisations recoup implementation costs through increased revenue within a fairly short time, between one and two years in most cases ⁽¹⁾ ⁽²⁾ ⁽³⁾ ⁽⁴⁾ ⁽⁵⁾.

Table 1

Costs and potential annual efficiency savings in EMAS ⁽¹⁾*(EUR)*

Organisation size ⁽²⁾	Potential annual efficiency savings	First year implementation costs ⁽³⁾ of EMAS	EMAS Annual costs ⁽⁴⁾
Micro	3 000 – 10 000	22 500	10 000
Small	20 000 – 40 000	38 000	22 000
Medium	Up to 100 000	40 000	17 000
Large	Up to 400 000	67 000	39 000
Data on 'Potential annual efficiency savings' are based on energy savings only. No data are available on resource efficiency savings			

Source: 'Costs and Benefits of EMAS to Registered Organisations', study for European Commission, 2009.

⁽¹⁾ The figures in Table 1 are indicative and related to the category sizes. Therefore they cannot be applied directly to any organisation in any situation.

⁽²⁾ Organisation sizes as defined in Commission Recommendation 2003/361/EC concerning the definition of micro, small and medium-sized enterprises (OJ L 124, 20.5.2003, p. 36).

⁽³⁾ SMEs can often reduce their first year implementation costs by implementing EMAS via the EMAS Easy methodology. Recent estimates show that in some cases costs can be reduced down to EUR 11 500 for micro organisations and EUR 17 000 for small organisations in the first year of implementation. These estimates are purely indicative and based on data provided by SME's following seminars for SMEs in different Member States.

⁽⁴⁾ SMEs can often reduce their first year implementation costs by implementing EMAS via the EMAS Easy methodology. Recent estimates show that in some cases costs can be reduced down to EUR 2 200/year for micro organisations and EUR 3 300/year for small organisations. These estimates are purely indicative and based on data provided by SMEs following seminars for SME's in different Member States.

⁽¹⁾ EVER Study: Evaluation of EMAS and Eco-Label for their Revision (2005), IEFÉ-Università Bocconi for DG Environment of the European Commission.

⁽²⁾ Hamschmidt J., Dyllick T. (2001), 'ISO 14001: profitable? Yes! But is it eco-effective?', Greener Management International, n. 34.

⁽³⁾ CESQA SINCERT (2002), Indagine sulla certificazione ambientale secondo la norma UNI EN ISO 14001; risultati indagine Triveneto.

⁽⁴⁾ Freimann, Walther (2001), The impacts of corporate environmental management systems: a comparison of EMAS and ISO 14001, Greener Management International, No 36, pp. 91-103.

⁽⁵⁾ IRIS (2000), Environmental management systems — paper tiger or powerful tool. The Swedish Institute of Production Engineering Research. Molndal.

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The EMAS ‘Toolkit for small organisations’ ⁽¹⁾ provides many other examples of cost/benefit savings.

As a whole, micro and small organisations face proportionally higher fixed and external costs than medium or large organisations, since the latter benefit from economies of scale, with a higher proportion of costs borne internally by environment departments, and lower external costs as they have less need for consultants. However, even very large organisations are advised to investigate implementation costs in detail.

EMAS and energy management systems such as EN 16001 and ISO 50001 are quite similar. As management of energy use is part of EMAS, EMAS registered organisations already improve their energy efficiency, consequently they fulfil most EN 16001 and ISO 50001 requirements. Therefore this can also result in cost reductions.

Organisations considering EMAS registration should also take into account the technical and financial support or subsidies that Member States, national, regional or local authorities and EMAS Competent Bodies offer.

IV. EMAS REGULATION

The EMAS scheme was established in Regulation (EC) No 1221/2009 (also known as EMAS III) and is directly applicable in all Member States.

1. GENERAL

1.1. SCOPE

Since 2001, any public or private organisation can implement EMAS. With EMAS III, the scheme is also available to non-European organisations or European companies operating in non-European countries. On the latter issue, there is specific guidance on EU corporate registration, third country and global registration.

“‘Organisation” means a company, corporation, firm, enterprise, authority or institution, located inside or outside the Community, or part or combination thereof, whether incorporated or not, public or private, which has its own functions and administration.’

EMAS can be implemented in one, several or all sites belonging to private or public organisations in any sector of activity ⁽²⁾. The smallest entity that can be registered is a site.

“‘Site” means a distinct geographic location under the management control of an organisation covering activities, products and services, including all infrastructure, equipment and materials; a site is the smallest entity to be considered for registration.’

A ‘distinct geographic location’ should be understood as:

‘A physical continuity of land, buildings, equipment or infrastructures, possibly interrupted by external elements provided that functional and organizational continuity of activities is assured.’

⁽¹⁾ http://ec.europa.eu/environment/emas/join_emas/what_if_i_am_an_sme_en.htm

⁽²⁾ OJ L 393, 30.12.2006, p. 1.

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1.2. REQUIREMENTS

The general procedure for implementing EMAS can be summarised as follows:

- (1) The organisation should start with an environmental review, an initial analysis of all activities the organisation carries out, to identify relevant direct and indirect environmental aspects, and the applicable environmental legislation;
- (2) Then an environmental management system needs to be implemented, in line with the requirements of EN ISO 14001 (Annex II of EMAS Regulation);
- (3) The system needs to be checked by carrying out internal audits and a management review;
- (4) The organisation writes an EMAS environmental statement;
- (5) The environmental review and the environmental management system are verified and the statement is validated by an accredited or licensed EMAS verifier;
- (6) Once the organisation has been verified, it submits an application for registration to the Competent Body.

In accordance with the Article 46 of the EMAS Regulation the European Commission is developing ‘Sectoral Reference Documents’⁽¹⁾ (SRDs) for a number of priority sectors in consultation with Member States and other stakeholders.

Each document includes the following elements:

- best environmental management practice;
- environmental performance indicators for the specific sectors concerned;
- where appropriate, benchmarks of excellence and rating systems identifying environmental performance levels.

When available for their specific sector, EMAS registered organisations are to take SRDs into account at two different levels:

1. When developing and implementing their environmental management system in light of the environmental reviews (Article 4(1)(b));
2. When preparing the environmental statement (Article 4(1)(d) and Article 4(4)).

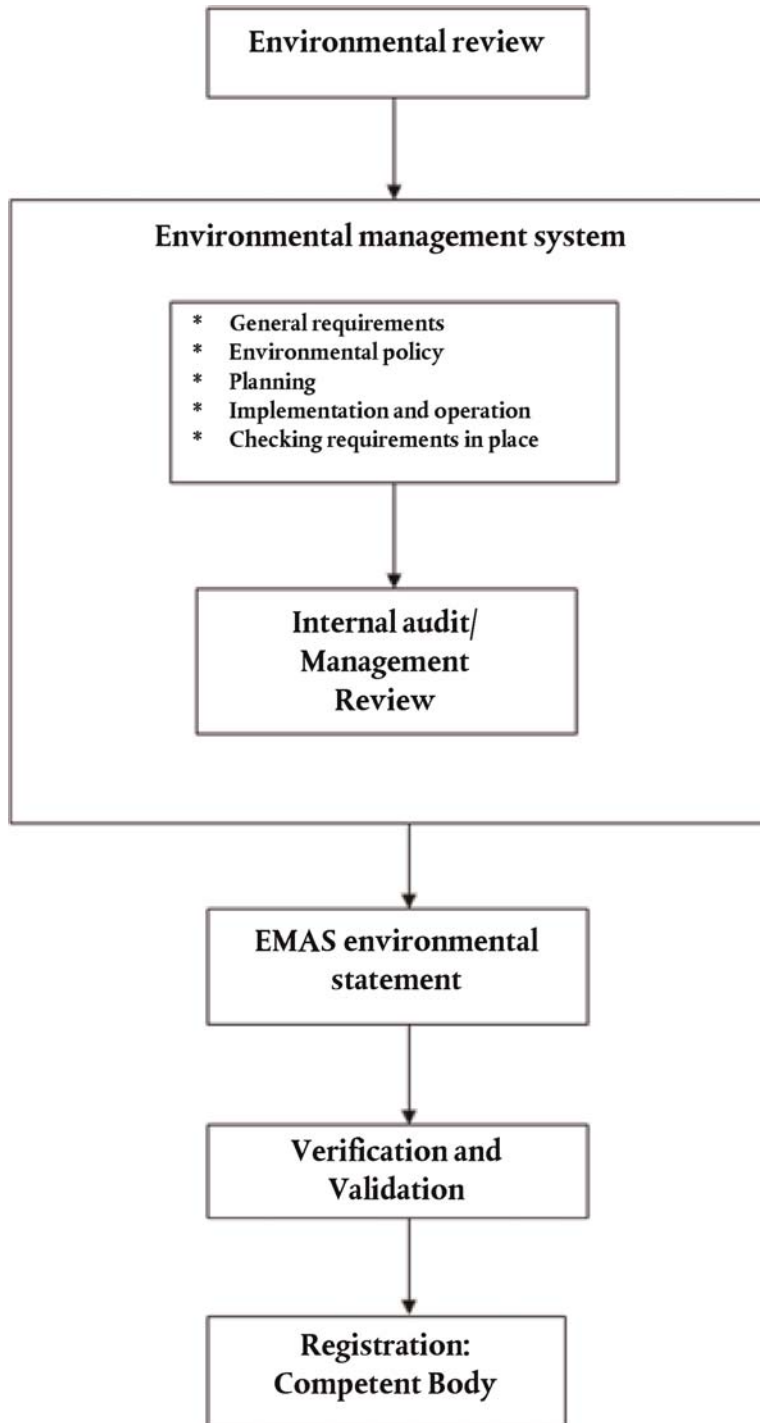
EMAS participation is an ongoing process. Every time an organisation reviews its environmental performance and plans improvements it shall consult the SRD (when available) on specific topics to find inspiration about which issues to tackle next in a step-wise approach.

⁽¹⁾ The indicative list of 11 priority sectors for which Sectoral Reference Documents will be developed, is published in the communication from the Commission ‘Establishment of the working plan setting out an indicative list of sectors for the adoption of sectoral and cross-sectoral reference documents, under Regulation (EC) No 1221/2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS)’ (OJ C 358, 8.12.2011, p. 2).

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Figure 2

General schedule for EMAS implementation



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Table 2

Indicative time schedule for the implementation of EMAS. The time involved in each activity is an average, which can be shorter or longer depending on the Member State, the organisation size, etc.

EMAS	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10
Environmental review	X	X								
Environmental management system		X	X	X	X	X	X			
General requirements		X								
Environmental policy		X								
Planning: Environmental Objectives and targets		X								
Planning: Environmental programme			X	X	X					
Implementation and operation: Resources, roles, responsibility and authority					X					
Implementation and operation: Staff competence, training and awareness, including employee involvement					X					
Implementation and operation: Communication (internal and external)						X				
Implementation and operation: Documentation and control of documents		X	X	X	X	X				
Implementation and operation: Operational control						X	X			
Implementation and operation: Emergency plans							X			
Checking: Monitoring and measuring, evaluation of compliance, non-conformity, corrective and preventive action, control of records					X	X	X			

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EMAS	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10
Checking: Internal Audit							X	X		
Management review								X		
EMAS environmental statement									X	
Verification and Validation									X	
Registration										X

2. HOW TO IMPLEMENT EMAS

2.1. ENVIRONMENTAL REVIEW

The first step in implementing EMAS properly is to conduct a thorough analysis of an organisation's internal structure and activities. The aim is to identify environmental *aspects* (as defined below) associated with environmental *impacts*. That is the basis for setting up a formal environmental management system.

“Environmental Review” means an initial comprehensive analysis of environmental aspects, environmental impacts and environmental performance related to an organisation's activities, products and services.’

The analysis must include:

- Legal requirements that apply to the organisation;
- Identification of direct and indirect environmental aspects;
- Criteria for assessing the significance of the environmental aspects;
- Examination of all existing environmental management practices and procedures;
- Evaluation of feedback after investigation of incidents in the past.

‘Environmental aspect’ means an element of an organisation's activities, products or services that has or can have an impact on the environment. Environmental aspects may be input related (consumption of raw materials and energy, for instance) or output related (air emissions, waste generation, etc.).

▼ **M1***Figure 3***Relation between activities, environmental aspects and environmental impacts**

The organisation needs procedures to ensure that activities identified as significant during the first environmental review are properly followed up later. Environmental aspects and related impacts may change, as may the organisation's activities. If the changes are substantial, the environmental review may have to be updated. An organisation should also be aware of new developments, techniques, research results, etc. to help it reassess the significance of its environmental aspects and the possible need to carry out a new environmental review if its activities change significantly.

What is the procedure for carrying out an environmental review?

Organisations must:

- identify environmental aspects stemming from their manufacturing processes, activities or services; and
- establish criteria to assess the significance of these aspects. The criteria need to be comprehensive and it must be possible to verify them independently.

The organisation should remember that it will have to disclose the environmental aspects it identifies and the results of the evaluation to external stakeholders.

How should environmental aspects be identified?

All relevant information needs to be gathered.

This can mean:

- Visiting sites to check process inputs and outputs (taking notes, making drawings as required);
- Collecting location maps and pictures;
- Identifying applicable environmental legislation;
- Collecting all environmental permits, licences and similar documents;
- Checking all sources of information (incoming invoices, counters, data concerning equipment, etc.);
- Checking the use of products (often the purchasing and sales departments are useful starting points);
- Identifying key persons (management and workers). Workers involved in all internal systems should be asked for input;

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- Requesting information from subcontractors, who may have a significant influence on an organisation's environmental performance;
- Taking into account past accidents, the results of monitoring and inspections; and
- Identifying start-up and shut down situations and identified risks.

Both direct and indirect environmental aspects must be taken into account, and the definitions below should be helpful in identifying these:

“direct environmental aspect” means an environmental aspect associated with activities, products and services of the organisation itself over which it has direct management control.’

“indirect environmental aspect” means an environmental aspect which can result from the interaction of an organisation with third parties and which can to a reasonable degree be influenced by an organisation.’

It is essential to consider indirect aspects. This applies both to the private and public sectors, so local authorities, service companies or financial institutions, for instance, need to extend their review beyond site aspects.

Organisations must be able to show they have identified significant environmental aspects associated with their procurement procedures, and that they have addressed significant environmental impacts associated with these in their management system.

Table 3

Examples of direct and indirect aspects

Environmental aspects	
Direct aspects	Indirect aspects
— Air emissions	— Product life cycle related issues
— Water emissions	— Capital investment
— Waste	— Insurance services
— Use of natural resources and raw materials	— Administrative and planning decisions
— Local issues (noise, vibration, odours)	— Environmental performance of contractors, subcontractors and suppliers
— Land use	— Choice and composition of services e.g. transport, catering, etc.
— Air emissions related to transport	
— Risks of environmental accidents and emergency situations	

Direct environmental aspects have to include the related legal requirements and permit limits, e.g. if specific pollutants are bound to emission limit values or other requirements, those emissions should be considered as direct environmental aspects.

▼ M1**Assessment of environmental aspects**

The next step is to associate aspects with their effects or impacts on the environment. Table 4 provides an example of such links.

Table 4

Examples of environmental aspects and impacts

Activity	Environmental aspect	Environmental impact
Transport	— Used oils for machinery	— Soil, water, air pollution
	— Carbon emissions of trucks and machinery	— Greenhouse effect
Construction	— Air emissions, noise, vibration etc. by construction machines	— Noise, soil, water, air pollution
	— Land use	— Land cover destruction — Biodiversity loss
Office services	— Use of materials such as paper, toner, etc.	— Mixed municipal waste pollution
	— Electric power consumption (leading to indirect CO ₂ emissions)	— Greenhouse effect
Chemical industry	— Waste water	— Water pollution
	— Emission of volatile organic compounds	— Photochemical ozone
	— Emission of ozone depleting substances	— Ozone layer depletion

Once the aspects and their impacts have been identified, the next step is to conduct a detailed assessment of each to determine significant environmental aspects.

“Significant environmental aspect” means an environmental aspect that has or can have a significant environmental impact.’

The issues to consider when assessing significance are:

- (i) potential to cause environmental harm;
- (ii) fragility of the local, regional or global environment;
- (iii) size, number, frequency and reversibility of the aspect or impact;
- (iv) existence and requirements of relevant environmental legislation;
- (v) importance to stakeholders and employees of the organisation.

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Based on these criteria, the organisation can draw up an internal procedure or use other tools to assess the significance of environmental aspects. Small and medium-sized Enterprises (SMEs) will find that the EMAS SME toolkit⁽¹⁾ provides very useful information.

In assessing the significance of environmental aspects, it is important to take into account not just normal operating conditions, but also start-up, shutdown and emergency conditions. Past, present and planned activities should all be considered.

For each environmental aspect, the corresponding impact should be rated according to:

- Magnitude — level of emissions, energy and water consumption, etc.;
- Severity — hazards, toxicity, etc.;
- Frequency/probability;
- Concerns of interested parties;
- Legal requirements.

Table 5

Assessing environmental aspects

Assessing criteria	Example
Which outputs or activities of the organisation may negatively affect the environment?	Waste: mixed municipal waste, waste packaging, hazardous waste
Magnitude of aspects which may impact the environment	Quantity of waste: High, medium, low
Severity of aspects which may impact on the environment	Hazardousness of waste, toxicity of materials: High, medium, low
Frequency of aspects which may impact the environment	High, medium, low
Public and employee awareness for the aspects associated to the organisation	Severe, some, no complaints
Organisation activities regulated by environmental legislation	Waste law permit, monitoring obligations

Note: It is useful to quantify criteria and the overall significance of particular aspects.

How to check legal compliance

“Legal compliance” means full implementation of applicable legal requirements, including permit conditions, relating to the environment.’

⁽¹⁾ http://ec.europa.eu/environment/emas/join_emas/what_if_i_am_an_sme_en.htm

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Member States have to ensure that organisations have access to information and assistance on the following issues, at a minimum:

- Information on the applicable legal requirements relating to the environment; and
- Identification of the competent enforcement authorities for specific legal requirements relating to the environment.

The enforcement authorities are required to reply to requests for information, at least from small organisations, on the applicable legal requirements relating to the environment, as well as information on how organisations can meet those legal requirements.

Identifying all applicable legal requirements means taking into account different levels of environmental legislation, if appropriate, such as national, regional or local requirements, including permits and licences.

The organisation must also take into account other relevant requirements, for instance, in procurement conditions, business contracts, voluntary agreements that the organisation has signed or subscribed to, etc.

It is essential to identify legal requirements at this point, so that an organisation can pinpoint any that may not be fulfilled. If necessary, an organisation must then take measures to comply with all relevant environmental legislation (see 2.2.5.2 for evaluation of legal compliance).

2.2. ENVIRONMENTAL MANAGEMENT SYSTEM

““Environmental management system” means the part of the overall management system that includes the organisational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy and managing the environmental aspects.’

2.2.1. *General requirements*

To start with, the organisation must define and document the scope of its environmental management system.

Each site to be involved in an EMAS registration must comply with all the requirements of EMAS.

The organisation has to set up, document, implement and maintain an environmental management system in accordance with section 4 of EN ISO 14001. If the organisation has implemented an environmental management system (other than ISO 14001) that the Commission has recognised⁽¹⁾, it does not have to repeat items that have already been officially recognised when it seeks to fulfil EMAS requirements.

2.2.2. *Environmental policy*

““Environmental policy” means the overall intentions and direction of an organisation relating to its environmental performance as formally expressed by top management (...). It provides a framework for action and for the setting of environmental objectives and targets’.

Environmental policy must include the following points:

- Commitment to complying with legal and other requirements related to its environmental aspects;

⁽¹⁾ According to an official Art. 45 procedure as described in the EMAS Regulation.

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- Commitment to preventing pollution;
- Commitment to continually improving environmental performance.

The environmental policy is a **framework for action** and for setting strategic environmental objectives and targets (see below). It needs to be clear and must address the top priorities on which specific objectives and targets can be further defined.

2.2.3. Planning

Once basic underlying issues as described above have been covered, the process moves on to planning.

2.2.3.1. Environmental objectives and targets

““Environmental objective” means an overall environmental goal, arising from the environmental policy, that an organisation sets itself to achieve, and which is quantified where practicable.”

““Environmental target” means a detailed performance requirement, arising from the environmental objectives, applicable to an organisation or parts thereof, and that needs to be set and met in order to achieve those objectives.”

An organisation must draw up and document the objectives and detailed targets for each of the aspects relevant in the organisation, in line with its environmental policy.

Once objectives have been defined, the next step is to set proper targets for them. With targets, it is possible to plan specific actions to be carried out to achieve good environmental management.

*Figure 4***Relation between objectives, targets and actions**

An example:

Environmental objective	Minimise hazardous waste generation
Target	Reduce the use of organic solvents in the process by 20 % within 3 years
Action	Reusing solvents whenever possible Recycling organic solvents

Objectives and targets should be measurable where possible, and consistent with an organisation's environmental policy. The 'SMART' criteria are useful:

- **Specific** — each target should address a single issue;
- **Measurable** — each target should be expressed quantitatively;
- **Achievable** — it should be possible to meet the targets;

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- **Realistic** — targets should be demanding and drive continuous improvement, but not overly ambitious. They can always be revised once they have been met;
- **Time-bound** — there should be a deadline for achieving each target.

When available for their specific sector, organisations should use relevant elements of the Sectoral Reference Documents as referred to in Article 46 of the EMAS Regulation. These should be used when defining and reviewing the environmental targets and objectives of the organisation in accordance with the relevant environmental aspects identified in the environmental review. However meeting the identified benchmarks of excellence is not mandatory because EMAS leaves the assessment of the feasibility of the benchmarks and of the implementation of the best practices, in terms of costs and benefits, to the organisations themselves.

2.2.3.2. Environmental programme

“Environmental Programme” means a description of the measures, responsibilities and means taken or envisaged to achieve environmental objectives and targets and the deadlines for achieving the environmental objectives and targets.’

The environmental programme is a tool to help the organisation plan and implement improvements from day to day. It should be kept up to date, and detailed enough to give an overview of progress towards meeting targets. The programme should specify who is responsible for achieving objectives and targets, as well as details of the resources and timeframes involved. Resources themselves (e.g. financial, technical or personnel means) cannot be environmental objectives.

In practice, the programme is often drawn up in tabular form, covering the following:

- environmental objectives, linked to direct and indirect aspects;
- specific targets to achieve objectives; and
- actions, responsibilities, means and timeframe for each target:
 - Description of the action(s);
 - Person in charge of the target;
 - State of play at the start of implementation;
 - Means necessary to achieve targets;
 - Frequency of monitoring progress towards the target;
 - Final result to be achieved, including deadline;
 - Records associated to the process above must be kept.

Both direct and indirect aspects should be taken into account in drawing up the programme. The organisation should commit itself to improving its environmental performance continuously.

When deciding on which actions to implement to improve their environmental performance, the organisations should take into account the relevant elements of the Sectoral Reference Documents as referred to in Article 46 of the EMAS Regulation, when available for their sector.

In particular they should consider the relevant best environmental management practices and benchmarks of excellence (which provide an indication of the environmental performance level that is achieved by best performers) to identify measures and actions, and possibly to set priorities, to (further) improve their environmental performance.

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However, implementing best environmental management practices or meeting the identified benchmarks of excellence is not mandatory, because EMAS leaves the assessment of the feasibility of the benchmarks and of the implementation of the best practices, in terms of costs and benefits, to the organisations themselves.

2.2.4. Implementation and operation**2.2.4.1. Resources, roles, responsibility and authority**

If EMAS is to succeed, then top management must be willing to provide the resources and organisational structures needed to support the system. These include human resources and specialised skills in personnel, organisational infrastructure, technology, as well as financial resources.

The environmental review will have examined existing organisational infrastructure, management practices and procedures. At this point, it is time to adapt internal structures and procedures if necessary.

The organisation's top management must appoint a management representative, i.e., a person ultimately responsible for the environmental management system. Their role is to make sure that all the environmental management system requirements are in place, working and up-to-date, as well as to keep the general management team informed about how the system is working. They should report on its strengths and weaknesses, and on improvements needed.

The representative should be qualified and experienced in environmental issues, environment-related legal requirements, management aspects, working group skills, with leadership and coordination skills. The organisation must ensure these competences are all available within the organisation.

Competence, training and awareness

The organisation has to define the experience and knowledge required among staff for good environmental management performance.

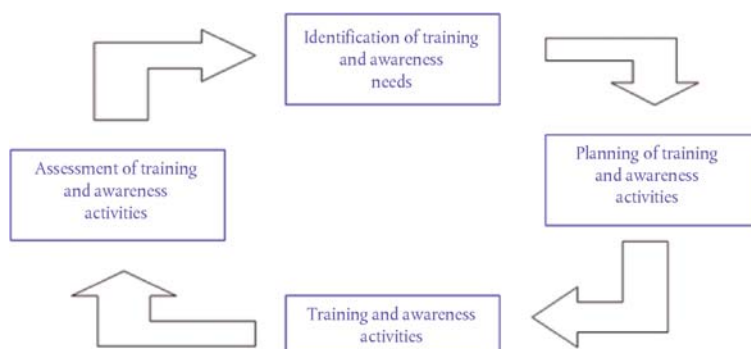
It must draw up, implement and maintain a procedure to identify training needs and do whatever is necessary to ensure that staff involved in the environmental management system has appropriate knowledge of:

- The organisation's environment policy;
- Legal requirements and other environmental requirements applicable to the organisation;
- The objectives and targets set up for the organisation as a whole and for their specific work areas;
- Environmental aspects and impacts and the methodology for monitoring them;
- Their roles and responsibilities within the environmental management system.

Everyone working for the organisation or on its behalf should be aware of their roles within EMAS and the environmental benefits of the system. They should receive, or at least have access to, training on environmental awareness and on the organisation's environmental management system.

▼ **M1**

Figure 5

Flow chart diagram on training within the environmental management system

Environmental awareness can be achieved through training or other activities, such as communication campaigns, surveys, etc.

Actively involved employees are a driving force for continuous, successful improvement, and they help to anchor EMAS in the organisation. They can become involved through, for instance, an environmental committee, working groups, by suggestion systems, incentive programmes or other activities.

There should be roles for employees at different levels within the development and implementation of the system. They could, for instance, be involved in:

- Identifying environmental aspects;
- Drawing up and revising procedures and/or instructions;
- Proposing environmental objectives and targets;
- Taking part in an internal audit process;
- Drafting the EMAS environmental statement.

Management must offer on-going feedback to employees, and seek feedback from them.

2.2.4.2. Communication

Good internal and external two-way communication is essential to implement an EMAS-registered environmental management system successfully. The organisation needs to recognise the need to communicate with stakeholders on environmental issues and the value of doing so. It is obliged to make the environmental statement public, and it will need to identify what will be communicated and to whom. It will need to monitor the results of its communication and to determine whether it has been effective.

Internal communication should flow in both directions (top down and bottom up). This can be done by using intranet, brochures, internal publications, newsletters, suggestion boxes, meetings, bulletin boards, etc.

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Examples of external communication are the EMAS environmental statement, internet, action days, press releases, brochures and use of the EMAS logo if possible and allowed⁽¹⁾.

2.2.4.3. Documentation and control of documents

There should be documentation on the environmental management system, covering the following:

- Environmental policy;
- Environmental objectives and targets;
- Description of the scope of the environmental management system;
- Description of the main elements of the environmental management system;
- Roles, responsibilities and authorities;
- Procedure for managing operational control;
- Operational procedures;
- Work instructions.

Documentation should be clear and concise to avoid confusion or misunderstanding.

EMAS documents can be integrated into other management systems (quality, energy, health and safety, etc.) or vice versa to optimise them, to avoid duplication and to reduce bureaucracy.

SMEs should aim to offer their staff clear, simple, easy-to-use documentation.

Environmental management manual

This covers the environmental policy, environmental protocols and activities. It should be integrated into the organisation's annual management plan. The manual does not need to be long and complex. It should help staff to understand how the organisation has set up and structured its environmental management system, how the different parts of the environmental management system are interrelated and what the roles of particular individuals are within the scheme. This manual is not obligatory, though most organisations opt to have one.

Procedures

Documents on procedures describe HOW, WHEN and by WHOM, specific actions have to be carried out.

Examples are procedures for:

- identifying and evaluating significant aspects;
- managing legal compliance;
- managing the identified significant environmental aspects;
- managing monitoring and measurements;
- managing emergency preparedness;

⁽¹⁾ As specified in Article 10 and Annex V of the EMAS regulation, and section 3 of the present document.

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- managing non-conformities, preventive and corrective actions;
- identifying and managing competence, training and awareness;
- managing communication;
- managing documents;
- managing records;
- managing internal audits.

Work instructions

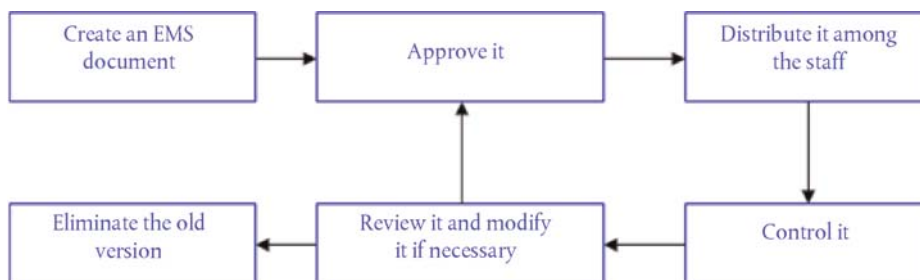
Work instructions must be clear and easy to understand. They should explain the relevance of an activity, the environmental risk associated with it, specific training for staff responsible for carrying it out, and how it is to be supervised. It may be useful to illustrate it with pictures, pictograms or other ways of ensuring all employees can readily understand the instructions.

Managing documents

The organisation has to set up, implement and maintain a procedure to manage documents drafted for the environmental management system. Specific attention should be paid to records (see 2.2.5.4).

This will require a procedure to:

Figure 6

Process to manage documents within an environmental management system

The system should ensure that different versions of documents remain available, and that documents remain legible and readily identifiable.

Documents from external sources can be included, as they are often essential to ensuring the environmental management system works correctly. Such documents could include information from local authorities and public administrations, equipment user manuals, health and safety sheets, etc.

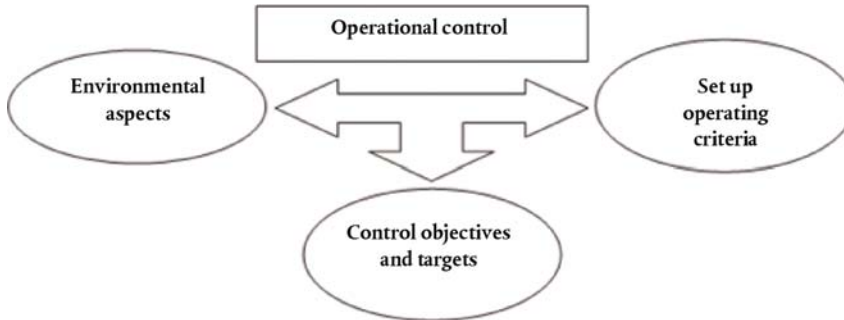
2.2.4.4. Operational control

Operational control involves identifying and planning operations that are associated with the significant environmental aspects consistent with the policy, objectives and targets (see figure 7). It might also cover activities such as equipment maintenance, start-up and shutdown, management of onsite contractors, and services provided by suppliers or vendors. There need to be procedures to address identified risks, to set targets and to measure environmental performance (preferably through clear environmental indicators). The procedures

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must define normal conditions. Abnormal conditions and emergencies must be defined and described. Operational control procedures should be well documented and submitted to internal audits.

Figure 7

Operational control**2.2.4.5. Emergency preparedness and response**

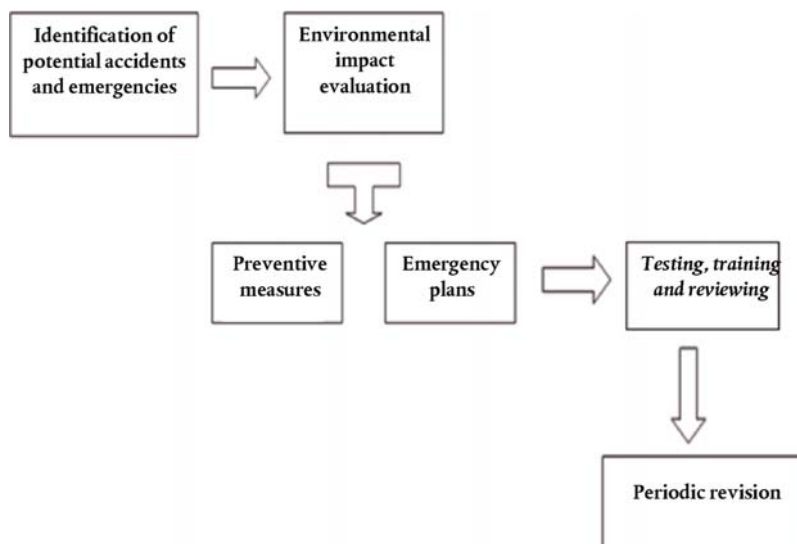
The organisation has to draw up, implement and maintain procedures to identify potential emergencies and potential accidents to:

- Avoid the risk of an accident;
- Describe how the organisation responds to accidents;
- Prevent or mitigate associated adverse environmental impacts.

The emergency plan is essential in industry and in organisations involved in potentially risky activities.

The organisation must periodically review its emergency preparedness (including appropriate training) and its response procedures. It should revise them if necessary, particularly after emergencies or accidents. Procedures should also be tested periodically.

Figure 8

Emergency plans

▼ M1**2.2.5. Checking****2.2.5.1. Monitoring and measurement**

The organisation needs to draw up, implement and maintain a procedure to monitor and measure significant parameters such as air emissions, waste, water and noise regularly to gain added value from the findings. Reporting on core performance indicators is an obligation (see 2.3.2).

Legal requirements on monitoring have to be taken into account, and monitoring criteria such as the frequency of inspections and the methodology must comply with them. Information on these is useful to ensure:

- Compliance with legal requirements and regulations;
- Accurate evaluation of environmental performance;
- A complete and transparent EMAS statement.

Depending on the organisation's needs, other factors can also be measured and monitored:

- Significant environmental aspects;
- Environmental policy and objectives;
- Level of awareness among employees, etc.

Measuring equipment must be calibrated on a regular basis to comply with legislation and to obtain accurate results.

2.2.5.2. Evaluation of legal compliance

Legal compliance is a key requirement of the EMAS regulation and an organisation cannot register without it, so it has to have a procedure to review and evaluate this regularly.

This is best done by making a list of all relevant legislation and specific requirements, then comparing this to the organisation's specific circumstances (see table 6). Larger, more complex organisations may need to use databases or seek external assistance.

If the verifier finds instances of non-compliance that have not been corrected, they are not allowed to validate an environmental statement or to sign the final declaration (Annex VII).

Table 6

Example of simple legal compliance evaluation

Applicable environmental legislation	Specific requirement	Status of the organisation	Result
Waste law	<ul style="list-style-type: none"> — Permit for waste production — Waste management 	<ul style="list-style-type: none"> — Outdated permit — Waste management under control 	Get an updated permit
Air emissions law	<ul style="list-style-type: none"> — Emission limits (NO_x, SO_x, particles, etc.) — Permit for boilers 	<ul style="list-style-type: none"> — Under the limits — Permit updated 	OK
Noise law	<ul style="list-style-type: none"> — Noise limit in the area 	<ul style="list-style-type: none"> — Under the level permitted 	OK

▼ **M1**

Applicable environmental legislation	Specific requirement	Status of the organisation	Result
Water treatment law	<ul style="list-style-type: none"> — Specific treatment (elimination of P and N) — Effluent limits — Permit for emission to water-course 	<ul style="list-style-type: none"> — Not in place yet — Not in full compliance — Permit not updated 	Correct the situation
GHG laws	<ul style="list-style-type: none"> — Limits of GHG allocated 	<ul style="list-style-type: none"> — Under the limit 	OK. It's possible to sell some emission allowances

2.2.5.3. Non-conformity, corrective and preventive actions

The organisation has to set up, implement and maintain a procedure for dealing with cases and potential cases of non-conformity, with EMAS requirements.

The procedure must include ways of:

- Identifying and correcting the case;
- Investigating the cause and effects of the case;
- Evaluating the need for action to avoid recurrence;
- Recording the results of corrective action taken;
- Evaluating the need for measures to prevent cases of non-conformity;
- Implementing appropriate preventive action to avoid such cases; and
- Reviewing the effectiveness of corrective and preventive action.

Non-conformity means any kind of non-fulfilment with the basic requirements specified in procedures and technical instructions.

Non-conformities may be the result of human or implementation error. Changes to correct and avoid recurrence must be made as soon as possible.

Non-conformities may be detected through:

- Operational control;
- Internal/external audit;
- Management review; or
- As part of daily activity.

Corrective and preventive actions

The EMAS management representative has to be informed about non-conformities so they can make decisions about taking corrective action, if appropriate.

Where potential non-conformities have been identified, the EMAS management representative has to be informed, so they can make decisions about taking preventive action, if appropriate.

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Both corrective and preventive action should be recorded. It may be necessary to change the environmental management system documentation as a result.

2.2.5.4. Control of records

The organisation must set up a system to maintain records to show that it complies with the requirements of its environmental management system.

The organisation must set up, implement and maintain a procedure for managing its records. This should cover issues such as identification, storage, protection, retrieval, retention and disposal of records.

Records have to be and remain identifiable, legible, updated and traceable.

Examples of records:

- electricity, water and raw materials consumption;
- waste generated (hazardous and non-hazardous waste);
- greenhouse gases (GHG) emissions;
- incidents, accidents and complaints;
- legal requirements;
- audit reports and management reviews;
- inspection reports;
- significant environmental aspects;
- non-conformities, corrective and preventive actions;
- communication and training;
- suggestions from staff; and
- training and seminars.

2.2.6. Internal audit

EMAS pays particular attention to the internal audit in Annex III.

“Internal environmental audit” means a systematic, documented, periodic and objective evaluation of the environmental performance of an organisation, management system and processes designed to protect the environment.’

The organisation has to set up an internal audit procedure as part of the management system. This must cover responsibilities and requirements for planning and conducting audits, reporting results and keeping records, the determination of audit criteria, scope, frequency and methods.

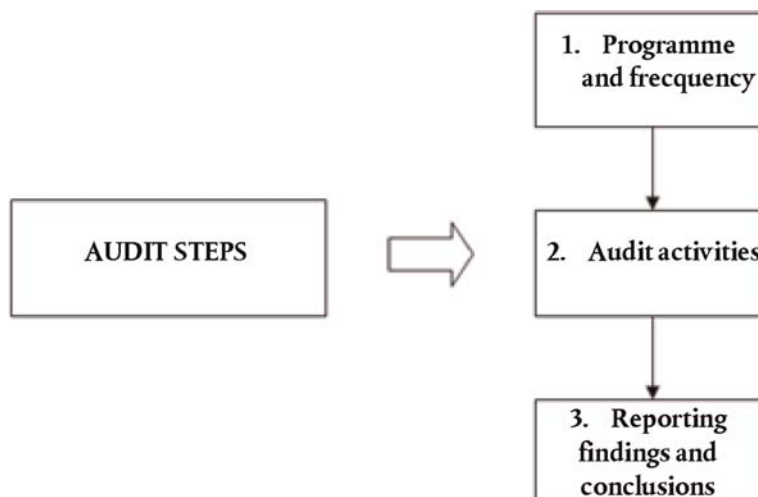
The goal of the internal audit is to determine:

- if the environmental management system meets the requirements of the EMAS Regulation;
- if it has been properly implemented and maintained;
- to guarantee that the organisation's management gets the information it needs to review the organisation's environmental performance;
- the effectiveness of the environmental management system.

The audit must be carried out objectively by independent personnel. The internal auditor can be a trained member of the staff or an external person or team.

▼ M1**General rules**

- Establish an audit programme;
- Define the scope of the audit. This will depend on the size and type of organisation. The scope must specify the subject areas covered, the activities to be audited, the environmental criteria to be considered and the period to be covered in the audit;
- Specify the resources needed to carry out the audit, for example, well-trained personnel with a good knowledge of the activity, technical aspects, environmental aspects, legal requirements;
- Make sure that all the activities in the organisation are carried out in conformity with previously defined procedures; and
- Identify potential new problems and put measures in place to prevent occurrence.

Internal audit steps*Figure 9***Internal audit steps****2.2.6.1. Audit programme and audit frequency**

The programme must include:

- specific goals of the internal audit;
- how to check whether the environmental management system is coherent and conforms with the organisation's policy and programme and fulfils the EMAS requirements;
- compliance with applicable environmental regulatory requirements.

The organisation must carry out internal audits on a yearly basis to have a proper overview of its significant environmental aspects. The audit cycle, which covers all the organisation's activities, must be completed within three years. Small organisations may extend this period to four years.

The frequency with which any specific activity is audited will vary, depending on:

- Nature, scale and complexity of the activities concerned;
- Significance of associated environmental impacts;
- Importance and urgency of the problems detected by previous audits; and
- History of environmental problems.

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As a rule, complex activities with a more significant environmental impact need to be audited more frequently.

For satisfactory results, all staff involved in an internal audit must have a clear idea of the environmental objectives of the exercise and the specific roles of everyone taking part (directors, managers, employees, auditors, etc.).

2.2.6.2. Internal audit activities

It is important to prepare for the internal audit beforehand. First, identify the auditor/audit team. The organisation may use its own staff as auditors, or engage outside auditors. They must be objective and impartial and be properly skilled and trained. The auditor/audit team should:

- Prepare a good audit plan, by collecting information on the objective, scope, place and date arranged with the organisation;
- Deliver the audit plan to the organisation sufficiently in advance;
- Draw up checklists;
- Distribute tasks within the audit team.

For an audit to be meaningful, the audit team must check compliance with environmental legislation, whether objectives and targets have been met, and whether the management system is effective and adequate.

The audit process must include the following steps:

- Understanding of the management system;
- Evaluation of the system's strengths and weaknesses;
- Gathering relevant evidence (e.g. data, records, documents);
- Evaluating audit findings;
- Preparing audit conclusions; and
- Reporting audit findings and conclusions.

2.2.6.3. Reporting audit findings and conclusions

The aim of the audit report is to provide management with:

- written evidence concerning the scope of the audit;
- information on the extent to which objectives have been met;
- information on whether objectives are in line with the organisation's environmental policy;
- information on the reliability and effectiveness of the monitoring system;
- proposed corrective actions if required.

The report must be submitted to the EMAS management representative who finalises corrective actions if non-conformities (including cases of non-compliance, if any) have been identified.

2.2.7. Management review

Top management has to review the management system on a regular basis (at least annually) to ensure it is fit for purpose and effectiveness. The management review needs to be recorded, and records kept.

▼ M1**Content of management review**

Inputs:

- Results of internal audits including evaluation of legal compliance;
- External communication;
- Complaints;
- Extent to which objectives and targets have been met;
- Status of corrective and preventive actions;
- Follow-up to previous management reviews;
- Changing circumstances, e.g. legal developments, environmental changes;
- Recommendations for improvement.

Outputs include all decisions and activities, changes to environmental policy, objectives, targets and other aspects of the environmental management system.

2.3. EMAS ENVIRONMENTAL STATEMENT

“Environmental statement” means the comprehensive information to the public and other interested parties regarding an organisation's: structure and activities; environmental policy and environmental management system, environmental aspects and impacts; environmental programme, objectives and targets; environmental performance and compliance with applicable legal obligations relating to the environment.’

The statement is one of the unique characteristics of EMAS compared with other environmental management systems.

For the public, it affirms the organisation's commitment to taking action on the environment.

For the organisation, it is a good opportunity to state what it is doing to improve the environment.

EMAS does set out some minimum requirements for the statement, but the organisation can decide how much detail it wishes to go into, as well as the structure and layout, as long as the content is clear, reliable, credible and correct. It is up to the organisation to decide if it wants to include its environmental statement in its annual report, or other reports, for instance, on corporate social responsibility.

2.3.1. *Minimum content for EMAS environmental statement*

- (1) *A clear and unambiguous description of the organisation registering under EMAS and a summary of its activities, products and services and its relationship to any parent organisations as appropriate*

Include diagrams, maps, flow charts, aerial photographs, etc. to illustrate the content. NACE codes to describe activities should also be included.

- (2) *The environmental policy and a brief description of the organisation's environmental management system*

A proper description of the system is important to provide clear information about the working structure. The environmental policy has to be included.

▼ **M1**

- (3) *A description of all the significant direct and indirect environmental aspects which result in significant environmental impacts of the organisation and an explanation of the nature of the impacts as related to these aspects (Annex I.2 of the EMAS Regulation)*

Direct and indirect environmental aspects should be given separately. The impacts of both should be given, using tables or flowcharts.

- (4) *A description of the environmental objectives and targets in relation to the significant environmental aspects and impacts*

Use lists of targets and objectives, as well as indicators to assess progress on improving performance. Include the environmental programme and refer to specific measures taken or planned to improve performance.

- (5) *A summary of the data available on the performance of the organisation against its environmental objectives and targets with respect to its significant environmental impacts. Reporting shall be on the core indicators and on other relevant existing environmental performance indicators as set out in Section C of Annex IV of the EMAS Regulation*

Core indicators focus on six key areas: energy, materials, water, waste, biodiversity (through land use) and emissions (see 2.3.2.2).

The organisation shall also report on its performance according to other more specific indicators related to significant environmental aspects mentioned in the environmental review. (see 2.3.2.3). In case no quantitative data is available to report on significant direct or indirect environmental aspects, organisations shall report their performance on the basis of qualitative indicators.

Where sectoral reference documents (SRDs) as referred to in Article 46 of the EMAS Regulation are available for the specific sector, the organisations should consider the relevant sector-specific environmental performance indicators in the SRD when choosing the indicators ⁽¹⁾ to use for their reporting of environmental performance.

- (6) *Other factors regarding environmental performance including performance against legal provisions with respect to their significant environmental impacts*

Use tables and/or graphs comparing legal reference limits to limits measured and/or calculated by the organisation.

It is not always possible to measure environmental performance with data. Soft factors are also relevant, and may include changes in behaviour, improvements in processes and other measures taken to improve environmental performance.

When reporting on these other factors, the organisations should take into account the relevant sectoral reference documents (SRDs) as referred to in Article 46 of the EMAS Regulation. They should therefore mention in their environmental statement how the relevant best environmental management practices and, if available, benchmarks of excellence were used to identify measures and actions, and possibly to set priorities, to (further) improve their environmental performance.

⁽¹⁾ According to Annex IV (B.e.) of the EMAS Regulation, the environmental statement shall contain 'a summary of the data available on the performance of the organisation against its environmental objectives and targets with respect to its significant environmental impacts. Reporting shall be on the core indicators and on other relevant existing environmental performance indicators as set out in Section C'. Annex IV — Section C states that 'each organisation shall also report annually on its performance relating to the more specific environmental aspects as identified in its environmental statement and, where available, take account of sectoral reference documents as referred to in Article 46.'

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The relevance and applicability of the best environmental management practices and benchmarks of excellence should be assessed by the organisation according to the significant environmental aspects identified by the organisation in its environmental review, as well as technical and financial aspects.

Elements of SRDs (indicators, BEMPs or benchmarks of excellence) not considered relevant to the significant environmental aspects identified by the organisation in its environmental review should not be reported or described in the environmental statement.

(7) A reference to the applicable legal requirements relating to the environment

EMAS requires legal compliance. The environmental statement is an opportunity to state how the organisation achieves this.

Though EMAS-registered organisations should have available an internal list of all relevant legal requirements, it is not necessary to include them all in the environmental statement. An outline is enough in this context.

(8) The name and accreditation or licence number of the environmental verifier and the date of validation

If the organisation publishes its environmental statement as part of another report, it should identify the statement as such and indicate that it has been validated by the environmental verifier. Although it is not mandatory to annex the declaration referred to in Article 25(9) to the EMAS environmental statement is it considered best practise to do so.

2.3.2. Core indicators and other relevant existing environmental performance indicators

2.3.2.1. Core indicators

Organisations have to report on the core environmental performance indicators (also known as key performance indicators) relevant to direct environmental aspects of the organisation. They should also report on other performance indicators relevant to more specific environmental aspects. They should take into account sectoral reference documents (SRDs) where these are available.

Core indicators apply to all types of organisations. They measure performance in the following key areas:

- Energy;
- Materials;
- Water;
- Waste;
- Land use with regard to biodiversity;
- Emissions.

Each core indicator is composed of a figure A (input), a figure B (output) and a ratio figure $R = (A/B)$.

(i) Figure A (input)

The Input (figure A) is reported as follows:

Energy:

- (a) Total annual energy consumption, expressed in MWh or GJ;
- (b) Percentage of (a) from renewable energy sources, **produced** by the organisation.

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The indicator (b) captures the percentage of annual energy consumption from renewable energy sources actually produced by the organisation. Energy purchased from an energy provider is not included under this indicator, and may be considered as part of 'green procurement' measures.

Materials:

Annual mass flow of different materials used, expressed in tonnes, excluding energy carriers and water.

The annual mass flow of different materials can be divided according to the use to which they are put. They might, for instance, include raw materials such as metal, wood or chemicals, or intermediate goods, depending on the activities of the organisation.

Water:

Total annual water consumption, expressed in m³.

This indicator requires reporting on the total annual amount of water the organisation consumes.

It is useful to clarify different types of water consumption, and to report on consumption according to the source of the water, e.g. surface water, ground water.

Other useful information might include the amount of waste water, waste water treated and reused, rainwater and grey-water recycling.

Waste:

This covers the total annual generation of

- waste (broken down by type) expressed in tonnes;
- hazardous waste, expressed in tonnes or kilograms.

Reporting on waste and hazardous waste is compulsory under the EMAS Regulation. It is good practice to break waste down by type for both streams. The results of the environmental review, including relevant legal obligations on reporting waste, should be taken as a basis. More detailed reporting could be done in line with the national waste classification system which implements the European List of Waste.

Reporting long lists of waste types could be counterproductive and confusing for communication purposes, so 'clustering' information according to the European List is an option. Waste could then be recorded by weight or volume for the different types, such as metals, plastic, paper, sludge, ash, etc. Adding information on the amount of waste that is recovered, recycled, used for energy production or landfilled, could also be useful.

Land use with regard to biodiversity:

Use of land, expressed in m² of built-up-area.

Biodiversity is a complex, relatively new issue among core indicators. Some of the factors driving loss of biodiversity (climate change, emission/pollution) are already covered by environmental aspects and related indicators in the EMAS Regulation, covering energy and water consumption, emissions, waste, etc.

Not all biodiversity indicators are relevant for all sectors/organisations, and not all can be implemented directly when starting to manage these aspects. The environmental review should give a good indication of relevant factors. The organisation should consider not just local impacts, but also direct and indirect

▼ M1

impacts on biodiversity more widely, e.g. extraction of raw material, procurement/supply chain, production and product, transport and logistics, marketing and communication. There is no single indicator relevant for all organisations.

The biodiversity indicator on land use, provided for in Annex IV of the EMAS Regulation, can be seen as common denominator. This only covers the premises of the organisation in terms of built-up area. However, it is highly recommended that sealed areas should also be included in the land use indicator.

Emissions:

- (a) Total annual emissions of greenhouse gases (CO₂, CH₄, N₂O, HFC, PFC, SF₆), expressed in tonnes of CO₂ equivalent;
- (b) Total annual air emissions (including at least SO₂, NO_x, PM), expressed in kilograms or tonnes.

Note: Because the impacts of these substances are different, they should not be added up.

The approach to quantifying emissions, especially greenhouse gases and air pollutants, needs to be clarified⁽¹⁾. As a starting point, organisations need to take into account existing legal requirements. This is clearly the case for organisations whose installations fall under the scope of the EU Emission Trading Scheme or the European Pollutant Release and Transfer Register Regulation. In other cases, European, globally recognised or national/regional common methodologies when available may be applied.

Although reporting on core indicators is only mandatory for direct aspects, an organisation has to take into account all significant environmental aspects, direct and indirect. So it is best to report significant indirect greenhouse gas emissions, preferably separately from direct emissions.

(ii) Figure B (output)

Overall annual output (figure B) is the same for all fields, but adapted for different types of organisation:

- (a) Production sector (industry): state the total gross value-added, expressed in million euro or total annual physical output, expressed in tonnes. Small organisations can state the total annual turnover or number of employees;
- (b) Non-production sector (service, administration): state the number of employees.

2.3.2.2. Core indicators and related elements of flexibility — rationale

It is important to understand the rationale behind the setting of indicators and the elements of flexibility provided in the EMAS Regulation (Annex IV of the EMAS Regulation).

Annex IV C.1 states that indicators must:

- (a) give an accurate appraisal of the organisation's environmental performance;
- (b) be understandable and unambiguous;
- (c) allow for a year on year comparison to assess the development of the environmental performance of the organisation;

⁽¹⁾ However, the EMAS regulation is not the right place to establish any methodology or tool for the development of emissions inventories and/or the quantification of emissions.

▼ **M1**

- (d) allow for comparison with sector, national or regional benchmarks as appropriate;
- (e) allow for comparison with regulatory requirements as appropriate.

Those are the main functions of the key performance indicators.

However, there is some **flexibility** over use of the indicators if that helps to achieve their function.

They are as follows:

- **Conditions for using the confidentiality clause, referred in Annex IV C.1** — ‘if disclosure would adversely affect the confidentiality of commercial or industrial information (...), the organisation may be permitted to index this information in its reporting, e.g., by establishing a base line year (with the index number 100) from which the development of the actual input/impact would appear.’ This clause could be invoked if the use of an indicator might disclose sensitive data that could enable a competitor to calculate the average price of production;
- **Conditions for NOT reporting on a specific core indicator provided in Annex IV** — Annex IV C2(a) and (b) on core indicators states that ‘where an organisation concludes that one or more core indicators are not relevant to its significant direct environmental aspects, that organisation may not report on those core indicators. The organisation shall provide justification to that effect with reference to its environmental review.’ For the sake of transparency, that justification should also be mentioned in the environmental statement. Since each core indicator is composed of a figure A for input, B for output and R for the ratio A/B, this element of flexibility applies for the **entire core indicator as such, including the specific relation A/B**;
- **Conditions for reporting using another indicator (A/B) INSTEAD OF a specific core indicator as in Annex IV** — if an organisation decides not to report under (a) specific indicator(s) as provided for in Annex IV, but chooses another instead, that indicator also has to provide for an input A and an output B. Using this flexibility should always be justified with reference to the environmental review, showing how the option chosen helps to better indicate the relevant performance. For this specific provision, the EMAS Sectoral Reference Document should be taken into account, if available for the sector under consideration. For example, instead of ‘number of employees’, a tourist accommodation service may opt for ‘number of guest-nights’, a school may choose ‘number of pupils’, a waste management organisation may use ‘amount of waste managed, in tons’, and a hospital may prefer ‘number of overnight patients’, etc.;
- **Conditions for using other elements to express input (A) and output (B), IN ADDITION to the specific core indicators provided in Annex IV** — An organisation may also use other elements to express the total annual input/impact in a given field and the overall annual output. For example, a service organisation may report using a measure of output (B) ‘number of employees’ for its administrative component and a different measure of output for the specific service provided;
- **Measurement units** — If those cited in Annex IV of the EMAS Regulation do not clearly reflect the environmental performance of an organisation and do not provide a clear picture for communication purposes, then alternatives may be used, as long as the organisation justifies this. It must be possible to

▼ M1

convert the units into those specified in the Regulation. Ideally, a footnote with a conversion should be added;

- **Currencies related to GVA or total annual turnover other than Euros** —
Though the EMAS Regulation refers to ‘million Euros’ as a measure of output for gross value-added, organisations based in countries that do not belong to the Eurozone can use their national currency.

2.3.2.3. Other relevant environmental performance indicators

The organisation must also report on its performance according to other relevant indicators related to significant environmental aspects mentioned in the environmental review.

Where sectoral reference documents (SRDs) as referred to in Article 46 of the EMAS Regulation are available for the specific sector, the assessment of the organisation's environmental performance shall take into account the relevant document.

Organisations should therefore consider the relevant sector-specific environmental performance indicators in the SRD when choosing the indicators ⁽¹⁾ to use for their reporting of environmental performance. They should take into account the indicators proposed in the corresponding SRD and their relevance with regards to the significant environmental aspects identified by the organisation in its environmental review. Indicators should only be taken into account where relevant to those environmental aspects that are judged as being most significant in the environmental review.

2.3.2.4. Local accountability

Local accountability is important in EMAS. That is why all EMAS registered organisations should report on the significant environmental impacts of each site as described in the Annex IV of the Regulation.

In any case, information on trends in emissions to air and water, water consumption, use of energy and the amount of waste should be provided at site level. When the multisite verification procedure described in Section 2.4.3 of this User Guide applies, such information can be provided at the level of groups of sites provided that those figures reflect accurately the trends at site level.

The organisation may index information only if there are confidentiality issues (see 2.3.2.2)

Furthermore, the fact that ongoing improvements can be achieved on permanent sites, but not on temporary sites needs to be taken into account. If this issue arises, it should be stated in the environmental review. The possibility of implementing alternative measures, including, for instance, other ‘soft’ (qualitative) indicators, should be taken into account. In any case, for sectors covered by EMAS sectoral reference documents, information concerning temporary sites may be considered.

⁽¹⁾ According to Annex IV (B.e.) of the EMAS Regulation, the environmental statement shall contain ‘a summary of the data available on the performance of the organisation against its environmental objectives and targets with respect to its significant environmental impacts. Reporting shall be on the core indicators and on other relevant existing environmental performance indicators as set out in Section C’. Annex IV — Section C states that ‘each organisation shall also report annually on its performance relating to the more specific environmental aspects as identified in its environmental statement and, where available, take account of sectoral reference documents as referred to in Article 46.’

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Table 7

Example of the use of core performance indicators in public administration organisations

Core indicator	Annual input/impact (A)	Overall annual output of the organisation (B)	Ratio A/B
Energy	Annual consumption MWh, GJ	Number of employees (non-production sector)	MWh/person and/or KWh/person
Materials	Annual consumption of paper in tonnes	Number of employees (non-production sector)	Tonnes/person and/or Number of paper sheets/person/day
Water	Annual consumption m ³	Number of employees (non-production sector)	m ³ /person and/or l/person
Waste	Annual generation of waste in tonnes Annual generation of hazardous waste in kilograms	Number of employees (non-production sector)	Tonnes of waste/person and/or Kg/person Kg of hazardous waste/person
Land use with regard to biodiversity	Use of land, m ² of built-up area (including sealed area)	Number of employees (non-production sector)	m ² of built-up area/person and/or m ² of sealed area/person
GHG emissions	Annual emissions of GHG in tonnes of CO ₂ e (CO ₂ e = CO ₂ equivalent)	Number of employees (non-production sector)	tonnes CO ₂ e/person and/or Kg CO ₂ e/person

Table 8

Example of the use of core performance indicators in the production sector

Core indicator	Annual input/impact (A)	Overall annual output of the organisation (B)	Ratio A/B
Energy	Annual consumption MWh, GJ	Total annual gross value added (million euros) (*) or Total annual physical output (tonnes)	MWh/million euro or MWh/tonne of product
Materials	Annual mass flow of the different materials used, in tonnes	Total annual gross value added (million euros) (*) or Total annual physical output (tonnes)	For each one of the different materials used: Material in tonnes/million euro or Material in tonnes/tonne product
Water	Annual consumption m ³	Total annual gross value added (million euros) (*) or Total annual physical output (tonnes)	m ³ /million euro or m ³ /tonne of product
Waste	Annual generation of waste in tonnes Annual generation of hazardous waste in tonnes	Total annual gross value added (million euros) (*) or Total annual physical output (tonnes)	Tonnes of waste/million euro or Tonnes of waste/tonne product Tonnes of hazardous waste/million euro or Tonnes of hazardous waste/tonne product

▼ **M1**

Core indicator	Annual input/impact (A)	Overall annual output of the organisation (B)	Ratio A/B
Land use with regard to biodiversity	Use of land, m ² of built-up area (including sealed area)	Total annual gross value added (million euros) (*) or Total annual physical output (tonnes)	m ² of built-up area and/or m ² of sealed area/million euro or m ² of built-up area and/or m ² of sealed area/tonne of product
GHG emissions	Annual emissions of GHG in tonnes of CO _{2e}	Total annual gross value added (million euros) (*) or Total annual physical output (tonnes)	Tonnes of CO ₂ equivalent/million euro or Tonnes of CO ₂ equivalent/tonne of product

(*) The official definition of gross value added is included in the Commission Regulation (EC) No 1503/2006 of 28 September 2006 implementing and amending Council Regulation (EC) No 1165/98 concerning short-term statistics as regards definitions of variables, list of variables and frequency of data compilation (OJ L 281, 12.10.2006, p. 15). Value added at basic prices can be calculated from turnover (excluding VAT and other similar deductible taxes directly linked to turnover), plus capitalised production, plus other operating income plus or minus changes in stocks, minus the purchases of goods and services, minus taxes on products which are linked to turnover but not deductible plus any subsidies on products received. Income and expenditure classified as financial or extraordinary in company accounts is excluded from value added. Hence, subsidies on products are included in value added at basic prices, whereas all taxes on products are excluded. Value-added is calculated 'gross' as value adjustments (such as depreciation) are not subtracted.

Note: The EMAS environmental statement can be used to report on specific core performance indicators, in particular energy and greenhouse gases emissions.

2.4. VERIFICATION AND VALIDATION PROCEDURE

“Verification” means the conformity assessment process carried out by an environmental verifier to demonstrate whether an organisation's environmental review, environmental policy, environmental management system and internal audit and its implementation fulfil the requirements of this Regulation.’

“Validation” means the confirmation by the environmental verifier who carried out the verification, that the information and data in an organisation's environmental statement and updated environmental statement are reliable, credible and correct and meet the requirements of the Regulation.’

2.4.1. Who is allowed to verify and validate EMAS?

Only accredited or licensed environmental verifiers can carry out these tasks.

“Environmental verifier” means: a conformity assessment body as defined in Regulation (EC) No 765/2008 [of the European Parliament and of the Council] ⁽¹⁾ or any association or group of such bodies, which has obtained accreditation in accordance with this Regulation; or any natural or legal person, or any association or group of such persons, which has obtained a licence to carry out verification and validation in accordance with this Regulation.’ ⁽²⁾

⁽¹⁾ Regulation (EC) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products and repealing Regulation (EEC) No 339/93 (OJ L 218, 13.8.2008, p. 30).

⁽²⁾ Reference to ‘this regulation’ in the EMAS Regulation refers to ‘the EMAS Regulation’

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- The organisation may contact the EMAS Competent Body in its Member State, or the EMAS Accreditation or Licensing Body responsible for the accreditation of EMAS verifiers for information about accredited environmental verifiers. If an organisation wants information about verifiers operating in their sector from Member States other than their own, this is available through the EU EMAS register ⁽¹⁾;
- The scope of an accredited or licensed environmental verifier is determined according to NACE codes, classification of economic activities set out in Regulation (EC) No 1893/2006 of the European Parliament and of the Council ⁽²⁾. When an organisation contracts an environmental verifier, it must ensure the verifier is accredited or licensed for the specific NACE code corresponding to the organisation's activities;
- Once the verifier is accredited or licensed in one Member State, he/she can operate in all EU countries ⁽³⁾;
- Information about accredited or licensed verifiers is available either from the Commission EMAS website or through the appropriate bodies in Member States.

Note: It is useful for the organisation to check whether the verifier has notified the information mentioned in Article 24 of the EMAS Regulation to the relevant accreditation or licensing body at least four weeks before verification to allow supervision by Accreditation or Licensing Body of the Member State where they wish to operate. In absence of supervision the Competent Body may refuse the registration of the organisation.

2.4.2. *What are the tasks of environmental verifiers?*

- (1) Verify if the organisation is in conformity with all the requirements of the EMAS Regulation with respect to the initial environmental review, environmental management system, environmental audit and its results and the environmental statement;
- (2) Check if the organisation complies with relevant Community, national, regional and local legal requirements relating to the environment;

Note 1: The verifier has to check if the organisation has established implemented and maintained procedure(s) for periodically evaluating compliance with applicable legal requirements ⁽⁴⁾. The verifier carries out an in-depth check of the legal compliance of a company. Part of this task is checking material evidence received that there is no breach of environmental legislation ⁽⁵⁾. Verifiers may use the findings of enforcement authorities. If they do not find evidence of non-compliance, this is stated in the environmental declaration and signed by the verifier. However, the duty of the verifier is to check that the requirements of the Regulation are satisfied through the usual audit techniques. This means that s/he will not be able to check compliance with legal requirements in the same way as enforcement authorities do.

⁽¹⁾ http://ec.europa.eu/environment/emas/emas_registrations/register_en.htm

⁽²⁾ Regulation (EC) No 1893/2006 of the European Parliament and of the Council of 20 December 2006 establishing the statistical classification of economic activities NACE Revision 2 and amending Council Regulation (EEC) No 3037/90 as well as certain EC Regulations on specific statistical domains (OJ L 393, 30.12.2006, p. 1).

⁽³⁾ Subject to the supervision requirements of the accreditation or licensing body of the Member State where they wish to operate, as specified in article 24 of the EMAS Regulation

⁽⁴⁾ Article A.9.1.2 'Evaluation of compliance' of Annex II of the Regulation, and Article A.10.2 non-conformity and corrective actions' of Annex II of the Regulation.

⁽⁵⁾ Article 13(2)(c) and verifying that there are no relevant complaints from interested parties, or that complaints have been positively solved (article 13(2)(d)).

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Note 2: If a verifier detects a case of non-conformity or non-compliance in the period between two registrations, the following options exist. He/she can report to the Competent Body that the organisation in question has to be deleted from the EMAS Register. Alternatively if the organisation has shown that it took timely measures in cooperation with the enforcement authorities to restore legal compliance, the verifier can still sign the declaration on verification and validation activities, as per Annex VII of the Regulation.

- (3) Check the organisation's continuous improvement of environmental performance;
- (4) Check the reliability, credibility and accuracy of the data included and used in the EMAS environmental statement and any environmental information to be validated;
- (5) Visit the organisation or site. The procedures for single-site and multisite organisations are different and it is important to stress the differences in the respective approaches. The EMAS Regulation (Art 25(4)) requires visiting for each organisation each time a validation/verification activity needs to take place:
 - (a) In case of a one-site-organisation that means that the verifier has to go on site every year;
 - (b) In case of small one-site-organisations and if the derogation for small organisations can be applied (Art 7) validation/verification activities have to be done after two and four years with the effect that the verifier is obliged to visit the site after two and four years;
 - (c) But in the case of a registered multisite-organisation, Art 25(4) still requires visiting the organisation at each time of verification/validation activities. Thus from a legal point of view this obligation can be seen as fulfilled when the verifier visits the organisation (maybe one site, maybe different sites) each year.

However, taking into account the tasks of the verifier and his statement regarding legal compliance the visiting program has to ensure that each site included in the registration number of this multisite-organisation is at least visited (completely verified) once within a cycle of 36 months. Without completely verifying each included site at least one time within this cycle, the verifier would not fulfil his tasks as required by the EMAS III Regulation. This also means that prior to the first registration of an organisation all sites of a multisite-organisation must be visited by the environmental verifier.

As an exception to this general rule, a sampling methodology can be used for the verification of multisite organisations. Provided that specific conditions are respected verifiers may visit within a cycle of 36 months a selection of sites that are representative for the organisation's activities and provide a reliable and trustworthy assessment of the organisation's overall environmental performance and compliance with the requirements of the EMAS Regulation.

This sampling methodology can only be used in mutual agreement with the environmental verifier and provided that the requirements defined in Section 2.4.3 and the implementation guidelines defined in Section 2.4.4. of this User Guide have been respected.

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Therefore, when an organisation requests the application of the sampling method, the verifier shall check the following elements to decide if the utilisation of a sampling method is appropriate:

- The organisation complies with the requirements mentioned in Section 2.4.3. of this User Guide;
- The implementation guidelines defined in Section 2.4.4 have been respected.

Furthermore the environmental verifier can decide to restrict sampling where site sampling is inappropriate for gaining sufficient confidence in the effectiveness of the management system due to specific facts. Such restrictions should be defined by the environmental verifiers with respect to:

- Environmental conditions or other relevant considerations associated with the organisation context;
- Variations in the local implementation of the management system to address the specificities of the different sites;
- The compliance record of the organisation (e.g. illustrated by enforcement authorities' records of non-compliance issues, the number of complaints and the evaluation of corrective actions).

Where this is the case, the verifier should document the specific reasons restricting the eligibility of organisations to use sampling.

The environmental verifier shall also evaluate the transparency of grouping of similar sites requested by the Section 2.4.3.2 and the impact of such grouping on the content of the environmental statement and on the overall environmental performance of the organization. The results and the findings of this evaluation shall be documented in the verification report.

The environmental verifier shall keep detailed records on each application of multisite sampling, justifying the sampling methodology and the parameters/criteria used, and demonstrating that the sampling is operating in accordance with this document.

- (6) If during the verification process cases of non-conformity or non-compliance are detected in a multisite organisation where the sampling method has been applied the verifier shall:

- investigate to which extent this non-conformity or non-compliance is site specific or whether other sites may be affected;
- require the organisation to identify all sites that could have been impacted, to take the necessary corrective actions in those sites and to adapt the management system in case he has indications that the non-conformity or non-compliance could point toward a deficiency of the overall management system potentially affecting other sites. In the case of non-conformities or non-compliance that cannot be corrected by taking timely corrective actions the verifier should report to the Competent Body that the organisation in question has to be suspended or deleted from the EMAS Register;
- require evidence of these actions and verify their effectiveness by enlarging the size of the sample to additional sites once the corrective actions have been taken; and

▼ M1

- validate the environmental statement and sign the declaration on verification and validation activities, as per Annex VII of the Regulation only when he is satisfied with the evidences that all sites comply with the requirements of the EMAS regulation and with all legal requirements related to the environment.
- (7) When performing the first verification the verifier shall, at a minimum check that the organisation fulfils the following requirements:
- (a) a fully operational environmental management system is in place;
 - (b) a fully planned audit programme is in place;
 - (c) a management review has been completed;
 - (d) if the organisation wants to use a sampling method for verification of its sites the provisions of chapter 2.4.3 and 2.4.4 of this Users guide are respected; and
 - (e) the EMAS environmental statement has been drafted and Sectoral Reference Documents have been taken into account, where available.

2.4.3. *Requirements for the utilisation of a sampling method for verification of multisite organisations*

2.4.3.1. General principles

Applying a sampling method may be appropriate for organisations with multiple sites in order to adapt verification effort without compromising confidence in legal compliance and complete implementation of the management system so that continuous improvements of the environmental performance at each site included in the scope the EMAS-registration can be achieved.

Where appropriate according to the criteria defined in Section 2.4.3.2 and upon request of the organisation, the environmental verifier(s) can agree to use a sampling method to verify multisite organisations.

2.4.3.2. Eligibility criteria for organisations

- (a) Procedures for sampling in a multisite organisation can only be applied to groups of similar sites;
- (b) The similarity of sites shall be determined in terms of being located in the same Member State, operating the same kind of activities, same procedure, same legal requirements, similar environmental aspects and impacts, a comparable significance of the environmental impacts and similar environmental management and control practices;
- (c) Group(s) of similar sites shall be established as part of the Environmental Management System and in mutual agreement with the environmental verifier. These groups shall be reflected in the internal audits and management review and mentioned in the Environmental Statement;
- (d) All sites not included in a group due to a lack of similarity shall be excluded from the scope of the sampling and must be verified individually;
- (e) All sites comprised in the EMAS registration shall be under the direct control and authority of the organisation;
- (f) The environmental management system shall be centrally controlled and administered and be subject to central management review. All sites comprised in the EMAS registration shall be subject to the organisation's environmental review and internal audit program and all shall have been internally audited (including auditing of the legal compliance) prior to the first registration.

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Furthermore the organisation must demonstrate its authority and ability to initiate organisational change in all sites comprised in the EMAS registration if required to achieve environmental objectives. The organisation must also demonstrate its ability to collect and analyse data (including but not limited to the items listed below) from all sites including headquarter:

- All elements included in the environmental review as defined in Annex 1 of the EMAS Regulation (Regulation EC No 1221/2009), which includes, inter alia, the identification of the applicable legal requirements, the environmental aspects or associated impacts and the environmental management practice and procedure;
- Environmental Management System documentation and system changes;
- Internal audit and evaluation of the results, including evaluation of compliance with legal requirements related to the environment;
- Management Review;
- Environmental performance;
- Complaints; and
- Evaluation of corrective actions.

(g) Sampling shall not be applied for:

- organisations to which incentives have been granted based on the requirement to verify all sites within a verification cycle;
- sites located in Third Countries;
- sites operating under fundamentally different legal environmental requirements;
- sites subject to legislations regulating pollutant emissions, hazardous waste or the use or storage of dangerous substances (e.g. Directive 2010/75/EU of the European Parliament and of the Council⁽¹⁾ (IED) or Directive 2012/18/EU of the European Parliament and of the Council⁽²⁾ (Seveso));
- sites presenting as part of their significant environmental aspects a risk of environmental accident.

Those sites shall be excluded from the scope of the sampling method and shall be verified individually.

(h) The organisation shall be active in the economic sectors in which the use of a sampling method is permitted under Section 2.4.3.3.

2.4.3.3. Economic sectors in which the use of a sampling method can be allowed

(a) The verification of multisite organisations by using a sampling method is allowed in the following sectors:

⁽¹⁾ Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (OJ L 334, 17.12.2010, p. 17).

⁽²⁾ Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC (OJ L 197, 24.7.2012, p. 1).

▼ **M1**

Table 9

Economic sectors in which the use of a sampling method is allowed

Economic Sector	NACE Code
Financial service activities, except insurance and pension funding	64
Insurance, reinsurance and pension funding, except compulsory social security	65
Legal and accounting activities	69
Management consultancy activities	70.2
Employment activities (e.g. human resources activities, temporary employment, employment placement)	78
Travel agency, tour operator and other reservation service and related activities	79
Office administrative and support activities	82.1
Pre-Primary and primary education	85.1 and 85.2
Libraries and archives	91

(b) Member States may implement pilot projects in other sectors mentioned in Table 10 in order to collect learning on the use of a sampling method. For that purpose, they shall notify the following information to the European Commission:

- a clear and unambiguous description of the organisation registering under EMAS, including a brief description of the organisation context and a summary of its activities, products and services and its relationship to any parent organisations as appropriate;
- the list of sites for which sampling should be applied;
- the groups of sites, including grouping methodology;
- the sites restricted from sampling and reason for restriction;
- a description of all the significant direct and indirect environmental aspects which result in significant environmental impacts of the organisation, including an explanation of how the nature of the impacts relates to the significant direct and indirect aspects and the identification of the significant environmental aspects associated with the sites for which sampling should be applied;
- the potential risks related to these environmental aspects;
- the environmental policy and a brief description of the environmental management system of the organisation, including its objectives and targets in relation to the significant environmental aspects and impacts; if the organisation has not EMS in place yet they should describe the EMS envisaged and its main targets;

▼ M1

- a reference to the applicable legal requirements relating to the environment.

Following this notification the European Commission informs the EMAS Committee of the planned pilot project and provides an opinion on its appropriateness. If the majority of the members of the EMAS Committee does not object within a period of two months the pilot projects may be initiated according to the following rules:

- The organisation follows all the requirements of the EMAS regulation regarding registration or renewal of registration;
- The sampling method should be established following the implementation guidelines described on the Section 2.4.4 of this User Guide.

The duration of those pilot projects shall not exceed three years. After successful pilot project implementation including a positive verification confirming that the organisation is in conformity with all the requirements of the EMAS Regulation the organisation and its sites can be registered with EMAS for three years, or four years if the derogation of Article 7 applies.

An evaluation of each project shall be presented to the EMAS Committee.

Based on the pilot project evaluation the EMAS Committee may recommend to include the sector in the list of sectors in which the use of a sampling method is allowed (Table 9).

Table 10

Economic sectors in which the use of a sampling method can be allowed in pilot projects

Economic Sector	NACE Code
Water collection, treatment and supply	36
Sewerage	37
Following activities part of retail trade	
Retail sale in non-specialised stores (e. g. supermarkets)	47.1
Retail sale of food, beverages and tobacco in specialised stores	47.2
Retail sale of textiles in specialised stores	47.51
Retail sale of cultural and recreation goods in specialised stores	47.6
Retail sale of clothing in specialised stores	47.71
Retail sale of footwear and leather goods in specialised stores	47.72
Retail sale of cosmetic and toilet articles in specialised stores	47.75
Retail sale of watches and jewellery in specialised stores	47.77
Following activities part of accommodation and food service	
Hotels and similar accommodation	55.1
Holiday and other short-stay accommodation	55.2

▼ **M1**

Economic Sector	NACE Code
Restaurants (but not mobile food service)	56.1
Beverage serving activities	56.3
Computer programming, consultancy and related activities	62
Real estate activities: buying, selling and rental of real estate (excluding operating real estate).	68
Advertising and market research	73
Other professional, scientific and technical activities	74
General public administration activities	84.11
Secondary, Higher and other education	85.3, 85.4, 85.5, 85.6
Residential care activities	87
Social work activities without accommodation	88
Creative, arts and entertainment activities	90
Museums and other cultural activities	91
Sports activities	93.1
Activities of membership organisations	94

2.4.4. Implementation guidelines regarding the use of a sampling method for the verification of multisite organisations

2.4.4.1. General principles

- (a) The organisation shall prepare a clear description of the scope suggested for applying the sampling method (the number of sites, a listing of all sites covered and a short description of their activities, as well as a mention of the sites excluded from the sampling);
- (b) The sites that the organisations suggests to include in the sampling method shall be divided in one or more groups of similar sites as defined in Section 2.4.3.2(c) of this User Guide. The similarity level of a group of sites must guarantee that the verification of a sample of sites will be highly representative of the whole group. As mentioned in Section 2.4.3.2(d), all sites not included in a group due to a lack of similarity shall be excluded from the scope of the sampling and must be verified individually;
- (c) The verifier shall agree with the suggested scope, define the character of each group of sites and draft a verification plan that shall include a description of the methodology and criteria used to define the groups of sites, the method that will be used to select the sites (for both the random and non-random parts) and the timing of verification. This verification plan shall also include the key activities and processes of each group of sites, the significant environmental aspects related to each group of sites, and an estimate of the risk levels of environmental accidents related to the these aspects.

▼ **M1****2.4.4.2. The sampling method**

The sampling method to select sites for on-site visits within the different groups of sites must comply with the requirements outlined below.

- (a) A representative sample shall be taken from each group of similar sites;
- (b) Sampling shall be partly selective based on the factors set out below and partly nonselective (random), and shall result in a representative range of different sites;
- (c) Within each group, at least 50 % of the sample of sites (rounded to the upper whole number) shall be selected at random (non-selective). The environmental verifier must document the procedure used to complete this random selection;
- (d) The methodology for the remaining selective sampling part shall take into account the provisions mentioned below. The methodology shall make sure that the differences among the sites selected is as large as possible and must include at least the following aspects:
 - Results of environmental review and internal site audits or previous verifications;
 - Records of incidents, complaints and other relevant aspects of corrective and preventive action;
 - Significant variations in the size of the sites;
 - Variations in, and the complexity of the management system and processes conducted at the sites;
 - Modifications since the last verification;
 - Maturity of the management system and knowledge of the organisation;
 - Differences in culture, language and regulatory requirements; and
 - Geographical dispersion.

Taking those aspects into account the verifier shall also aim at including in the sample as much as possible sites that have not been verified yet.

- (e) The minimum number of sites that should be included in the sample taken from each group of sites is derived by the following formula:
 - For the initial EMAS registration and for the renewal of registration this number shall be the **square root of the number of sites comprised in each group multiplied by 2** and rounded to the upper whole number (e.g. for a group of 100 sites: $\sqrt{100} \times 2 = 20$).
- (f) The size of the sample should be increased where the environmental verifiers' analysis of the sites included in the EMAS registration indicates special circumstances in respect of factors such as:
 - The size of the sites and number of employees (e.g. more than 50 employees on a site);
 - The complexity and risk for non-similar groups of sites;
 - Variations in environmental performance;
 - Variations in working practices and reporting of environmental impacts;
 - Variations in activities undertaken;

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- Significance and extent of environmental aspects and associated environmental impacts;
- Records of complaints and other relevant aspects of corrective and preventive action; and
- Results of internal audits and management review.

Example of multisite organisation verification using sampling method:

Taking the example of a company active in the clothes retail sector with the following sites:

- 100 stores > 150 m²
- 400 stores < 150 m²
- 3 warehouses of various size and content
- 1 headquarters

1. Sites grouping for application of the sampling method:

- Group 1: 100 stores > 150m²
- Group 2: 400 stores < 150m²
- Individual sites:
 - 3 warehouses
 - 1 headquarters

2. Verification prior to first registration:

- All individual sites (3 warehouses, 1 headquarters)
- Group 1: at least $\sqrt{100}$ stores $\times 2 = 20$ stores
- Group 2: at least $\sqrt{400}$ stores $\times 2 = 40$ stores

3. Verification prior to registration renewal:

- All individual sites should be visited
- Group 1: at least $\sqrt{100}$ stores $\times 2 = 20$ stores
- Group 2: at least $\sqrt{400}$ stores $\times 2 = 40$ stores

2.4.5. *Documentation in the environmental statement of the reasoning behind sampling size and methods*

The EMAS registered organisations for which the environmental verifier has used a sampling/verification plan, as mentioned in Section 2.4.3 of this User Guide, should document this sampling plan in their environmental statement. The environmental statement should (briefly) elucidate the reasoning behind the method used for grouping the sites and the selected sample size. The environmental statement shall contain a list of all sites and clearly distinguish between visited and non-visited sites.

2.5. REGISTRATION PROCEDURE

The EMAS III Regulation provides some general rules on registration. Member States may adapt these in their own environmental legislation.

▼ **M1**

Once the system has been implemented, verified and the EMAS environmental statement validated, the organisation's next step is to apply to the Competent Body for registration.

2.5.1. *Which Competent Body does an organisation use?*

Table 11

Competent Bodies ⁽¹⁾ for different registrations

Different situations	Where to register
Organisation with one site in EU	Competent Body officially designated by the Member State in which the organisation is located.
Organisation with multiple sites inside one Member State (Federal State or similar)	Designated Competent Body by the Member State for this purpose.
Registration of organisations with multiple sites in several EU Member States (EU Corporate Registration)	In case of EU Corporate Registration, the location of the headquarters or management centre (in that order of preference) of the organisation is decisive in determining the Leading Competent Body.
Registration of organisations with one or multiple sites in third countries (Third Country Registration)	If a Member State decides to provide for Third Country Registration, according to article 3.3 of the EMAS Regulation, registration in that specific Member State will, in practice, depend on the availability of accredited verifiers. The potential verifier should be accredited in the specific Member State that provides for third country registration, for that specific third country and for the specific economic sector(s) involved (determined based on NACE codes).
Registration of an organisation with multiple sites in Member States and in Third Countries (Global Registration)	The Member State where the Competent Body in charge of this procedure will be located is established on the basis of conditions in the following order of preference: <ol style="list-style-type: none"> (1) When the organisation has headquarters in a Member State that provides for Third Country Registration, the application should be submitted to the Competent Body in that Member State; (2) If the headquarters of the organisation is not located in a Member State that provides for Third Country Registration, but it has a Management Centre there, the application should be submitted to the Competent Body in that Member State; (3) If the organisation that applies for Global registration has neither headquarters nor a Management Centre in a Member State that provides for Third Country Registrations, then the organisation has to set up an 'ad hoc' management centre in a Member State that provides for Third Country Registration, and the application should be submitted to the Competent Body in that Member State. <p><i>Note:</i> If more than one Member State is covered by the application, the coordination procedure between the involved Competent Bodies, as established in section 3.2 (of the Guide on EU Corporate Registration, Third Country and</p>

▼ **M1**

Different situations	Where to register
	Global Registration under Regulation (EC) No 1221/2009), must be followed. Then that Competent Body will act as Leading Competent Body under the EU Corporate aspects of the procedure.

Note: As far as registration is concerned, the relevant structures can differ from one Member State to another. Usually, there is one Competent Body per Member State; however, in some Member States it is common to have different Competent Bodies at regional level.

(¹) A list with contact details of Competent Bodies, Accreditation Bodies or environmental verifiers in the EU Member States and Norway can be found under: http://ec.europa.eu/environment/emas/emas_contacts/competent_bodies_en.htm

2.5.2. Documents and/or requirements for registration

The application must be submitted in the official language of the Member State in which the organisation wants to be registered. It must include:

- (1) Validated EMAS environmental statement (electronic or printed version);
- (2) Declaration signed by the environmental verifier confirming that the verification and validation were carried out in accordance with the Regulation (Annex VII of the Regulation);
- (3) Completed application form (Annex VI of the Regulation), with information about the organisation, sites and the environmental verifier;
- (4) Evidence of payment of fees, if applicable.

2.5.3. Conditions to be met prior to/during the EMAS registration process

- (1) Verification and validation conducted in accordance with the Regulation;
- (2) Application form fully filled in, all supporting documents in order;
- (3) Competent Body satisfied with material evidence that there is no evidence of breach of legal requirements relating to the environment. A written report from the enforcement authority that there is no indication of such a breach would be suitable material evidence;
- (4) No relevant complaints from interested parties; or complaints resolved satisfactorily;
- (5) Competent Body satisfied, on the basis of evidence received, that the organisation meets all the requirements of the Regulation;
- (6) If applicable, the Competent Body has received the required fee.

It is considered best practise for a Competent Body take a final decision on the EMAS registration of an applying organisation within 3 months after a successful application. Only in exceptional cases a longer period to reach a final registration decision can be justified.

2.5.4. Suspension or deletion of organisations from the register

This may occur:

- if a Competent Body has reasons to believe that an organisation does not comply with the Regulation;
- if a Competent Body receives a written supervision report from the Accreditation or Licensing Body with evidence that the environmental verifier did not carry out duties in line with the Regulation provisions;

▼ **M1**

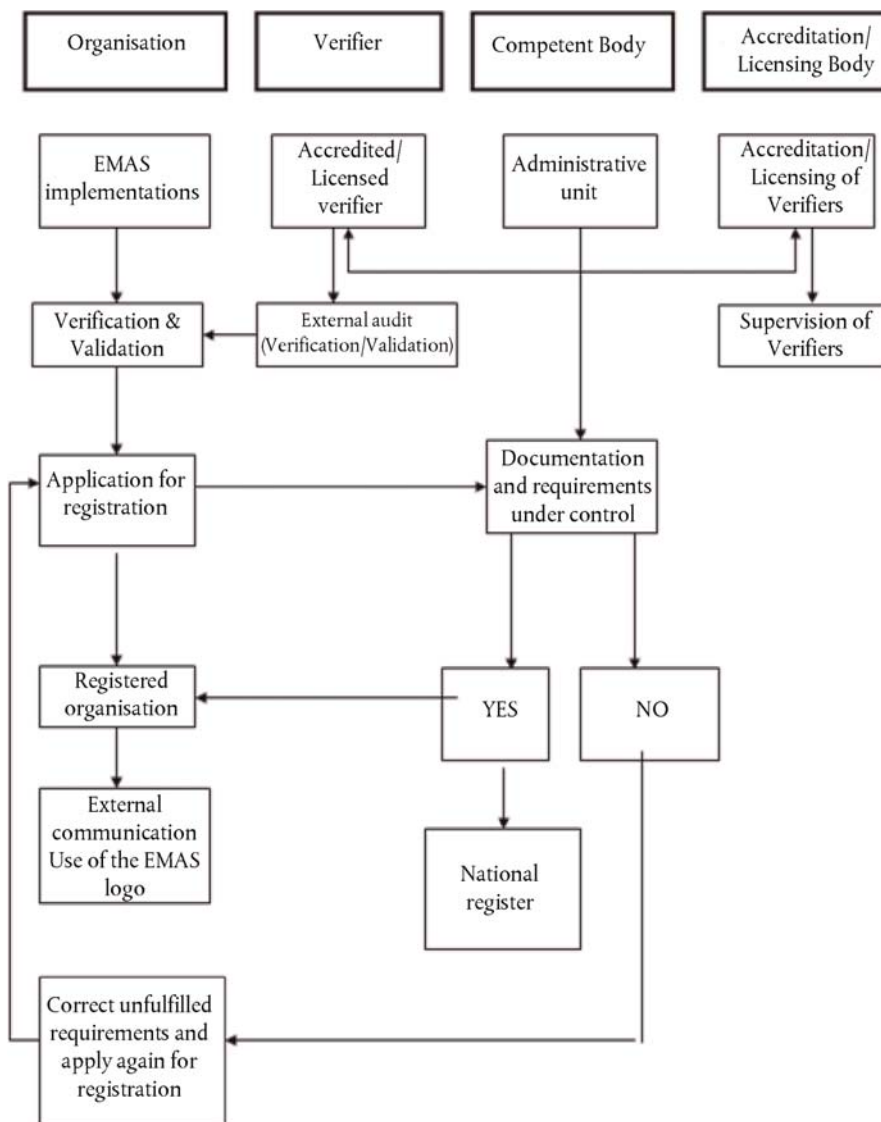
- if an organisation fails to submit any of the following documents to the Competent Body within two months of being required to do so: validated environmental statement, updated environmental statement or a declaration on verification and validation activities signed by the verifier (Annex VII), the application form (Annex VI);
- if a Competent Body is informed of a breach of legal requirements on the environment, through a written report from the enforcement authority.

The Competent Body can lift the suspension only once it receives satisfactory information regarding the organisation's compliance with the Regulation.

The EMAS Regulation does not specify the duration of suspensions, and it is therefore up to the respective Competent Bodies to decide on these. However, they should not exceed 12 months.

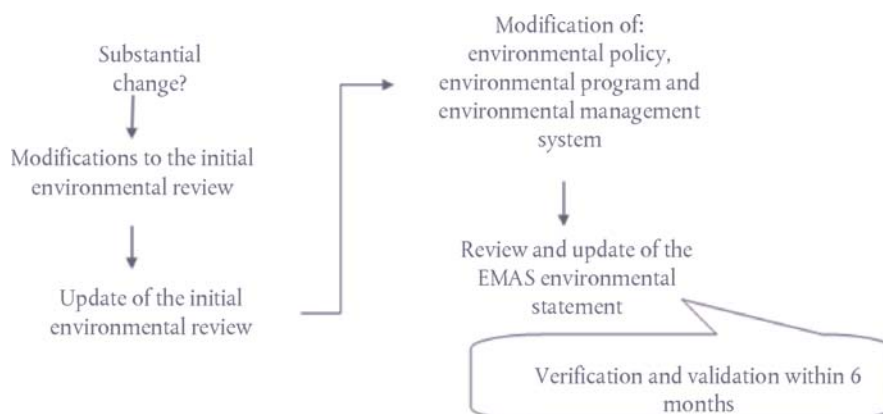
Figure 10

EMAS pillars. Registration procedure



▼ **M1****2.6. SUBSTANTIAL CHANGES**

An organisation making changes in its operation, structure, administration, process, activities, products or service, must take into account the environmental impact of such changes, as these may affect the validity of the EMAS Registration. Minor changes may be absorbed, but substantial changes will require an updated environmental review, policy, programme, management system and statement. All updated documents have to be verified and validated within six months. After validation, the organisation has to submit the changes to the Competent Body, using Annex VI of the Regulation.

*Figure 11***Flow chart on dealing with substantial changes under EMAS****3. USE OF THE EMAS LOGO****What is the EMAS logo?**

The EMAS logo is a graphic image, associated with:

- Correct implementation of the EMAS scheme;
- Commitment to continuous environmental improvement;
- Active involvement of employees;
- Credibility of information on the organisation's environmental performance;
- Proven legal compliance.

The EMAS logo is a good way to show that the organisation is environmentally friendly.

3.1. HOW TO USE THE EMAS LOGO

Only organisations with a valid EMAS registration can use the EMAS logo.

- The logo must always bear the organisation's registration number, except for promotional and marketing activities of the EMAS scheme;
- Only the official logo is valid;
- If the organisation has several sites, not all of which are included in the registration, it may only use the logo for registered sites and shall not give the impression that the entire organisation is registered;
- The environmental statement should preferably bear the logo.

▼ **M1**

Figure 12
EMAS logo



Verified environmental management
 Reg. No. XXXX

The use of the EMAS logo for promotional activities and marketing of the scheme

Only in this situation the EMAS logo can be used without the registration number. Competent Bodies, Accreditation and Licensing Bodies and other stakeholders may use the logo.

3.2. HOW NOT TO USE THE EMAS LOGO

- On products or packaging, to avoid confusion with product labels;
- With comparative claims concerning other activities and services.

The logo must not be used in ways that may cause confusion with other labels for products or services.

Table 12

Use of EMAS logo: Examples

No	Example or situation	Allowed
1	Logo on a registered organisation's letter, envelope, business card, corporate uniform, corporate PC, bag, EMAS flag and other similar use of the EMAS logo, for promotional purposes at corporate level.	YES, together with registration number, since it promotes the EMAS registered organisation.
2	Logo on a document's header, submitted to authorities, incorporating validated data concerning the organisation's performance.	YES, together with registration number.

▼ M1

No	Example or situation	Allowed
3	Logo on a folder containing a report on a partially registered organisation.	YES, together with registration number, but the logo must mention only the registered sites.
4	Logo on a product with the message 'ecological product'.	NO, it might be confused with ecolabels for products.
5	Logo in the (in-flight) magazine of a registered airline, along with some validated information.	YES, together with registration number.
6	Logo on an aeroplane, on a train, on a bus, on a corporate car or truck, or on a metro of an EMAS registered company.	YES, together with registration number.
7	Logo placed on a registered distribution company's truck along with the company name, beside a validated statement saying 'We have reduced the average diesel consumption of our truck fleet by 20 % to x litres per 100 km between 2009 and 2012'.	YES, together with registration number.
8	Logo stamped on a non-registered tourist accommodation photo, included in registered travel agency catalogue.	NO, the use of the logo is confusing. It can be only be applied to the travel agency.
9	Logo stamped on a registered travel agency catalogue, containing validated information on sustainable tourism measures, implemented by the organisation.	YES, together with registration number.
10	Logo placed on an internal hand-out for employees, containing exclusively validated information on the operation of the environmental management system.	YES, the logo does not need the registration number, since it is an internal communication for general awareness raising purposes.
11	Logo on the newsletter or the cover of a brochure for customers and suppliers, content taken from the validated environmental statement.	YES, together with the registration number, because it is a communication to the general public using concrete examples of a specific EMAS registered company, coming from that registered organisation.
12	Logo within the annual environmental report of a holding that includes registered and non-registered sites, heading the chapter on the validated environmental statement in which the EMAS registered sites of the organisation are clearly identifiable.	YES, together with registration number(s). If the registration is a corporate registration in which several sites reside under the same number, that number must be used. If all EMAS sites are registered individually, the registration numbers of the individual sites must be recognisable.
13	Logo as an underlying graphic for a compilation of validated environmental data in a business report.	YES, together with registration number.
14	A general brochure of a governmental organisation addressing how EMAS registered organisations in general can best recycle or process their various fractions of waste.	YES, without a registration number, since this brochure is for the purpose of raising awareness in general, it is not linked to a registration number.
15	Logo beside validated environmental information on an organisation's website.	YES, together with registration number.

▼ M1

No	Example or situation	Allowed
16	Logo on exhibition stands of the registered organisation, promoting the registered organisation as such.	YES, together with registration number.
17	Logo on exhibition stands of a registered organisation but promoting EMAS as Environmental Management System in general.	YES, the logo does not need registration number, since it is for promotional purposes.
18	Logo in a newspaper, as an underlying graphic in a joint advertisement of two companies announcing their environmental cooperation along the supply chain (one is registered, the other is not).	NO, it is confusing, as one of the organisations is not registered.
19	Logo without a registration number used for promotional purposes by a non-registered organisation.	YES, but only for EMAS promotion activities and not for the promotion of the organisation itself.
20	Logo on tickets of a registered municipal transport organisation	YES, the logo does not need registration number, if used to promote EMAS in general. If the logo on the tickets is promoting a specific EMAS registered organisation it would have to carry the registration number of that specific organisation.

4. HOW TO MOVE FROM OTHER ENVIRONMENTAL MANAGEMENT SYSTEMS TO EMAS

There is a growing number of environmental management systems all over the EU, designed to cover needs in specific areas or sectors of activity. Local or regional administrations may use such systems to improve sustainability or environmental performance. The most relevant of these systems are available via a link in an annex to this guide.

The EMAS Regulation mentions the possibility of assessing the level of equivalence between it and other systems. Official recognition of some or all parts of other environmental management systems can ease an organisation's transition to EMAS. The procedure is as follows:

- (a) Member States must submit to the Commission a written request for the recognition of the environmental management system or part of it;
- (b) The relevant parts of the environmental management system and the elements corresponding to EMAS must be analysed and specified in the request, providing evidence of equivalence to EMAS;
- (c) The Commission submits the proposal to the EMAS Committee (established in accordance with Article 49 of the Regulation);
- (d) The EU's Official Journal publishes details of the recognised environmental management system or parts of it, after the Commission approves them.

Organisations that have implemented a recognised environmental management system or parts of it do not have to repeat those parts already recognised when they go for EMAS.

Each Member State has its own procedures to deal with applications for recognition. For more information on these, ask the relevant Competent Body.

▼ M1**5. EMAS III FOR SMALL AND MEDIUM ENTERPRISES (SMES)**

“Small organisations” means:

- (a) micro, small, and medium-sized enterprises as defined in the Commission Recommendation 2003/361/EC of 6 May or;
- (b) local authorities governing less than 10 000 inhabitants or other public authorities employing fewer than 250 persons and having an annual budget not exceeding 50 million Euros, or an annual balance sheet not exceeding 43 million Euros, including all of the following:
- (c) government or other public administrations, or public advisory bodies at national, regional or local level;
- (d) natural or legal persons performing public administrative functions under national law, including specific duties, activities or services in relation to the environment; and
- (e) natural or legal persons having public responsibilities or functions, or providing public services, relating to the environment under the control of a body or person referred to in point (b).’

Verification and internal audit period

SMEs can have the full verification carried out over four years instead of three. The time period for internal audit can also be extended, from one year to two. The same applies to the environmental statement. However, the organisation must forward the non-validated updated statement to the Competent Body each year all the same.

To benefit from this option, the organisation must apply to the Competent Body, which can extend the time period allowed if the verifier has confirmed the conditions of Article 7:

- that there is no significant environmental risk;
- that there have been no substantial changes in the organisation;
- that the organisation does not contribute to significant local problems.

Verification and validation

Environmental verifiers should take into account the characteristics of small organisations to avoid burdening them unnecessarily. SMEs often have scant resources and means, so they are less able to cope with extensive reporting and lengthy procedures. The verifier should also take into account other characteristics of SMEs, such as multifunctional staff, on-the-job training and the ability to adapt rapidly to change. The main goal is to achieve objective evidence that the EMAS system is effective and that the procedures are scaled to the size and complexity of the business, the competence of its staff and the nature of the environmental impact.

Fees

It is up to each Member State to set fees for EMAS registration procedures. Some do not charge fees. In any case, the Regulation states that fees must be reasonable and proportionate to the organisation's size.

▼ M1**Technical and financial support**

Technical and financial support for the EMAS scheme in general, and for SMEs in particular, has to be provided on two levels. Member States have to make available information on legal requirements and the enforcement authorities, as well as technical information on accredited or licensed verifiers, registration procedures, grants and financial support. The Commission provides information and paves the way for organisations that want to register for EMAS by recognising parts of other environmental management systems or by integrating EMAS into other EU policies.

‘EMAS Easy’ Method

Although the ‘EMAS Easy’⁽¹⁾ method is not mentioned in the Regulation, it should be taken into account as a tool available for small organisations. It helps them to implement all EMAS requirements quickly, cheaply and simply.

Cluster and step-by-step approach

Local authorities, in cooperation with chambers of commerce, industrial associations and others, can provide support for SMEs wishing to implement EMAS by facilitating a cluster and step-by-step approach.

A ‘cluster’ is a way of implementing EMAS as a group, useful for organisations in the same sector of activity or located in the same geographical area. They can share the implementation process and then proceed with individual registration.

The step-by-step approach can be tailored to the needs in each Member State. It could be linked, for example, to general projects or plans, to promote EMAS implementation in a municipality or in an area where different entities plan to encourage organisations to implement good environmental practice in different phases or ways.

Example: A good example of this approach could be to take a group of SMEs in an industrial area or in a region lead by the municipality, in cooperation with a chamber of commerce and industrial associations operating in the area. The organisations involved can take part in a step-by-step EMAS implementation plan. The first step would be to facilitate all companies in conducting an EMAS environmental review. The second step would involve designing and implementing good management practices. The third step would be to put in place a formal environmental management system such as EN ISO 14001. Finally, the companies could go for EMAS as the premium management system.

This concept could be an opportunity to develop promotional plans in groups of organisations, in sectors of activity or in specific territories where there is interest in promoting the implementation of environmental management systems, formal or informal, before finally going for full EMAS.

⁽¹⁾ Additional information about the EMAS Easy method can be found via: http://ec.europa.eu/environment/emas/join_emas/what_if_i_am_an_sme_en.htm

▼ M1*ANNEX II*

More EMAS related information to be used in conjunction with this users guide can be found at the Commission's EMAS web pages <http://ec.europa.eu/environment/emas/> where you can find:

- Regulation (EC) No 1221/2009, of 25 November 2009 — <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:342:0001:0045:EN:PDF>
- Communication from the Commission — Establishment of the working plan setting out an indicative list of sectors for the adoption of sectoral and cross-sectoral reference documents, under the EMAS Regulation — <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52011XC1208%2801%29>
- EMAS Sectoral Reference Documents for the priority sectors identified — http://ec.europa.eu/environment/emas/emas_publications/sectoral_reference_documents_en.htm
- Fact sheets about 20 environmental management system approaches (from step to step towards EMAS) — http://ec.europa.eu/environment/emas/emas_publications/publications_studies_en.htm#Step up to EMAS
- Index with all Competent Bodies and Accreditation or Licensing Bodies involved in EMAS — http://ec.europa.eu/environment/emas/emas_contacts/competent_bodies_en.htm
- EMAS documents — http://ec.europa.eu/environment/emas/emas_publications_en.htm
- EMAS Fact sheets on specific subjects where the need for more detailed information has been identified — http://ec.europa.eu/environment/emas/emas_publications/publications_studies_en.htm#Fact Sheets
- EMAS Global: Commission Decision 2011/832/EU of 7 December 2011 concerning a guide on EU corporate registration, third country and global registration under Regulation (EC) No 1221/2009 of the European Parliament and of the Council on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS) — <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1512397918431&uri=CELEX:32011D0832>
- http://ec.europa.eu/environment/emas/join_emas/emas_global_en.htm