

WE-EEN

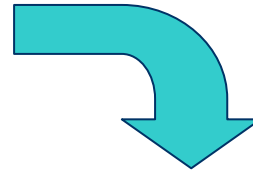


WE -EEN
*Wizard of the
Environment:
the Enterprise
Europe Network*

Environmental Management
Systems

Giovanni Franco - Sogesca ltd

UNI EN ISO 14001



Environmental
impacts



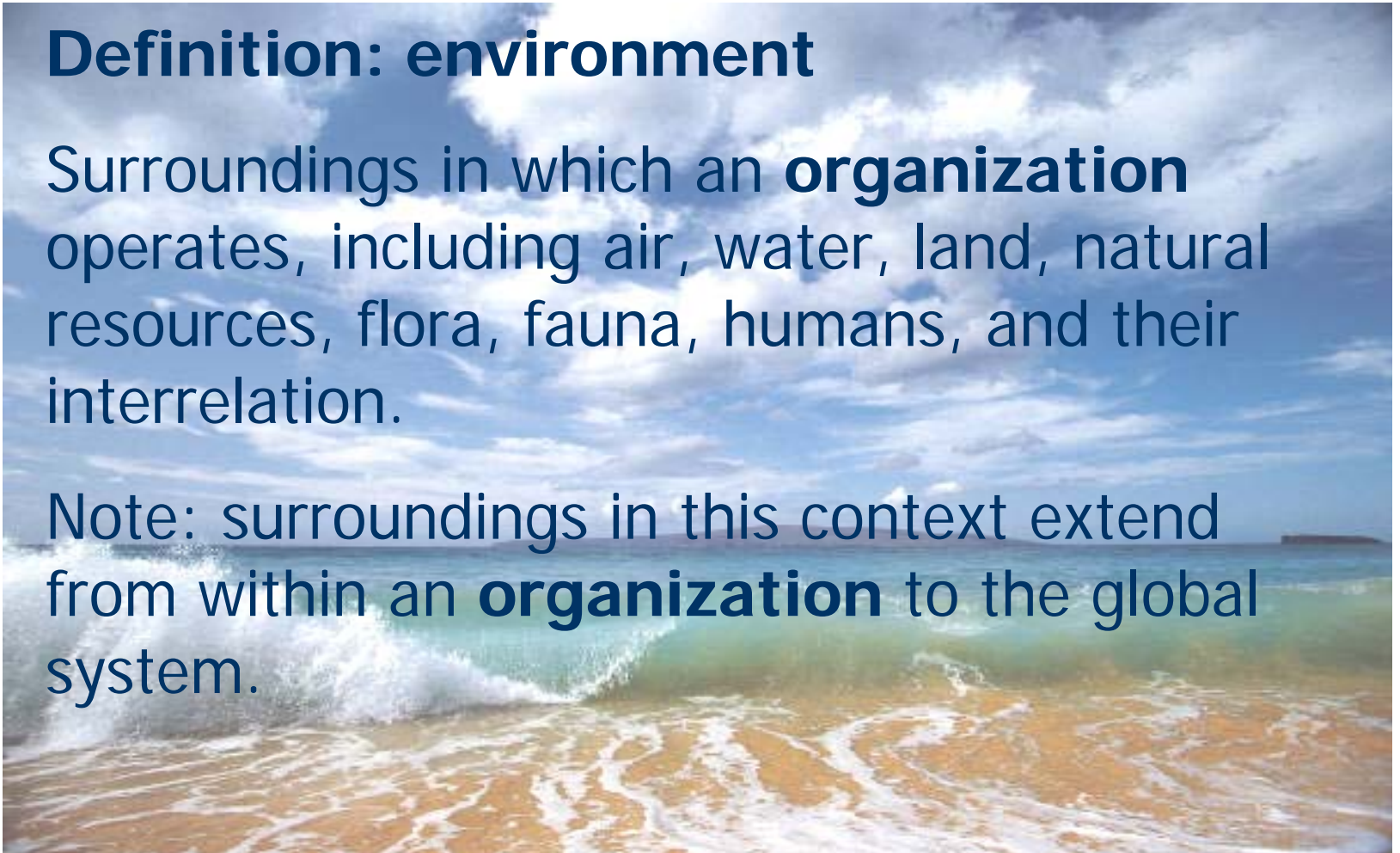
Introduction:

The overall aim of this International Standard is to support environmental protection and prevention of pollution in balance with socio-economical requirements.

Definition: environment

Surroundings in which an **organization** operates, including air, water, land, natural resources, flora, fauna, humans, and their interrelation.

Note: surroundings in this context extend from within an **organization** to the global system.



Introduction

International Standards covering environmental management are intended to provide organizations with the elements of an effective environmental management system (EMS) that can be integrated with other management requirements and help organizations to achieve environmental and economic goals.

Why an EMS?

May an EMS be integrated with other MS, existing rules?

Introduction

This International Standard specifies requirements for an environmental management system to enable an organization to develop and implement a policy and objectives which take into account legal requirements and information about significant environmental aspects. It is intended to apply to all types and sizes of organization (...).

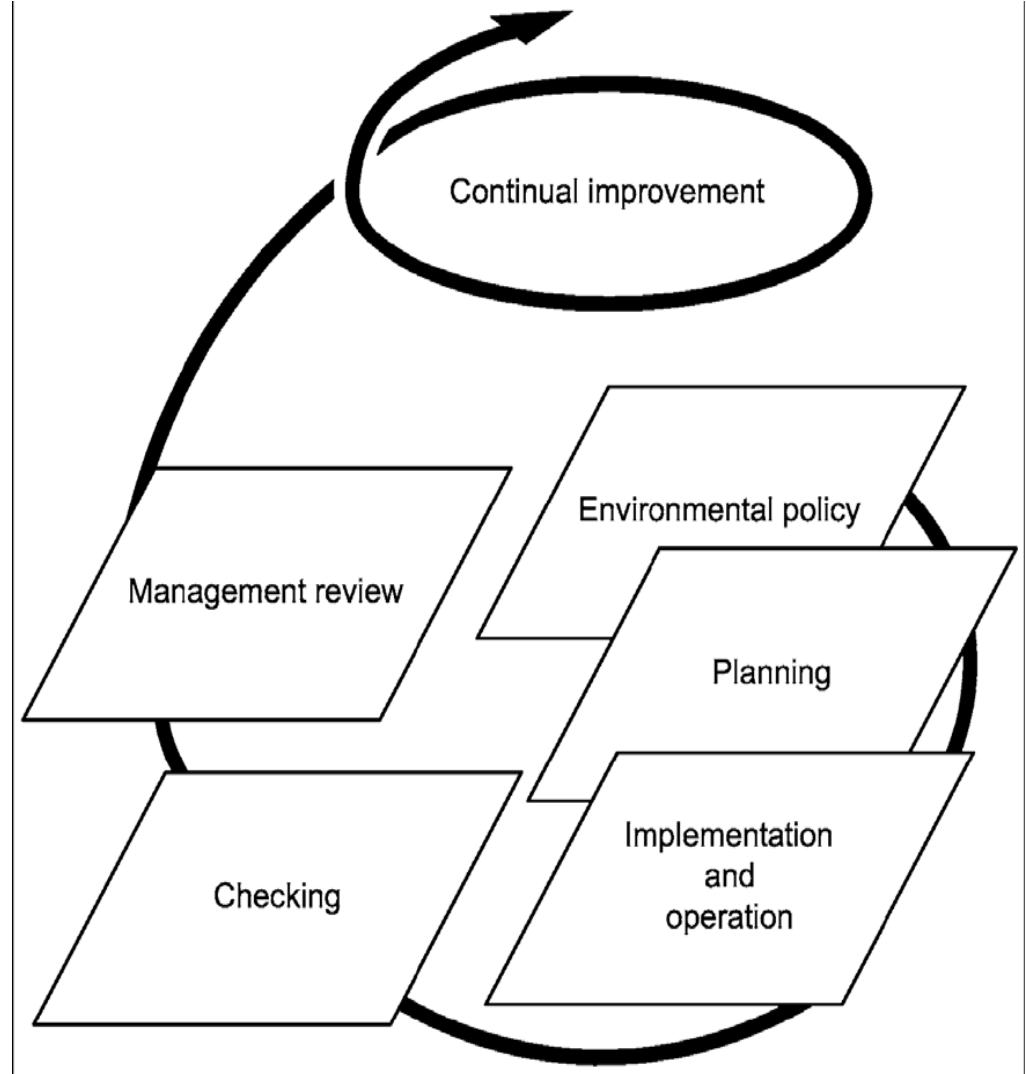
What's in ISO 14001 and EMAS Reg.?

Which kind of organisations may apply for ISO 14001 and EMAS certifications?

Introduction

The EMS has to be planned according to the following scheme in order to provide “continual improvement” of EMS performances.

How does ISO 14001 run?



Introduction

ISO 14001 does not establish absolute requirements for environmental performance beyond the commitments.

Thus, two organizations carrying out similar operations but having different environmental performance can both conform to its requirements.

How does ISO 14001 run?

Introduction

In order to achieve environmental objectives, the environmental management system can encourage organizations to consider implementation of the best available techniques, where appropriate and where economically viable, and fully take into account the cost-effectiveness of such techniques.

Are investments mandatory?

Introduction

This International Standard does not include requirements specific to other management systems, such as those for quality, occupational health and safety, financial or risk management, though its elements can be aligned or integrated with those of other management systems. It is possible for an organization to adapt its existing management system(s) in order to establish an environmental management system.

May an EMS be integrated with other MS and existing rules?

Introduction

The level of detail and complexity of the environmental management system, the extent of documentation and the resources devoted to it depend on a number of factors, such as the scope of the system, the size of an organization and the nature of its activities, products and services.

The ISO 14001 does establish quantitative requirements in terms of number of documents, pages, etc.?

Scope

It is up to the organisation to define (and document) the extent (activities, areas, plants ...) to which the EMS shall apply.

It is not admitted to exclude “bad parts” of the organisation’s activities/plants.

All the requirements in this International Standard are intended to be incorporated into the EMS.

The ISO 14001 does establish quantitative requirements in terms of number of documents, pages, etc.?

May I exclude «bad parts»?

Scope

ISO 14001 (...) applies to those environmental aspects that the organization identifies as those which it can control and those which it can influence. It doesn't state specific environmental performance criteria.

Which are the environmental aspects which the ISO 14001 deals with.?

Terms and definitions (selection of)

Continual improvement:

Recurring process of enhancing the EMS in order to achieve improvements in overall environmental performance consistent with the organization's environmental policy.

Note: the process need not take place in all areas of activity simultaneously.

Terms and definitions (selection of)

Environmental aspect:

Element of an organization's activities or products or services that can interact with the environment.

Note: a significant environmental aspect has or can have a significant environmental impact

Environmental impact:

Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's environmental aspects.

Terms and definitions (selection of)

Environmental management system:

Part of an organization's management system used to develop and implement its environmental policy and manage its environmental aspects

Note 1: management system is a set of interrelated elements used to establish policy and objectives and to achieve those objectives.

Note 2: A management system includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources.

Terms and definitions (selection of)

Environmental performance:

Measurable results of an organization's management of its environmental aspects.

Note: in the context of environmental management systems (3.8), results can be measured against the organization's environmental policy, environmental objectives, environmental targets and other environmental performance requirements.

Terms and definitions (selection of)

Environmental target:

Detailed performance requirement, applicable to the organization or parts thereof, that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives.

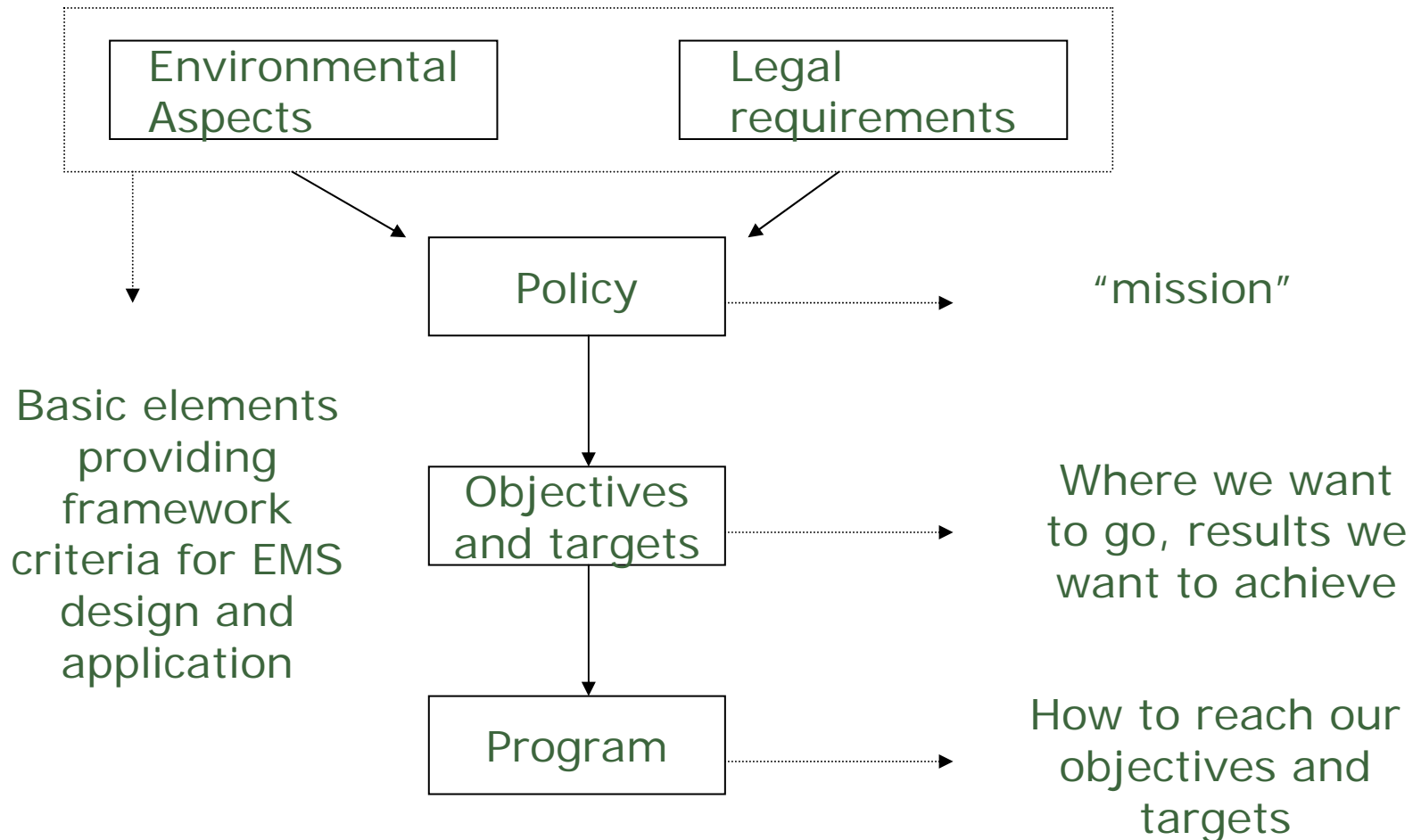
Terms and definitions (selection of)

Organization:

Company, corporation, firm, enterprise, authority or institution, or part or combination thereof, whether incorporated or not, public or private, that has its own functions and administration.

Note: For organizations with more than one operating unit, a single operating unit may be defined as an organization.

ISO 14001 requirements: policy and planning (§ 4.3.1)



ISO 14001 requirements: policy and planning

Environmental policy

Top management shall define the organization's environmental policy and ensure that, within the defined scope of its environmental management system, it:

- a) is appropriate to the nature, scale and environmental impacts of its activities, products and services;
- b) includes a commitment to continual improvement and prevention of pollution;
- c) includes a commitment to comply with applicable legal requirements and with other requirements to which the organization subscribes which relate to its environmental aspects;
- d) provides the framework for setting and reviewing environmental objectives and targets;
- e) is documented, implemented and maintained;
- f) is communicated to all persons working for or on behalf of the organization; and
- g) is available to the public.

ISO 14001 requirements: policy and planning

Environmental aspects

The organization shall establish, implement and maintain a procedure(s)

a) to identify the environmental aspects of its activities, products and services within the defined scope of the environmental management system that it can control and those that it can influence taking into account planned or new developments, or new or modified activities, products and services, and

b) to determine those aspects that have or can have significant impact(s) on the environment (i.e. significant environmental aspects).

The organization shall document this information and keep it up to date.

The organization shall ensure that the significant environmental aspects are taken into account in establishing, implementing and maintaining its environmental management system.

Environmental aspects - examples



Oils spill to the seawaters

Chemicals storage



Environmental aspects - examples



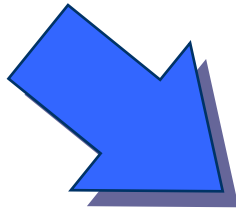
Oils spills from maintenance



Waste storage

ACTIVITIES

Environmental review



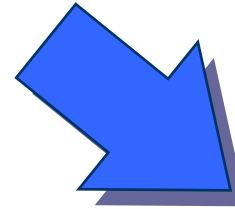
Direct and indirect environmental aspects

Direct Environmental Aspect:

Under the total and direct control of the organisation

Indirect Environmental Aspect:

Aspects that can be influenced by the organisation



IMPACTS

ISO 14001 requirements: policy and planning

Legal and other requirements

The organization shall establish, implement and maintain a procedure(s)

- a) to identify and have access to the applicable legal requirements and other requirements to which the organization subscribes related to its environmental aspects, and
- b) to determine how these requirements apply to its environmental aspects.

The organization shall ensure that these applicable legal requirements and other requirements to which the organization subscribes are taken into account in establishing, implementing and maintaining its environmental management system.

ISO 14001 requirements: policy and planning

Objectives, targets and programme(s)

The organization shall establish, implement and maintain documented environmental objectives and targets, at relevant functions and levels within the organization.

The objectives and targets shall be measurable, where practicable, and consistent with the environmental policy, including the commitments to prevention of pollution, to compliance with applicable legal requirements and with other requirements to which the organization subscribes, and to continual improvement.

When establishing and reviewing its objectives and targets, an organization shall take into account the legal requirements and other requirements to which the organization subscribes, and its significant environmental aspects. It shall also consider its technological options, its financial, operational and business requirements, and the views of interested parties.



EMS Implementation and operation (§ 4.4)



Who has to do it?

➤ *How?*

➤ *When?*



Resources, roles, responsibility and authority

Management shall ensure the availability of resources essential to establish, implement, maintain and improve the environmental management system. Resources include human resources and specialized skills, organizational infrastructure, technology and financial resources.

Roles, responsibilities and authorities shall be defined, documented and communicated in order to facilitate an effective environmental management.

The organization's top management shall appoint a specific management representative(s) who, irrespective of other responsibilities, shall have defined roles, responsibilities and authority for:

- a) ensuring that an environmental management system is established, implemented and maintained in accordance with the requirements of this International Standard;
- b) reporting to top management on the performance of the environmental management system for review, including recommendations for improvement.

Competence, training and awareness

The organization shall ensure that any person(s) performing tasks for it or on its behalf that have the potential to cause a significant environmental impact identified by the organization is (are) competent on the basis of appropriate education, training or experience, and shall retain associated records.

The organization shall identify training needs associated with its environmental aspects and its environmental management system. It shall provide training or take other action to meet these needs, and shall retain associated records.

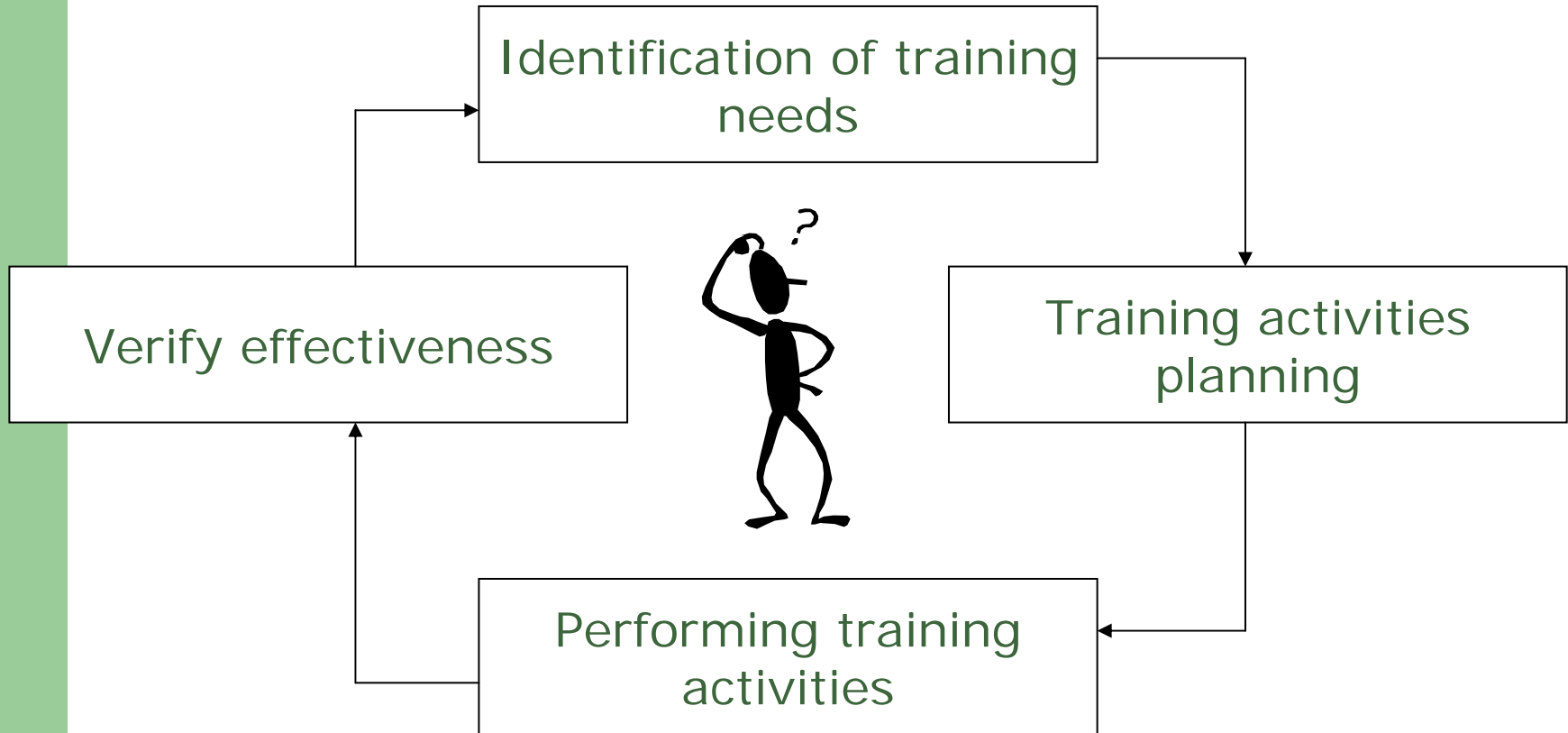
The organization shall establish, implement and maintain a procedure(s) to make persons working for it or on its behalf aware of:

- a) the importance of conformity with the environmental policy and procedures and with the requirements of the environmental management system;
- b) the significant environmental aspects and related actual or potential impacts

associated with their work, and the environmental benefits of improved personal performance;

- c) their roles and responsibilities in achieving conformity with the requirements of the environmental management system; and
- d) the potential consequences of departure from specified procedures.

Competence, training and awareness (§ 4.4.2)



Communication (§ 4.4.3)

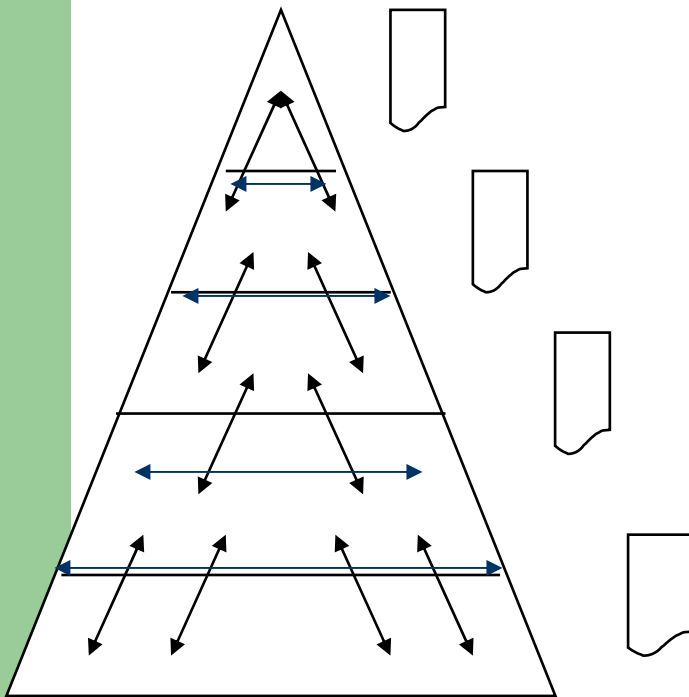
With regard to its environmental aspects and environmental management system, the organization shall establish, implement and maintain a procedure(s) for:

- a) internal communication among the various levels and functions of the organization;
- b) receiving, documenting and responding to relevant communication from external interested parties.

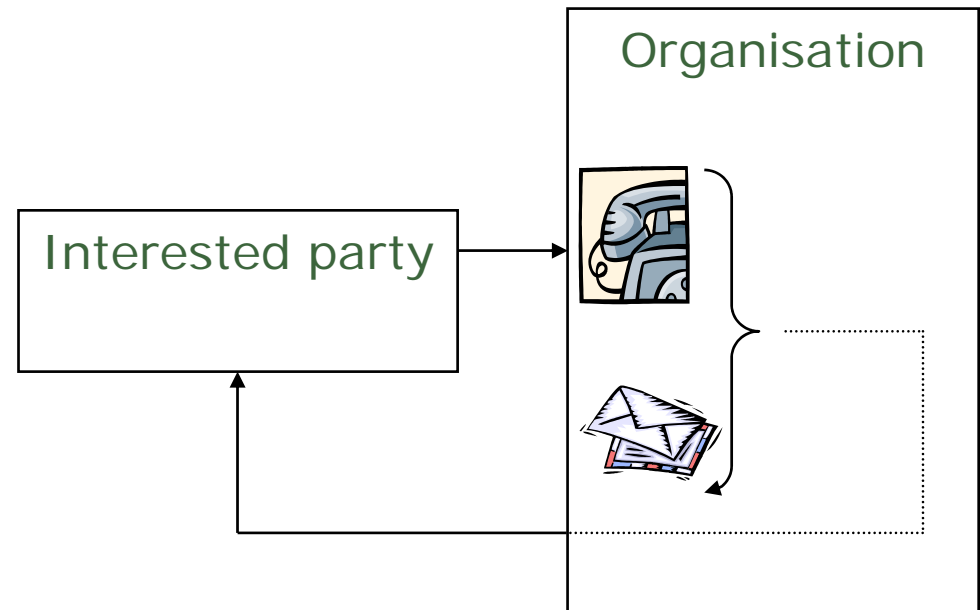
The organization shall decide whether to communicate externally about its significant environmental aspects, and shall document its decision. If the decision is to communicate, the organization shall establish and implement a method(s) for this external communication.

Communication (§4.4.3)

Internal communication



To and from interested parties communication

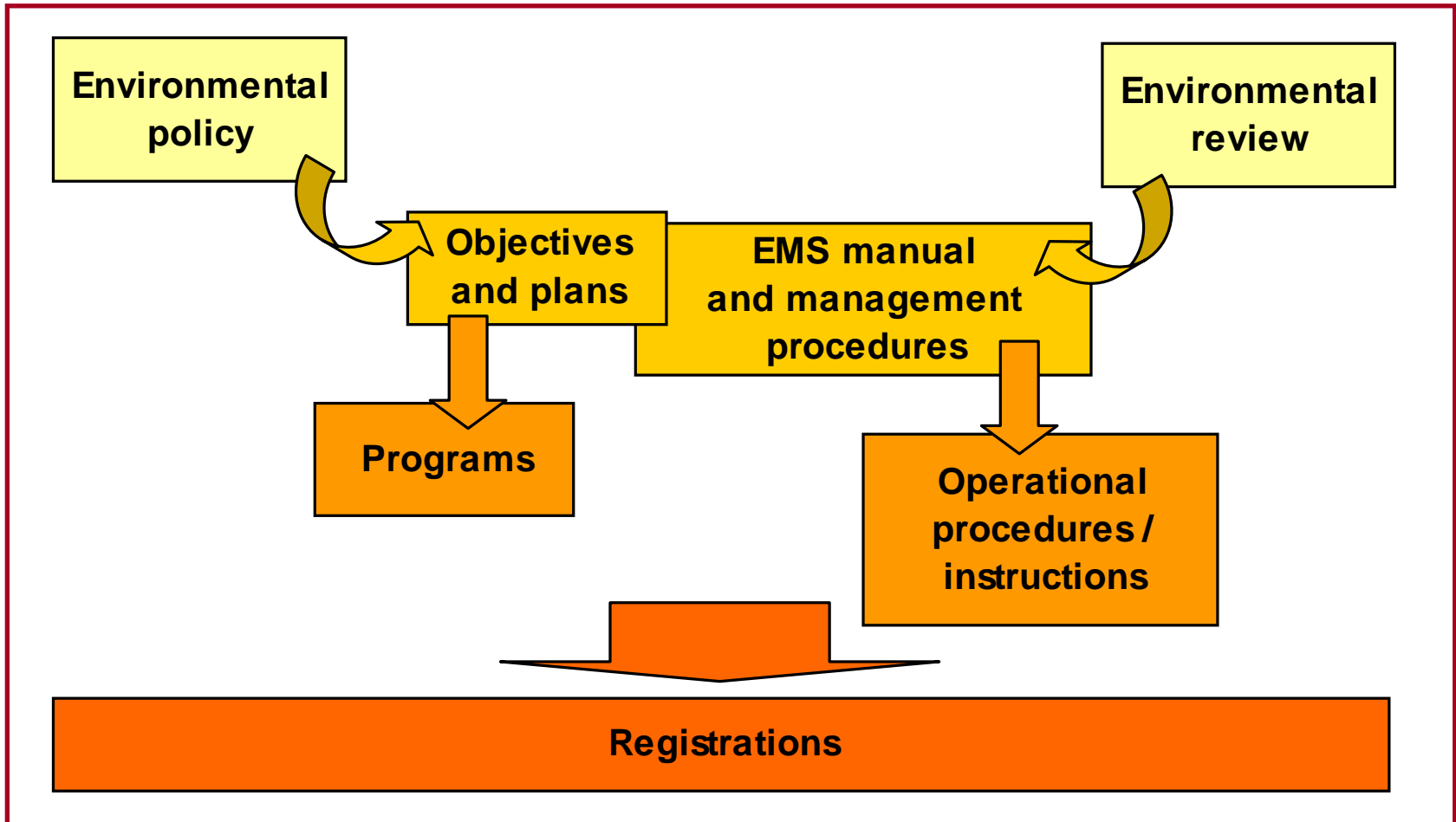


Documentation (§ 4.4.4)

The environmental management system documentation shall include:

- a) the environmental policy, objectives and targets;
- b) description of the scope of the environmental management system;
- c) description of the main elements of the environmental management system and their interaction, and reference to related documents;
- d) documents, including records, required by this International Standard; and
- e) documents, including records, determined by the organization to be necessary to ensure the effective planning, operation and control of processes that relate to its significant environmental aspects.

EMS documentation



Documents control (§ 4.4.5)

Documents have to be controlled. Records are a special type of document and shall be controlled in accordance with the requirements given in 4.5.4.

The organization shall establish, implement and maintain a procedure(s) to:

- a) approve documents for adequacy prior to issue;
- b) review and update as necessary and re-approve documents;
- c) ensure that changes and the current revision status of documents are identified;
- d) ensure that relevant versions of applicable documents are available at points of use;
- e) ensure that documents remain legible and readily identifiable;
- f) ensure that documents of external origin determined by the organization to be necessary for the planning and operation of the environmental management system are identified and their distribution controlled; and
- g) prevent the unintended use of obsolete documents and apply suitable identification to them if they are retained for any purpose.

Documents control (§ 4.4.5)



File: Draft_document control procedure rev cf 2009 03 20

Environmental Management System

Page 1 of 5

Documents control

Revision list

Revision n.	Description	Date
1	First issue	
2		
3		
4		
5		

Written by EC

Verified by MR

Approved by MR

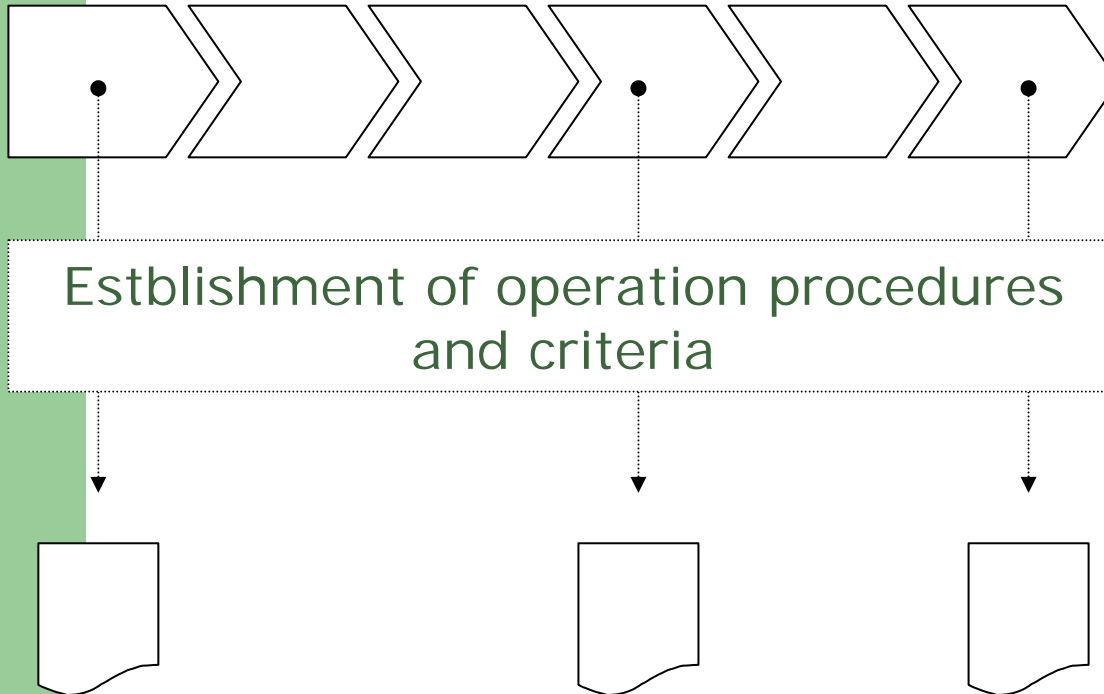
Operational control (§ 4.4.6)

The organization shall identify and plan those operations that are associated with the identified significant environmental aspects consistent with its environmental policy, objectives and targets, in order to ensure that they are carried out under specified conditions, by:

- a) establishing, implementing and maintaining a documented procedure(s) to control situations where their absence could lead to deviation from the environmental policy, objectives and targets; and
- b) stipulating the operating criteria in the procedure(s); and
- c) establishing, implementing and maintaining procedures related to the identified significant environmental aspects of goods and services used by the organization and communicating applicable procedures and requirements to suppliers, including contractors.

Operational control (§ 4.4.6)

Analysis of activities,
operations and processes



	File: Draft_tanker discharge operational instruction rev of 2009 06 18	
	Environmental Management System	Page 1 of 1

Operational instruction Tanker discharge at XXXXXXX area

Written by: ISO 14001 coordinator	Verified by: XXX Environmental representative	Approved by: XXX Station Manager
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1 Aim and scope

This operational instruction shall be applied for all tankers carrying dangerous chemicals to XXX.

2 Responsibilities

The tanker driver ensure that all safety devices of the tanker are in place and properly operating; have and wear his own health and safety means.
 Concierge not allow tanks to enter Enemalta installation without control
 The responsible of the area where the chemical has to be delivered to control that all safety procedures are complied.

3 Instructions



Tank discharging at XXX area
Note incorrect behaviour of the driver

- The concierge stop the tanker and inform the responsible of the XXX area.
- The responsible of the XXX area comes to the concierge, gets on the tanker and shows the correct way to the driver.
- The tanker shall be stopped in the proper position; the engine shall be turned off.
- The driver shall be asked to wear his own health and safety devices, to stop the tanker with wedges and to collect the tanker to the grounding (in case of flammables).
- The driver will keep the pipe from the tanker and collect it to the XXX area storage taps.
- After that, the tankers' taps can be opened and the discharge can take place.
- At the end, all taps shall be closed; after that the pipe will be replaced into the tanker, the grounding will be removed and the tanker can move to the exit.
- The responsible of the XXX area gets on the tanker to go with the driver to the exit.
- The responsible of the XXX area shall inform the concierge that the operation has been successfully carried out.

Emergency preparedness and response (§ 4.4.7)

The organization shall establish, implement and maintain a procedure(s) to identify potential emergency situations and potential accidents that can have an impact(s) on the environment and how it will respond to them.

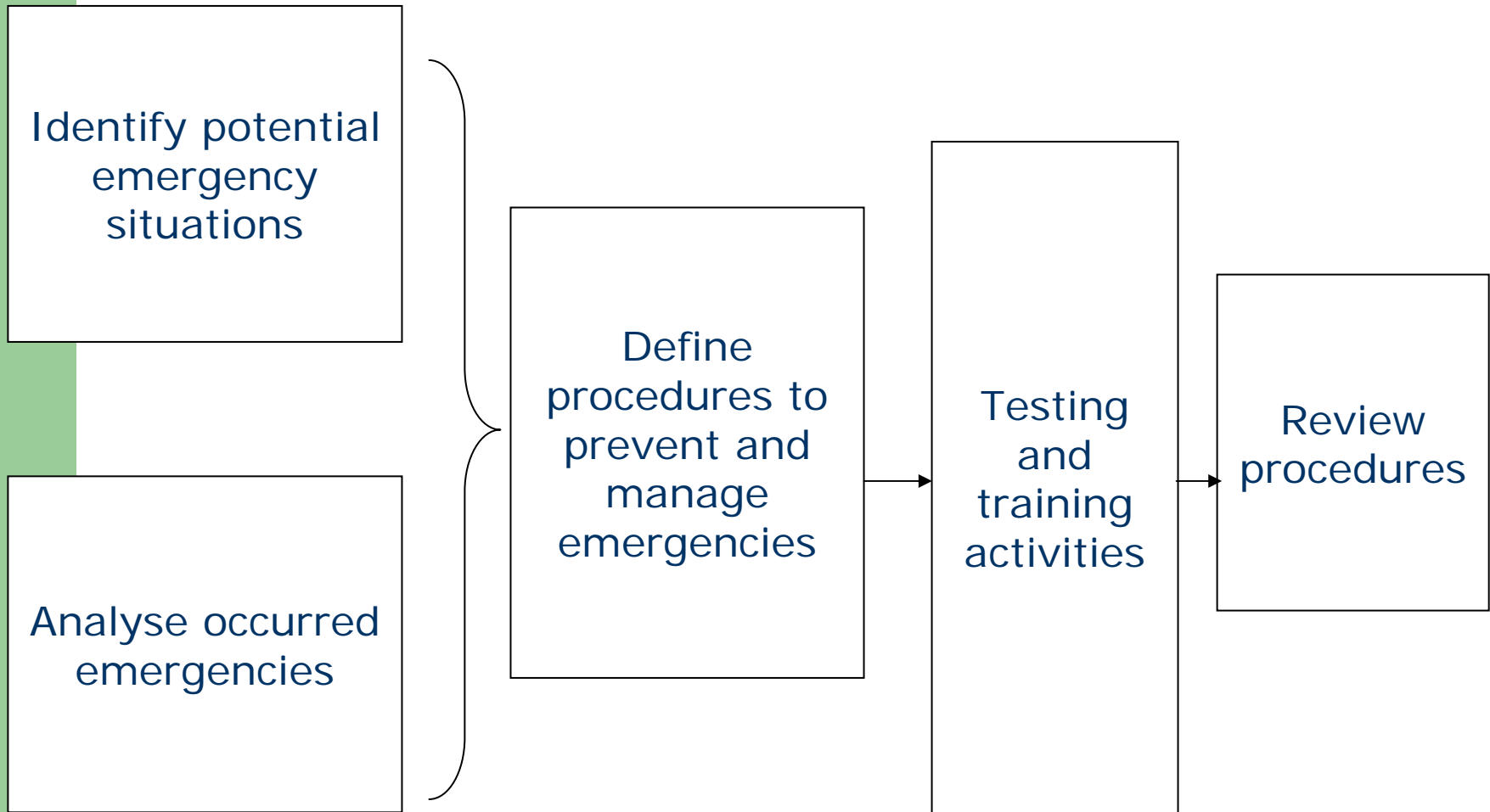
The organization shall respond to actual emergency situations and accidents and prevent or mitigate associated adverse environmental impacts.

The organization shall periodically review and, where necessary, revise its emergency preparedness and response procedures, in particular, after the occurrence of accidents or emergency situations.

The organization shall also periodically test such procedures where practicable.



Emergency preparedness and response (§ 4.4.7)

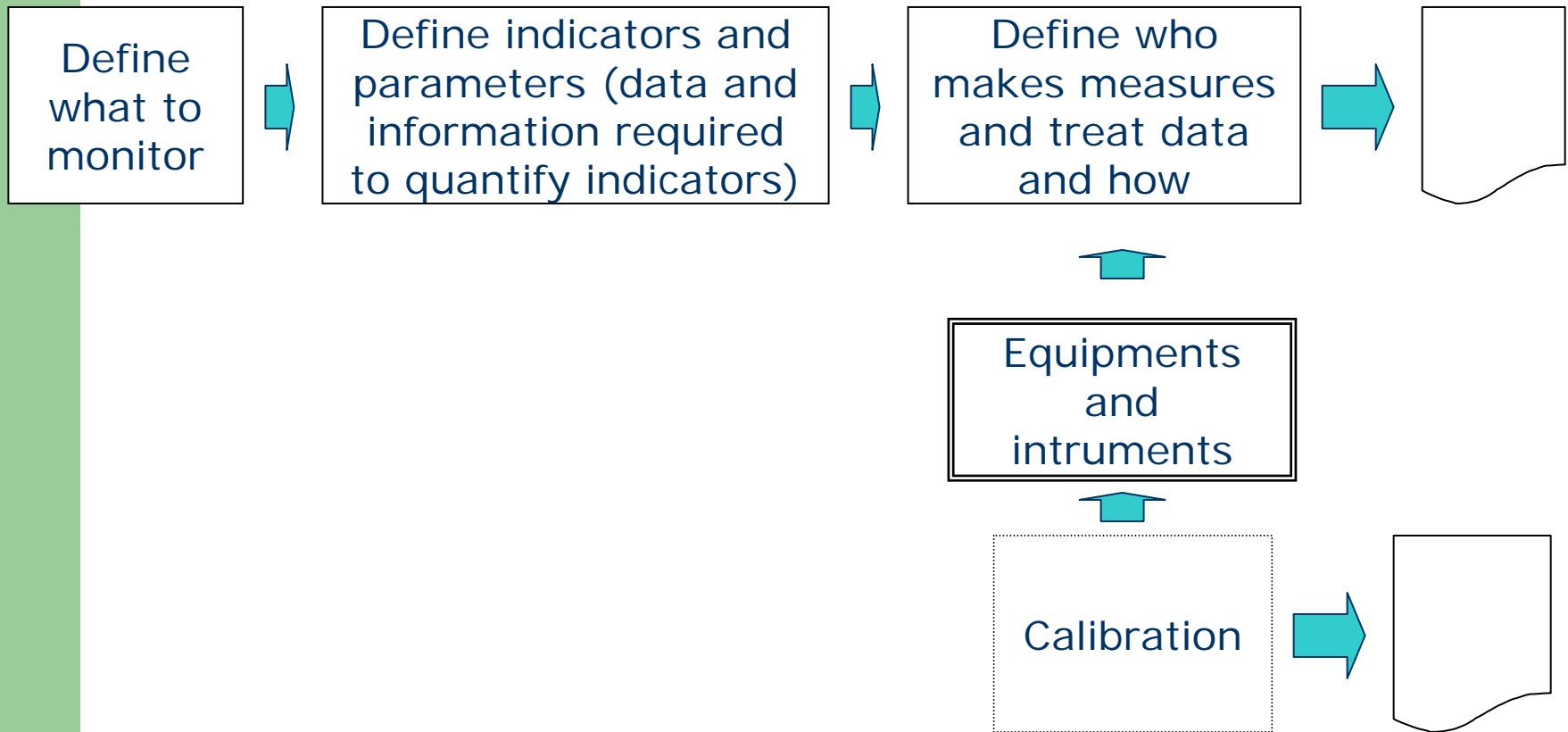


Checking (§ 4.5)
Monitoring and measurement (§ 4.5.1)

The organization shall establish, implement and maintain a procedure(s) to monitor and measure, on a regular basis, the key characteristics of its operations that can have a significant environmental impact. The procedure(s) shall include the documenting of information to monitor performance, applicable operational controls and conformity with the organization's environmental objectives and targets.

The organization shall ensure that calibrated or verified monitoring and measurement equipment is used and maintained and shall retain associated records.

Checking (§ 4.5)
Monitoring and measurement (§ 4.5.1)



Checking (§ 4.5)
Evaluation of compliance (§ 4.5.2)

4.5.2.1 Consistent with its commitment to compliance, the organization shall establish, implement and maintain a procedure(s) for periodically evaluating compliance with applicable legal requirements.

The organization shall keep records of the results of the periodic evaluations.

4.5.2.2 The organization shall evaluate compliance with other requirements to which it subscribes. The organization may wish to combine this evaluation with the evaluation of legal compliance referred to in 4.5.2.1 or to establish a separate procedure(s).

The organization shall keep records of the results of the periodic evaluations.

Checking (§ 4.5)

Nonconformity, corrective action and preventive action (§ 4.5.3)

The organization shall establish, implement and maintain a procedure(s) for dealing with actual and potential nonconformity(ies) and for taking corrective action and preventive action. The procedure(s) shall define requirements for:

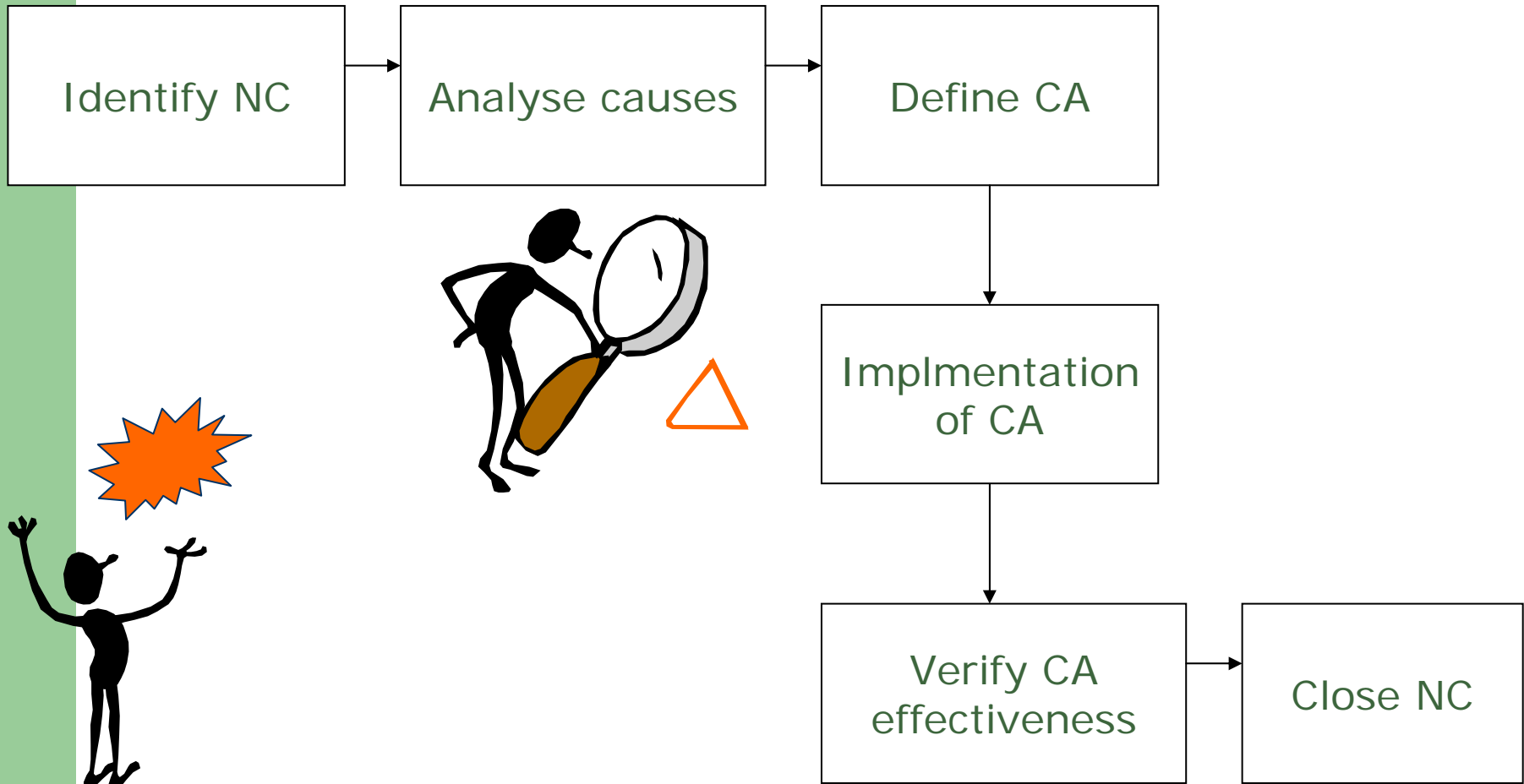
- a) identifying and correcting nonconformity(ies) and taking action(s) to mitigate their environmental impacts;
- b) investigating nonconformity(ies), determining their cause(s) and taking actions in order to avoid their recurrence;
- c) evaluating the need for action(s) to prevent nonconformity(ies) and implementing appropriate actions designed to avoid their occurrence;
- d) recording the results of corrective action(s) and preventive action(s) taken; and
- e) reviewing the effectiveness of corrective action(s) and preventive action(s) taken.

Actions taken shall be appropriate to the magnitude of the problems and the environmental impacts encountered.

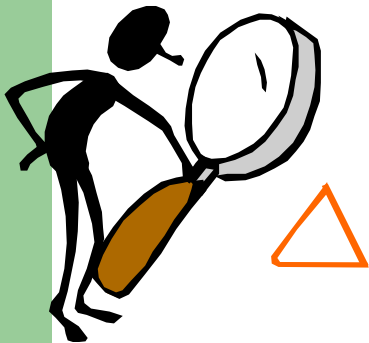
The organization shall ensure that any necessary changes are made to environmental management system documentation.

Checking (§ 4.5)

Nonconformity, corrective action and preventive action (§ 4.5.3)



Checking (§ 4.5) Nonconformity, corrective action and preventive action (§ 4.5.3)



Action plan n. ___/___

Date of issue _____

Action plan issued on the basis of:

- Internal non conformity, recommendation
- Non conformity, recommendation issued by third party
- Objective, target
- Legal requirement
- Other, specify: _____

Reference to non conformity / recommendation / objective and target / legal requirement / other:

Informed people: _____

General responsible of the action: _____

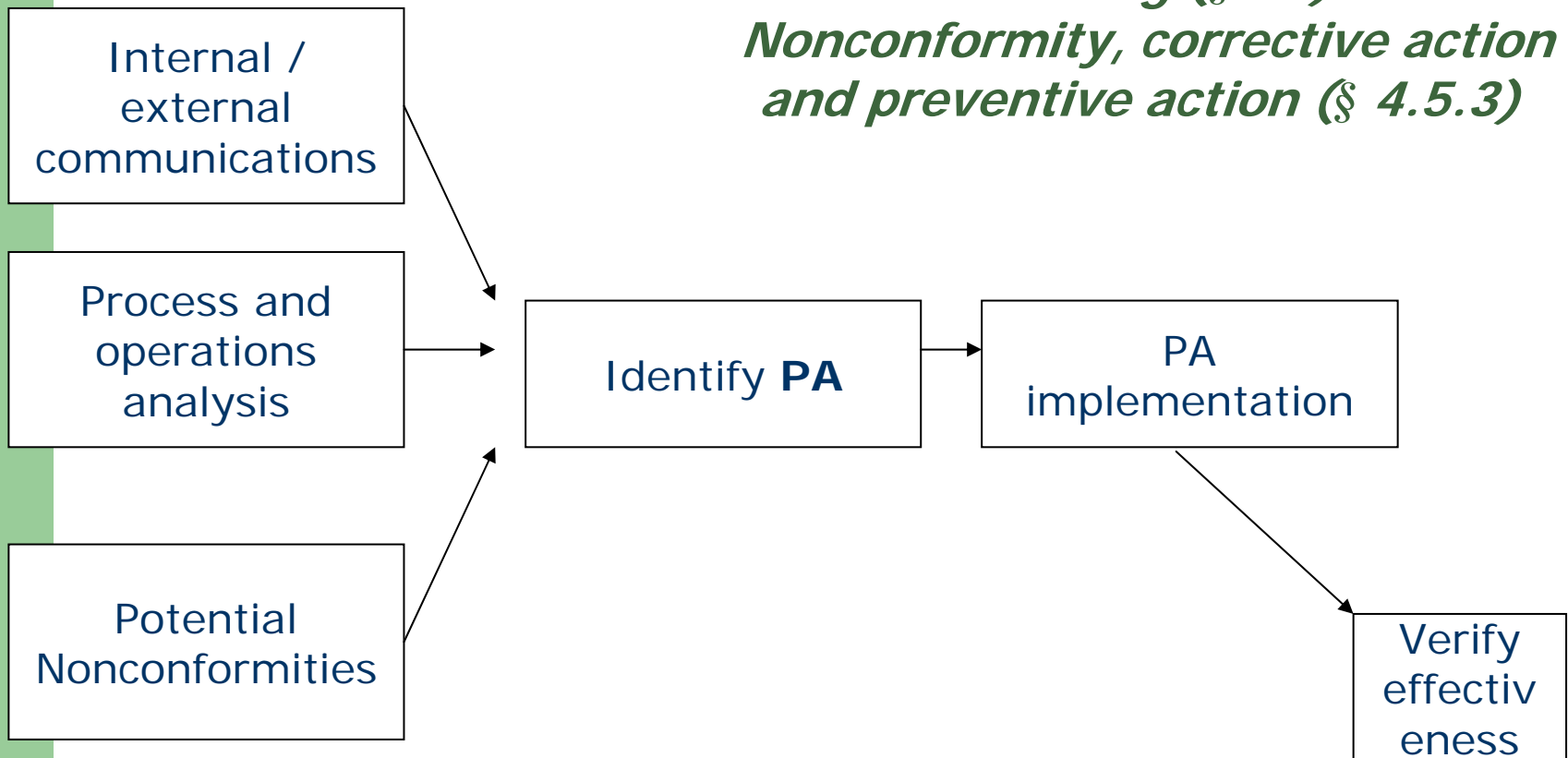
Action planning:

Single action, task	Resp.	Means, resources	Deadline	Date of final check

Final comments / effectiveness of the action (by EC)

Date: _____

*Checking (§ 4.5)
Nonconformity, corrective action
and preventive action (§ 4.5.3)*



Checking (§ 4.5)
Control of records (§ 4.5.4)

The organization shall establish and maintain records as necessary to demonstrate conformity to the requirements of its environmental management system and of this International Standard, and the results achieved.

The organization shall establish, implement and maintain a procedure(s) for the identification, storage, protection, retrieval, retention and disposal of records.

Records shall be and remain legible, identifiable and traceable.

WE-EEN



FORMULARIO RIFIUTI

D.Lgs. del 5 febbraio 1997, n. 22
Art. 15 e successive modifiche e integrazioni
D.M. del 17 aprile 1998, n. 145
Decreto Ministero, ambiente 4 aprile 2002

NUMERO PROTETTO
07062005

DATI DI CARIZIONE DEL FORMALINO
ARR259132-05

1 PRODUTTORE o DETENTORE
Denominazione: _____
Unità Locale: _____
Cod. fis.: **80074270374** N. Aut. / Albo: _____ del _____

2 DESTINATARIO
Denominazione o Ragione sociale: **ALFAREC S.p.A.**
Via **Pietro Nenni n. 4**
Lungo di Destinazione: **40065 PIAN DI MACINA - PIANORO (BO)**
Tel. **051 77 56 67** - Fax **051 77 57 65**
Codice Fiscale **03298810379**
Partita I.V.A. **00610691206**
Cod. fis.: _____ N. Autorizz. / Albo: **FL633** del **080502**

3 TRASPORTATORE
Denominazione o Ragione sociale: **ALFAREC S.p.A.**
Indirizzo: **Via Pietro Nenni n. 4**
40065 PIAN DI MACINA - PIANORO (BO)
Tel. **051 77 56 67** - Fax **051 77 57 65**
Codice Fiscale **03298810379**
Partita I.V.A. **00610691206** N. Autorizz. / Albo: **Bologna** del **300801**
Trasporto di rifiuti non pericolosi prodotti nel proprio stabilimento: di _____

ANNOTAZIONI
Dato e ora partenza 07/06/2005 1.0530
Materiale non classificato pericoloso, secondo la normativa ADR, per il trasporto delle merci su strada.

4 CARATTERISTICHE DEL RIFIUTO
Denominazione / Descrizione del rifiuto: **Sostanze chimiche organiche 1° scarto cont. o costituite da sostanze pericolose (BENZENE)**
CODICE del RIFIUTO: **160508** SINGOLO RIFIUTO: CARATTERISTICHE di PERICOLO: **H3A - H4 - H5 - H6** N. COLLI/CONTENITORI: **01**

5 DESTINAZIONE DEL RIFIUTO
 Recupero Smaltimento **15**

6 QUANTITÀ Kg. **4** Litri **7 PERCORSO** **Bo - Pianoro** **8 TRASPORTO SOTTOPOSTO A NORMATIVA ADR / RID** SI X

9 FIRME _____

10 MODALITÀ E MEZZO DI TRASPORTO Targa autotrasporto: **BK 966 YD** Targa rimorchino: _____
Cognome e Nome Conducente: _____ Data e Ora inizio trasporto: **07062005 0930**

11 RISERVATO AL DESTINATARIO
Si dichiara che il carico è stato: Accettato per intero Accettato per la seguente quantità: _____ Kg Litri
 Resposto per le seguenti motivazioni: _____
Data: _____ Firma del Destinataro: _____

Checking (§ 4.5)
Control of records (§ 4.5.4)

Checking (§ 4.5) - Internal audit (§ 4.5.5)

The organization shall ensure that internal audits of the environmental management system are conducted at planned intervals to:

a) determine whether the environmental management system:

1) conforms to planned arrangements for environmental management including the requirements of this International Standard; and

2) has been properly implemented and is maintained; and

b) provide information on the results of audits to management.

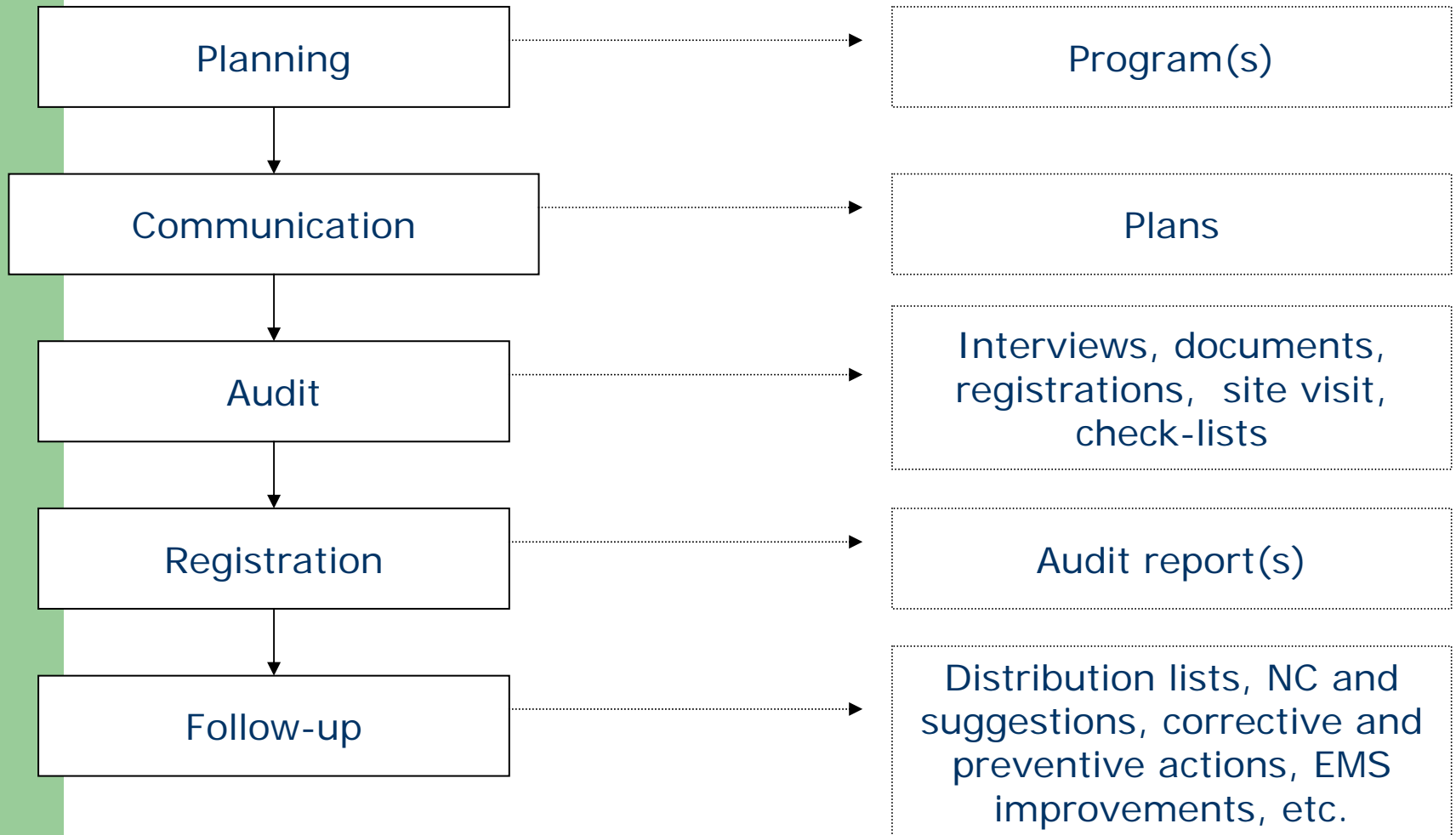
Audit programme(s) shall be planned, established, implemented and maintained by the organization, taking into consideration the environmental importance of the operation(s) concerned and the results of previous audits.

Audit procedure(s) shall be established, implemented and maintained that address:

- the responsibilities and requirements for planning and conducting audits, reporting results and retaining associated records;
- the determination of audit criteria, scope, frequency and methods.

Selection of auditors and conduct of audits shall ensure objectivity and the impartiality of the audit process.

Checking (§ 4.5) - Internal audit (§ 4.5.5)



Management review (§ 4.6)

Top management shall review the organization's environmental management system, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness.

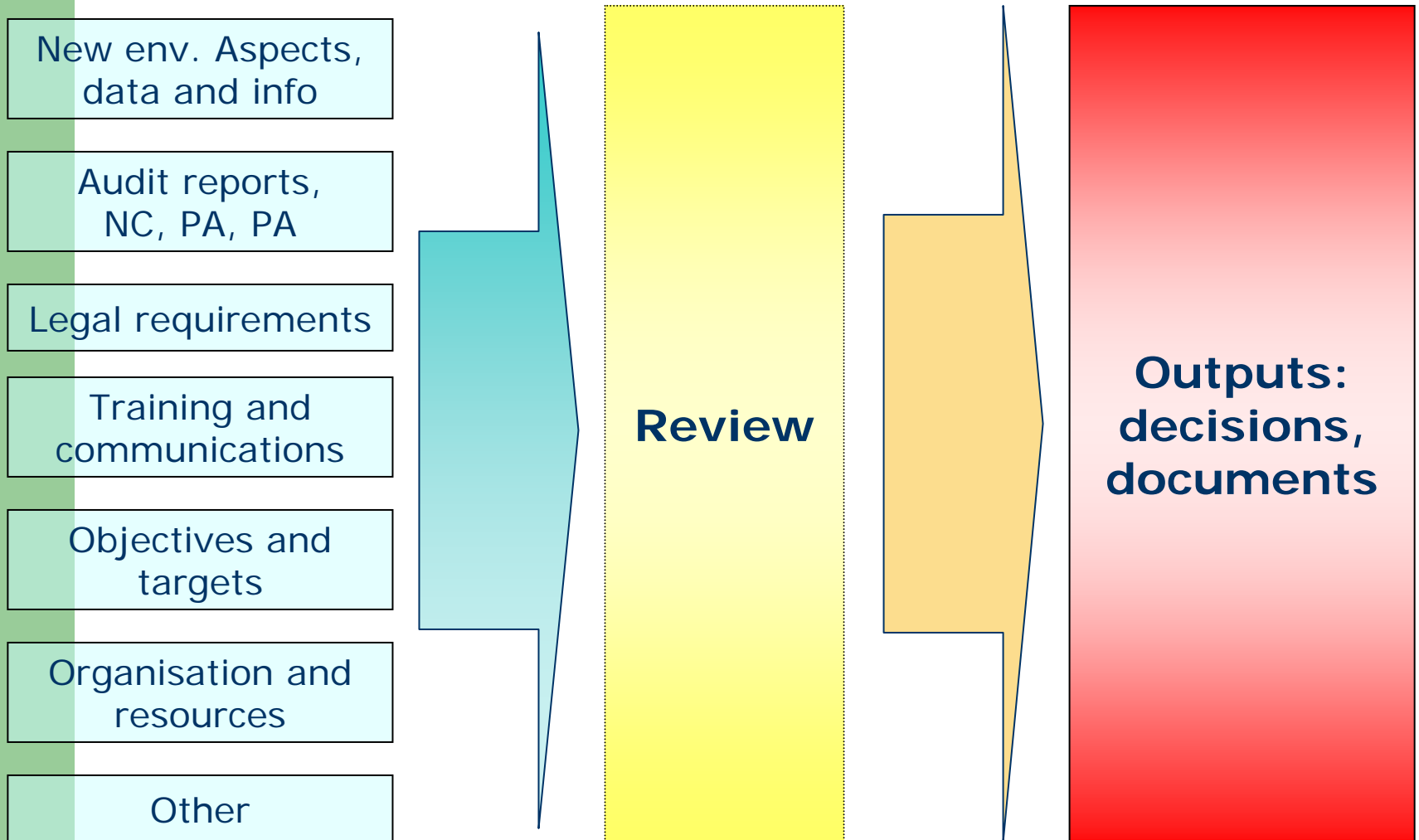
Reviews shall include assessing opportunities for improvement and the need for changes to the environmental management system, including the environmental policy and environmental objectives and targets. Records of the management reviews shall be retained.

Input to management reviews shall include:

Management review (§ 4.6)

- a) results of internal audits and evaluations of compliance with legal requirements and with other requirements to which the organization subscribes;
- b) communication(s) from external interested parties, including complaints;
- c) the environmental performance of the organization;
- d) the extent to which objectives and targets have been met;
- e) status of corrective and preventive actions;
- f) follow-up actions from previous management reviews;
- g) changing circumstances, including developments in legal and other requirements related to its environmental aspects; and
- h) recommendations for improvement.

The outputs from management reviews shall include any decisions and actions related to possible changes to environmental policy, objectives, targets and other elements of the environmental management system, consistent with the commitment to continual improvement.



Management review (§ 4.6)

Services related to EMS

- Information
- Training
- Auditing
- Environmental legislative compliance
- GAP analysis
- EMS designing and implementation
- Selection of certifiers
- EMS maintenance after first certification
-