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# QMS/EMS Implementation and Control

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Cooperation for innovation and the exchange of good practices [Knowledge Alliance](#)

**ICT IN TEXTILE AND CLOTHING HIGHER EDUCATION AND BUSINESS**

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# TRAINING COURSE

## INDUSTRIAL ENGINEERING, QUALITY CONTROL AND MANAGEMENT

**Course:** QMS/EMS Implementation and Control

Partner: P4 – University of Zagreb Faculty of Textile Technology

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## Lecture plan:

### I. WHAT IS EMAS?

#### ***EMAS - Eco Management and Audit Scheme***

- *Environmental management system (scheme), based on EU legislation, intended for organizations operating in the EU.*
  
- *Similar to ISO - EMS, but upgraded and improved.*
  
- *The European Commission (EC) promotes EMAS as a powerful tool which the company allows:*
  - *identifying the most sensitive environmental impacts,*
  - *reducing/ eliminating such impacts,*
  - *providing partners and the public with credibility information on environmental impacts and improvement ecological performance of the company.*



## Lecture plan:

**EMAS is designed to achieve - *to the sixth action program EU Environment protection***

→ 7 priorities were highlighted:

1. Clean air for Europe
2. Protection of the Earth
3. Sustainable Use of Pesticides (IPM)
4. Protection and preservation of the coastal environment (sea)
5. Waste prevention and recycling
6. Sustainable use of natural resources
7. Improvement of the urban environment

Therefore, the focus of EMAS's implementation in these areas of environmental protection is high.



## Lecture plan:

### **EMAS system differences compared to ISO 14001**

- ❖ The role of the Environmental Report has been strengthened
  - verification of reports by an independent competent body
  - obligation to publish the report
- ❖ Obligation to harmonize with environmental legal regulation
  - timely alignment with the laws and regulations of environmental protection
- ❖ Inclusion of all employees in the system (in realization of all activities specified by methodology)
- ❖ Demand for continuous performance-related improvements along with environmental impacts
  - with proof of independent third party verification and validation

*This upgrade has increased the credibility and transparency of the environmental management system.*



## Lecture plan:

### II. Normative Basis for EMAS

3 development stages:

EMAS I → **1993**. - Eco Management and Audit Scheme (Council Regulation (EEC) No 1836/93); introduction with by voluntary application in industrial companies

→ has been in use since 1995

EMAS II → **2001**. - extension of the scope of EMAS application for the entire economy, the public sector and private services (*Council Regulation No 761/2001/EC*)

EMAS III → **2009**. - new rules on EMAS implementation (Council Regulation (EC) No 1221/2009)



## Lecture plan:

### ➔ **EMAS becomes mandatory for**

- large pollutants
- locations of high environmental risk
- organizations using EU funds

### ➔ **It is encouraged to introduce EMAS** and in

- public sector companies (administrations, schools, hospitals, ..)
- small businesses (SMEs)
- service activity and
- finances sector

### ➔ **EMAS is strengthened as a credible scheme and environmental management system for European organizations and institutions.**



## Lecture plan:

### III. Implementation of EMAS system

General features for implementation

- *Integration of ISO 14001 in EMAS (Regulation (EC) No 196/2006 )*
- *Certificate verification procedure and guarantee its recognition (Art. 9 Rules (EC) No 761/2001)*
- *Introducing the logo - EMAS logo (Decision 2006/193 / EC)*



## Lecture plan:

### **General steps in EMAS implementation and registration**

#### **1. Initial Review**

- State of the art - analysis of environmental problems related to activity of company

Purpose: identification of the most significant environmental impacts and program priorities for environmental management

- Examining and evaluating ecological features of the process

Includes:

- all aspects of the environment related to the organization's activities, determining direct and indirect environmental impacts related to: raw materials, energy, production, materials, waste, emissions, transportation, application, ..
- analysis of legal regulations - application and harmonization



## Lecture plan:

### 2. Creating environmental and program policies

- Environment policy is the document in which the company expresses its commitment to continuous improving environmental performance and compliance with all relevant ecological regulations
  - *Define and set environmental management goals*
- Based on the policy, the Management Program is developed ecological performance and emissions
- elaborates on a *specific work plan with specific goals and measures for their realization*
- elaborates the *methodology of how goals are set can achieve*
- The program should be regularly renewed and supplemented accordingly new knowledge.

## Lecture plan:

### **3. Establish EMS according to ISO 14001**

→ Development of Environmental Management System Elements in conforms to the requirements of ISO14001

### **4. Audit and certification of system**

→ Determining whether everything is being done in accordance with the EMAS scheme?

#### **Internal audit**

- ❖ the company is implementing itself
- ❖ should include all activities and impacts
- ❖ identify measures for improving

#### **External audit**

- Performs an independent third party
- EMS certification in accordance with EN ISO 19011



## Lecture plan:

### **5. Company Statement - Environmental Report**

- ⇒ The company summarizes its environmental policy, program and environmental management system
- ⇒ It provides credible information on ecological performance and environmental impacts

The Certified Verifier checks and verifies the truthfulness of the data and information in the Report and compliance with EMAS regulation

The validated report is sent to an EU Competent Body

- The company is included in the register of EMAS organizations.
- Obtain the right to use the EMAS sign.



## Lecture plan:

- The Environmental Report should be publicly disclosed and made available to the public and interested parties
  
- Update the data once a year
- Publish in paper form every 3 years
  
- Guidelines for Reporting are in the following standards:
  - HRN EN ISO 14031 - Environmental Impact Assessment
  - HRN EN ISO 14040 - Life Cycle Assessment (LCA) - Principles and framework of work
  - HRN EN ISO 14044 - Life Cycle Assessment (LCA) - Requirements and Guidelines

## Lecture plan:

### IV. Designation of the EMAS system

⇒ **3 labels** - the guarantee of environmental management and information system reliability, not the guarantee of eco-products

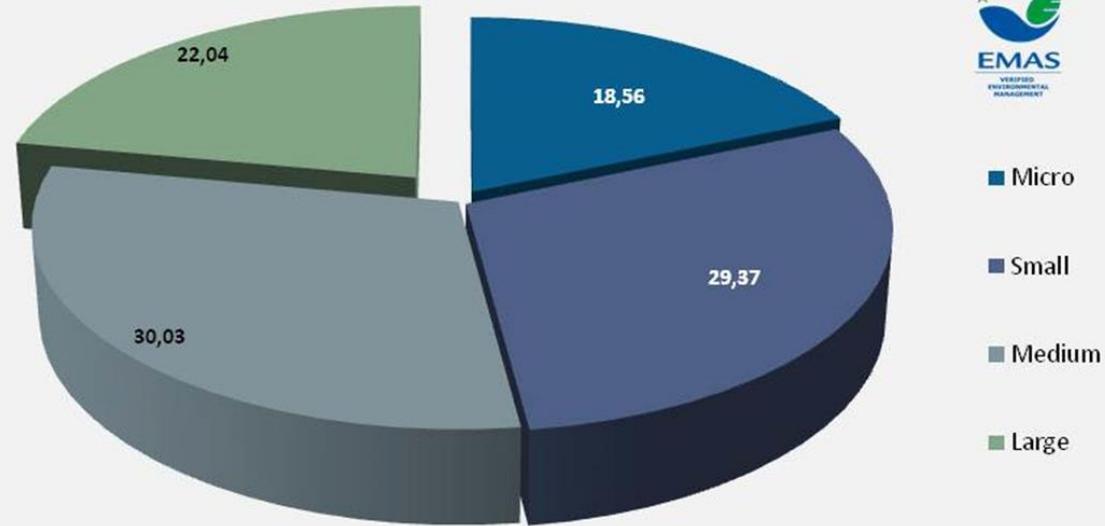
1. General EMAS logo (Fig. 1)
2. System Verification Mark environmental management (Fig. 2)
3. Validation Report of the Environmental Report (Fig. 3)





## Lecture plan:

### -Official statistics of the European EMAS Helpdesk- Size of Organisations with EMAS registration\* (October 2015)



\* Source: EMAS Register and German Register

# CONTACTS

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**ICT-TEX**

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