

# Project: 'Eurocompetence for operational personnel in the chemical industry: recommendations for identification, assessment and validation of competences'

Proposal for a project in the scope of the European social dialogue Chemical industry.  
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For WG ETLT of ECEG and EMCEF

## Context

Competence development is an issue in national member states, both in human resource management in companies and in vocational education. In the scope of the EU agenda on Skills and Lifelong Learning and the developments around the European Qualification Framework (EQF) and sectoral qualification frameworks, the European social partners of the Chemical Industry, ECEG-EMCEF, have taken the initiative for a joint European funded project on competences for operational personnel in the chemical industry.

## Objectives

Aim of the project is to develop a set of **RECOMMENDATIONS**, to be approved by ECEG and EMCEF associations, on the identification, assessment and validation of competences for operational personnel in the chemical industry. These **RECOMMENDATIONS** can be used as a reference tool by the European Chemical Industry for recruitment, training and assessment of operational personnel and by the educational sector for (development of) VET programmes. The **RECOMMENDATIONS** can also be used as supporting materials for a sectoral qualification framework for the chemical industry, linked to the EQF.

Aim is to develop **RECOMMENDATIONS** in four phases:

1. Demarcation: **Job profiles and levels**
2. Identification of competencies for each job profile: **Competence profiles**
3. Assessment of competencies: **Competence assessment instruments**
- 4: Validation of competencies: **Competence validation procedures**

## Target groups

**RECOMMENDATIONS**, approved by ECEG and EMCEF associations, can be used both by industry and by the educational field, for example:

Industry:

- Employers, specifically in SMES, to help define job descriptions for recruitment, check for skills gaps, create training plans and encourage skills development
- Employers to serve as a reference/benchmark for recruitment and competence management
- Employees to self assess their job role and competencies
- National Chemical associations

Educational field:

- National Agencies, responsible for VET to benchmark or develop qualifications
- Educational institutes at different levels, from VET to Higher Education, to benchmark or update education programs
- Training providers to benchmark or update training programs

## Work Packages

The project will be executed in four work packages.

WP 1. Defining job profiles and levels

WP 2. Identifying competencies profiles

WP 3. Describing appropriate competence assessment instruments

WP 4: Describing appropriate competence validation procedures

## Results

Results of the project are **RECOMMENDATIONS** on:

1. Job profiles for an operator and a shift supervisor in a chemical company.  
The job profiles are a description of the work context and core tasks and, as far as possible, a link to education levels in national member states and to the European Qualification Framework (EQF).
2. Competencies profiles for an operator and shift supervisor  
The competence profiles are sets of competences, enriched by sub-competences and proficiency levels with links to EQF levels.
3. Competence assessment instruments  
The competence assessment instruments are proven methods of assessment of competence, specifically for the chemical industry, in member states.
4. Competence validation procedures  
The competence validation procedures are proven methods of validation of competencies of workers with work experience but lacking formal certification.

## Working method

We propose a working method in three steps for each working package:

### **Step 1: Desk top studies -> result first draft of RECOMMENDATIONS**

VAPRO and Interfora will prepare a first draft of Recommendations for each WP topic, making use of what has already been developed at national and European level, such as: Competence matrixes for operating jobs in the chemical industry, developed in two Leonardo projects ECTS/EQF Chemistry<sup>1</sup> ([www.ects-chemie.de](http://www.ects-chemie.de); [www.eqf-chemie.de](http://www.eqf-chemie.de)); European e-competence framework ([www.ecompetences.eu](http://www.ecompetences.eu)); Skills need analysis in member states.

### **Step 2: Discussion in reference group -> result second draft RECOMMENDATIONS**

Draft Recommendations for each WP topic are discussed in a reference group of high level company experts. VAPRO and Interfora adapt the draft Recommendations based on the outcome of the discussion in the reference group.

### **Step 3: Discussion in ECEG/EMCEF workshop -> result Approved RECOMMENDATIONS**

The second drafts of the Recommendations are discussed in workshops for all ECEG and EMCEF members. The result of the ECEG/EMCEF workshops will be the Approval of the Recommendations.

The result of the total project will be a final document:

“European chemical Industry **RECOMMENDATIONS** for identification, assessment and validation of competences”

## Timeline

The estimated time for this project is 18 months.

To execute the project in a time and budget efficient manner, we propose to combine activities for the four work packages. Assuming that the start of the project will be in January 2010 a possible scheme could be:

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<sup>1</sup> The Leonardo projects ECTS-EQF Chemistry were executed from 2005-2008 with representatives from nine countries: Germany, Austria, Italy, UK, Sweden, Netherlands, Poland, Czech Republic and Hungary. The projects produced a competence matrix for the jobs of operator, supervisor and process engineer for the chemical industry. The Eurocompetence project will build on the results of these Leonardo projects by verifying outcomes with high level experts from industry and ECEG and EMCEF members and by adding job profiles, proficiency levels, tools and procedures for assessment and validation.

| Quarter ->               | 2010     |          |  |                              | 2011   |   |
|--------------------------|----------|----------|--|------------------------------|--|---|
|                          | 1        | 2        | 3  | 4                            | 1  | 2   |
| WP 1 job profiles        | Desk top | Desk top | - Reference group meeting combined with WP 2<br>- ECEF/EMCEF Workshop combined with WP 2 | Approved Recommendation WP 1 |  |   |
| WP 2 competence profiles | Desk top | Desk top | - Reference group meeting combined with WP 1<br>- ECEF/EMCEF Workshop combined with WP 1 | Approved Recommendation WP 2 |  |   |
| WP 3 assessment          |          |          | Desk top   | Desk top                     | - Reference group meeting combined with WP 4<br>- ECEF/EMCEF Workshop combined with WP 4 | Approved Recommendation WP 3  |
| WP 4 validation          |          |          | Desk top   | Desk top                     | - Reference group meeting combined with WP 3<br>- ECEF/EMCEF Workshop combined with WP 3 | Approved Recommendation WP 4  |
| Final report             |          |          |  |                              |  | European chemical Industry recommendations for identification, assessment and validation of competences |

## Participants and roles

### **ECEG and EMCEF**

ECEG and EMCEF are the Partners in the project. ECEG and EMCEF, because of limited capacity, have asked VAPRO and INTERFORA to prepare the project proposal and execute, manage and administrate the project on their behalf.

VAPRO and INTERFORA will submit the project proposal to the European Commission on behalf of ECEG and EMCEF.

The WG ETLL of ECEG and EMCEF will act as sounding board during the duration of the project. To keep a close contact between ECEG/EMCEF and VAPRO/Interfora during the duration of the project, Liliana Dombolova, as chair of the WG ETLL, will act as contact person. She will also attend the two reference group meetings on behalf of ECEG and EMCEG and will assist in the organisation of the ECEG/EMCEF workshops.

### **VAPRO and INTERFORA**

VAPRO and INTERFORA are two consultancy companies with extensive experience in competence development and vocational education and training for the chemical industry. Both VAPRO and Interfora have an extensive network comprising education and training institutes and companies, both national, in their home countries, and international in most EU countries. See company profiles of VAPRO and Interfora attached.

### **Reference Group**

ECEG and EMCEF, under coordination of Liliana Dombolova, will use their contacts in the member states to ask representatives of a few big chemical companies, with branches in different EU countries, for a Reference Group to discuss draft proposals. A total of two Reference Group meetings in the time span of a year is envisaged.