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**AQUA-TNET**

**SOCRATES THEMATIC NETWORK  
AQUACULTURE, FISHERIES AND AQUATIC RESOURCE  
MANAGEMENT**

presentation by  
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***Crete Centre  
of the Hellenic Centre of Marine  
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# The Tuning Project

The objectives:

- To implement the Bologna - Prague - Berlin – Bergen-London process at university level
- To find ways to implement two (three) cycles
- To identify common reference points from discipline and university perspective
- To develop professional profiles and comparable and compatible learning outcomes
- To facilitate employability by promoting transparency in educational structures (easily readable and comparable degrees)
- To develop a common language which is understood by all stakeholders (Higher education sector, employers, professional bodies)

# **The Tuning Project**

**TUNING FOCUSSES ON COMPETENCES**

# Learning outcomes / competences: *Definition*

- What a learner is expected to know, understand, and / or be able to do at the end of a period of learning  
(after completion of a degree programme)

# Why Focus on competences?

- Further transparency of professional profiles in study programs and emphasis on learning outcomes
- Shift to a more oriented approach to education
- Growing demands of a life-long learning society which requires more flexibility

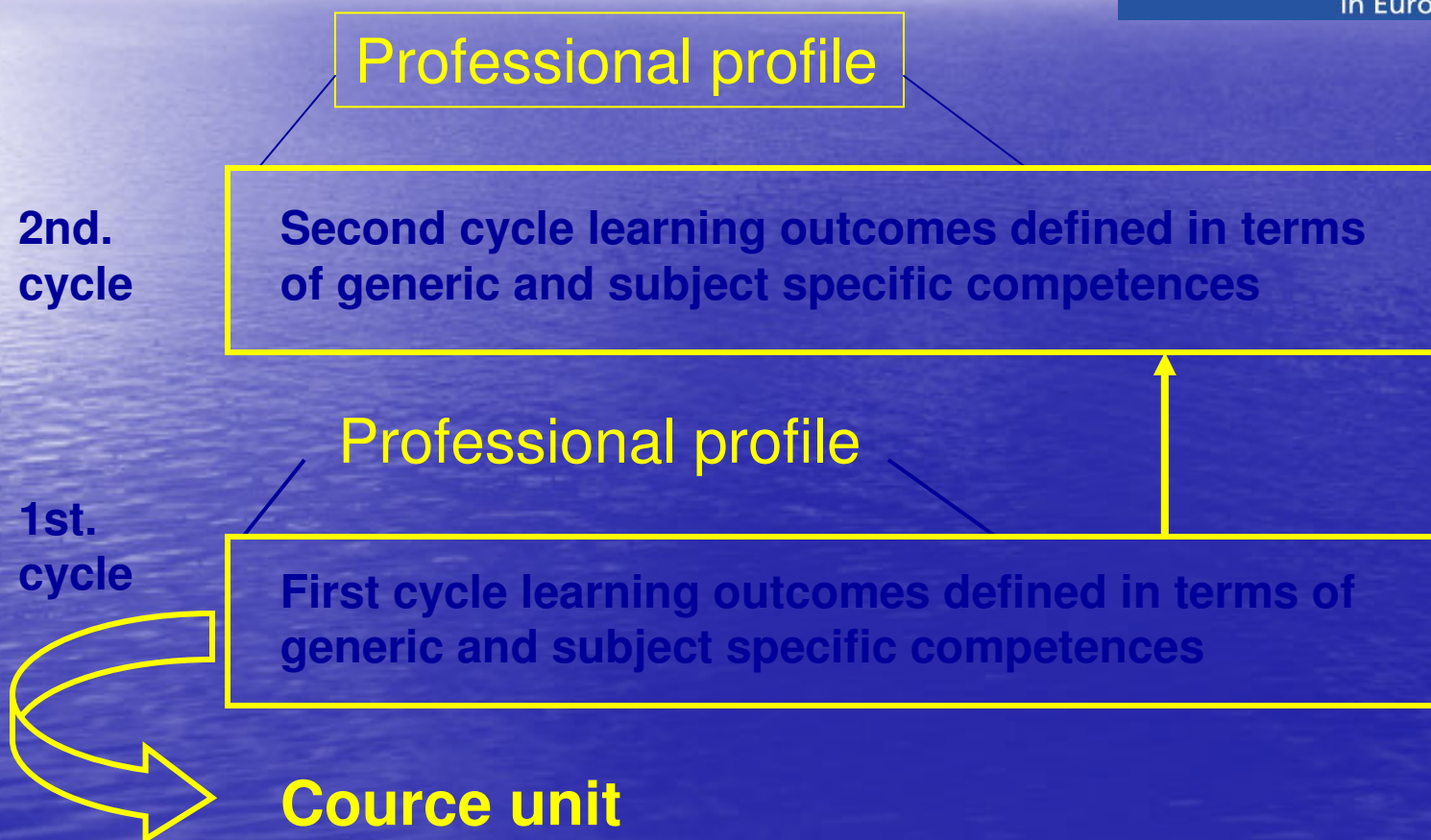
# Why Focus on competences?

- Need for higher levels of employability and citizenship
- Enhancement of the European Dimension of Higher Education
- Need for a shared language for consulting with all stakeholders

# The Tuning Project

- ***Line 1: Generic competences***
- Consultation with graduates, employers and academics on the importance of 30 generic competences and an evaluation of how well HE institutions develop them.
- ***Line 2: Subject specific competences (knowledge, understanding and skills)***
- Mapping of subject areas and development of common reference points and subject specific competences of each of the pilot disciplines.

# LEARNING OUTCOMES AND COMPETENCES IN STUDY PROGRAMMES



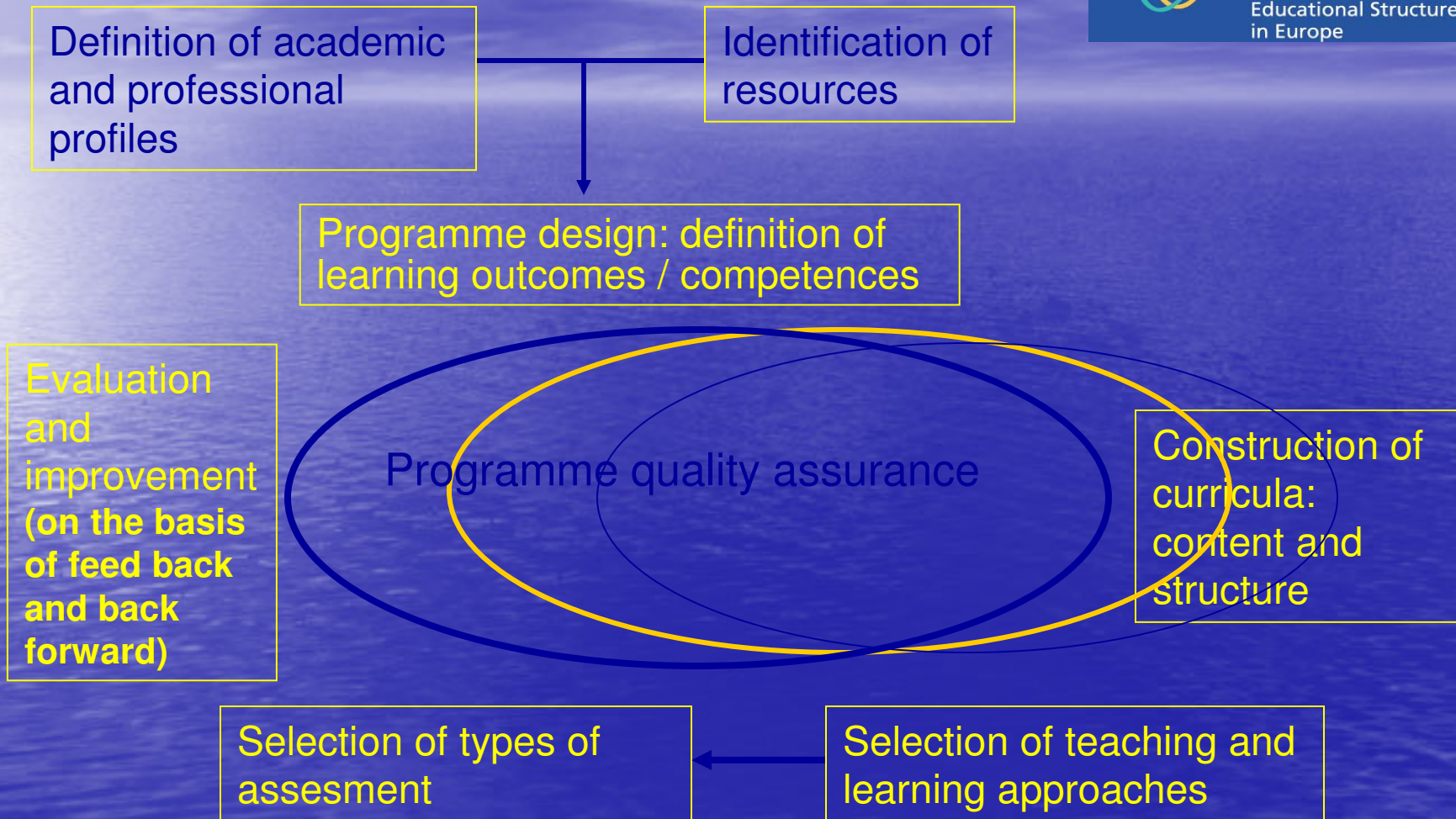
# LEARNING OUTCOMES AND COMPETENCES IN STUDY PROGRAMMES

## Example

Course unit/ learning outcome	Competence									
	A	B	C	D	E	F	G	H	I	F
Unit 1										
Unit 2			X				X			
Unit 3	X				X			X		
Unit 4	X		X							X

**X = THIS COMPETENCE IS DEVELOPED AND ASSESSED AND IS MENTIONED IN THE LEARNING OUTCOME**

# THE TUNING DYNAMIC QUALITY DEVELOPMENT CIRCLE



# The Tuning Project

- ***Line 3: ECTS as a European credit accumulation system: new perspectives***
- Development of ECTS as a tool for programme design: basis is learning outcomes + student workload measured in time.
- ***Line 4: Mapping of approaches to teaching / learning and assessment in different countries***  
(based on the development of competences)
- ***Line 5: Quality enhancement in HE study programmes***

# THE TUNING QUESTIONNAIRE

**FOCUS ON GENERIC COMPETENCES  
(GENERAL ACADEMIC SKILLS)**

**TARGET GROUPS:**

- **GRADUATES**
- **EMPLOYERS**
- **ACADEMICS**

**WHAT ARE THE MOST IMPORTANT COMPETENCES TO BE  
EMPLOYABLE INDEPENDENT OF ONE'S SUBJECT AREA?**

**ARE THESE ACTUALLY TAUGHT AND TO WHAT EXTENT?**

# THE TUNING QUESTIONNAIRE

## TYPES OF COMPETENCES MEASURED:

- Instrumental competences: cognitive abilities, methodological abilities, technological abilities and linguistic abilities
- Interpersonal competences: individual abilities like social skills (social interaction and co-operation)
- Systemic competences: abilities and skills concerning whole systems (combination of understanding, sensibility and knowledge; prior acquisition of instrumental and interpersonal competences required)

# Module

- **Definition**

- A module is a self-contained, formally structured learning experience with a coherent and explicit set of learning outcomes and assessment criteria.

- **Require**

- Define learning outcomes
- Allocate credits

# Module

- **Facilitate**

- Design of individual study-programmes (profiles)
- modularisation
- Different routes to identifiable degrees, certificates, profiles etc.

# Good Practice

- It is advisable that
  - a module lasts for a specified period of time
  - preferably for no longer than one semester
  - A module should neither be too small nor too large
  - It is suggested that a module should not carry less than 5 credits.
  - It is also proposed that a module should carry 5 or a multiple of 5 credits.

# Workload: *definition*

- A quantitative measure of all learning activities that may be feasibly required for the achievement of the learning outcomes i.e. contact hours (lectures), working in the library, in the laboratory, at home, within a group, alone...

# Credit: *definition*

- A quantified means of expressing the volume of learning based on the achievement of learning outcomes and their associated workload
- Mirrors the *student workload* necessary to achieve the *competences* defined as *learning outcomes* of a learning area
  - It only reflects *what* the student has achieved (learning outcomes)
  - It does not state *how* the student performed (grade)

# Credit System : *definition*

- A credit system is not only for university learning but *has to cover* all areas of learning
  - Formal
  - Non-formal
  - Informal
- That is for all forms of *education and training*
- Description of learning outcomes quantified by credits leads to a qualifications framework

# Recognition

- ECTS
- Diploma Supplement
- Qualifications Framework

# ECTS - Credit System

- A credit system *is*
  - a systematic way of describing an educational programme in terms of components to which credits are attached
- A credit system *means*
  - From teacher to learner viewpoint
  - From input to output orientation

# ECTS

- There are several systems but ECTS only has been tested throughout all Member States of the EU and beyond
- European Credit Transfer System (ECTS)
  - Introduced 1989 as a pilot within Socrates ERASMUS
    - Primarily for facilitating European mobility
    - Used on a small scale
    - Impacting upon a relatively small number of students

# ECTS-Context

- ECTS as a Tool for **Quality Assurance**
- *ECTS and **Internationalisation** – Cooperation with Partners outside Europe*
- Credit Accumulation, Competences and the Definition of **Learning Outcomes**
- *ECTS and the **Diploma Supplement**: Complementary Tools for Recognition and Transparency*
- Credits for **Lifelong Learning**
- *ECTS – a **Student Perspective***

# ECTS Key Features

- Student-centered system
- Based on workload required to achieve learning outcomes
- “Convention” that 60 credits represents an annual workload of a full-time student
- Allocated to all aspects of study programme
- Based on completion + assessment
- Respect for the Learning Agreement between student and institutions

# ECTS and Academic Recognition

- **Credits for Accumulation**
  - Curricular reform
  - Mobility within systems
  - Lifelong Learning
- **Credit Transfer + Accumulation**
  - Enhancing transparency and comparability
  - Facilitating mutual recognition of qualifications

# ECTS Guidelines

- About 40 weeks of full-time learning
- Normally 1 credit equals 25-30 hours
- Time to be invested by the learner to achieve the learning outcomes, including independent studies
- Credits are allocated in such a way that the first academic degree can be obtained on the basis of 180-240 credits predetermined in a respective study-programme
- This has to be stated in the ECTS documents

# ECTS - Assessment

- The effectiveness of the invested workload of the student has to be proven through assessments of any form.
  - Success is not proven by attendance only.
- In case of success the student receives the number of credits predetermined .
  - It is not possible to award fewer or more credits than pre-determined.

# ECTS - Grading

- The performance of the student is documented by a grade.
  - The grade ranks the student.
- This rank – together with the local grade – is sent to the home university of the student
- Once a student has achieved all pre-determined credits of a programme he/she has registered for or he/she can be considered for the respective academic degree.

# ECTS - Grading

## *Of the successful students* ECTS Grade

- The best 10% A
- The following 25% B
- The following 30% C
- The following 25% D
- The following 10% E

# ECTS - Grading

- *Of the unsuccessful students*      *Grade*
- Amendments are required  
before the performance  
could be considered as „passed“      FX
- Significant amendments are required      F

# ECTS Development

- Development towards a *Transfer and Accumulation System*, enhanced by the Bologna process
  - Effectively means mainstreaming ECTS as a generalised credit system for the emerging European Higher Education Area
  - Of key importance for Europe's higher education institutions and students

# ECTS - Good Practice

- Stand-alone modules, Intensive Programmes, Life-Long-Learning, Learning Activities, Open-and-Distance-Learning, School and Vocational Education
  - All these forms and types of learning follow the same principles
  - Credits are also used to defining Accreditation of Prior Learning and Accreditation of Prior and Experimental Learning.

# Use of ECTS

- The role of ECTS in the development of joint degrees
- The introduction and use of ECTS at doctoral level
- Matching ECTS and national grading systems
- Linking credits and different levels of study
- ECTS and quality: as an instrument for promoting transparency ECTS facilitates the dialogue on quality in a comparative perspective

# ECTS and Bologna

- With its instruments to communicate transparency, ie
  - Information Package / Course Catalogue
  - Learning Agreement
  - Transcript of Records
  - Allocation of Credits
  - Grading System
  - Diploma Supplement

# ECTS and Bologna

- its linkage with learning outcomes

*ECTS definitely supports employability and is an element of the quality assurance / enhancement system*

# ECTS Instruments

- See the other instruments in their original version as they are published on the internet
- [europa.eu.int/comm/education](http://europa.eu.int/comm/education)
  - [Europass.cedefop.eu.int/htm](http://Europass.cedefop.eu.int/htm)
  - [Europa.eu.int/comm/education/programmes/europass/index\\_it.html](http://Europa.eu.int/comm/education/programmes/europass/index_it.html)
  - ECTS/DS KEY FEATURES also as a booklet

# Diploma Supplement

The **purpose** of the supplement is to provide sufficient independent data

- to improve the international “transparency” and
- fair academic and professional recognition of qualifications (diplomas, degrees, certificates, etc.).

# Purpose

- ***Delivers neutral information***
  - transparency
  - fair academic / professional recognition
- ***Allows for***
  - Identification of an adequate level of the qualification
  - Requirements for entry and exit in the sense of LLL
  - Adaptation of changes
  - Reduction of costs
- ***Respects***
  - National / institutional autonomy

# EUROPASS

- Filled-in by the „Holder“ himself:
  - Standardised Structure of Curriculum Vitae
  - Language portfolio
- Filled-in on the basis of tested learning outcomes:
  - Mobility
  - Certificate Supplement
  - Diploma Supplement

# European Higher Education Qualifications Framework

## Purpose

- directly linked to key objectives of the Bologna Process
  - International transparency
  - Recognition
  - Mobility
- makes transparent the relationship between European national higher education frameworks of qualifications
- is an articulation mechanism between national frameworks

# European Higher Education Qualifications Framework

- Should encompass and contribute to the four main purposes of higher education
  - Preparation for the labour market
  - Preparation for life as active citizens in a democratic society
  - Personal development
  - The development and maintenance of a broad, advanced knowledge base

# MOBILITY

- **ISSUES**

- **DURATION**
- **WINDOWS FOR EXCHANGE**
- **ACADEMIC RECOGNITION – CREDITS**
- **PROFESSIONAL RECOGNITION**
- **ALL SUBJECTS – LESS POPULAR?**

- **TYPES OF MOBILITY**

- **ACADEMIC**
- **WORK PLACEMENT**

# Quality assurance

- ECTS
- Monitoring
- Assessment
- Accreditation
- Evaluation

# Common „papers“ Joint documents

- Degree(s)
  - National
  - Joint Degrees
- EUROPASS
  - CV
  - Diploma supplement
  - Certificate supplement
  - Mobility pass
  - Language portfolio (Common European Language Framework)

# Common „papers“ Joint documents

- Application Form
- Learning Agreement
- Transcript of Records
- Information Package / Course Catalogue  
(ECTS)

## TUNING IV

Curricular Reform Taking Shape.

Learning Outcomes and Competences in Higher Education

The project intends to cover three action lines:

- **Wider validation and dissemination,**
- **implementation and**
- **further extension and development**

## TUNING IV

### Curricular Reform Taking Shape.

#### Learning Outcomes and Competences in Higher Education

- The first task of this project is developing the structure further to a **wider validation and dissemination** of the Tuning approach both at European level and at the level of the countries involved. The focus will be on the main stakeholders, in particular key professionals, employers, policy makers, directors of studies and senior academic teaching staff as well as representatives of student organisations and students. A selected group will be asked to endorse the Tuning methodology of defining programmes of study on the notions of societal needs, available resources, professional and academic profiles and learning outcomes and competences.
- Therefore, the second major task of the proposed project is **to implement** the Tuning approach in practice. For this purpose a structure will be set-up and instruction material will be produced, which should assist in this process. At first instance the focus will be on the institutions that have been active in the Tuning project either as part of the project itself or as partner in a thematic network. In those institutions an internal nucleus is already present which can be used as a point of departure. At the same time support will be given to all other higher education institutions which show interest in using the Tuning approach. For this purpose two European Tuning Information and Counselling Centres (ETICCs), as well as national Tuning Information Points (TIPs) will be established.

## TUNING IV

Curricular Reform Taking Shape.

Learning Outcomes and Competences in Higher Education

- **Thus, the third task is to extend the project with five higher education institutions from Turkey as well as to link up with another 20 networks of subject areas to develop reference point and cycle descriptors. Furthermore the project will be further developed by concentrating its efforts on the following new topics:**
    - 1) development and use of intermediate level indicators,**
    - 2) ways of assessment and assessment criteria (including grading),**
    - 3) use of learning outcomes and competences in quality assurance and accreditation procedures at programme level in practice and**
    - 4) validation of competences achieved in informal, non-formal and formal learning settings (including work placements) to get access to and as part of a qualification.**
- Furthermore the Tuning membership is expected to evaluate and update / fine tune the outcomes of the project so far.**

<i>Stage in life of project</i>	<i>Outputs: By the end of this stage we will have achieved / produced</i>	<i>Activities leading to this output</i>	<i>Partners / Persons involved</i>
<b>VALIDATION AND DISSEMINATION</b>			
Running period of project	Further validation of the Tuning methodology and tools by key stakeholders: professionals, employers, policy makers, directors of studies and senior academic staff and representatives of student organisations.	<ul style="list-style-type: none"> <li>-Organisation of four international conferences each covering a sector of academia: medical sector, natural sciences, social sciences and humanities</li> <li>All nine tuning groups as well as relevant Thematic networks will be involved in the setting up and delivery of the programme.</li> <li>- Dissemination conference in each of the countries taking part in the project. Some 28 conferences will be planned.</li> <li>- Establishing a Tuning Information Point (TIP) in each of the countries covered by the Tuning project</li> </ul>	<ul style="list-style-type: none"> <li>Joint co-ordinators (2)</li> <li>Tuning project assistants (2)</li> <li>Management Committee (21)</li> <li>All 9 Tuning groups</li> <li>Relevant TNP (coordinators)</li> <li>Joint co-ordinators (2)</li> <li>Tuning project assistants (2)</li> <li>Management Committee (21)</li> <li>The National Tuning Information Point (TIP)</li> <li>The Tuning membership</li> <li>The Ministry</li> <li>The Rectors Conference.</li> </ul>
Running period of project	Dissemination of Tuning methodology and approaches, including the correct use of ECTS and the Tuning tools for calculating student workload and enhancing study programmes	<ul style="list-style-type: none"> <li>- Four wide scale international conferences about the main Tuning themes.</li> <li>Preparation of: <ul style="list-style-type: none"> <li>-Power Point presentations</li> <li>-Journal (2 or 3)</li> <li>-Newsletter (every 4 months)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Joint co-ordinators (2)</li> <li>Tuning project assistants (2)</li> <li>Management Committee (21)</li> <li>EUA,</li> <li>EURASHE,</li> <li>ESIB</li> <li>ECA and</li> <li>ENIC/NARIC.</li> <li>Joint co-ordinators (2)</li> <li>Tuning project assistants (2)</li> <li>Management Committee (21)</li> </ul>

## IMPLEMENTATION

Jan 2007 Nov 2006	Use of Tuning methodology and tools in programme design, implementation, delivery and enhancement	<ul style="list-style-type: none"> <li>- Production of instruction of guidance material including a brochure for the writing of learning outcomes at programme and module level</li> <li>- Establishment of two European Tuning Information and Counselling Centres (ETICCs) (at the University of Deusto and the University of Groningen). These centres will organise workshops for academic and supporting staff.</li> </ul>	Joint co-ordinators (2) Tuning project assistants (2) Joint co-ordinators (2) Tuning project assistants (2) Workshop leaders
Running period of project	Obtaining reference points and cycle descriptors for as many subject areas as possible	Development of relevant material by an additional 20 TNPs and other subject-specific networks.	Joint co-ordinators (2) Tuning project assistants (2) Tuning counsellors (20) (9 Subject Area Groups)
Jan 2007 - June 2008	Linking the Tuning approach to a wide range of types of learning	To develop (further) (bilateral) co-operation with relevant organisations in the field of vocational education and training, life long learning, etc. Preparation by Task force nr. 1. Special attention will be given to work placement s in higher education.	Joint co-ordinators (2) Tuning project assistants (2) Management Committee (21) Task force nr.1 (6)
Running period of project	Making all Tuning material accessible for wider use.	<ul style="list-style-type: none"> <li>- Distribution of Tuning general and subject specific brochures. Planned is the production, in close co-operation with the Thematic Networks and other disciplinary networks of another 20 subject specific brochures according to a common format.</li> <li>- Update and further extension of the Tuning interactive website. Virtual communities will be created for a growing number of networks as well as for countries.</li> </ul>	Joint co-ordinators (2) Tuning project assistants (2) 20 TNPs <i>Input by:</i> Joint co-ordinators (2) Tuning project assistants (2) Management Committee (21) All 9 Tuning groups TNPs <i>Carried out by:</i> Webmaster

*EXTENSION AND FURTHER DEVELOPMENT*

	Reference points and cycle descriptors for another 20 subject areas	Supporting 20 additional Thematic networks and other disciplinary networks to prepare key documents and a so-called summary of outcomes	Joint co-ordinators (2) Tuning project assistants (2) TNP coordinators (20) Tuning counsellors (20)
Oct 2006 - Feb 2007	Extension of the membership with five higher education institutions from Turkey	Launch for a call of interest in the Autumn of 2006. Selection of candidates early 2007.	Joint co-ordinators (2) Tuning project assistants (2) Management Committee (21)
Running period of project	Testing, evaluating, monitoring, updating and adjusting Tuning methodology and tools.	Consolidation of nine subject area groups for testing, etc. Extension of the nine groups with a total of five new member institutions from Turkey. Organisation of one meeting of each of the nine subject area groups and one combined meeting for all groups for reflection, adjustment and further development.	Joint co-ordinators (2) Tuning project assistants (2) Management Committee (21) Members 9 Subject Area groups (142)
March 2007- June 2008	Model of intermediate level indicators for the first, second and third cycle	Preparation by Task Force nr. 2 of a draft paper to be discussed in the nine subject area groups. Finalizing model / paper on the basis of the contribution of the SAGs of a draft paper to be discussed in the nine subject area groups. Finalizing model / paper on the basis of the contribution of the SAGs	Joint co-ordinators (2) Tuning project assistants (2) Task Force nr. 2 (6) Management Committee (21) Members 9 Subject Area groups (142)
March 2007 - June 2008	An overview of best practice regarding assessment and assessment criteria	Collection examples of good practice by Task Force nr. 2. Preparation of a key document regarding the best use of assessment and assessment criteria in higher education	Joint co-ordinators (2) Tuning project assistants (2) Task Force nr.2 (6) Management Committee (21) Members 9 Subject Area groups (142)
April 2007 - June 2008	An operational framework for the use of learning outcomes and competences for quality assurance and accreditation practices and procedures	In close co-operation with ECA Task Force nr. 3 will be formed to discuss the issue on the basis of an inventory of examples of good practice. This should first result in a discussion paper for the Tuning membership and as an outcome of the consultation process in an operational framework.	Joint co-ordinators (2) Tuning project assistants (2) Task Force nr. 3 (6) Management Committee (21) Members 9 Subject Area groups (142)
Jan 2007 - June 2008	Develop ways of good practice and or an operational framework regarding the validation and recognition of learning outcomes and competences achieved in different types of learning. Special emphasis will be given to work placement in higher education.	In close co-operation with relevant organisations Task Force nr. 1 will be set up to come up with a discussion paper to be discussed and endorsed by the Tuning membership.	Joint co-ordinators (2) Tuning project assistants (2) Task Force nr. 1 (6) Management Committee (21) Members 9 Subject Area groups (142)
Running period of project	'Tuning' activities and exchanging knowledge and experience at European level and with other parts of the world (related to the external dimension of the Bologna Process) .	- Establishing a semi-permanent European platform of Higher Education Institutions for tuning structures and contents of higher education, irrespective of discipline. A legal entity has been created already for this purpose. -Close co-operation with the project Tuning Latin America (in which also Tuning Europe institutions are involved) and, if applicable, other Tuning project related to different parts of the world.	Joint co-ordinators (2) Tuning project assistants (2) Management Committee (21) Members 9 Subject Area groups (142) Joint co-ordinators (2) Tuning project assistants (2) Management Committee (21)

## UNIVERSITY OF CRETE

### **Active participation in both PHASE II & PHASE III (SAG European Studies)**

An indicative list of activities, which the University of Crete was involved in:

- **The European Studies Template**
- **Degree profiles and occupations**
- **Typical occupations of graduates in European Studies**
- **Questionnaire for academics on “European Studies”, related to the clarification of competences, that they should be acquired by the students in both the 1st and the 2nd Cycle.**
- **Role of subject area in other degree programmes**  
(Consultation process with stakeholders. There are now several academic and professional bodies in the European Studies area. In particular, there are national European Community Studies Associations (ECSA) in most European countries and there are also periodic ECSA World Conferences. The Jean Monnet programme has created Chairs and Centres of Excellence).

**UNIVERSITY OF CRETE**  
**Active participation in both PHASE II & PHASE III**  
**(SAG European Studies)**

- **Developing of fundamental documents** such as the Tuning glossary of terms, and the Set of agreed definitions regarding modes of teaching, learning and assessment (including learning outcomes).
- **Main documents titled “European Studies: Approaches to Learning, Teaching and Assessment and the Subject Area Competences”**
- **Construction of the “Profile of the European Studies Qualification at Bachelor Level”**
- **According to the TUNING Glossary (European Studies Area Group), INTENDED LEARNING OUTCOMES are defined as such: “INTENDED LEARNING OUTCOMES:** Intended learning outcomes are statements – made by the academic staff – of what a learner is expected to know, understand and/or be able to demonstrate after completion of a process of learning. Learning outcomes must be accompanied by appropriate assessment criteria which can be used to judge whether the expected learning outcomes have been achieved. Learning outcomes, together with assessment criteria, specify the requirements for the award of credit, while grading is based on attainment above or below the requirements for the award of credit. Credit accumulation and transfer is facilitated if clear learning outcomes are available to indicate with precision the achievements for which the credit will be awarded”

**The University of Crete has already renewed  
its participation in the *TUNING PROJECT, Phase IV***

# Thanks

- Special thanks to Prof. Volker Gehmlich, ECTS/DS National Contact Point – Germany, for contributing to this presentation with information material.