

MÜDEK

Mühendislik Eğitim Programları Değerlendirme ve Akreditasyon Derneği
Association for Evaluation and Accreditation of Engineering Programs

MÜDEK: Engineering Program Accreditation Agency of Turkey and EUR-ACE

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Presentation Outline

- Quality Assurance in Higher Education in Turkey
- MÜDEK: Engineering Program Accreditation Agency of Turkey
- MÜDEK Accreditation Process and Criteria
- MÜDEK - EUR-ACE Relations

Quality Assurance in Higher Education in Turkey

- Higher Education Council of Turkey (YÖK)
 - Oversees activities of Higher Education Institutions (HEI) in Turkey
 - Imposes minimum requirements for degree programs offered by HEI's.
 - Involved in Bologna process implementation
 - Published Regulations for Academic Assessment and Quality Improvement in HEI's (September 2005)
- Institutional and program level quality audits of HEI's by external quality assurance agencies are not mandatory but are encouraged by YÖK

MÜDEK- Association for Evaluation and Accreditation of Engineering Programs: A brief history

May 2002: Engineering Deans Council in Turkey established an independent, non-governmental platform with the name **Engineering Evaluation Board (MÜDEK)** for evaluation of engineering degree programs in Turkey.

Jan 2003: MÜDEK held its first workshop for program evaluator training.

Aug 2003: MÜDEK started its first program evaluation activities.

Jan 2007: MÜDEK became a legal entity in the form of an association: Changed its name to **Association for Evaluation and Accreditation of Engineering Programs** (*Mühendislik Eğitim Programlari Degerlendirme ve Akreditasyon Dernegi*) while retaining the original acronym “MÜDEK” as its short name.

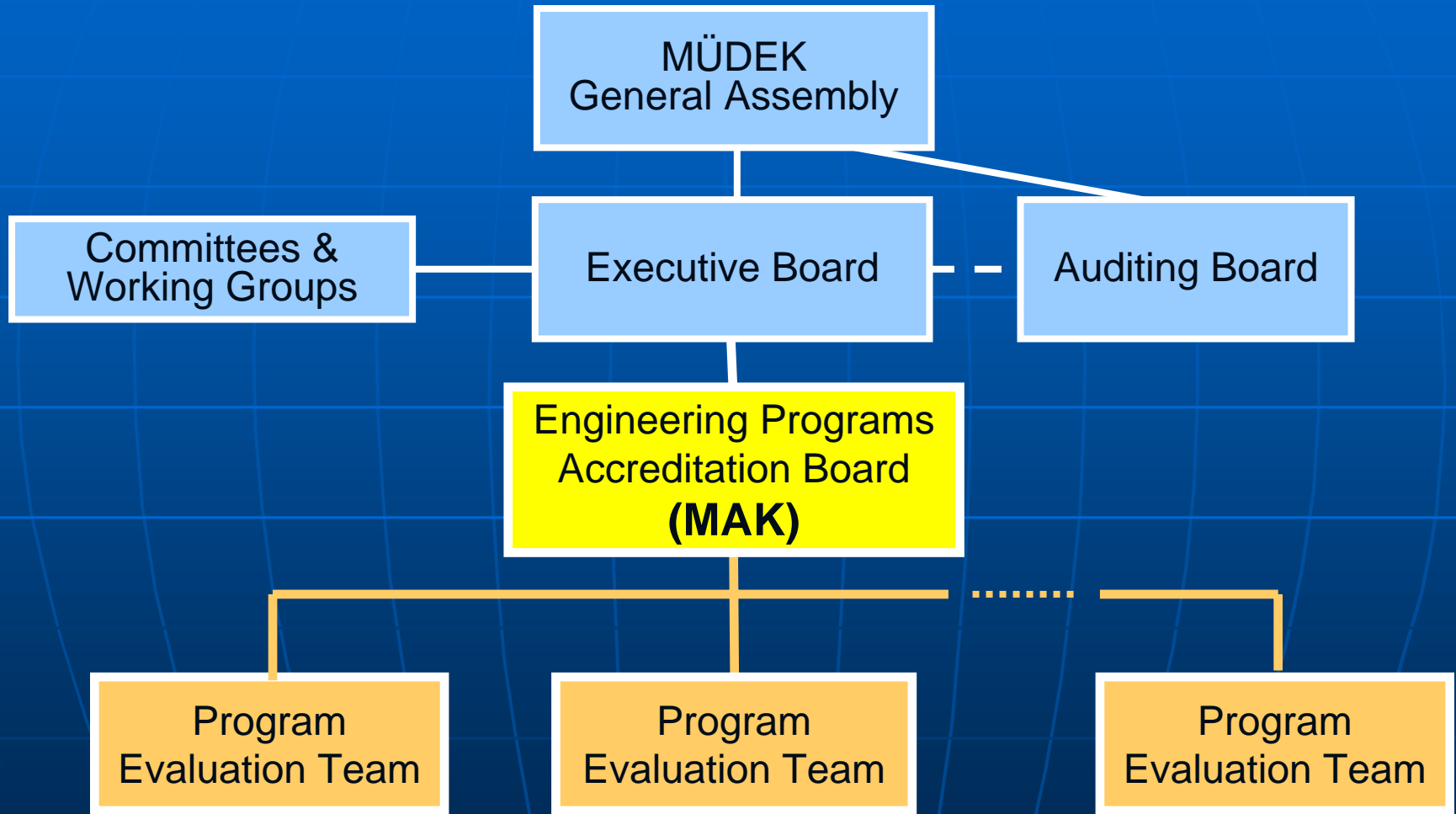
Nov 2007: Higher Education Council of Turkey (YÖK) officially recognized MÜDEK as the national agency for accrediting engineering programs in Turkey.

Main Objectives of MÜDEK

1. Accreditation of first cycle (4 years bachelor's) and second cycle (master's) engineering programs^(*) administered by engineering schools in Turkey
2. Selecting and training program evaluators
3. Providing information to and training program administrators (deans and program chairs) and academic staff on program accreditation
4. Reviewing and updating program accreditation criteria and procedures

^(*) MÜDEK currently accredits only first cycle (4 years bachelor's) programs

MÜDEK Organization Chart



Engineering Programs Accreditation Board (MAK)

- MAK runs the accreditation process and makes the final accreditation decisions
- Consists of eight members
 - One representative of the Union of Chambers of Engineering and Architects of Turkey (TMMOB)
 - One representative of the Turkish Society for Quality (KalDer)
 - Two representatives of industry
 - Four representatives of academia
- Membership closed to current deans of engineering schools and upper administration of HEI's
- Members serve for two years, limited to three consecutive terms
- 3 of its members:
 - Chairman
 - Deputy Chairman (Chairman elect)
 - Previous Chairman

Program Evaluation & Accreditation Activities of MÜDEK

	2003-2007 evaluated	2008 expected
No. of HEI's visited	10	6
No. of disciplines involved	14	13
No. of programs evaluated	80 (25)	36 (9)
No. of programs accredited	37*	

() interim evaluations * as of 30.09.2007

MÜDEK Accreditation Process Highlights

- Accreditation process, criteria and procedures are pre-defined and publicly available from <http://www.mudek.org.tr/>
- Starts with a self-assessment report from the HEI for each program to be accredited
- External assessment by ad-hoc evaluation teams
- Includes 3 day visit to the HEI
- MAK takes accreditation action, an evaluation report sent to the HEI
- Requires periodic re-evaluation (maximum 5 years)
- Shorter (2 year) interim evaluations as required
- HEI's can appeal to MÜDEK and request re-evaluations and re-visits

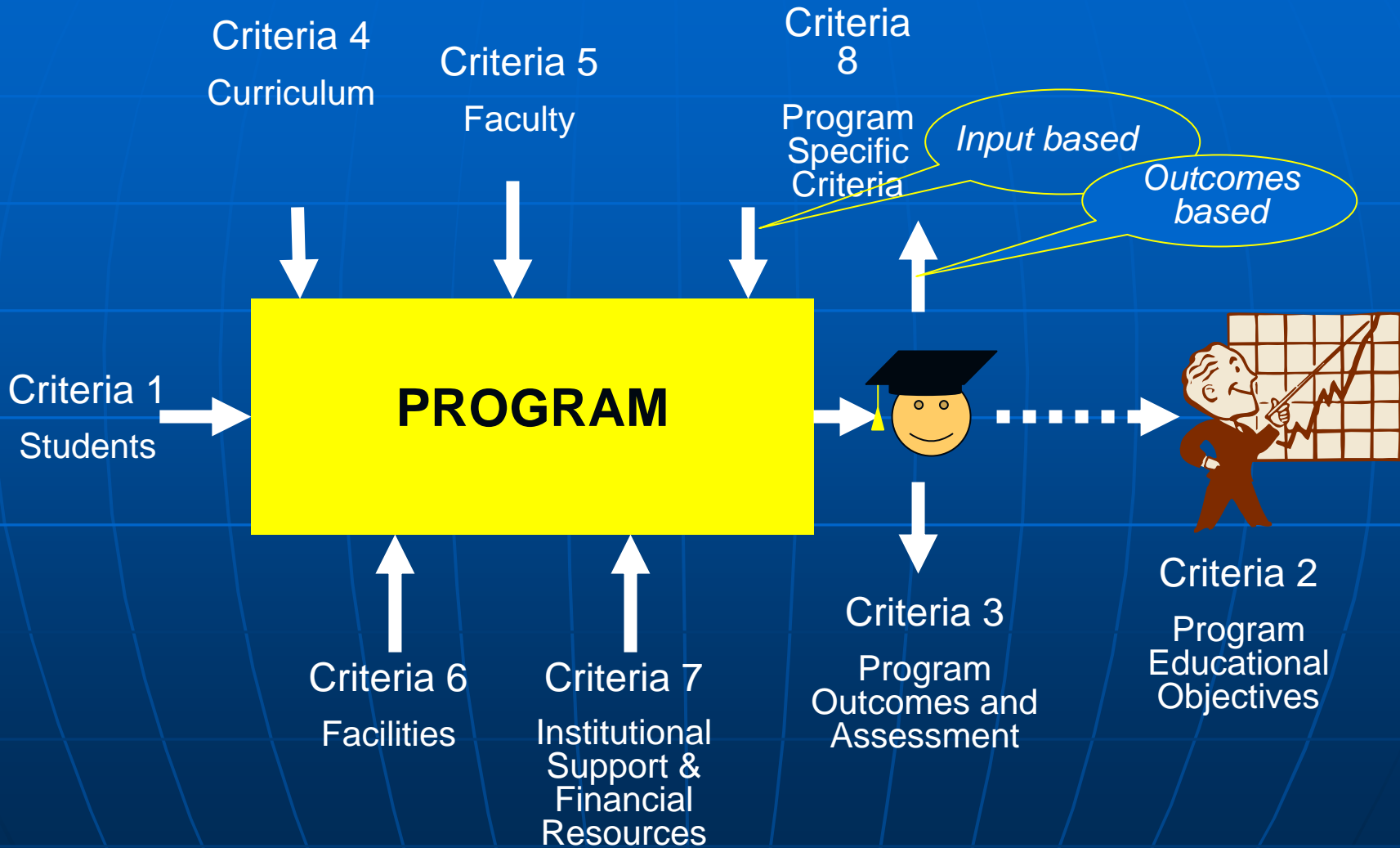
MÜDEK Evaluation Teams

- One **TEAM** is formed for each HEI applying to MÜDEK for the evaluation of its programs
- **TEAM CHAIR** is selected among current or former MÜDEK MAK members or experienced program evaluators
- At least one **EVALUATOR** for each program to be evaluated
- Evaluators are selected from a pool of MÜDEK-trained evaluators:
 - evaluators serve voluntarily
 - 82 trained evaluators including 24 practicing engineers in 14 disciplines, as of Jan 2008
- Conflict-of-interest issues are taken into consideration

MÜDEK Accreditation Process Steps

1. HEI's send statement of intent to MÜDEK for the engineering programs that will apply for accreditation *[30 Jan 2008]*
2. HEI's send Self-Assessment Reports (SAR's) for each program to MÜDEK *[01 August 2008]*
3. Evaluation teams are formed by MÜDEK *[August-September 2008]*
4. Teams study SAR's and request additional documents *[Sep-Oct 2008]*
5. Teams visit HEI's (3 day institution visit) *[November-December 2008]*
6. Teams submit draft reports to MÜDEK *[January-February 2009]*
7. Reports are finalized after consistency and editorial checks *[Mar-Jun 2009]*
8. Accreditation decisions are made by MÜDEK MAK; results and final reports are sent to the HEI's *[June 2009]*
9. List of accredited programs is updated and published on the MÜDEK web site <http://www.mudek.org.tr/> *[30 September 2009]*

MÜDEK Evaluation Criteria



MÜDEK Program Outcomes (Criteria 3)

Engineering programs must demonstrate that their graduates have acquired:

- (a) an ability to apply knowledge of mathematics, science, and engineering
- (b) an ability to design and conduct experiments, as well as to analyze and interpret experimental data
- (c) an ability to design a system, component, or process to meet desired needs
- (d) an ability to function on multidisciplinary teams
- (e) an ability to identify, formulate, and solve engineering problems
- (f) an understanding of professional and ethical responsibility
- (g) an ability to communicate effectively
- (h) the broad education necessary to understand the impact of engineering solutions in a global and societal context
- (i) a recognition of the need for, and an ability to engage in life-long learning
- (j) a knowledge of contemporary issues
- (k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

MÜDEK v.s. EUR-ACE Program Outcomes

EUR-ACE Program Outcomes	Corresponding MÜDEK Program Outcomes
1. KNOWLEDGE and UNDERSTANDING	(a), (h), (j)
2. ENGINEERING ANALYSIS	(a), (e)
3. ENGINEERING DESIGN	(c)
4. INVESTIGATIONS	(i), (k), (b)
5. ENGINEERING PRACTICE	(k), (j)
6. TRANSFERABLE SKILLS	(d), (g), (f), (h), (i)

EUR-ACE Related Activities of MÜDEK

- Participated in the initial **EUR-ACE** project as an informal partner and contributed to the development of the EUR-ACE Framework Standards by providing feedback at several stages of the project
- Joined the current **EUR-ACE Implementation** project as a formal partner
- Submitted its letter of intent to participate in the new **EUR-ACE SPREAD** project, whose proposal yet to be submitted
- Became a full member of **ENAE** (European Network for Accreditation of Engineering Education) in November 2006
- Has formally applied to ENAE for authorization to award the **EUR-ACE[®] Label**
- The intention is to award the EUR-ACE[®] Label to all programs accredited by MÜDEK

Thank you

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<http://www.mudek.org.tr/>