

## ADMINISTRATIVE BOARD DECISION

Kazan

October 5, 2011 №3/2011

Kazan National Research Technological University  
Hall of the Academic Council meetings, (building A, 1<sup>st</sup> floor), 17.00

**I. Reported:** AEER President Y.P. Pokholkov on results of the AEER activities for the first half of 2011

**Resolved:**

Approve the AEER activities for the period from 1.01.2011 to 31.06.2011. APPENDIX 1

**II. Reported:** AEER President Y.P. Pokholkov on approval of the AEER organisational structure.

**Resolved:**

Approve the AEER organisational structure APPENDIX 2

**III. Reported:** AEER President Y.P. Pokholkov on approval of the Regulations and members of the AEER Certification Board

**Resolved:**

Approve the Regulations on the AEER Certification Board APPENDIX 3

Appoint **Petr Chubik**, Rector of National Research Tomsk Polytechnic University, the chairman of the Certification Board.

Charge P.S. Chubik to form the AEER Certification Board.

Consider and approve the members of the AEER Certification Board on the AEER Administrative Board meeting.

**IV. Reported:** AEER President Y.P. Pokholkov on approval of the Regulations and members of the AEER Expert Council

**Resolved:**

Approve the Regulations on the AEER Expert Council APPENDIX 4

Consider the list of candidates to be included into the AEER Expert Council on the AEER Administrative Board meeting.

Chairman

Y.P. Pokholkov

Secretary

G.I. Vasilyeva

**Results of the activities of the Association for Engineering Education of Russia  
for the first half of 2011**

**1. Educational programmes accreditation**

In the first half of 2011 the decision was made on accreditation **with the award of «EUR-ACE®Label»** of 30 educational programmes of 6 universities, evaluation of 2 educational programmes has been postponed til the next meeting of the Accreditation Board in connection with the need to request additional documents.

**Accredited:**

**East Kazakhstan State Technical University named after D. Serikbaev**

- 050713 «Transport, Transport Engineering and Technology» (B) 5 years
- 050703 «Information systems» (B) 5 years

**Eurasian National University named after L.N. Gumilev**

- 050702 «Automation and Control» (B) 5 years
- 050732 «Standardization, Metrology and Certification» (B) 5 years
- 050901 «Organisation of Transport, Traffic and Operation» (B) 5 years
- 6N0702 «Automation and Control» (M) 5 years
- 6N0732 «Standardization, Metrology and Certification» (M) 5 years
- 6N0901 «Organisation of Transport, Traffic and Operation» (M) 5 years

**Kazakh National Technical University named after K.I. Satpaev**

- 050713 «Transport, Transport Engineering and Technology» (B) 5 years
- 050719 «Radio Engineering, Electronics and Telecommunications» (B) 5 years
- 050716 «Instrument-making» (B) 5 years
- 050720 «Chemical Technology of Inorganic Substances» (B) 3 years
- 050721 «Chemical Technology of Inorganic Substances» (B) 5 years
- 050722 «Polygraphy» (B) 5 years
- 050724 «Manufacturing machinery and equipment» (B) 5 years
- 050729 «Construction» (B) 5 years
- 050731 «Life Safety and Environmental Protection» (B) 5 years
- 050732 «Standardization, Metrology and Certification» (B) 5 years

**Kazan State Technical University named after Tupolev**

- 150600 «Material Science and Technology of New Materials» (B) 5 years
- 160100 «Aircraft Engineering and Rocket Production» (B) 5 years
- 230100 «Computer Science and Engineering» (B) 5 years

**National Research Technological University “MISIS”**

- 150100 «Metallurgy of Ferrous Metals» (B) 5 years

**Tomsk Polytechnic University**

- 150900 «Technology, Equipment and Automation of Mechanical Engineering» (B) 5 years
- 220301 «Automation of Technological Processes and Production» (D) 5 years

- 210100 «Physical Electronics» (M) 5 years
- 140200 «Power Grid Mode Management» (M) 5 years
- 140400 «Electric Drives and Electric Drives Control Systems» (M) 5 years
- 200100 «Systems of Orientation, Stabilization and Navigation» (M) 5 years
- 130500 «Oil and Gas» (Б) 5 лет
- 130500 «Geological and Geophysical Issues of Oil and Gas Fields Development» (M) 5 years

**Postponed:**

**Kazan State Technical University named after Tupolev**

- 140100 «Thermal Engineering» (Б)
- 230200 «Information Systems» (Б).

In the second quarter of 2011, there were two advisory visits to Kostanai Engineering and Pedagogical University (050713 "Transport, Transport Engineering and Technology" and 050732 "Standardization, Metrology and Certification") and Siberian State Aerospace University (220100.62 "System Analysis and Control" and 230100.62 "Computer Science and Engineering"), and one accreditation visit to Ufa State Oil Technical University to audit Bachelor educational programme 270100 "Building" and Master educational programme 550109 " Resource Saving and Ecology of Building Materials, Products and Constructions "

Within the III quarter of 2011, there was the accreditation visit to Kostanai Engineering and Pedagogical University for auditing Bachelor educational programmes 050 713 "Transport, Transport Engineering and Technology" and 050732 "Standardization, Metrology and Certification" (Republic of Kazakhstan). The audit of Siberian State Aerospace University is prepared for the accreditation of Bachelor educational programmes 220100.62 "System Analysis and Control" and 230100.62, "Computer Science and Engineering". Director of AC AEER S.I. Gerasimov participated as an observer in the visit for the accreditation procedures of the educational programme Master of Science HES-SO in Engineering Institution, University of Applied Sciences Western Switzerland (Lausanne, Switzerland).

**2. Participation in international projects**

**On June 19-22 in Stockholm, Sweden, in KTH Royal Institute of Technology,** the working meeting on the international project “Quality System of S&T Universities for sustainable Industry (QUESTE-SI)” was held, in which Ksenya Tolkacheva, member of the Association, participated on behalf of AEER.

The project is financed by the European Commission within the framework of Lifelong Learning Programme. The project objective is to improve specialists training quality in leading technical universities to meet the requirements of industry. The specific objectives are:

- to create a network of leading universities to share experiences, innovative ideas and methods to improve the quality of educational programmes development
- to create an interactive system of educational programmes quality assessment

The grant holder of the project is the European Foundation for Management Development. The project involves 20 participants from Austria, Belgium, the United Kingdom, Germany, Spain, Italy, Macedonia, the Netherlands, Poland, France, Czech Republic, Sweden. Russia is represented by the Association for Engineering Education.

The main topic of the meeting was general grid on sustainability and specific requirements for Energy, Material resources, ICT and Human Resources. The following questions were discussed:

- What is the demand from companies regarding sustainability?
- Which competencies are needed?
- How it modifies the paradigm of education?
- How can engineering education and technical institutions/universities better train students for this future and be better role models for sustainability?
- Where is the industry now?
- Where is the education now?
- What is needed to get to where we want?
- Is a ranking system or quality assurance system really an answer to this problem?

All consortium partners had opportunity to study the report that describes the Russian system of public accreditation of educational programmes in engineering and technology with AEER experts share their best practices on the issue and comment on the results of the survey aimed at improving current AEER accreditation criteria taking into account industry requirements for sustainable development. The presentation about energy and sustainability in Russian Higher Education was also made.

### **3. Journal “Engineering Education”**

**JUNE, 2011 – English version of the Journal - № 6, ISSUE TOPIC: Improvement of Engineering Education as the Basis of its Quality Assurance**

**JUNE, 2011 – Russian version of the Journal - № 7, ISSUE TOPIC: Engineering Education in Russia: Challenges, Problems, and Solutions.**

### **4. Meeting of the Washington Accord and the APEC Engineering Register**

On June 13-17, 2011, the delegation consisting of AEER President Yury P. Pokhokov, Director of the AEER Accreditation Centre Sergey I. Gerasimov and Head of TPU Certification Center Aleksandr V. Zamyatin took part in the regular (once every 2 years) meeting of the Washington Accord (WA) and the APEC Engineering Register (APEC).

At the WA meeting AEER President made a presentation on progress in public and professional accreditation in Russia, conducted by AEER. On its basis, the discussion of the work of AEER to improve AEER procedures and documentation on the organisation and carrying out of public and professional accreditation was held. The WA Mentoring Committee noted the significant progress of AEER and recommended to continue efforts to advancement of the signing by AEER of the Washington Accord in 2012. The need to sign the Washington Accord by AEER is dictated by AEER pursuit for improvement of the quality of Russian

engineering education programmes and their international recognition in the case of public and professional accreditation of these programmes by AEER structures.

They also participated in the meeting of the APEC Engineer agreement, the leading international register of professional engineers. The agreement between the APEC participating countries was signed with the purpose of mutual recognition of criteria (requirements) and procedures for certification of professional engineers in the member countries. Russia represented by AEER is the APEC full member from 2010. Certification of professional engineers in Russia is conducted by the Russian Union of Scientific and Engineering Organizations and the Association for Engineering Education of Russia.

### **23.06.2011 The working meeting was held for further preparation of the Association for Engineering Education of Russia for signing of the Washington Accord.**

The meeting attended by AEER President Y.P. Pokholkov, Director of the Accreditation Centre S.I. Gerasimov and the Association members responsible for this activity summarized participation in the meeting of the Washington Accord. On its basis, a plan of actions for improving the procedures and methodologies of accreditation of educational programmes in engineering and technology in accordance with recommendations of the WA Mentoring Committee was developed. The organisational questions of the visit of the WA observers in 2011-2012 academic year to participate in procedures of accreditation of educational programmes of Russian universities were also discussed.

## **5. Preparation for seminars**

### **International Scientific and Practical Seminar-Training "Best Practices of Engineering Training with Industry Assistance at European Universities"**

**Dates:** November 7-11, 2011

**Venue:** Czech Technical University in Prague

**Organisers:**

- Association for Engineering Education of Russia
- National Research Tomsk Polytechnic University
- Association of Leading Universities of Russia
- Czech Technical University in Prague
- European Society for Engineering Education SEFI
- Engineering Academy of the Czech Republic

**Seminar objective** – to generalize international experience and consider best examples of educational programmes and technology of training of specialists in engineering and technology. The seminar programme also aims at establishment of meaningful contacts and development of international cooperation of universities in order to unite efforts for development and implementation of joint educational programmes and for research.

**Seminar participants:** European experts, rectors, vice-rectors, deans, head of departments of universities of Russia, as well as business leaders interested in using best practices and improvement of the quality of training of engineers.

## 6. AEER Awards

### **Six Medals of Peter the First, the highest Awards of the Association for Engineering Education of Russia, were presented**

The Administrative Board on March 22, 2011, decided on awarding

<b>Mesyac Gennady Andreevich</b>	Vice-President of the Russian Academy of Science, Director of RAS Physics Institute (Moscow), RAS Full Member
<b>Fedorov Igor Borisovich</b>	President of Moscow State Technical University
<b>Kolesnikov Konstantin Sergeevich</b>	RAS Academician
<b>Agranovich Boris Lvovich</b>	Professor of National Research Tomsk Polytechnic University
<b>Peter Skalicky</b>	Rector of the Vienna University of Technology (TU Wien)
<b>Brian G.D. Smart</b>	Executive Dean, Heriot-Watt Campus, Dubai
<b>Kuznetsov Yury Aleksandrovich</b>	RAMAS Corresponding Member

**March 22, 2011**, on XII AEER General Assembly the Medal of Peter the First "For Development of Engineering Profession and Education" was presented to **Mesyac Gennady Andreevich**

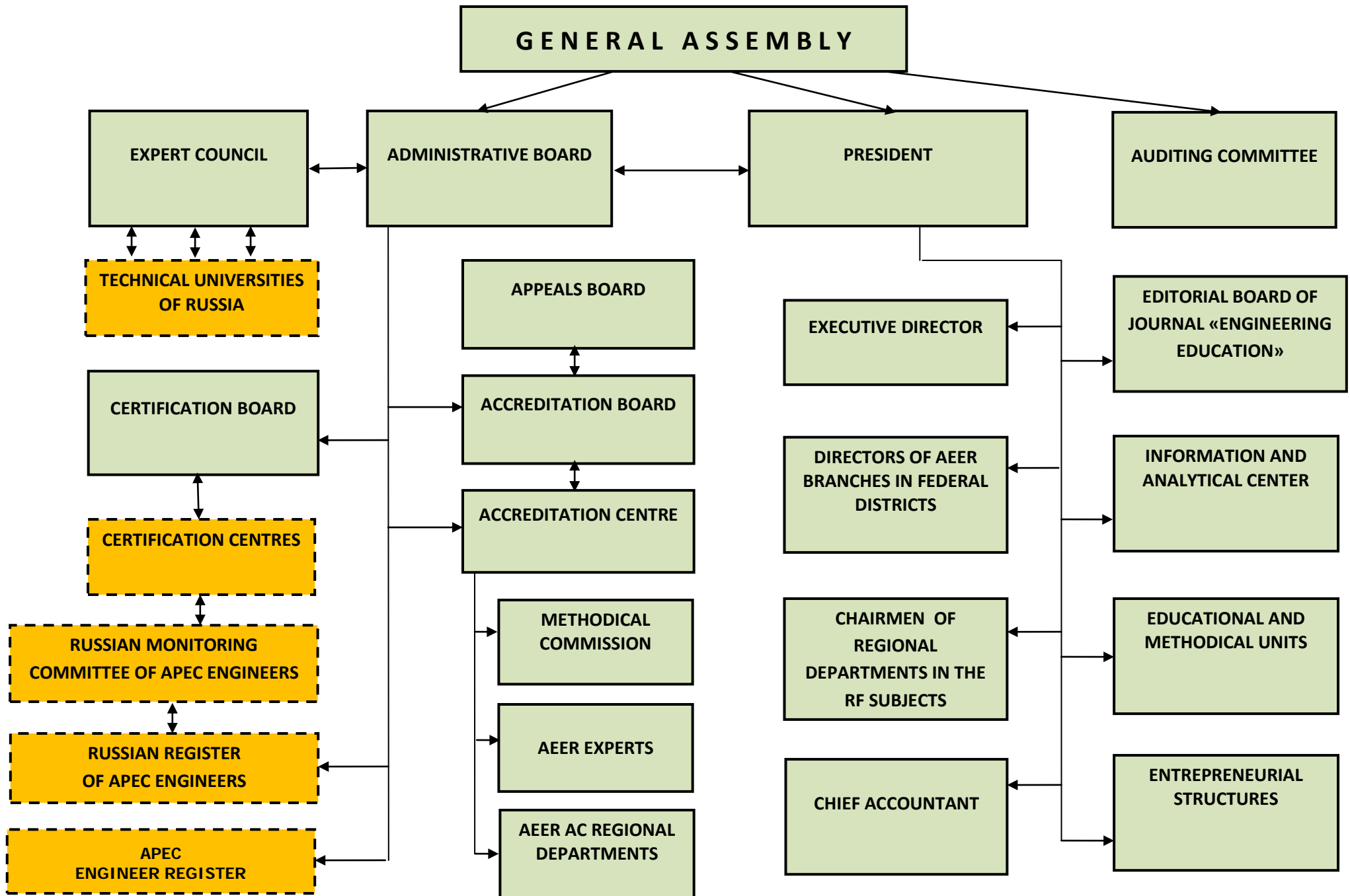
**April 5, 2011**, at the meeting of the Academic Council of National Research Tomsk Polytechnic University Vice-President of the Association for Engineering Education of Russia **Boris Lvovich Agranovich** was presented with the Medal of Peter the First "For Development of Engineering Profession and Education", established by the AEER. The Administrative Board Decision on awarding was adopted on 22 March, 2011.

**April 29, 2011**, during the celebrations of 70th anniversary of Rector of Vienna University of Technology Prof. Peter Skalicky, AEER President Yury Pokholkov and AEER First Vice-President Aleksandr Sigov on behalf of the Administrative Board presented **Peter Skalicky** with the Medal of Peter the First "For Development of Engineering Profession and Education".

**May 12, 2011**, at the enlarged meeting of the Council of the Association of Technical Universities President of the Association Yury Pokholkov presented **Igor Borisovich Fyodorov**, President of the MSTU, RAS Academician, and **Konstantin Sergeevich Kolesnikov**, RAS Academician, with the Medals of Peter the First "For Development of Engineering Profession and Education". Decision to award was made at the meeting of the AEER Administrative Board on 22 March, 2011.

**June 3, 2011**, in International Cultural Centre of Tomsk Polytechnic University on the gala evening dedicated to graduation of the TPU System of Elite Technical Education, **Yury Aleksandrovich Kuznetsov**, RAMAS Corresponding Member, was presented with the Medal of Peter the First "For Development of Engineering Profession and Education". Decision to award was made at the meeting of the AEER Administrative Board on 22 March, 2011.

# AEER ORGANISATIONAL STRUCTURE



**Regulations on the Certification Board**  
of the Association for Engineering Education of Russia

**I. General Provisions**

1. The Certification Board (CB) is the working body of the Association for Engineering Education of Russia (AEER) responsible for the quality of engineering qualifications certification conducted by the APEC Certification Centres in Russia.

**II. Objectives of the Certification Board**

1. The CB concludes on compliance of procedures and criteria for certification used by the Certification Centres with the requirements of the APEC Engineer Register.
2. The CB registers in the Russian APEC Engineer Register and submits information to the APEC Engineer Register.
3. The CB approves the criteria and procedure for engineering qualifications certification.
4. The CB makes proposals for development and improvement of the activities of Certification Centres.
5. The CB considers statements of candidates of disagreement with the decision of a Certification Centre to reject an application for certification and registration in the Russian APEC Engineer Register and the International APEC Engineer Register.

**III. Members of the Certification Board**

1. The CB consists of leading expert in the field of engineering and engineering education from various circles, including industry representatives being the half of members, and the other half - representatives of scientific and educational community.
2. The CB Chairman is appointed by the AEER Administrative Board and re-elected once in four years.
3. Members of the Board are renewed by one-third in four years.

**IV. Meetings of the Certification Board**

1. The CB meetings are held at least once in six months. An extraordinary Board meeting may be convened if necessary or at the suggestion of the Chairman or at the request of at least one-third of its members.



2. The Board members should be notified of the venue and agenda for the next meeting not later than 2 months before the planned date of the meeting.
3. The meeting of the Board shall be considered valid if attended by two-thirds of its members in person or by proxy. Each Board member can represent under power of attorney the interests of no more than two members.

V. Decision-making process

1. The Certification Centres submit reports (in the prescribed form) on the engineering qualifications certification in accordance with the criteria of the APEC Engineer Register to the CB.
2. The CB conducts the audit of the Certification Centres and of the reports submitted by the Certification Centres.
3. The CB sends its opinion letter to the Russian APEC Monitoring Committee.
4. The Russian APEC Monitoring Committee decides on certification and registration of professional engineers in the Russian APEC Engineer Register.
5. The CB provides information on the Russian APEC Engineer Register to be published in the journal "Engineering Education", the AEER web-site and to the APEC Engineer Register.

VI. Accounting and reporting

- a. The CB submits an annual report on its activities to the AEER Administrative Board.
1. The AEER keeps records of the engineers received the APEC Engineer Register Certificates by entering their data into the Russian APEC Engineer Register.

## Appendix 4

### **Regulations on the Expert Council** of the Association for Engineering Education of Russia

#### I. General provisions

1. The Expert Council (EC) is a permanent public body for expert, information and advisory support of the Association for Engineering Education of Russia (AEER).
2. The members of the Expert Council work on a voluntary and contractual basis.

#### II. Objectives of the Expert Council:

1. Expert examination of the state and directions of development of engineering education and engineering in Russia.
2. Involvement of leaders of organisations, enterprises, leading educational institutions, business structures, leading experts in the field of engineering and technology into the expert examination of the state and directions of development of engineering education and engineering in Russia
3. Expert examination of the level of training in engineering and technology at Russian universities.
4. Expert examination of the results of existing scientific schools at Russian universities in the field of in engineering and engineering education.
5. Expert examination of the proposals for improvement and development of the system of engineering education.

#### III. Members of the Expert Council:

1. The EC is formed on the proposals of regional departments, the AEER Administrative Board and approved by the AEER President.
2. The EC consists of leading experts in the field of engineering and education from various circles, including representatives from industry and research and education community.

3. The EC Chairman is elected on the Council meeting by open vote.

IV. Meetings of the Expert Council:

1. The Expert Council meets as necessary but at least once a year.
2. The Council members should be notified of the venue and agenda for the next meeting not later than 2 months before the planned date.

V. Decision-making process

1. The EC decisions are of advisory nature for the AEER.

VI. Accounting and reporting.

1. The EC submits an annual report on its activities to the AEER Administrative Board.