TABLE OF CONTENTS

4. Message from the President
5. Foreword by the Secretary General
6. Strong and United
8. Mission, Activities and Benefits
9. CESAER Annual Meeting 2018
10. Members
12. Presidency and Board
14. Research
15. Education
16. Innovation
17. Leadership and Sustainability
18. Resources
18. Secretariat
MESSAGE FROM THE PRESIDENT

In 2018, CESAER - the strong and united voice of universities of Science & Technology (S&T) in Europe - has moved quickly to implement our new collaborative leadership structure, increased the participation of our Members and started new work across a number of key strategic areas. This puts into practice our intent, set out in the Work Plan 2018-2019, of acceleration, engagement and collaboration. I am delighted that, alongside our Directors, I have been able to work with Vice President colleagues for Research, for Education, for Innovation & Impact, for Leadership & Sustainability, and for Resources. We have organised and refocused our task forces into these themes and introduced advisory committees so support the Vice Presidents. We have revised our approach to financial reporting and planning. Importantly, we have had constructive dialogue with European institutions such as the Commission, including Commissioner Carlos Moedas on the plans for Horizon Europe, and Commissioner Corina Crețu on regional development funds.

I am delighted to present you this Annual Report 2018 summarising our work and the impact created in the last year to demonstrate how we are contributing to European policies and programmes in research, education and innovation. Together with my colleagues in the Presidency and the Board, we look forward to continuing our success in 2019 and beyond.

With the political, economic, societal and technological challenges we currently face in the first part of the 21st century, there has never been a better time for our association to show leadership and make contributions to Europe that add value and demonstrate the distinctive role of universities of S&T.

CESAER is working well, thanks to the hard work of its staff, the collaboration of its Members, and the collective vision, expertise, experience and energy that we share.

Professor Sir Jim McDonald
President of CESAER
Principal & Vice Chancellor University of Strathclyde
FOREWORD BY THE SECRETARY GENERAL

We continued to expand the vibrant network of staff from over fifty universities of S&T from twenty six countries. Together, we connected to a wide range of stakeholders - including policy-makers, politicians and funders. We thus voiced the interests of our Members on key topics and developments in European policies and programmes for research, education and innovation with a dedicated focus on research and the EU funding programmes. For example, we are delighted that Karel Luyben (our Vice President for Research) is representing our Members, the European Federation of Academies of Sciences and Humanities (ALLEA) and the European University Association (EUA) as chairman of the Executive Board of the European Open Science Cloud (EOSC).

Our various publications testify our collective representation on key issues to senior policy-makers and funders at heart of (European) decision-making. They also demonstrate our direct support taking forward specific collaborative activities and initiatives which strengthen our collective position in relation to learning and teaching, research excellence and innovation, leadership, and strategic influence. In 2019, we have notably published our first two white papers complementing our positions stimulating debate, setting agendas, addressing specific (societal) challenges and providing guidance. You may expect more of those from us in the future to strengthen our authoritative and executive capacity and our profile as a thought-leader.

Building on the achievements in 2017 - such as adopting a Strategy 2025 and amending our Articles of Association - we delivered an even more effective, efficient and supportive membership organisation through the launch of a new website and information systems with exclusive access for our Members. Last year was a landmark year for us through the expansion of the Secretariat to four full-time equivalents.

Benefits to our Members also include an attractive range and programme of events, such as the CESAER Annual Meetings 2018 kindly hosted by the University POLITEHNICA of Bucharest and the many events of our task forces and governing bodies.

David Bohmert
CESAER Secretary General
Our Members educate just over 1 million students of which over 160,000 (16%) are international.

We unite and employ over 86,000 academic staff.

Our Members were awarded 2 billion euros worth of European research projects including 500 ERC Projects, 1,000 MSCA Fellowships, and 4,000 Collaborative Projects.
Within our Members, we reach out to over 500 staff. Together, they are involved over 900 times in our task forces and governing bodies.

We published our first two white papers ever on Sharing experiences with Human Resources Strategy for Researchers and on The role of universities of S&T in innovation ecosystems.

15 statements & letters were published, advancing CESAER’s united voice and defending the prioritisation of research, education and innovation in Europe.
MISSION, ACTIVITIES AND BENEFITS

MISSION

The mission is structured around five aims:

• **to learn from each other**: share information and best practice in the areas of higher education, research, innovation and university governance;
• **to influence key bodies**: aid policy-makers and funders to shape European strategies, policies and funding programmes;
• **to boost participation in (European) funding programmes**;
• **to promote our strengths globally**: support our Members in displaying their excellence and distinctiveness at European level and beyond;
• **to advance debate on key issues**: promote reflection and understanding of the role of science and technology in open knowledge societies.

ACTIVITIES

We carry out activities connected with our five aims:

• share experiences, identify best practice and provide guidance;
• deploy task forces and (ad hoc) committees;
• organise events, such as meetings, workshops and conferences;
• monitor European policies and programmes and inform the Members about them;
• undertake consultations and surveys amongst Members and define, voice and represent their collective interests and contributions;
• publish press releases, input, statements and papers;
• liaise with European institutions and stakeholders;
• support communication of the Members in Europe and beyond;
• liaise with the Members and encourage the embedding of activities within the institutions;
• improve the functioning of our Association.

BENEFITS

We provide the following benefits to our Members:

• unrivalled access to and exchange with networks of staff in like-minded institutions;
• connections to and influence on wide range of stakeholders, including policy-makers, politicians and funders;
• direct support to take forward specific collaborative activities and initiatives which strengthen our collective position in relation to learning and teaching, research excellence and innovation, leadership, and strategic influence;
• creating influential voice on behalf of Members, which takes account of range of needs and positions;
• collective representation on key issues to senior policy-makers and funders at heart of (European) decision-making, enabling us to lobby and influence effectively as group, and which also provides support where required for national representations;
• delivering effective, efficient and supportive membership organisation;
• offering attractive range and programme of events.
The CAM 2018 included an attractive range of programmes and events, such as seven workshops supporting the ongoing work of the our task forces and a conference on ‘Engines of Excellence, Talent and Innovation’ and the 31st General Assembly on 19th October.

CESAER ANNUAL MEETINGS 2018

From 17th to 19th October, the representatives and leaders from our Members discussed the future of S&T at the University POLITEHNICA of Bucharest (UPB). We gathered to celebrate the bicentennial year of UPB, celebrating 200 years of its mission to impact society for the better. Moreover, 2018 was a milestone year in the Romanian history, as it marked a century since the formation of the modern Romanian state. Finally, the gathering was timely with a view on the Romanian Presidency of the Council of the EU in the first half of 2019.

The event thus emphasised the value of European collaboration in research, education and innovation for the benefit of society. Key topics discussed included the role of universities of S&T in research and innovation infrastructures and the ongoing interinstitutional negotiations on the next generation of EU funding instruments.

Our Board met with the European Commissioner for Regional Development Ms Corina Crețu whose speech emphasised the need for stronger incentives for research, the private sector, higher education institutions and public authorities to work together to scale-up and commercialise new ideas.
OUR MEMBERS IN 2019

Aalborg University - Denmark
Aalto University - Finland
Ben-Gurion University of the Negev - Israel
Brno University of Technology - Czechia
Budapest University of Technology and Economics - Hungary
Chalmers University of Technology - Sweden
Communauté Université Grenoble Alpes - France
Czech Technical University in Prague - Czechia
Delft University of Technology - Netherlands
Ecole Polytechnique Fédérale de Lausanne - Switzerland
ETH Zurich - Switzerland
Gdańsk University of Technology - Poland
Ghent University - Belgium
Graz University of Technology - Austria
Institut National des Sciences Appliquées Lyon - France
Instituto Superior Técnico - Portugal
Istanbul Technical University - Turkey
Karlsruhe Institute of Technology - Germany
Kaunas University of Technology - Lithuania
KTH Royal Institute of Technology - Sweden
KU Leuven - Belgium
Leibniz Universität Hannover - Germany
Lund University - Sweden
Norwegian University of Science and Technology - Norway
Paris Institute of Technology - France
Politecnico di Milano - Italy
Politecnico di Torino - Italy
Poznan University of Technology - Poland
Riga Technical University - Latvia
RWTH Aachen University - Germany
Tallinn University of Technology - Estonia
Technical University of Madrid - Spain
Technion - Israel Institute of Technology - Israel
Technische Universität Berlin - Germany
Technische Universität Braunschweig - Germany
Technische Universität Darmstadt - Germany
Technische Universität Dresden - Germany
Tomsk Polytechnic University - Russia
TU Wien - Austria
Universidade NOVA de Lisboa - Portugal
Universitat Politècnica de Catalunya - Spain
Universitat Politècnica de València - Spain
Université Catholique de Louvain - Belgium
Université Paris-Saclay - France
University College Dublin - Ireland
University of Porto - Portugal
University of Sheffield - United Kingdom
University of Strathclyde - United Kingdom
University of Stuttgart - Germany
University of Surrey – United Kingdom
University of Twente - Netherlands
University POLITEHNICA of Bucharest - Romania
Warsaw University of Technology - Poland
PRESIDENCY 2018-2019

The Presidency is composed of the President and five Vice Presidents. One of the Vice Presidents acts as Treasurer. The Presidency is responsible for the ongoing affairs of the association and the preparation and implementation of the decisions by the General Assembly and the Board. The members of the Presidency are also members of the Board of Directors. In 2018, the Presidency was composed of:

Sir Jim McDonald
President
Principal & Vice Chancellor of University of Strathclyde

Sigbritt Karlsson
1st Vice President for Leadership & Sustainability
President KTH Royal Institute of Technology in Stockholm

David FitzPatrick
Vice-President for Resources & Treasurer Principal
Dean of Engineering at University College Dublin

Wayne D. Kaplan
Vice President for Innovation & Impact
Executive Vice President for Research of Technion - Israel Institute of Technology

Karel Luyben
Vice President for Research
Rector Magnificus Emeritus of Delft University of Technology

Jurgita Šiugždinienė
Vice President for Education
Advisor to Rector on Education of Kaunas University of Technology
BOARD OF DIRECTORS 2018-2019

Our association is governed by the Board consisting of Directors which are elected from amongst the Members. The Board enacts the decisions of the General Assembly and is vested with the widest powers with regard to the steering of the association not reserved for the General Assembly. In 2018, the following Directors completed our Board:

Rajmund Bacewicz
Director 2016-2019
Vice-Rector for Research of Warsaw University of Technology

Guillermo Cisneros Perez
Director 2016-2019
Rector Magnificus of Technical University of Madrid

Mihnea Costoiu
Director 2018-2021
Rector of University POLITEHNICA of Bucharest

Anders Hagström
Director 2016-2019
Director Global Education Affairs at ETH Zurich

Holger Hanselka
Director 2018-2021
President of Karlsruhe Institute of Technology

Vojtěch Petráček
Director 2016-2019
Rector of Czech Technical University in Prague

Arlindo Manuel Lime de Oliveira
Director 2018-2021
President of Instituto Superior Técnico

Rik Van de Walle
Director 2018-2021
Rector of Ghent University

Marc Zolver
Director 2016-2019
Vice President for International Affairs at CentraleSupélec for Université Paris-Saclay
FOUR STRATEGIC THEMES

Our work in 2018 was structured within four strategic themes each led by a Vice President:

1. Research
2. Education
3. Innovation and Impact
4. Leadership and Sustainability

1. RESEARCH

Excellent Research is at the core and focus of our association. To adequately reflect our Members’ diverse contexts and perspectives, we define priorities through engagement of Members and wider stakeholders, linking to our association’s strategic perspective and vision. The goal is that impact of activities goes beyond the institutional level and can have an influence on national as well as European structures and policies. The work under research is divided in three main areas:

1. a look into the future through the mapping of S&T defining trend in key scientific areas;
2. the implementation and adherence to open science by universities of S&T;
3. the role of universities in research and innovation infrastructures.

TASK FORCE S&T IN THE 21ST CENTURY

The Task Force S&T in the 21st Century is a new body co-chaired by Marleen Stikker (De Waag) and Arlindo Oliveira. It will identify the drivers behind long-term trends in S&T in general with an initial focus on Artificial Intelligence (AI), biotechnology and quantum technology.

TASK FORCE OPEN SCIENCE

The Task Force Open Science advances the understanding and implementation of open science by our Members (researchers and support staff), with particular attention to Open Access (OA) to scientific publications and Research Data Management (RDM). Karel Luyben (TU Delft) and Wilma van Wezenbeek (TU Delft) co-chair this task force of 41 persons from 30 Members. The task force aims at contributing to the following European OA goals to be achieved by 2020: First, push for full open access for all scientific publications. Second, a fundamentally new approach towards optimal research data management and reuse of research data: making good data stewardship and sharing the default approach for all publicly funded research. The Task Force has advanced cases studies on how different researchers approach data sharing. While focusing on RDM and OA, the task force will monitor the broader developments in open science, liaise with other relevant task forces on open education and open innovation and voice the interests of our Members.

TASK FORCE RESEARCH & INNOVATION INFRASTRUCTURES

The Task Force Research & Innovation Infrastructures supports our Members in affirming and furthering the role of universities of S&T in research and innovation infrastructures. Lars Börjesson (Chalmers) chairs this task force counting 19 persons from 16 Members. The task force published two statements in 2018, on Shaping the European Open Science Cloud, and Innovation Infrastructures. It also hosted a workshop and provided the central theme for a conference at CAM 2018, by the beginning of 2019, it has delivered a white paper on Universities of S&T as Engines of Excellence, Talent and Innovation - Roles in Research and Innovation Infrastructures.
2. EDUCATION

Our activities on Education focus on key topics of importance for our Members assuring human capital in S&T for the 21st century, ensuring employability of our graduates and improving career development of S&T graduates, and - in doing so - meeting the needs of business, industry, public services and society at large for skilled employees. We are working to influence the debate on the European Educational Area (EEA) and European University Networks and promote better understanding of the values of S&T programmes and degrees by business and industry and in view of the ‘learning society’.

TASK FORCE S&T EDUCATION FOR THE 21ST CENTURY

The Task Force S&T Education for the 21st Century supports our Members in assuring human capital in S&T for the 21st century, ensuring employability of our graduates and improving career development of S&T graduates. It addresses the following key areas:

1. human capital in S&T for 21st century;
2. interdisciplinary curricula;
3. opportunities for S&T universities to provide continuous education and professional development and up-skilling opportunities.

Ralph Bruder (TU Darmstadt) chairs this task force of 21 people from 18 Members.

TASK FORCE COST OF STEAM EDUCATION

The Task Force Cost of STEAM Education is a new body and has recruited its first Chair, Thom Palstra (University of Twente). It creates an influential voice on behalf of the Members, enabling us to lobby and influence effectively as a group towards policy-makers and funders at the heart of European decision-making, and providing support where required for national representations.

Ravindranathan Thampi (UCD) and Monika Sester (Hannover) co-chair the task force with 31 persons from 23 Members.

TASK FORCE MOBILITY

The Task Force Mobility promotes trust and cooperation amongst our Members to assure recognition of credits and degrees for student mobility (Lisbon Convention) and more opportunities for joint, double and dual degrees. We replied to the European Commission consultation on the mutual recognition of diplomas and study periods abroad, developing recommendations and a discussion paper on the topic. The task force jointly organised a successful session at ESOF 2018 in Toulouse on ‘Open & responsible science & technology for the United Nations Sustainable Development Goals’ with the Task Force Ethics & Values, and organised a workshop on mutual recognition of diplomas and study periods abroad at CAM 2018.
3. INNOVATION AND IMPACT

Through Innovation and Impact, we are pursuing opportunities to establish a distinct profile for our association, testifying the close collaboration of our Members with business, industry and public services directed towards delivering tangible economic, social and societal impact and skills needed for the 21st century, including innovative and entrepreneurial mind-sets. Our particular focus is on innovation ecosystems, knowledge exchange and impact. Universities need to fully evaluate the impact of their innovation on society, and establish mechanisms to maximise this impact. The real issue to address is how to create value for business, industry, public services and society at large. Therefore, collaboration between different entities in research and innovation cycles is crucial. Universities are the basis of knowledge production and training of the professionals, researchers and entrepreneurs of tomorrow.

TASK FORCE INNOVATION

The Task Force Innovation supports the Members by addressing the strategic positioning of universities of S&T in innovation ecosystems, their relation with industry and governments. Tim Bedford (Strathclyde) and Bram Wijlands (RWTH Aachen) co-chair this task force of 30 persons from 24 Members and Yvonne Kinnaird (Strathclyde) acts as its Secretary. In 2018, the task force completed surveys on the role of universities in innovation ecosystems on innovative mind-sets and case studies on role of universities in innovation ecosystems. Additionally, it undertook a questionnaire on best practices on intellectual property management. It held a joint workshop with the Joint Research Centre on Regional Innovation Impact Assessment Framework of Universities and a workshop on Role of Universities in Innovation Ecosystems organised at the CAM 2018. It published a white paper on the Role of Universities in Innovation Ecosystems.

TASK FORCE IMPACT & OUTREACH

The Task Force Impact & Outreach supports our Members to maximise impact and provide world-class training in core research and innovation competencies. It aims at increasing our Member’s visibility and working on their capacity building in innovation, impact, S&T research and communication management. Christine Ahrend (TU Berlin) chairs this task force.
4. LEADERSHIP AND SUSTAINABILITY

The theme Leadership and Sustainability provides significant added value to the network underpinning efforts and issues being faced by universities under Research, Education and Innovation and Impact. It supports our Members’ ability to deliver their ambitions and to demonstrate their successes.

TASK FORCE BENCHMARK

The Task Force Benchmark inspires and supports our Members optimising the depiction of performance in important rankings and sharing experiences on and data from rankings and metrics issues. Mads Nygård (NTNU) chairs this task force of 35 persons from 25 Members and Kristin Brekke (NTNU) acts as its Secretary. Rona Smith (Strathclyde) leads the work on the Annual Member Monitor and Per-Eric Thörnström (Chalmers) leads the work on next generation metrics. The Task Force organised a workshop on optimising bibliometrics for engineering and technology with Elsevier, and published a statement on Assess and Reward Europe’s Universities. Additionally it published the Annual Member Monitor 2018 and organised a workshop on next generation metrics during CAM 2018.

TASK FORCE COMPETITIVE FUNDING

The Task Force Competitive Funding supports our Members in participating in and the shaping of European funding policies and programmes with specific focus on Horizon Europe and Erasmus and provide insights and share best practice concerning competitive funding from regional, national, European and international sources. Olivier Küttel (EPFL) chairs this task force of 35 persons from 22 Members and David Bohmert (CESAER) acts as its Secretary. The task force closely followed the developments next generation of EU funding instruments and published statements on the proposal for the Multi-annual Financial Framework from 2021 to 2027, Horizon Europe, and the next Erasmus programme.

TASK FORCE ETHICS & VALUES

The Task Force Ethics & Values supports our Members in addressing the ethical challenges resulting from the scientific and technological developments in the 21st century and provides guidance on how to optimise their contribution to contributing to finding solutions to United Nations Sustainable Development Goals (UN SDG). Jeroen van den Hoven (TU Delft) chairs this task force of 21 persons from 17 Members. In it co-organised a workshop on the contribution of S&T to the UN SDG during ESOF 2018.
RESOURCES

The annual subscription 2018 amounted to €9,000. The Annual Account for our fiscal year from 1st October 2017 to 30th September 2018 was:

<table>
<thead>
<tr>
<th>TYPE COSTS</th>
<th>COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTERNAL BODIES</td>
<td>76,000</td>
</tr>
<tr>
<td>SECRETARIAT</td>
<td>78,298</td>
</tr>
<tr>
<td>EVENTS</td>
<td>27,540</td>
</tr>
<tr>
<td>PROJECTS</td>
<td>3,000</td>
</tr>
<tr>
<td>ICT</td>
<td>19,985</td>
</tr>
<tr>
<td>ADMINISTRATION</td>
<td>13,433</td>
</tr>
<tr>
<td>SALARIES</td>
<td>436,637</td>
</tr>
<tr>
<td>TOTAL EXPENSES</td>
<td>654,893</td>
</tr>
<tr>
<td>INCOME</td>
<td>642,120</td>
</tr>
<tr>
<td>TOTAL INCOME</td>
<td>642,120</td>
</tr>
<tr>
<td>FROM RESERVE</td>
<td>12,773</td>
</tr>
</tbody>
</table>

SECRETARIAT

The Secretariat ensures the execution and implementation of the decisions by the General Assembly, the Board and the Presidency and manages the daily operation of the association. The Secretariat has expanded to four full-time equivalents through the addition of a Senior Advisor for Research and a Communication & Education Officer.

CONTACT
Kasteelpark Arenberg 1 Box 2200
3001 LEUVEN
BELGIUM
+32 16 32 16 87
info@cesaer.org

David Bohmert
Secretary General
+32 16 32 64 49
david.bohmert@cesaer.org

Lieve Coninx
Head of Relations
+32 16 32 16 87
lieve.coninx@cesaer.org

Ricardo Migueis
Senior Advisor for Research & Innovation
+32 16 32 68 65
ricardo.migueis@cesaer.org

Calum Mackichan
Communication & Education Officer
+32 16 32 41 19
calum.mackichan@cesaer.org

Resources

The annual subscription 2018 amounted to €9,000. The Annual Account for our fiscal year from 1st October 2017 to 30th September 2018 was:

<table>
<thead>
<tr>
<th>TYPE COSTS</th>
<th>COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTERNAL BODIES</td>
<td>76,000</td>
</tr>
<tr>
<td>SECRETARIAT</td>
<td>78,298</td>
</tr>
<tr>
<td>EVENTS</td>
<td>27,540</td>
</tr>
<tr>
<td>PROJECTS</td>
<td>3,000</td>
</tr>
<tr>
<td>ICT</td>
<td>19,985</td>
</tr>
<tr>
<td>ADMINISTRATION</td>
<td>13,433</td>
</tr>
<tr>
<td>SALARIES</td>
<td>436,637</td>
</tr>
<tr>
<td>TOTAL EXPENSES</td>
<td>654,893</td>
</tr>
<tr>
<td>INCOME</td>
<td>642,120</td>
</tr>
<tr>
<td>TOTAL INCOME</td>
<td>642,120</td>
</tr>
<tr>
<td>FROM RESERVE</td>
<td>12,773</td>
</tr>
</tbody>
</table>

Secretariat

The Secretariat ensures the execution and implementation of the decisions by the General Assembly, the Board and the Presidency and manages the daily operation of the association. The Secretariat has expanded to four full-time equivalents through the addition of a Senior Advisor for Research and a Communication & Education Officer.

Contact
Kasteelpark Arenberg 1 Box 2200
3001 Leuven
Belgium
+32 16 32 16 87
info@cesaer.org

David Bohmert
Secretary General
+32 16 32 64 49
david.bohmert@cesaer.org

Lieve Coninx
Head of Relations
+32 16 32 16 87
lieve.coninx@cesaer.org

Ricardo Migueis
Senior Advisor for Research & Innovation
+32 16 32 68 65
ricardo.migueis@cesaer.org

Calum Mackichan
Communication & Education Officer
+32 16 32 41 19
calum.mackichan@cesaer.org