

Monday, November 13, 2017 – 14:30—17:00

Real Academia de Ingeniería
Calle Don Pedro, 10, 28005 Madrid, España

Board Members

Dr. Elías Fereres (President)

Dame Ann Dowling (Past-President)

Acad. Eng. Lucio Cáceres (President-Elect)

Dr. Ruth David (Secretary/Treasurer)

Paul Verstraeten (Belgium)

Hideaki Koizumi (Japan)

Martin Philip Bendsoe (Denmark)

Jaime Parada (Mexico)

Vladimir Androcec (Croatia)

Frank Behrendt (Germany)

Trueman Goba (South Africa)

Ulrich Suter (Switzerland)

1. Welcome and approval of agenda
 2. Approval of Board Minutes of 12 September 2016
 3. Report of the Secretary/Treasurer
 - a. Audit Committee: 2016 Financial Audit
 - b. 2017 Financial Status
 - c. 2018 Operating Budget
 - d. CAETS Website
 - e. Rotation Schedule
 4. Continuation of CAETS Theme: *Engineering a Better World*
 5. Inter-Academy Partnership
- Coffee Break
6. CAETS/WFEO Cooperation
 7. CAETS Discussion Topics for 2018
 8. CAETS Committees
 9. New Business

Adjourn

CAETS International Council of Academies of Engineering and Technological Sciences, Inc.

Board of Directors Meeting
1105 - 1220 Monday, September 12, 2016
Al Qusimi North, The Royal Academy of Engineering, London
Summary Minutes

Draft 14 September 2016

Participants:

Members: Ann Dowling, President; Elias Fereres, President-elect; William C. Salmon, Secretary, Treasurer; Baldev Raj, Past President; Bruno Revellin-Falcoz, NATF; Karl A. Almas, NTVA; Robert L. Evans, CAE, Canada; Paul Verstraeten, BACAS; Hideaki Koizumi, EAJ; Martin Philip Bendsoe, ATV; Jaime Parada, AI.

Guests: Lucio Caceres, ANIU; Shane McHugh, RAEng; Samantha Frost, RAEng; Jaime Domínguez, RAIng; K V Raghavan, INAE; Rajan Minocha, INAE; David Tomlinson, RAEng.

1. The President welcomed all and briefly outlined the program and objectives for the next two-day sessions. She noted that Bill Salmon had informed her that this will be his last CAETS meeting serving as its Secretary, Treasurer. The Agenda was approved.
2. The Summary Minutes of the Board Meeting of October 12, 2015 were approved as circulated.
3. The President noted that results of the Executive Committee Meeting of September 12, 2016 would be mentioned as appropriate to the Board discussion topics.

The President reported on the status of discussions with the IAP. Although continuing as an ex-officio member of the Board of one part of the IAP, CAETS would not become formally involved in the IAP. CAETS, AI (Mexico), responded to the IAP invite to serve and was appointed on a new IAP study committee, “Improving Global Policy-making Strategies to Obtain Sustaining Development Goals.”

4. The Board received the Audit Committee report.

The Board approved the 2017 CAETS Budget.

The Board recommended the continuation of the dues structure for 2018.

The President-elect briefly described the 2017 CAETS Annual Meeting, hosted by RAIng, scheduled for November 14-17 (Tues-Fri), in Madrid. In keeping with the general theme, “Engineering for a Better World” specific topics will include the contributions of engineering to the Bioeconomy, emphasizing challenges such as future food security, the food-land-energy nexus, and the blue bioeconomy. As time is short, it is important to contact other member academies here in London to identify speakers. It was noted that the CAETS meeting held in 2010 dealt with food security.

Lucio Caceres, ANIU representative briefly outlined the program proposed for September 9-13, 2018 in Montevideo. The focus will be on “Sustainable Development of Agroforestry Systems” under the general theme of “Engineering for a Better World.”

A brief proposal from IVA is included with the support documents on the CAETS web site concerning the 2019 CAETS Meeting to be held in Stockholm.

5. RAEng invited views on “Diversity” and prepared a discussion paper for use during this Council discussion topic.

It was suggested that discussion topics for the 2017 Council meeting consider “Diversity” and “Ethics and Engineering.”

6. A press release will be available covering the discussions of the Tuesday meeting (13 Sept.) and a statement covering the two-day program (13-14 Sept.) would be available for the Council’s consideration. There would also be a statement on “Diversity” reflecting the Council’s discussion.
7. The “CAETS Strategic Review” fed from the discussions in Delhi on the future of CAETS. A review group led by the President-elect conducted a survey. That led to three options. The consensus of the group was to remain on current course, particularly the networking dimension, improving what is done where we can, within the limit of funds and talent available.
8. Next Board Meeting: November 14, 2017, Madrid
9. Adjourn

CAETS Financial Summary

| | FY2014 Audited | FY2015 Audited | FY2016 Audited | FY2017 Budget¹ | FY2017 YTD | FY2017 EAC |
|---------------------------|---------------------------|---------------------------|---------------------------|--------------------------------------|-------------------|-----------------------|
| Dues | | | | 81,000.00 | 83,000.00 | |
| Net (less fees/exch) | 79,656.65 | 77,286.97 | 79,975.20 | | 82,828.20 | 82,828.20 |
| Operating Expenses | | | | | | |
| Communications | 1,611.67 | 1,538.20 | 531.36 | 2,000.00 | | 500.00 |
| Equipment | 68.43 | 342.13 | 1,230.78 | 2,000.00 | | - |
| Legal-Professional Fees | | | | 100.00 | 960.00 | 1,060.00 |
| Management Fee | 44,000.00 | 44,000.00 | 44,000.00 | 44,000.00 | 33,000.00 | 44,000.00 |
| Meetings | | 101.21 | | 600.00 | 127.07 | 300.00 |
| Postage, Delivery | 347.25 | 635.78 | 21.24 | 2,000.00 | 33.30 | 100.00 |
| Printing | 550.00 | | 600.00 | 2,000.00 | | - |
| Supplies | 399.85 | 170.63 | 147.40 | 300.00 | 189.90 | 250.00 |
| Travel | 30,616.39 | 8,587.68 | 17,382.37 | 25,000.00 | 7,255.23 | 20,000.00 |
| Strategy Implementation | 918.10 | | | 3,000.00 | | |
| | 78,511.69 | 55,375.63 | 63,913.15 | 81,000.00 | 41,565.50 | 66,210.00 |

¹Approved by Board 16 September 2016

Dues based on 6 at \$1K; 3 at \$2K; 11 at \$3K; 6 at \$6K

CAETS 2018 Budget

Board Agenda Item 3.c

| | FY2014 Audited | FY2015 Audited | FY2016 Audited | FY2017 Budget ¹ | FY2018 Proposed Budget ² |
|---------------------------|-------------------|-------------------|-------------------|-------------------------------|-------------------------------------------|
| Dues | | | | 81,000.00 | 81,000.00 |
| Net (less fees/exch) | 79,656.65 | 77,286.97 | 79,975.20 | | |
| Operating Expenses | | | | | |
| Communications | 1,611.67 | 1,538.20 | 531.36 | 2,000.00 | |
| Website Upgrade | | | | | 7,000.00 |
| Equipment | 68.43 | 342.13 | 1,230.78 | 2,000.00 | 500.00 |
| Legal-Professional Fees | | | | 100.00 | 100.00 |
| Management Fee | 44,000.00 | 44,000.00 | 44,000.00 | 44,000.00 | 44,000.00 |
| Meetings | | 101.21 | | 600.00 | 300.00 |
| Postage, Delivery | 347.25 | 635.78 | 21.24 | 2,000.00 | 300.00 |
| Printing | 550.00 | | 600.00 | 2,000.00 | 500.00 |
| Supplies | 399.85 | 170.63 | 147.40 | 300.00 | 300.00 |
| Travel | 30,616.39 | 8,587.68 | 17,382.37 | 25,000.00 | 25,000.00 |
| Strategy Implementation | 918.10 | | | 3,000.00 | 3,000.00 |
| | 78,511.69 | 55,375.63 | 63,913.15 | 81,000.00 | 81,000.00 |

| | |
|-----------------------------|--------|
| Reserves³ | |
| Rebuild CAETS Website | 13,000 |

¹Approved by Board 16 September 2016

Dues based on 6 at \$1K; 3 at \$2K; 11 at \$3K; 6 at \$6K

²FY2018 Proposed Budget based on current dues schedule

³Note: NAE is currently supporting hosting of the CAETS website, but the content management system is obsolete and difficult to maintain. Additionally, the site lacks standard security provisions, as well as privacy and copyright policies. The current vendor has provided a bid of \$20,000; a copy is provided in Item 3.d. NAE has agreed to continue paying \$6,000/year to cover maintenance and subscription fees. The proposal is to take \$7,000 from the 2018 operating budget and \$13,000 from reserves.



Quote

NAE Program Office CAETS Website Enhancement 2017

Date: October 30, 2017

Reference No: 20171030a

Client Contact: Maribeth Keitz
NAE Program Office
2101 Constitution Avenue Northwest,
Washington, DC
Phone: 202-334-1650
Email: mkeitz@nae.edu

Account Manager: Cristina Tofan
Diamax Information Systems Corporation
144 Church St. NW, Suite 210
Vienna, VA, 22180
Phone: 703-752-6237
Fax: 703-752-6201
E-mail: ctofan@diamax.com

Prepared By: Derek Rector
drector@diamax.com

Terms: Estimate valid 120 days from date of issue. Total cost of project will not exceed estimate without written authorization from Client. Invoices will be submitted monthly for time and materials applied towards completion of deliverables. 25% services down payment and applicable software license fees may be required prior to commencement of work.

Thank you for considering Diamax. Please contact me with any questions regarding the following recommendations and estimates.

Best regards,

Derek



Deliverables

CAETS Website Upgrade

Diamax will upgrade the CAETS website and database to the latest Miliu framework in order to increase site performance, improve functionality, allow for the expansion to mobile friendly interfaces, and support both public and private content. This will utilize the same technology as the NAE websites, allowing for easier future integrations and potential cross-site access and interaction.

\$20,000- for the setup and implementation of the new framework and transfer of the content from the existing site to the new framework.

CAETS Subscription

The current implementation of the site does not include the implementation of any new modules or product features that are not standard. The subscription will remain the same until CAETS decides on expanded functionality that will necessitate increased server space or support.

Total Cost

CAETS Website Upgrade and Subscription:

\$20,000

CAETS Rotation Schedule - 2017

Board Agenda Item 3.e

| Member Academy | Date Elected | Annual Meeting Host | | Officer | | | Board | | | |
|------------------------|--------------|---------------------|---|-----------------|-----------|----------------|-------|------------------------|------------------------|-----------------------|
| | | | | President Elect | President | Past President | Board | 2017 | 2018 | 2019 |
| Spain (RAI) | 1999 | 2017 | C | 2016 | 2017 | 2018 | 2012 | Elias Fereres | Elias Fereres | |
| Uruguay (ANIU) | 2000 | 2018 | | 2017 | 2018 | 2019 | 2012 | Lucio Caceres | Lucio Caceres | Lucio Caceres |
| Sweden (IVA) | 1978 (F) | 2019 | | 2018 | 2019 | 2020 | 2012 | | Tuula Teeri | Tuula Teeri |
| Korea (NAEK) | 2000 | 2020 | | 2019 | 2020 | 2021 | 2013 | | | |
| Argentina (ANI) | 1999 | 2021 | | 2020 | 2021 | 2022 | 2008 | | | NOM 2019 |
| France (NATF) | 1989 | 2022 | | 2021 | 2022 | 2023 | 2015 | | | |
| Croatia (HATZ) | 2000 | 2023 | | 2022 | 2023 | 2024 | 2017 | Vladimir Androcec | Vladimir Androcec | |
| Finland (TAF) | 1989 | 2001 | C | | | | 2010 | | | NOM 2019 |
| Czech Repubic (EA CR) | 1999 | 2002 | | | | | 2015 | | | |
| USA (NAE) | 1978 (F) | 2003 | C | | | | 2018 | | Roger McCarthy | Roger McCarthy |
| Norway (NTVA) | 1990 | 2004 | | | | | 2015 | | | |
| Germany (acatech) | 2005 | | | | | | 2017 | Frank Behrendt | Frank Behrendt | |
| Australia (ATSE) | 1978 (F) | 2005 | C | | | | 2014 | | | |
| Belgium (BACAS) | 1990 | 2006 | | | | | 2016 | Paul Verstraeten | | |
| Japan (EAJ) | 1990 | 2007 | C | | | | 2016 | Hideaki Koizumi | | |
| Netherlands (AcTI.nl) | 1993 | 2008 | | | | | 2018 | | Lucas P. J. J. Noldus | Lucas P. J. J. Noldus |
| Slovenia (IAS) | 2000 | | | | | | 2018 | | Prof. Stane Pejovnik | Prof. Stane Pejovnik |
| South Africa (SAAE) | 2009 | | | | | | 2017 | Trueman Goba | Trueman Goba | |
| Canada (CAE) | 1991 | 2009 | C | | | | 2015 | | | |
| Denmark (ATV) | 1987 | 2010 | | | | | 2016 | Martin Philip Bendsoe | | |
| Mexico (AI)* | 1978 (F) | 2011 | C | | | | 2016 | Jaime Parada | | |
| Switzerland (SATW) | 1988 | 2012 | | | | | 2017 | Ulrich (Ueli) W. Suter | Ulrich (Ueli) W. Suter | |
| Hungary (HAE) | 1995 | 2013 | | | | | 2018 | | István Králik | István Králik |
| China (CAE) | 1997 | 2014 | C | | | | 2007 | | | NOM 2019 |
| India (INAE) | 1999 | 2015 | C | | | | 2010 | | | NOM 2019 |
| United Kingdom (RAEng) | 1978 (F) | 2016 | C | | | 2017 | 2010 | Ann Dowling | | |
| Secretary/Treasurer | | 2017 | | | | | | Ruth David | Ruth David | Ruth David |

F - Founding Member

C - Convocation

*Formed in 2002 by merger of the National Academy of Engineering (Founding Member) and the Mexican Academy of Engineering

Discussion Topic: CAETS Theme

“Engineering a Better World” was introduced to CAETS as the theme of the 2016 Annual Meeting hosted by the RAEng. This theme has been continued for 2017 and 2018.

Does CAETS wish to adopt this theme more formally and begin using it on the website and other communications?

From the CAETS EXCOM Meeting in March (Summary Minutes):

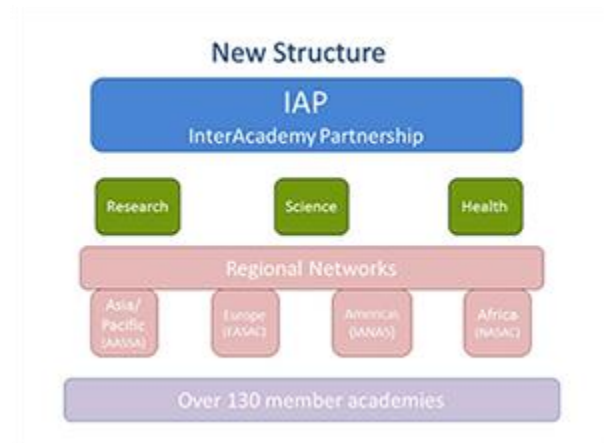
A draft agreement between CAETS and WFEO was discussed, with emphasis on the need to identify one or more topics of mutual interest that could provide a basis for collaboration. The WFEO President Elect, Dr. Marlene Kanga, offered several examples for CAETS consideration: formation of joint working groups on particular issues – for example, in energy; collaboration in preparation of position statements, especially those relating to the United Nations Sustainable Development Goals; and capacity building in engineering education, especially in Asia and Africa. The RAEng suggested consideration of Diversity as another thematic topic in which CAETS and WFEO have mutual interests. Given that the 2017 CAETS meetings include Diversity as an agenda item, RAEng agreed to engage WFEO on this topic and invite their participation. ExCom members further agreed that the WFEO-proposed topics are also of interest to CAETS and that an agenda item for the upcoming Council meeting should be to identify one or more projects to launch a CAETS/WFEO collaboration.

The purpose of this discussion is to consider parameters of a potential collaboration with WFEO on Diversity and/or other topics of mutual interest. How might a constructive collaboration be framed/implemented?

Reference: <http://www.interacademies.org/>

The InterAcademy Partnership (IAP), was formally launched in South Africa in March 2016, bringing together established networks of academies of science, medicine and engineering, namely IAP, the global network of science academies, the InterAcademy Medical Panel (IAMP) and the InterAcademy Council (IAC).

Under the new InterAcademy Partnership, more than 130 national and regional member/ academies work together to support the special role of science and its efforts to seek solutions to address the world's most challenging problems. In particular, the new IAP will harness the expertise of the world's scientific, medical and engineering leaders to advance sound policies, promote excellence in science education, improve public health, and achieve other critical development goals.



InterAcademy Council

Since 2000, IAP for Research, known up to now as the InterAcademy Council, has mobilized the best scientists and engineers worldwide to provide high quality in-depth advice to the United Nations and the broader global community on critical issues such as the importance of building scientific and technological capacity worldwide, aiming for a sustainable energy future, enhancing African agriculture, reviewing of the processes of the UN's Intergovernmental Panel on Climate Change (IPCC), and, most recently, providing a broad vision of scientific responsibility in the global research enterprise.

IAP for Science

iap
the global network of science academies

Since 1993, IAP for Science, previously known up to now as the InterAcademy Panel, has harnessed the power found in the world's scientific community to address global challenges and create contribute to a more successful world.

IAP Science brings together 107 member academies to advise the global public and decision-makers on the scientific aspects of critical global issues, such as poverty, sustainable development, climate change, biotechnology and global health. It also works to improve science education and scientific literacy in member countries across the globe.

IAP for Health

iamp
the interacademy medical panel

Established in 2000, IAP for Health, known up to now as the InterAcademy Medical Panel, is a global network of more than 70 medical academies and medical sections of academies of science and engineering.

It is committed to improving health world-wide, for example by strengthening the capacity of academies to provide evidence-based advice to governments on health and science policy, and by supporting projects by member academies to strengthen health research and higher education in their countries.

The InterAcademy Partnership has approached CAETS to determine its interest in engaging in some more tangible way going forward. There is apparently some interest in creating a 3rd box on the second tier for "Engineering", which could include CAETS and/or individual engineering academies.

This discussion is to probe CAETS members' interests in conducting exploratory discussions with IAP leadership, and if interested, setting the parameters for that discussion.

Discussion Topic

How might the CAETS website better support CAETS Committee Activities?

Currently 3 committees are listed, but only 1 remains active:

CAETS Energy Committee

Committee active, but website not maintained.

CAETS Noise Control Technology Committee

Last update 2014

Committee on International Organizations

Mission: Develop and implement an ongoing advisory/consultative role, with appropriate CAETS recognition, with the relevant scientific/technological organs of the United Nations (UN) system.

- Established 2005
- Website last updated 2012

Note: The IAP has an ongoing project relating to the Sustainable Development Goals.

Should CAETS consider establishing committees for other purposes (e.g. Diversity)? IAP engagement?
Sustainable Development Goals?

Are the CAETS Study Procedures current and effective for committee work?

How might we better communicate our results?