

Participants

Officers

Denis Ranque – 2022 President Neven Duic – 2022 President-Elect Manuel Solanet – 2022 Past-President Vedran Mornar – 2023 President Mika Hannula – 2023 President-Elect Ruth David – Secretary/Treasurer

2021-2022 Board Members

Elisabeth Monard

Rita Hofmann-Sievert

Ulrich Wagner

Nasim A. Khan

2022-2023 Board Members Nils Andersen

Cather Simpson

Bob Pullen

Torbjorn Digernes

2023-2024 Board Members Nadine Aubrey

Andras Sollosi-Nagy Jaime Dominquez

Minutes

The meeting was convened at 10:02 am (GMT-6:00) by CAETS President Denis Ranque, who welcomed all participants and thanked them for joining the meeting. The meeting agenda was approved as presented.

2022 CAETS Member Survey

The primary topic of the meeting was a discussion of the results received to date from the CAETS 2022 Member Survey. A summary of available responses was provided to all participants in advance of the meeting. President Ranque noted that the information would be of value for CAETS planning purposes and that it would be important to clearly identify next steps. CAETS Secretary/Treasurer Ruth David noted that surveys had not been received from some member academies as of the date of the meeting, but that communications indicated additional responses would be forthcoming.

The discussion proceeded through each section of the survey. In discussing Sections 1. Communications Committee and Section 2. Working Groups/Communities, the Secretary noted that the primary purposes for gathering the information were to invite all member academies to participate in all CAETS activities (annual call for participation) and to establish academynamed points of contact for each activity in which they wished to participate in an effort to streamline communications.

In discussing the Communications Committee, the Secretary noted that in accordance with Operating Guidelines, committee leadership was to be Board-approved. She noted that per the guidelines, Lucas Noldus (Netherlands), current Deputy Chair, would succeed Hugh Bradlow (Australia), current Chair, beginning 1 January 2023, and that Cather Simpson (New Zealand), was nominated (and agreed to serve) as the Deputy Chair beginning in 2023. The board approved this nomination. The Secretary reported that leadership had been identified for the Energy Community and that two working groups were being established. An e-Mobility Working Group will be led by Nevin Duic (Croatia); and a "sequel" Working Group, which will extend the timeframe considered in the 2022 Energy Report, will be led by Axel Meisen (Canada).

The Secretary reported that David Thomlinson (United Kingdom) had agreed to continue as Chair of the Engineering for the Sustainable Development Goals Working Group, likely until the 2023 annual meetings, and that Sweden had agreed to name a Deputy Chair. She invited discussion regarding one area of feedback, which was a query regarding member academy engagement with the United Nations. She noted that CAETS currently maintains Consultative Status with the UN but had no ongoing institutional engagement. Incoming Board Member Andras Sollosi-Nagy, who maintains close ties to some UN activities volunteered to help establish linkages going forward; the Secretary will establish communications between him and leadership of the Engineering for SDGs Working Group.

The President reported that he had received information from the French Academy of Sciences that an international group of scientists was promoting the idea of creation under the auspices of UNO a new body, provisionally called IPREDICT, aiming at advising governments on technologies and their interactions with society. This would be a similar role to the one IPCC (Intergovernmental Panel on Climate Change, a body of the UN) is playing in the field of Climate Change. It may be worth considering whether CAETS should investigate and possibly support this potential opportunity, being noted it seems extremely ambitious and complex. He will share the information he has available with the Board for further action.

The Secretary reported that the Diversity and Inclusion Working Group would continue to be led by the two co-chairs who presented to the Council during the 2022 annual meetings: Shane McHugh (United Kingdom) and Kylie Walker (Australia). She noted that member academy interest in this working group was less than that for other CAETS activities, but still exceeded the 25% threshold which was set as a minimum for establishing or maintaining CAETS activities.

The Secretary reported that new leadership was recruited for the Engineering Education Working Group, as Jesse Zhu (Canada) had served for more than the 3-years anticipated when the group was established. Indranil Manna (India) will serve as Chair and Katharine Frase (United States) will serve as Deputy Chair going forward. She noted that there remains strong member academy interest in this topic.

Section 3. Member Academy Priorities, was discussed briefly, with the Secretary noting that this section of the survey was intended mainly as information for member academies that may wish to pursue bi-lateral or multi-lateral initiatives with other members. She also noted that future surveys might be simplified by providing website linkages to relevant documents, thus reducing the burden of responding in full to a survey.

As part of the read-ahead materials, a synthesis of responses received from Section 4. Priority Technical Domains was provided to Board Members. The Secretary noted that the strongest overlap was seen in Energy, Water, Sustainability, Climate Change, and Artificial Intelligence (noting that these categories are note entirely orthogonal).

After discussion, it was agreed that once all (anticipated) responses are received, the synthesis will be re-visited and member academies will be invited to nominate one or more fellows to form "embryo communities" as a way to better assess interest in establishing new CAETS activities.

In discussing Section 5. Enabling Communities, it was observed that there are age demographics that impact the perceived utility of various networking tools, and also that it would be difficult to standardize on a tool across all member academies. This topic will be tabled for future consideration.

Section 6. Member Information Sharing received many responses, with key areas of interest including: academy membership (e.g., demographics in multiple dimensions); academy governance/operations (including sources of funding); opportunities for international collaboration (e.g., bi-lateral or multi-lateral activities); approaches to communicating impact of an academy; approaches to influencing national governments; access to reports/papers.

Given the evident desire to gain streamlined access to publicly available information, participants agreed that expansion of the "Member Contributions" portion of the CAETS website would be helpful. There was some discussion of the fact that, in accordance with its founding documents, CAETS activities are conducted in English, language issues might limit access. The Secretary noted that if access is clearly identified as "Member Contributions" so as not to be perceived as a CAETS product, this should not be an issue. The Secretary reported that once all survey responses are received and synthesized, an effort would be undertaken simplify access to the various categories of information desired, noting that a single survey addressing all areas would be quite burdensome for member academies.

Following discussion of the survey results, the President summarized next steps (for the Secretariat) as:

- 1) Solicit survey responses from member academies who have not yet replied;
- 2) Synthesize the results (Section 4. Priority Technical Domains);
- 3) Share all information with all member academies as well as leadership of all CAETS activities;
- Invite all member academies to nominate one or more participants to form "embryo communities" around Priority Technical Domains having the greatest member academy interest;

5) Pursue expansion of the Member Contributions area of the CAETS website to include additional publicly available information.

CAETS Copyright for Publications

The Secretary reported that a question had been raised about use of copyright on CAETS publications, recommending instead use of a Creative Commons license. She noted that historically CAETS had marked publications with a copyright (all rights reserved) but that the copyright was not registered (not uncommon). She further noted that Creative Commons basically flips the traditional model by granting all rights except those expressly reserved. She observed that Creative Commons licenses are in widespread use internationally in nongovernmental, governmental, and intergovernmental organizations. After discussion, during which the key point was that CAETS wants its publications to be used and therefore should reduce barriers to doing so, it was agreed that for the 2022 Energy report, a Creative Commons license would be used in lieu of the traditional copyright. The specific license to be used is CC BY-NC-SA, which requires attribution but in no way suggests CAETS endorsement of them or their use (BY); prohibits commercial use absent explicit consent from CAETS (NC), and requires that any modified work be distributed on the same terms (SA: ShareAlike). This will enable member academies (as well as others) to reprint all or portions of the report as well as to develop derivative products targeting their national audiences.

CAETS Dues Impact

The CAETS Treasurer reported that, in response to the approved increase in dues, one member academy had stated that the increase was unaffordable. Because the increase does not go into effect until 2024, this issue was tabled for discussion during a future meeting of the Board.

Query from Academy of Engineering of Poland

The Secretary reported she had received a query from the Academy of Engineering of Poland, which was once a member of CAETS, about reinstatement of CAETS membership. She noted that CAETS records indicated an annual dues letter was sent to the academy from 2001 through 2004, but no letter was sent from 2005 forward. Additionally, she noted that the academy was removed from the CAETS rotation schedule in 2005 indicating that the membership was inactive. She cited one case in which an academy had been delinquent on dues payments for a few years, but was reinstated with payment of back dues. It was agreed that the Academy of Engineering of Poland's desire to rejoin CAETS should be encouraged but that a new application for membership, together with a site visit, would be necessary. The Secretary is to work with the academy to encourage them to move forward with an application, providing assistance as needed.

Working Group Funding

The Treasurer reported that she had received a projected budget for the follow-on Energy Report in the amount of \$174,900, which included costs Administrative Support Staff (\$36,000); Editorial and Presentation Support (\$30,000); In-Person Meeting (\$93,000); and Contingency (\$15,900). This budget is for a period of 1.5 years.

She noted that the CAETS Bylaws state that (Article 5, Section 1): "Each member academy shall be responsible for the expenses of its delegation to a CAETS meeting, for the expenses of its member serving as an officer or member of the Board (with the exception of the Secretary/ Treasurer, which shall be the responsibility of CAETS), and for bearing the costs of CAETS meetings it hosts." The Bylaws allow for use of CAETS funds for these items only under exceptional circumstances.

She further noted that CAETS projected annual revenues for 2023 are \$88,580 and that the current 2023 Operating Budget is \$83,350, including a line item of \$5,000 for Strategy Implementation. Questions posed included:

- What should member academies fund?
- What items should CAETS fund?
- What is CAETS policy on deficit spending?

After discussion it was agreed that member academies should support their participants (including travel costs) engaging in CAETS activities as well as their academy staff (including administrative) who support the activities. It was further agreed that CAETS should avoid deficit spending unless there are exceptional circumstances (Board-approved). While CAETS could be expected to contribute toward items such as editorial support, that contribution will be limited by available funds.

The Treasurer noted that there may be options for reducing out-of-pocket costs for editorial support that will be pursued. The Treasurer was asked to review projected revenues and expenses and identify a budgetary strategy for supporting two simultaneous activities per year going forward.

<u>Adjournment</u>

President Ranque thanked all participants, noted that the Board should plan to meet approximately three times per year, and adjourned the meeting at 12:20 pm GMT-6:00.