

CAETS Council Agenda

24 September 2021 Virtual Meeting: 0830 – 1200 (ART)

0830	Welcome and Introductions	Manuel Solanet			
	1. <u>Action</u> : Approval of Agenda	Ruth David			
	2. Action: Approval of Council Minutes of 15 October 2020	Ruth David			
	3. Report from the 20 September 2021 Meeting of the Board	Ruth David			
	a. Information: 2020 Financial Audit Report				
	b. Information: Approved 2022 Operating Budget				
	c. Information: Options for international funds transfers				
	d. Information: Review of CAETS Dues Structure				
	4. Administrative Items	Ruth David			
	a. <u>Action</u> : Approval of 2022 Rotation Schedule				
	b. <u>Action</u> : Approval of 2022-2023 Dues Schedule				
	c. Information: Future CAETS Meeting Schedule				
	iii. 2024: Helsinki, Finland – 1-4 July 2024				
	5. Action: Election of Board Members for 2022-2023	Ruth David			
	President-Elect: Prof. Neven Duic, HATZ				
	Board Member: Professor Emeritus Torbjorn Digernes, NTVA				
0900	6. Report: Communications Committee	Hugh Bradlow			
0915	7. Report: Energy	Yves Bamberger			
0930	8. Report: Sustainable Development Goals	David Thomlinson			
0945	9. Report: Diversity and Inclusion	David Thomlinson			
1000	10. Report: Engineering Education	Jesse Zhu			
 Report from the 20 September 2021 Meeting of the Board Information: 2020 Financial Audit Report Information: Approved 2022 Operating Budget Information: Options for international funds transfers Information: Review of CAETS Dues Structure Administrative Items Action: Approval of 2022 Rotation Schedule Action: Approval of 2022-2023 Dues Schedule 2022: Paris, France – 26-30 September 2022 2023: Zagreb, Croatia – September 2023 2024: Helsinki, Finland – 1-4 July 2024 Action: Election of Board Members for 2022-2023 Ruth David President-Elect: Prof. Neven Duic, HATZ Board Member: Professor Emeritus Nils O Andersen, ATV Board Member: Professor Emeritus Nils O Andersen, ATV Board Member: Professor Emeritus Torbjorn Digernes, NTVA Report: Communications Committee Hugh Bradle Report: Energy Report: Bergy Yves Bamber Report: Energy Report: Energy Report: Energy Report: Energy Report: Energy Report: Energy Report: Engineering Education BeraK Information Bruno Reve Bruno Revei 					
1030	11. Information: CAETS 2022 Status Update – Paris, France	Bruno Revellin-Falcoz			
1050	12. Information: CAETS 2023 Status Update – Zagreb, Croatia	Vladimir Mrsa			



CAETS Council Agenda

1105	13. Information: CAETS 2024 Status Update – Helsinki, Finland	Panu Nykanen
1120	14. CAETS Strategy and Operating Guidelines	Ruth David
	a. <u>Action</u> : Approval of changes to CAETS Bylaws	
	b. Action: Endorsement of Preliminary Operating Guidelines	
1150	15. New Business	Manuel Solanet
	16. Recognition of CAETS Service	Manuel Solanet
	Oh-Kyong Kwon, Officer (2019-2021), President 2020, Korea Hideaki Koizumi, Board (2020-2021), Japan David Thomlinson, Board (2020-2021), United Kingdom Jose Albarran, Board (2020-2021), Mexico Peter Mascher, Board (2020-2021), Canada	
1200	ADJOURN	Manuel Solanet



15 October 2020 Virtual Meeting: 1400-1645 (KRT)

Welcome and Introductions

CAETS President Oh-Kyong Kwon opened the meeting by greeting all participants, with a special welcome to representatives from newly elected member academies: Royal Society Te Aparangi of New Zealand, Nigerian Academy of Engineering, and Academy of Engineering Sciences of Serbia. He also welcomed the Irish Academy of Engineering, participating in observer status. He then turned to Secretary/Treasurer Ruth David to introduce each agenda item.

- Approval of Agenda The meeting agenda was approved as presented.
- Approval of Council Minutes of 27 June 2019 Council minutes from 27 June 2019 were approved as presented.
- 3. Report from the 12 October 2020 Meeting of the Board
 - a. Information: 2019 Audit Committee Report

The Treasurer reported that the 2019 financial audit was completed without issues, noting that a copy of the summary financial statements was provided in the meeting materials, and thanking David Thomlinson (RAEng) for his service as Chair of the Audit Committee. She noted that at year end 2019 Operating Expenses were nearly \$15,000 below budget, but Reserve Expenses (unbudgeted) of \$41,635 had been incurred by three visiting committees performing site visits for membership applications from New Zealand, Nigeria, and Serbia. That resulted in a net decrease in reserves of approximately \$21,000 when accounting for Reserve Contributions by the newly elected member academies. She also projected an underrun in the 2020 Operating Expenses of at least \$30,000 due to the lack of travel and related expenses and indicated that CAETS Reserves should be fully restored to by the end of 2020.

The Treasurer also noted that an issue was identified during a pre-review of the CAETS 2019 financials by the NAE Financial Director relating to the disparity between dues payable and dues received stemming from transfer fees and/or currency fluctuations. After discussion, the Board had agreed that a new business procedure should be implemented to note on annual dues invoices any deviation (positive or negative) relating to the prior year payment, and adjusting the current dues invoice by that amount; this procedure will be implemented beginning with the 2021 Dues Invoices.

b. Information: Approved 2021 Operating Budget

The Treasurer reported that the Board had approved the 2021 Operating Budget as presented and that a copy was provided with the meeting materials.

c. Information: Conduct of Working Groups/Committees



The Secretary reported that the Board briefly discussed how CAETS decides when to establish new working groups/committees and also how their activities might more effectively be supported. The Board agreed that the details should be worked in conjunction with the next steps of CAETS strategy development and implementation.

- 4. Administrative Items
 - a. Approval of 2021 Rotation Schedule

The Secretary noted that the CAETS rotation schedule was provided in the meeting materials and that annual meeting hosts for 2023 (Croatia) and 2024 (Finland) had been confirmed. She also reported one change in the 2020 Rotation Schedule: Denmark asked to defer their nomination of a Board member and Switzerland agreed to submit a nominee in their place. In accordance with the 2021 Rotation Schedule presented, nominations include: Croatia (President-Elect), and Norway, South Africa, Denmark, and New Zealand (Board Members). The Rotation Schedule was approved as presented.

b. Approval of 2021 Dues Schedule

The Secretary noted that the 2021 Dues Schedule was provided in the meeting materials and that dues payable amounts remained unchanged. The Dues Schedule was approved as presented.

- c. Information: Future CAETS Meeting Schedule
 - i. 2021: Buenos Aires, Argentina September 20-23
 - ii. 2022: Paris, France March 21-25

The Secretary noted that the future CAETS meeting schedule was as shown on the agenda; additional information will be provided during upcoming agenda items.

5. Election of Board Members for 2021-2022

The Secretary introduced the slate of candidates for Board positions beginning in 2021, noting that a change had been made in the acatech nominee, but that the updated biography was provided in the meeting materials. The Board approved the election of the Board Members shown below.

President-Elect: Pascal Viginier, France (NATF)
Board Member: Ulrich Wagner, Germany (acatech)
Board Member: Elisabeth Monard, Belgium (BACAS)
Board Member: Rita Hofmann-Sievert, Switzerland (SATW)
Board Member: Nasim Khan, Pakistan (PAE)

6. Information: CAETS Strategic Plan Next Steps

CAETS Past-President Tuula Teeri (IVA) provided an update to the Council regarding the status of the strategic planning effort. She introduced a proposed revision of the CAETS Bylaws – Article 1. Objectives: addition of an objective specifically relating to CAETS promotion of diversity, inclusion, and ethics in the global engineering profession as well as



other minor revisions. She also introduced two options for structuring CAETS to more effectively achieve its objectives via the activities of its committees/working groups. She reported the following next steps: Refine specific proposals and gain approval of current Board Members by 31 December; socialize with and gain approval of incoming Board Members by 28 February 2021; socialize with entire Council through 31 May 2021; final language for any proposed Bylaws changes provided to Council 90 days in advance of 2021 Annual Meeting to support Council decision-making.

7. Information: CAETS 2021 Status Update

CAETS President-Elect Manuel Solanet (ANI) provided a brief overview of the CAETS 2021 program, which will be held in Buenos Aires, Argentina from 20-23 September. The event venue will be the Sheraton Hotel; the technical conference theme is *Engineering a better world: The Future of Energy*. He noted that ANI would begin inviting speakers and panelists by December 2020, would issue a call for papers on 1 April 2021, and that registration would open on 1 July 2021. He also shared a video introducing Argentina to CAETS members.

8. Information: CAETS 2022 Status Update

Bruno Revellin-Falcoz (NATF) gave opening remarks regarding CAETS 2022, which will be held in Paris, France from 21-25 March 2022, and then introduced Gerard Creuzet, NATF President of CAETS 2022 Organization Committee, to provide additional details. The event venue will be the Palais des Congres at Versailles; the theme for the technical conference is *Engineering a better world: Technological Breakthrough for Health*.

9. Committee Report: Energy

Chinho Park (NAEK), Chair of the CAETS Energy Committee, summarized the activities of the committee, indicating that a report titled "Solutions for High-Level Penetration of Intermittent Renewable Energy" is in final draft, with a target publication date of December 2020. The report will: 1) Compare each country's status quo in the energy mix; 2) Showcase new technologies that offset intermittency; and 3) Offer policies that control the energy market to reduce intermittency. The committee is also considering an external communications strategy targeting key international bodies. Yves Bamberger, NATF, was designated as the new Chair of the Energy Committee.

10. Committee Report: Communicating with the Public

Hugh Bradlow (ATSE), Chair of the CAETS Communications Committee presented a proposal for a CAETS Communications Prize developed in alignment with committee objectives: 1) Improve communications of technology policy to government and the public; 2) Inspire young people with the importance of engineering and technological sciences; and 3) Improve understanding of the important benefits of technology among the general public. The prize is designed to inspire students with engineering success stories and to show the general public how engineering changes their lives for the better. This proposal was endorsed by the CAETS Board, which recommended approval by the



Council. The Council voted to implement the proposal, with the first prizes to be awarded during the CAETS annual meetings in Buenos Aires in September 2021.

11. Working Group Report: Diversity and Inclusion

David Thomlinson (RAEng), Chair of the CAETS Diversity & Inclusion Working Group, delineated the purpose of the group, which is to share best practice among Academies in embedding diversity and inclusion into their Fellowships and activities, and to think of the role CAETS can play in disseminating best practice among Academies. He briefly summarized key messages identified during the group's initial meeting on 8 October 2020, as well as next steps, which include three future meetings to share more in-depth learning on D&I in Fellows, D&I in programs, and building inclusive cultures.

12. Working Group Report: Sustainable Development Goals

David Thomlinson (RAEng), Chair of the CAETS SDG Working Group, delineated the purpose of that group, which is to build the capacity of academies to take more leadership roles in sustainability policies by sharing knowledge and best practice on how the engineering profession is influencing, driving and leading progress towards sustainability targets at a national level. He reported that during its initial meeting on 29 September the discussion focused on academies' engagement in national sustainability plans, and looked for examples of good engineering leadership. Key learnings were captured and next steps were identified, including an intent to host three additional zoom meetings (quarterly), with an initial focus on national sustainability policies, particularly decarbonization.

13. Working Group Report: Engineering Education

Jesse Zhu (CAE, Canada), Chair of the CAETS Engineering Education Working Group, discussed a (virtual) Global Engineering Education Conference that the Canadian Academy of Engineering is proposing to host in the February-March 2021 timeframe. During the working group meeting on 7 October, CAETS sister academies were invited to co-organize the meeting; member response was positive. As a result, he offered CAETS an opportunity to become a recognized co-sponsor for the conference. He indicated that the working group would meet again on 21 October to begin development of the conference program. After discussion, the Council decided to defer a decision regarding CAETS co-sponsorship of the conference; a final decision will be subject to Board review and approval of the conference program.

14. Committee Report: COVID-19

Youn Hee Choi (NAEK), Chair of the CAETS COVID-19 Special Committee, summarized the outcomes from the committee's initial discussion on 12 October 2020. The purpose of the committee is to determine what role engineering professionals can play in overcoming the difficult situation of COVID-19. During its initial meeting the committee identified as its main agenda "Lessons Learned from COVID-19 and Future Directions for Engineering Innovation." The committee drafted a proposed CAETS statement focusing on three



measures that were shared with the Council. The proposed statement will be further refined prior to distribution to the Council members for their review.

The Council Meeting entered into Executive Session with CAETS member academies only.

15. Membership Application – The Irish Academy of Engineering (IAE)

The Secretary reported that the IAE submitted an application for membership in March of 2020 and that the full application was posted on the CAETS website, with a brief summary included in Council meeting materials. She also noted that due to ongoing travel restrictions the EXCOM decided a virtual meeting would be scheduled in lieu of a site visit; the agenda and a summary of that meeting was also provided in Council materials. Tuula Teeri, CAETS Past-President, led the CAETS delegation, which included Panu Nykanen (CoFA) and Ruth David (Secretary/Treasurer) during the virtual visit. Tuula summarized the outcomes from the discussion, strongly recommending election of IAE into CAETS—a recommendation endorsed by all members of the CAETS delegation.

The Irish Academy of Engineering was elected into CAETS with an affirmative vote by all members present and voting.

The Secretary reported that the EXCOM recommended initial annual dues for IAE of \$1030, which is consistent with recent past practice. The Council voted in agreement, setting IAE's annual dues at \$1030.

16. New Business

The Secretary invited members to introduce new business items. Sanak Mishra (INAE) observed that it was important to establish a consistent lexicon for describing CAETS activities, noting the current use of committees, working groups, and discussion groups without meaningful distinction. This issue will be addressed during the strategic planning process. There being no further new business, the agenda was turned back to President Kwon.

17. Recognition of CAETS Service

President recognized and thanked the following individuals for their service to CAETS: Tuula Teeri, Officer (2018-2020), CAETS President 2019, Sweden Hugh Bradlow, Board (2019-2020), Australia Xiaohong LI, Board (2019-2020), China Panu Nykanen, Board (2019-2020), Finland Sanak Mishra, Board (2019-2020), India

18. President Kwon adjourned the meeting at 1655 (KRT).



Council Member Attendees

Argentina	Manuel Solanet (President); Oscar Vignart (Past-President)
Australia	Hugh Bradlow (President); Kylie Walker (Executive Director, Policy)
Belgium	
Canada	Jesse Zhu (Chair, CAETS Education Committee)
China	Zhihua Zhong (Vice President), Hongtao Ren (Director, International Cooperation)
Croatia	
Czech Republic	
Denmark	Martin Bech (Senior Advisor)
Finland	Panu Nykanen (Secretary General)
France	Pascal Viginier (President); Bruno Revellin-Falcoz (Delegate for Foreign Affairs),
	Gerard Creuzet (Deputy Delegate for Foreign Affairs); Wolf Gehrisch (Fellow)
Germany	Ulrich Wagner (CAETS Representative), Diana Xu
Hungary	Miklos Bendzsel (President)
India	Sanak Mishra (President)
Japan	Hideaki Koizumi (Distinguished Fellow); Koichi Morimoto (International Affairs)
Korea	Oh-Kyong Kwon (President); Chinho Park (Energy Cmte); Inkyu Lee
Mexico	Monica Barrera Rivera (Vice President)
Netherlands	Lucas Noldus (International Affairs); Margrethe Jonkman (President)
New Zealand	Geoff Chase (CAETS Representative); Andrew Cleland (Chief Executive)
Nigeria	Alex Ogedegbe (President); Eme Ijioma (Treasurer); Titi Omo-Ettu (Executive Secretary)
Norway	Gisle Johanson (Secretary General); Tor Inge Waag (Secretary General Elect)
Pakistan	Jameel Ahmad Khan (President)
Serbia	Sanja Vranes (CAETS Representative)
Slovenia	Stane Pejovnik (Secretary General)
South Africa	Elsabe Kearsley (Vice President); Trueman Goba (President)
Spain	Jaime Dominques (CAETS Representative); Eloy Alvarez (Secretary General)
Sweden	Tuula Teeri (President); Elin Elliot (International Secretary)
Switzerland	Rolf Hugli (Secretary General)
United Kingdom	David Thomlinson (International Secretary); Shane McHugh (International Partnerships)
United States	John Anderson (President)
Uruguay	Julio Fernandez (President); Adriana Gambogi (Secretary)

Observers

Ireland

Jim Browne (President)

Agenda Item 3. Report from the 20 September 2021 Board Meeting

Audit completed with no issues

CAETS

2020 FINANCIAL SUMMARY

AUDITED

Fiscal year 2020

1/1/2020 -12/31/2020

	OPERATIO	NS			
	FY2018	FY2019	FY2020	FY2020	FY2021
Receipts	actual	actual	actual^1	budget	budget ³
Dues	80,811.00	81,175.00	90,535.50	84,460.00	87,550.00
Expenses					
Communications	510.79	84.99	74.99	2,500.00	500.00
Equipment	-	-	-	-	
Legal-Prof. Fees	162.00	80.00	13.64	300.00	300.00
Management Fee ²	44,000.00	50,000.00	50,000.00	50,000.00	50,000.00
Meetings	50.71	-	-	300.00	200.00
Postage, Delivery	183.12	-	12.05	200.00	100.00
Printing	-	-	-	360.00	200.00
Supplies	88.73	122.36	139.66	300.00	200.00
Travel	20,791.15	18,268.79	-	25,000.00	25,000.00
Strategy Implementation ⁴	2,887.70	-	-	5,500.00	5,500.00
Total Expenses	68,674.20	68,556.14	50,240.34	84,460.00	82,000.00

¹Budget approved in 2019 did not include dues from 3 new members totaling \$3090; adjusted budget \$87,550. 2020 Dues Receipts were \$87,461.25. Total Recepts included dues in arrears of \$3,074.25. Board approved (12 October 2020) new operating procedure beginning with 2021 invoices to adjust annual payment due for surplus or shortfall in prior year dues payment received.

²Increase recommended by Board and approved by Council September 2018; reviewed annually during budget approval process.

³2021 Budget approved by Board 12 October 2020.

⁴Activities endorsed by Board that are supportive of strategy implementation.

ACTIVITIES AND CHANGES IN RESERVE FUNDS

Balance From 12/31/2019		263,253.52
Revenue		
Dues Received	90,535.50	
Reserve Fund Contributions	-	
	90,535.50	
Expenses		
Operating Expenses	50,240.34	
Reserve Fund Expenses		
	50,240.34	
		40,295.16
Balance 12/31/2020	-	303,548.68

2022 Operating Budget

				PROPOSED BOARD
	FY2019	FY2020	FY2021	FY2022 APPROVED 9/20/2021
Receipts	actual	actual	budget	budget
Dues	81,175.00	90,535.50	87,550.00	88,580.00
Expenses				
Communications		-		500.00
Website	84.99	74.99	500.00	1,000.00
Equipment		-		
Legal-Prof. Fees	80.00	13.64	300.00	300.00
Management Fee	50,000.00	50,000.00	50,000.00	50,000.00
Meetings		-	200.00	100.00
Postage, Delivery		12.05	100.00	100.00
Printing		-	200.00	200.00
Supplies	122.36	139.66	200.00	150.00
Travel	18,268.79	-	25,000.00	25,000.00
Strategy Implementation		-	5,500.00	5,000.00
Total Expenses	68,556.14	50,240.34	82,000.00	82,350.00

Options (investigated) for International Funds Transfers

- 1. Bank of America Credit Card Processing
 - Bank of America Merchant Services: monthly fees, payment gateway fees, plus transaction fees (at least 3.5% plus \$0.15 on "card-not-present" transactions). Customer reviews are negative due to high fees and lack of transparency.
- 2. PayPal Business Account Payments via PayPal/Credit Card
 - Domestic fee is 3.5%; international fee is additional 1.5% plus fixed fee based on currency used. Coverage includes 200 countries and 25 currencies; does include all CAETS member countries.
- 3. GooglePay
 - Provides a window to either Western Union or Wise for sending money internationally.
- 4. Western Union
 - Variable transfer fees plus variable markups on exchange rates (up to 6%); all member countries supported but service options vary.
- 5. Wise (Formerly TransferWise)
 - Fees are relatively low and transparent; does not make money by marking up exchange rate. Available to roughly half of CAETS member countries for sending payments.
- 6. Global Reach
 - UK-based. Not available in the US, but you can transfer money to the US from other countries. Doesn't process transfers below 1,000 British Pounds; eliminates all academies at \$1,030 level.
- 7. PaySend
 - Scotland-based. Supports only 48 sending countries; does not include all member academies.
- 8. XE Money Transfer
 - Does not support credit card payments. No transfer fees; makes its margin from exchange rates; processed via SWIFT network so banks at either end charge a fee when you fund with a bank transfer. (Likely the same as current wire transfer process which uses the SWIFT network.)

Review of CAETS Dues Structure

Background: The 3-tiered structure (\$1,000, \$3,000, \$6,000) was adopted in 2005. An ad hoc process was established to encourage academies at the \$1,000 level to transition to \$2,000 and then \$3,000; success was limited. In 2018 a 3% increase for each tier was approved by the Council. At present there are effectively 4 tiers: \$1,030; \$2,060; \$3,090; \$6,180.

Per CAETS Strategy, the Board is charged with: "Review Dues Structure every 5 years to ensure equity across members and facilitate member development. Recommend changes to Council if needed."

The summary timeline States as a 2021 action item: "Initiate review of Dues Structure (Board)."

Suggested membership:

Founding Member Academy to Chair

United States (NAE) Australia (ATSE) Mexico (AIM) United Kingdom (RAEng) Sweden (IVA) Board designated 5 member academies to participate in review and report back to Board for recommendation to Council during 2022 Annual Meeting.

1 Member Academy from each tier:

\$6,180 (6)	\$3,090 (11)	\$2,060 (3)	\$1,030 (11)
Australia	Canada	Belgium	Argentina
China	Denmark	Netherlands	Croatia
India	Finland	Uruguay	Czech Republic
Japan	France		Hungary
United Kingdom	Germany		Ireland
United States	Korea		New Zealand
	Mexico		Nigeria
	Norway		Pakistan
	Spain		Serbia
	Sweden		Slovenia
	Switzerland		South Africa

Proposed Action: Approve initiation of review; select membership of ad hoc committee to evaluate (Secretariat to support) and report to Board 2 months prior to 2022 Annual Meeting. Suggest identification of primary and backup in case primary declines to participate.

CAETS Rotation Schedule - 2022

	Data	Annual		Officer				Board			
Member Academy	Date Elected	Meeting Host	President Elect	President	Past President	Board	2021	2022	2023		
Argentina (ANI)	1999	2021	2020	2021	2022	2020	Manuel A. Solanet	Manuel A. Solanet			
France (NATF)	1989	2022	2021	2022	2023	2021	Pascal Viginier	Pascal Viginier	Pascal Viginier		
Croatia (HATZ)	2000	2023	2022	2023	2024	2017		Neven Duic	Neven Duic		
Finland (TAF)	1989	2024	2023	2024	2025	2020			President-Elect	×	
Czech Repubic (EA CR)	1999	2025	2024	2025	2026	2015					
USA (NAE)	1978 (F)	2026	2025	2026	2027	2019					
Norway (NTVA)	1990	2027	2026	2027	2028	2015		Torbjorn Digernes	Torbjorn Digernes		
Germany (acatech)	2005					2022	Ulrich Wagner	Ulrich Wagner		1	
Australia (ATSE)	1978 (F)	2005				2020]	
Belgium (BACAS)	1990	2006				2022	Elisabeth Monard	Elisabeth Monard		1	
Japan (EAJ)	1990	2007				2021	Hideaki Koizumi			1_	
Netherlands (AcTI.nl)	1993	2008				2019			Board	X	
Slovenia (IAS)	2000					2019					
South Africa (SAAE)	2009					2017		Bob Pullen	Bob Pullen		
Canada (CAE)	1991	2009				2021	Peter Mascher				
Denmark (ATV)	1987	2010				2016		Nils O. Andersen	Nils O. Andersen		
Mexico (Al)	1978 (F)	2011				2021	Jose Albarran				
Switzerland (SATW)	1988	2012				2022	Rita Hofmann	Rita Hofmann		1_	
Hungary (HAE)	1995	2013				2019			Board	X	
China (CAE)	1997	2014				2020					
India (INAE)	1999	2015				2020					
United Kingdom (RAEng)	1978 (F)	2016			2017	2021	David Thomlinson			1	
Spain (RAI)	1999	2017	2016	2017	2018	2018			Board	×	
Pakistan (PAE)	2018					2022	Nasim A. Khan	Nasim A. Khan		1	
Uruguay (ANIU)	2000	2018	2017	2018	2019	2019				1	
New Zealand	2019							Geoff Chase	Geoff Chase	1	
Serbia (AESS)	2019								Board	- <mark>></mark>	
Nigeria (NAE)	2019									1	
Sweden (IVA)	1978 (F)	2019	2018	2019	2020	2020				1	
Ireland (IAE)	2020									1	
Korea (NAEK)	2000	2020	2019	2020	2021	2021	Prof. Kwon Oh-Kyong			1	

CAETS Dues Schedule

Country	Academy		2019	2020	2021	2022	2023
Argentina	Academia Nacional de Ingeniería	ANI	1030	1030	1030	1030	1030
Australia	Australian Academy of Technological Sciences and Engineering	ATSE	6180	6180	6180	6180	6180
Belgium	Royal Belgium Academy of Applied Sciences	BACAS	2060	2060	2060	2060	2060
Canada	Canadian Academy of Engineering	CAE	3090	3090	3090	3090	3090
China	Chinese Academy of Engineering	CAE	6180	6180	6180	6180	6180
Croatia	Croatian Academy of Engineering	HATZ	1030	1030	1030	1030	1030
Czech Republic	Engineering Academy of the Czech Republic	EA CR	1030	1030	1030	1030	1030
Denmark	Danish Academy of Technical Sciences	ATV	3090	3090	3090	3090	3090
Finland	Technology Academy Finland	TAF	3090	3090	3090	3090	3090
France	National Academy of Technologies of France	NATF	3090	3090	3090	3090	3090
Germany	German Academy of Science and Engineering	acatech	3090	3090	3090	3090	3090
Hungary	Hungarian Academy of Engineering	HAE	1030	1030	1030	1030	1030
India	Indian National Academy of Engineering	INAE	6180	6180	6180	6180	6180
Ireland	Irish Academy of Engineering				1030	1030	1030
Japan	The Engineering Academy of Japan	EAJ	6180	6180	6180	6180	6180
Korea	The National Academy of Engineering of Korea	NAEK	3090	3090	3090	3090	3090
Mexico	Academy of Engineering, Mexico	AI	3090	3090	3090	3090	3090
Netherlands	Netherlands Academy of Technology and Innovation	AcT.nl	2060	2060	2060	2060	2060
New Zealand	Royal Society Te Aparangi			1030	1030	1030	1030
Nigeria	Nigerian Academy of Engineering	NAE		1030	1030	1030	1030
Norway	Norwegian Academy of Technological Sciences	NTVA	3090	3090	3090	3090	3090
Pakistan	Pakistan Academy of Engineering	PAE	1030	1030	1030	1030	1030
Serbia	Academy of Engineering Sciences of Serbia	AESS		1030	1030	1030	1030
Slovenia	Slovenian Academy of Engineering	IAS	1030	1030	1030	1030	1030
South Africa	South African Academy of Engineering	SAAE	1030	1030	1030	1030	1030
Spain	Royal Academy of Engineering, Spain	RAI	3090	3090	3090	3090	3090
Sweden	Royal Swedish Academy of Engineering Sciences	IVA	3090	3090	3090	3090	3090
Switzerland	Swiss Academy of Engineering Sciences	SATW	3090	3090	3090	3090	3090
United Kingdom	Royal Academy of Engineering, UK	RAEng	6180	6180	6180	6180	6180
United States	National Academy of Engineering, US	NAE	6180	6180	6180	6180	6180
Uruguay	National Academy of Engineering of Uruguay	ANIU	2060	2060	2060	2060	2060
	Total Dues Payabl	e	84460	87550	88580	88580	88580

5.Board Nominees

ACTION: COUNCIL APPROVAL

Board Nominees for 2022-2023 Term

- President-Elect: Professor Neven Duic, HATZ
- Director: Professor Emeritus Nils O. Andersen, ATV
- Director: Mr. Robert (Bob) Pullen, SAAE
- Director: Distinguished Professor Geoff Chase, NZ
- Director: Professor Emeritus Torbjorn Digernes, NTVA

STATUS UPDATES

Communications Committee - Hugh Bradlow

Energy Working Group - Yves Bamberger

Sustainable Development Goals - David Thomlinson

Diversity and Inclusion - David Thomlinson

Engineering Education - Jesse Zhu



CAETS Energy committee 2021-2022 Action plan

Yves BAMBERGER CAETS Energy committee chairman 24 September 2021

Initialisation

• Proposal of a subject for the 2022 report:

« Towards energy consumption with low carbon emissions »

- Proposal of a working process and of a report structure:
 - Creation of Working Groups (buildings, iron and steel, cement,...)
 - > Energy committee seminars with all WG's members:
 - 2 hours sessions -2 consecutive days morning and afternoon
- Validation (with whom?)
- Call(s) for participants !!!
- First meetings of the WG's

Participation

- ~ 70 participants
- From 20 countries

Argentina, Canada, China, Croatia, Finland, France, Germany, Hungary, India, Ireland, Japan, Korea, Mexico, Nigeria, Norway, Portugal, Spain, South Africa, Switzerland, Uruguay

7 WG's (with around 7 to 15 members)

- > Buildings
- Food and Agriculture
- Cement
- Steel and Iron
- > Oil and gas
- Chemical industry
- > ITC

Structure of the report

- Executive summary
- Chapter « 0 » : transversal issues and recommendations
- Chapter 1 to 7 : to be drafted by Working Groups
- Annex: elements from the country analysis questionnaire responses

Structure of the report

- Executive summary
- Chapter « 0 » : transversal issues and recommendations
- Chapter 1 to 7 : to be drafted by the Working Groups
- Annex: elements from the country analysis questionnaire responses

□ The challenge : writing a useful report

CALENDAR

<u>2021</u>

- 17/2 : Subject proposal and discussion
- 3-4/5 : Subject and process validation First presentations
- 12-13/7 : Second presentations
- 13-14/9 : Transverse aspects 1

(cochairs meeting: 20/9)

- 25-26/10: Food 1, Building 1, Cement 1
- 29-30/11: Steel 1, Oil 1, Chemical 1, IT 1

(cochairs meeting: 10/1)

<u>2022</u>

- 7-8/2: Transverse aspects 2
- 7-8/3: Food 2, Building 2
- 11-12/4: Cement 2, Steel 2
- 9-10-11/5: Oil 2, Chemical 2, IT 2, Transverse aspects 3

(cochairs meeting: 16/5)

- 6-7/6: Final discussion-validation 😳
- 21/6 Transmission to CAETS secretariat

For example: September 13-14 seminar

- Day 1 (13 September) Morning session (10:00 12:00, Central European Summer Time)
 - 10:00 10:40 Jun KUBOYAMA (METI, Japan) "Energy efficiency benchmarking system in industry in Japan"
 - 10:40 11:20 Pr. UNNIKRISHNAN (Indian Institute of Technology, Mumbai, India) "Heat Pumping to save energy and enhance efficiency"
 - 11:20 12:00 Transverse issues, chapter 0, and country questionnaire discussion
- Day 1 (13 September) Afternoon session (17:00 19:00, CEST)
 - 17:00 17:40 Brian MOTHERWAY (IEA) "Priorities for energy efficiency seen by IEA" (provisory title)
 - 17:40 18:20 -- Carlos Herce (ENEA, Italy) "The Impact of Mandatory Energy Audits on Industrial Energy Efficiency in Italy"
 - 18:20 19:00 Godwin IGWE (University of Port Harcourt, Nigeria) "Decarbonisation and local and global pollution reduction"
- Day 2 (14 September) Morning session (10:00 12:00, CEST)
 - 10:00 10:40 Pr. Qingpen WEI (Tsinghua University, China)) "On-site performance measurement and modelling on borehole heat exchanger based deep geothermal heat pump systems for Space Heating in China"
 - 10:40 11:20 Julie GODEFROID (Chartered Institution of Building Services Engineers (CIBSE), UK) "Net Zero in the UK building stock:challenges , opportunities and cobenefits.
 - 11:20 12:00 Franck Behrendt (Technical University Berlin (TUB) Institute of Energy Engineering, Germany) "Decarbonisation of the Industrial Sector"
- Day 2 (14 September) Afternoon session (17:00 19:00, CEST)
 - 17:00 17:40 Pr. Ambuj SAGAR (Indian Institute of Technology, Bombay, India) "Policies and capacities for delivering energy efficiency in India"
 - 17:40 18:10 Karl OCHSNER (Former Chairman of the European Heat Pump association, Austria) "Process heat pumps for high temperature, an overview"
 - 18:10 -18:25 Erwin Adolfo Otto Fritz de la Orta (Academia de Ingeniería Mexico) "Decarbonization has already started, but what is the score?"
 - 18:25 19:15 Transverse issues, chapter 0, and country questionnaire discussion



Upcoming - Updates on Future CAETS Meetings

2022 - France

2023 - Croatia

2024 - Finland

CAETS 2024

Contact information

Panu Nykänen, Secretary General, Finnish Academy of Technical Sciences panu.nykanen@ttatv.fi

The Council of Finnish Academies info@academies.fi

CAETS 2024 | Conference July 1-4 2024 2024

Carbon Neutral Technologies and Society



Welcome to Finland

- Member of European Union
- Pop. 5.5 mo
- Capital Helsinki
- Languages Finnish, Swedish, English
- Temperature in July app. 20 32 °C
- Open export driven economy
- Industry, services, construction
- Metal industry, forestry, electronics, shipyards, automotive industry





Conference in Helsinki

Organiser: The Council of Finnish Academies, Finnish Academy of Technical Sciences

Topic:

Carbon free technologies and society

- Technology, industry and society
- Agriculture and forestry
- Social and economic impact
- Global questions

The date the venue

- Arrival on Monday 1 July 2024
- Opening and Plenaries Tuesday 2 July
- Sessions on Wednesday 3 July
- Excursion day on Thursday 4 July
- (Will be reviewed)

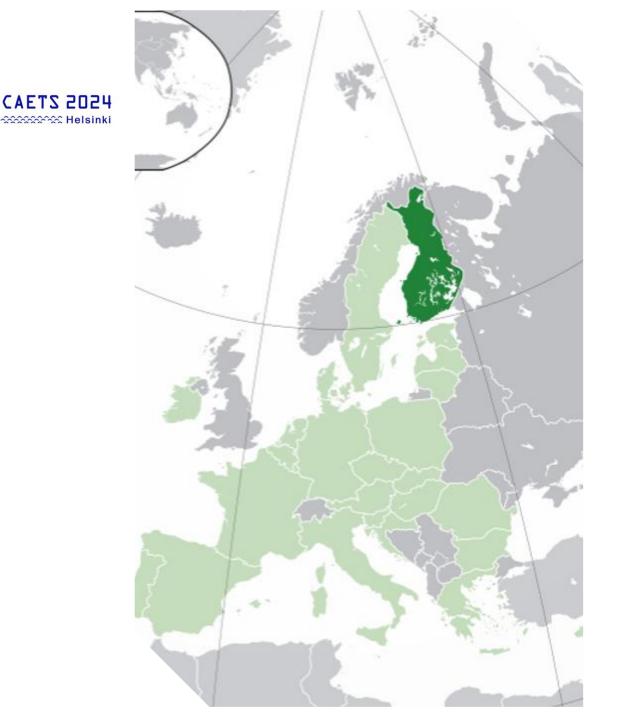
The venue is to be the Main building and the Central campus of the University of Helsinki (f. 1640)

- The venue is on the very central city beside the white Cathedral
- Number of hotels on the walking distance





CAETS 2024



How to get to Helsinki

- Helsinki is on the top of the world short way from Asia, America, Europe (long way from Australia and New Zealand)
- Helsinki Vantaa Airport is an important hub of air traffic
- You can get a ferry from Germany, Sweden
- Visiting Estonia by ferry or St.
 Petersburg by train in a short time

Item 14. CAETS Strategy and Operating Guidelines

Strategy: Review timeline

Bylaws: Approve changes

Operating Guidelines: Approve initial implementation

CAETS STRATEGY

Timeframe: 2021-2026

Abstract

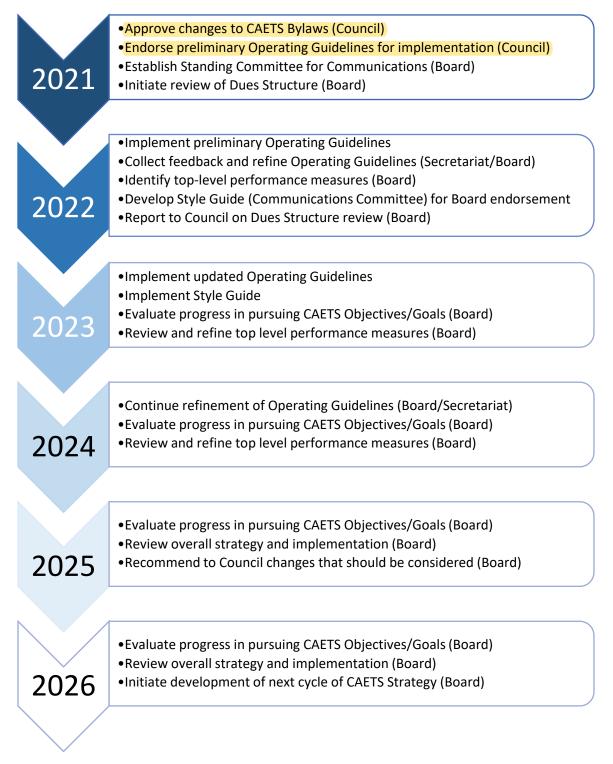
This document lays out an initial path forward, with emphasis on refinement of CAETS Objectives and identification of actions that employ existing CAETS bodies to better achieve those objectives. It also recommends establishment of a Standing Committee on Communications to address cross-cutting challenges that limit the effectiveness of current CAETS communications and reduce the potential impact of its activities. The implementation plan is delineated in "CAETS Operating Guidelines 2021", and changes in CAETS Bylaws are shown in "CAETS Bylaws 2021".

> Ruth David, Secretary/Treasurer ruth.a.david@outlook.com



CAETS Strategy 2021-2026

Summary Timeline



CAETS BYLAWS

Proposed Amendments

Contents

Section 1. MARKUP showing recommended amendments Section 2. RECOMMENDED FINAL (if approved by Council) Section 3. CURRENT BYLAWS (baseline)

> Ruth David, Secretary/Treasurer ruth.a.david@outlook.com

CAETS Bylaws

Changes to Bylaws

Approved October 13, 2000 Effective January 1, 2001 Amended July 14, 2005 (Art. 5, Sec. 1, b) Amended October 26, 2007 (Art. 3, Sec. 2, Sec.4) Amended June 30, 2010 (Art. 2, Sec.2; Art. 6) Amended November 30, 2017 (Art. 2, Sec. 2) Amended [pending Council approval] (Art. 1; Art. 2, Sec. 5; Art. 3, Sec 1.)

ARTICLE 1 - Objectives¹

Consistent with its Articles of Incorporation and in support of its mission, CAETS will:

- a) Provide an independent nonpolitical and non-governmental international organization of engineering and technological sciences academies, prepared to advise governments and international organizations on technical and policy issues related to its areas of expertise forum for enlightened dialog and communication of engineering and technological sciences;
- b) Contribute to the strengthening of advancement of engineering and technological activities sciences in order to promote sustainable economic growth, sustainable development, and social welfare societal well-being throughout the world;
- h) Foster a balanced public understanding of the applications of engineering and technology by the public; and
- Provide an international forum for discussion and communication of engineering and technological issues of common concern Prepare science-based proposals in order to advise governments and international organizations on policy issues related to engineering and technology development;
- e) c) Foster-cooperative international engineering and technological efforts through meaningful contacts for development of programs of bilateral and multilateral interest collaboration and the development of bi- and multilateral programs between the member academies;
- f) g) *Encourage improvement* Contribute to continuous improvement and modernization of engineering education and practice internationally;
- g) i) Foster establishment of additional engineering academies in countries where none exist; and.
- h) e)-Undertake other projects, programs, and activities not inconsistent with section 501 (c)(3) of the Internal Revenue Code and any applicable law of the District of Columbia. Promote diversity and inclusion in the global engineering profession;
 f) Premate others in a primeering advection research and practices.

f) Promote ethics in engineering education, research and practice;

CAETS may also undertake other projects, programs, and activities consistent with section 501(c)(3) of the US Internal Revenue Code and any applicable law of the District of Columbia.

¹ Red font indicates new language; mark-through and italicized language is to be deleted. Objective re-ordering is indicated in red letters prior to objective.

CAETS Bylaws

ARTICLE 2 - Council Membership

Section 1. Composition

The members of CAETS shall be academies of engineering and technological sciences. Each academy shall appoint a representative to speak and vote on its behalf. The body of the academy representatives shall be known as the Council. The CAETS officers shall be members of the Council without the right of vote, unless also the representative of an academy.

Section 2. Functions

Subject to the provisions of the Articles of Incorporation of CAETS and other provisions of these bylaws, the Council shall:

- a) Establish the policies of CAETS;
- b) Approve procedures for and the election of academies to membership in CAETS;
- c) Establish the initial contribution of new academy members and the annual dues of members;
- d) Accept the representative of each member academy to the Council and elect the members of the Board of Directors; and
- e) Approve the general concept and outline of CAETS convocations, symposia, projects, and endorsed activities.

Section 3. Criteria for Membership

A member of CAETS shall:

- a) Be representative of the engineering and technological community of that country;
- b) Subscribe to the nonpolitical, non-governmental international character of the Council;
- c) Have a peer elected membership with criteria for election based on significant personal contributions to engineering, technological sciences, or related activities;
- d) Be governed by its elected membership;
- e) Be engaged in significant activities demonstrating that its objectives are compatible with the objectives of the CAETS; and
- f) Have sufficient financial support to pay the costs of CAETS membership and the costs of participation in CAETS activities.

Section 4. Procedures for Admission of New Members

- a) Applications for admission will normally be accepted for consideration no earlier than three years after the official date of establishment of the applicant, with council flexibility for up to five years at its discretion.
- b) The election of a new member academy shall take place only during a regularly scheduled meeting of the Council when the Secretary/Treasurer receives completed application documents 90 days in advance of such meeting.
- c) Admission of a new member academy shall require the affirmative votes of at least all but one of the members' representatives present and voting.
- d) Applicants elected by the Council, on complying with Council-approved entry requirements, shall be admitted to CAETS effective at the conclusion of the Council meeting at which elected.

BOARD Recommends against addtion of "and see" CAETS Bylaws

1. MARKUP

Section 5. Meetings

Annual meetings of the Council shall be held at a place and date approved by the Council. With 90 days notice, special meetings of the Council may be called by the President or at the request of four or more members. Both annual meetings and special meetings of the Council may be held via teleconference or video conference provided all persons can hear *[Board Member suggested including "and see"]* each other and the means exist to attribute member votes. Council votes may also be conducted via email provided that all members give written consent to action without a meeting and that any question so decided shall have been transmitted in writing prior to the vote to every member of the Council in the same wording. Unless otherwise required by these Bylaws, the Articles of Incorporation, or by law, an affirmative vote of a majority of all of the members of the Council shall be necessary for action by mail vote. Each member is entitled to one vote on each matter submitted to a vote at any meeting, but no member with dues in arrears for a period of six months shall be entitled to vote. Fifty percent of the current CAETS membership, with accepted representation present, shall constitute a quorum.

Section 6. Resignation and Removal of Members

- a) A member may resign effective at the end of a fiscal year, provided it gives written notice to the Secretary/Treasurer prior to the beginning of that fiscal year.
- b) The removal of a member, for cause including extended non-payment of dues, shall take place only during a regularly scheduled meeting of the Council and shall require the affirmative votes of at least all but one of the members' representatives present and voting.

ARTICLE 3 - Board of Directors

Section 1. Functions

Subject to the provisions of the Articles of Incorporation and these bylaws, the Board of Directors shall be responsible for executing the policies, strategies, and actions approved by the Council. The Board shall have paramount authority with respect to the funds of CAETS, and the power to adopt the annual budget of the Council. The Board of Directors shall meet at least annually, in conjunction with meetings of the Council; and, with 90 30 days' notice, at the call of the President or two other members of the Board through the Secretary/Treasurer.

Section 2. Composition

The Board of Directors shall consist of the four officers and eight additional members.

Section 3. Officers

Officers may be, but are not required to be, representatives of the member academies. Election of officers shall be by majority vote by the Council of member representatives.

 a) The President shall be nominated by the member academy in position to make such nomination, based on date of membership in CAETS and as further described below in Article 3 Section 5. The President shall be the chief elected officer of the corporation and preside at meetings of the Council and of the Board of Directors.

1. MARKUP

CAETS Bylaws

- b) The President-elect shall be nominated by the member academy next in line to appoint the president. The President-elect, in the absence of the President, shall preside at meetings of the Council and of the Board.
- c) The Secretary/Treasurer shall be nominated by the member academy selected by the Council to host the CAETS Office. The Secretary/Treasurer shall provide the administration and other support necessary for assuring the continuity and effectiveness of Council and Board policies and programs.
- d) The Past-President shall be that person who has immediately preceded the current incumbent as president. If that person is unable for any reason to participate fully as a member of the Board of Directors, the position shall be vacant until the end of that term.

Section 4. Terms

The terms of office for the officers of the Board, with the exception of the Secretary/Treasurer, shall be one year beginning January 1. The terms of office for the additional members of the Board shall be two years beginning January 1. The Council shall set the term of the Secretary/Treasurer.

Section 5. Selection

- a) The selection of the member academy that nominates the President shall be based on a Councilapproved rotation schedule of all member academies based on date of membership in CAETS. The Board of Directors may approve temporary exchanges of position on that schedule, for a specific purpose only, between two member academies based on their joint agreement and request for Board approval.
- b) The positions on this rotation schedule of the member academies nominating additional members of the Board, relative to the position of the member academy nominating the president, shall be determined by the Council.
- c) Except for the position of Past-President, if the incumbent is unable to complete the term for whatever reason, the incumbent's academy will propose a successor nominee for approval by the Council to complete the term.

Section 6. Meetings

The Board of Directors may conduct business in any way permitted by the laws of the District of Columbia, including but not limited to telephone conference or similar communications equipment, provided all persons participating in such a meeting can hear each other. Participation in a meeting by such means shall constitute presence in person at the meeting. The Board of Directors may conduct any of its affairs by mail vote, provided that all members of the Board give signed, written consent to action without a meeting and that any question so decided shall have been transmitted in writing prior to the vote to every member of the Board in the same wording. Unless otherwise required by these Bylaws, the Articles of Incorporation, or by law, an affirmative vote of a majority of all of the members of the Board of Directors shall be necessary for action by mail vote. A quorum for the conduct of business of the Board of Directors shall consist of a majority of the number of its members.

Section 7. Removal/Vacancies

a) Directors may be removed, with or without cause, by a two-thirds vote of the entire Council at a regular meeting of the Council.

1. MARKUP

b) An officer may be removed, for cause, by a two-thirds vote of the entire Council at a regular meeting of the Council. Any vacancies created shall be filled by the member academy that nominated the removed officer.

ARTICLE 4 - Executive Committee

The Executive Committee shall consist of the President, President-elect, and the Secretary/Treasurer. The Executive Committee shall conduct routine business between meetings of the Board and act in emergencies. All actions of the Executive Committee shall be taken consistent with resolutions and policies of the Board. The Executive Committee shall not have authority as to the following matters:

- a) The submission to the Council any action requiring Council approval;
- b) The filling of vacancies in the Board of Directors or in any committee;
- c) The amendment or repeal of the bylaws or the adoption of new bylaws; and
- d) The amendment or repeal of any resolution of the Board of Directors which by its terms shall not be so amenable or repealable.

In addition to the Executive Committee, there shall be such standing committees as shall be authorized from time to time by the Board of Directors.

ARTICLE 5 - Expenses

Section 1. Member Expenses

- a) 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 position of Secretary/Treasurer, which shall be the responsibility of CAETS), and for bearing the costs of CAETS meetings it hosts.
- b) However, in exceptional circumstances when no other source of funding is readily available, and when requested in advance, within specifically budgeted funds, and with prior approval of the Executive Committee, travel expenses may be paid from CAETS funds for individuals pursuing objectives of the current CAETS Strategy.

Section 2. CAETS Expenses

Other expenses of the Council shall be included in the annual budget of CAETS prepared by the Secretary/Treasurer and approved by the Board of Directors.

ARTICLE 6 – Language

The language of CAETS Convocations, Symposia, Council, Board of Directors, and all other meetings and activities shall be English.

ARTICLE 7 - Fiscal Year

The fiscal year of CAETS shall be from January 1 of each year through December 31.

1. MARKUP

CAETS Bylaws

ARTICLE 8 - Indemnification

Every person who was or is a party or is threatened to be made a party to or is involved in any action, suit, or proceeding, whether civil, criminal, administrative, or investigative, by reason of the fact that the person, or another of whom the person is or was the legal representative, is or was an officer, director, employee, or agent of the corporation shall be indemnified and held harmless to the fullest extent permissible under the law against all expenses, liability, and loss (including attorneys' fees, judgments, fines, and amounts paid or to be paid in settlement reasonable incurred or suffered by the person in connection therewith), so long as such person acted in good faith and in a manner he or she reasonably believed to be within the scope of his or her authority and for a purpose that that person reasonably believed to be in the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. Such right of indemnification shall not be exclusive of any other right which such officers, directors, employees, or agents may have or thereafter acquire and, without limiting the generality of such statement, they shall be entitled to their respective rights of indemnification under any bylaw, agreement, provision of law, or otherwise, as well as their rights under this section.

ARTICLE 9 - Amendments

Section 1. Proposed Amendments

Amendments to these Articles may be proposed by a member academy at any time and will be considered at the next regularly scheduled meeting of the Council. Proposed amendments shall be provided to all member academies through the Secretary/Treasurer at least 90 calendar days before the Council meeting at which they are to be considered.

Section 2. Approval of Amendment

Approval of an amendment at a meeting of the Council shall require the affirmative votes of at least two-thirds of the member representatives present and voting.

ARTICLE 10 - Parliamentary Procedures

The provisions of Robert's Rules of Order shall govern the transactions of business at meetings in all cases to which they apply and to the extent they are not inconsistent with these bylaws or procedures established by the Council.

ACTION: COUNCIL APPROVAL OF CHANGES TO BYLAWS

OPERATING GUIDELINES

Preliminary

Contents Section 1. Preliminary Operating Guidelines (June 2021) Section 2. Existing Operating Procedures (June 2010) These Operating Guidelines span CAETS functions and operations that extend beyond strategy implementation.

> Ruth David, Secretary/Treasurer ruth.a.david@outlook.com

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1) Annual Meeting Host

	_	5		
	A	Relevant Governance (Bylaws) Article 2 – Council Membership; Section 2. Functions e) Approve the general concept and outline of CAETS convocations, symposia, projects, and endorsed activities.		
Theme: Global/ Regional Interest	Со	e member academy providing the CAETS President for the year normally hosts the nvocation/Symposium ¹ together with the annual meetings of the Board and Council. eliminary operating guidelines for the Annual Meeting Host are provided below. <u>Three Years in Advance</u> : The Rotation Schedule, which is updated annually by the Secretariat, identifies the annual meeting host for future years. At least 3 years in advance, the Secretariat will confirm the named academy's intent to host as schedule	Speakers: Diverse in nationality, gender, etc. d.	
	b)	<u>Two Years in Advance (during Annual Council Meeting)</u> : If the host academy intends more than a one-day symposium, it must seek Council approval for a specific theme-based convocation that may be up to 2.5 days in length. Preliminary dates should be provided as soon as possible.		
	c)	<u>Two Years in Advance</u> : If not already doing so, the Annual Meeting Host is strongly encouraged to designate representative(s) who actively participate in the CAETS Communications Committee from this time through the hosted meetings and subsequent wrap-up of key communications.		
	d)	One Year in Advance (during Annual Council Meeting): The host academy must confir with the Council the theme for the Symposium/Convocation, meeting dates, meeting venue, and provide a planned schedule of events ² for the week (information to be coordinated with the Secretariat).	ncil the theme for the Symposium/Convocation, meeting dates, meeting ovide a planned schedule of events ² for the week (information to be	
	e)	 <u>At least Ten Months in Advance</u>: Assemble planning committee for Symposium/ Convocation; include participation by CAETS member academies. i) Enable virtual participation by invited speakers and other participants upon reque ii) Invite presentations that address theme links to economic growth, sustainable development, and societal implications (Objective b). iii) Include presenters who are role models for diversity and inclusion (Objective e). iv) Include session/presentations focusing on relevant ethics issues (Objective f). v) Include session/presentations on engineering education implications of selected 	st.	

theme (if relevant).

¹ Convocation/Symposium: CAETS lexicon specifies Symposium for a 1-day event and Convocation for a longer event.

² A "standard" schedule of events (assuming 2-day convocation) includes: Day 1 – Board, Committees, and Working Group meetings; Day(s) 2-3 Symposium/Convocation; Day 4 – Council meeting; Day 5 – Technical/Cultural Tours (optional).

- f) <u>Approximately Six Months in Advance</u>: Establish meeting host website (or subdomain) to disseminate symposium/convocation information and logistics information (e.g. meeting venue, recommended hotels, local transportation), and to support meeting registration (for both in-person and virtual participation).
 - i) Open meeting registration 60-90 days prior to the final date which limits member access to hotel rooms at conference rate. (Note: If the meeting is virtual, registration may be opened 45 days in advance.)
 - ii) Maintain current schedule of events and program information on the site, including post-meeting summaries and recordings (as available).
- g) <u>Approximately Four Months in Advance</u>: After consultation with the Board (via the Secretariat), invite participation (as observers) non-member organizations and individuals; make available both virtual and in-person options. Primary consideration is given to inviting representatives of non-member engineering academies—particularly those considered prospective CAETS members—to Convocations/Symposia and Annual Meeting of the Council. Secondary consideration is given to inviting representatives of other, non-academy, engineering and related organizations.
- h) <u>Event Week</u>: Provide ample break time and space for bi- and multilateral meetings (Objective c).
- <u>Annual Council Meeting</u>: Present for Council discussion a draft outline of key topics and/or findings and recommendations stemming from the symposium/convocation that form the basis for a CAETS Statement. Identify key target audience(s) and summarize the communications plan.
- j) <u>One Week Post Event</u>: Transmit draft Statement to Secretariat for initiation of Pre-Publication Review process (Operating Guidelines Section 7).
- k) <u>Approximately Two Weeks Post Event</u>: Provide synopsis of Symposium/Convocation (or recorded video if available) on host website (Secretariat to link from CAETS website).
- I) Finalize CAETS Statement upon completion of review process and implement communications plan.

2) Board of Directors

Relevant Governance (Bylaws)

Article 3 – Board of Directors; Section 1. Functions

Subject to the provisions of the Articles of Incorporation and these bylaws, the Board of Directors shall be responsible for executing the policies, strategies, and actions approved by the Council. The Board shall have paramount authority with respect to the funds of CAETS, and the power to adopt the annual budget of the Council. The Board of Directors shall meet at least annually, in conjunction with meetings of the Council; and, with 30 days notice, at the call of the President or two other members of the Board through the Secretary/Treasurer.

Preliminary operating guidelines are provided below.

- a) <u>Three Months in Advance of the Annual Meeting</u>: The Board (via the Secretariat) will request status reports from all Working Groups and the Communications Committee to be submitted within 30 days.
- b) <u>Approximately Two Months in Advance of the Annual Meeting</u>: The Board will meet (virtually) to discuss the status reports, identify questions/concerns, and generate feedback for the Working Groups and Communications Committee to be addressed with the Board during its Annual Meeting.
- c) <u>Annual Meeting of the Board</u>: Agenda items to include:
 - i) Approval of the Annual Operating Budget
 - ii) Discussions (~15 minutes each) with the leadership of each Working Group and the Communications Committee regarding progress to date and plans for the next year.
 - iii) Board discussion of how current activities are advancing CAETS objectives;
 identification of gaps and potential new activities for recommendation to the Council; focus on identification and assessment of performance measures.
 - iv) Consideration of any new activities or working groups already proposed for recommendation to the Council.
 - v) Identification of next steps for implementation of the CAETS Strategy.

3) Council

Relevant Governance (Bylaws)

Article 2 – Council Membership; Section 2. Functions Subject to the provisions of the Articles of Incorporation of CAETS and other provisions of these bylaws, the Council shall:

- a) Establish the policies of CAETS;
- b) Approve procedures for and the election of academies to membership in CAETS;
- c) Establish the initial contribution of new academy members and the annual dues of members;
- d) Accept the representative of each member academy to the Council and elect the members of the Board of Directors; and
- e) Approve the general concept and outline of CAETS convocations, symposia, projects, and endorsed activities.

Preliminary operating guidelines for the Council's Annual Meeting are provided below.

- a) Administrative Items
 - i) Approve the updated Rotation Schedule
 - ii) Approve the annual Dues Schedule
- b) Election of Board Members for the following two-year period
- c) Discuss theme selection for following year's Symposium/Convocation (presented by upcoming host academy) and ensure that it is consistent with CAETS Objective b: Contribute to advancing engineering and technological sciences in order to promote economic growth, sustainable development and societal well-being throughout the world.
- d) Discuss theme selection for Symposium/Convocation to be held in 2 years (if available, to be presented by scheduled host academy); ensure that it is consistent with CAETS Objective b.
- e) Receive for discussion brief presentations by leadership of existing Working Groups and the Communications Committee delineating progress to date and plans for the coming year.
- f) Review and approve the general concept of other CAETS activities that have been proposed as reported by the Board.
- g) Discuss Statement outline (presented by current host academy) to help shape content in advance of draft preparation.
- h) Consider Membership Applications (if any); conduct election and establish initial dues.
- i) Discuss Membership Development issues: Identify and prioritize engagements with non-CAETS member nations based on upcoming annual meeting topics and locations.

4) Standing Committees

Relevant Governance (Bylaws)

Article 4 – Executive Committee

The Executive Committee shall consist of the President, President-elect, and the Secretary/Treasurer. The Executive Committee shall conduct routine business between meetings of the Board and act in emergencies. All actions of the Executive Committee shall be taken consistent with resolutions and policies of the Board. The Executive Committee shall not have authority as to the following matters:

- a) The submission to the Council any action requiring Council approval;
- b) The filling of vacancies in the Board of Directors or in any committee;
- c) The amendment or repeal of the bylaws or the adoption of new bylaws; and
- d) The amendment or repeal of any resolution of the Board of Directors which by its terms shall not be so amenable or repealable.

In addition to the Executive Committee, there shall be such standing committees as shall be authorized from time to time by the Board of Directors.

a) Executive Committee

The Executive Committee acts in accordance with the Bylaws shown above and routinely performs the following:

- i) Appoints a Visiting Committee, as required, to perform due diligence for Membership Applications.
- ii) Reviews materials developed by the Secretariat for presentation during the Annual Board and Council Meetings.

b) <u>Communications Committee</u>

The Communications Committee Charter includes three main elements: Development and maintenance of a Style Guide; oversight of the CAETS Communications Prizes; and derivation and synthesis of key messages from Working Groups and other activities.

*Style Guide*³: The committee will develop and maintain a CAETS Style Guide that sets content and style guidelines and defines templates for all CAETS communications (statements, reports, videos, website, etc.). The Communications Committee also will support review of draft publications.

³ A style guide is a set of standards for the writing, formatting and design of documents and other means of communication. It establishes standard style requirements to improve communication by ensuring consistency both within a document, and across multiple documents.

1. Preliminary (June 2021)

Communications Prizes: The committee will establish the annual schedule and provide oversight of the process for awarding the CAETS Communications Prizes. It also will gather lessons-learned from each cycle and adapt the guidelines and process as appropriate.

Key Messages: Using materials developed by CAETS Working Groups and other activities, the committee will derive and synthesize key messages that can be used by any member academy to communicate within their own country.

Preliminary operating guidelines are provided below.

- i) Committee Leadership The committee will operate with a Board-approved Chair and Deputy Chair, who will succeed the Chair. Terms will be approximately 3 years. Upon becoming Chair, the Deputy Chair will immediately nominate, for Board approval, a new Deputy Chair. The Board, in collaboration with committee leadership, will periodically review the committee charter and guidelines to assess whether modifications are needed.
- ii) Committee Membership Membership is open to all member academies and will include both Fellows and Communications Professionals nominated by their respective academies. An annual Call for Membership will invite participation; academies may retain the same representation, designate new nominees, or opt not to participate.
- iii) Meetings Semi-annual meetings are anticipated, with an in-person/hybrid meeting to be held in conjunction with the annual meetings; other meetings will be convened virtually.
- iv) Review of Draft Publications Committee leadership may designate, as needed, small ad hoc groups to review and comment on draft publications including, but not limited to, the annual statement, statements/reports developed by Working Groups, and communications proposed by other CAETS activities.
- v) Records Charter, membership, meeting minutes and working documents will be posted (by the Secretariat) on the CAETS website (Members Only section).

5) Working Groups

These preliminary operating guidelines are intended to maximize the impact of CAETS Working Groups on achievement of CAETS Objectives. Existing working groups (Energy, Engineering Education, Sustainable Development Goals, Diversity and Inclusion, COVID-19) will transition to this model during 2021-2022. New working groups will operate in accordance with these guidelines from initiation.

- a) Initiation Any member academy may propose creation of a new working group for Board consideration. Initial conditions include:
 - i) Member academy willingness to Chair the effort and recruitment of a willing Deputy Chair from another member academy.
 - ii) Draft charter (or statement of work) demonstrating alignment with CAETS Objectives and description of anticipated outputs (for example: statement(s), report(s), other activities).
- b) Evidence of interest in participation by at least 25% of CAETS member academies. The proposing academy will submit this information to the Secretariat, which will seek concurrence by a majority of the Board. This may be accomplished via email, a virtual meeting of the Board, or during the Annual Meeting of the Board.
- c) Charter The Working Group will maintain a charter (or statement of work) that demonstrates alignment with CAETS Objectives. If modified after initiation, the new charter (or statement of work) is subject to Board review and endorsement.
- d) Leadership Working Group leadership will include a Chair and a Deputy Chair, who will succeed the Chair. Leadership terms may be established by the Working Group but are expected to be at least 2-3 years. Once established, the Working Group will elect its subsequent leadership.
- e) Membership Working Group membership is open to all member academies. An annual Call for Membership will invite participation; academies may retain the same representation, designate new representatives, or opt not to participate. Additionally, Working Group leadership may, at any time, recruit additional subject matter expert participation from member academies.
- f) Meetings Meeting frequency will be established annually by Working Group leadership. Quarterly virtual meetings, at a minimum, are encouraged as a means to maintain engagement and momentum. Additional meetings may be scheduled throughout the year as needed to respond to time-sensitive matters or additional workload.
- g) Outputs All outputs intended to engage or inform audiences external to CAETS are subject to the Pre-Publications Review process described in Section 7.
- h) Records Charter, membership, meeting minutes and working documents will be posted (by the Secretariat) on the CAETS website (Members Only section).

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 i) Termination – A CAETS Working Group may be terminated upon the recommendation of its leadership, in the event that new leadership cannot be recruited, if active participation falls below 25% [Board member suggests 5-academy minimum] of CAETS member academies, or by decision of a majority of the Board based on a review of activities.

6) Other Activities

Board Recommends 25%

It is anticipated that most endorsed activities will stem from a CAETS Working Group. In the event that a member academy wishes to propose a CAETS-endorsed project or other activity (e.g. multi-national meeting/conference) the following guidelines apply.

- a) The proposing academy shall submit to the Secretariat, at least six months in advance, a description of the activity including purpose, format, anticipated participation, and projected impact relating to CAETS Objectives. The proposal must include endorsements by at least 25% [or 5] of CAETS member academies and must not be dependent upon CAETS funding.
- b) The Secretariat will seek approval by a majority of the Board. <u>Absent approval the</u> <u>activity may proceed, but it must not be publicized in any way as a CAETS-</u> <u>sponsored/endorsed activity</u>.
- c) If approved as a CAETS-endorsed activity, all external communications (for example: statements, reports, videos) stemming from the activity must be submitted to the Secretariat for initiation of the Pre-Publication Review in Section 7 prior to release.
- d) Records The proposing academy is responsible for providing relevant materials, including a synopsis of the activity, participation by CAETS member academies, and meeting minutes (if any) to the Secretariat for retention on the CAETS website.

During Board discussion it was suggested that CAETS establish an option for development and sustainment of "communities of interest" around enduring topics of interest to support multi-national networks of subject matter experts. This idea will be explored over the coming year.

1. Preliminary (June 2021)

7) Pre-Publication Review

Pre-Publication Review guidelines are applicable to all proposed CAETS communications (any communication attributed to CAETS)—regardless of media—intended for (or available to) audiences external to CAETS member academies.

- a) Leadership of the originating activity (e.g. Annual Meeting Host, Working Group Chair, Other Activity host) shall submit to the Secretariat a copy of the proposed communications prior to release.
- b) The Secretariat will immediately engage Communications Committee leadership to provide an independent review and transmit recommendations directly to the originating activity leadership within 2-3 weeks. Participants performing the review will generally be members of the Communications Committee who are not engaged in the originating activity. If deemed necessary, leadership will recruit additional member academy-affiliated subject matter experts to assist with the review.
- c) The Secretariat also will transmit the proposed communication(s) to all member academies (alternately, the materials may be posted on the CAETS protected website) **REVIEW**/ seeking review and comment. Member academies will be given three weeks to respond. Response options include:

AFTER REVISION

- i) Endorse with no changes
- ii) Endorse with suggested changes/corrections
- iii) Conditionally endorse—subject to explicit changes
- iv) Do not endorse

No response by an academy is interpreted to constitute i) Endorse with no changes.

- d) Member academy feedback will be synthesized by the Secretariat and provided to the originating activity leadership, which determines the disposition of recommended changes and provides a final copy to the Secretariat.
- e) Publication proceeds with the endorsement of at least two-thirds of the CAETS member academies together with concurrence by a two-thirds majority of the members of the CAETS Communications Committee. Endorsing member academies are listed in the final publication.

8) Admission of New Members to the Council

Relevant Governance (Bylaws)

Article 2 – Council Membership; Section 4. Procedures for Admission of New Members

- a) Applications for admission will normally be accepted for consideration no earlier than three years after the official date of establishment of the applicant, with council flexibility for up to five years at its discretion.
- b) The election of a new member academy shall take place only during a regularly scheduled meeting of the Council when the Secretary/Treasurer receives completed application documents 90 days in advance of such meeting.
- c) Admission of a new member academy shall require the affirmative votes of at least all but one of the members' representatives present and voting.
- d) Applicants elected by the Council, on complying with Council-approved entry requirements, shall be admitted to CAETS effective at the conclusion of the Council meeting at which elected.

Related operating guidelines are described below:

- a) Applications for admission shall be submitted to the CAETS Secretariat at least 90 days prior to the scheduled Annual Meeting during which it is to be considered. The application must include information that fully meets the items in CAETS Bylaws, Article 2 Council Membership; Section 3. Criteria for Membership. A suggested outline for the application is maintained on the CAETS public website (Membership/Becoming a CAETS Member).
- b) Access to the full membership application is provided to the Council via the Members Only section of the CAETS website.
- c) A Visiting Committee, appointed by the Executive Committee, will visit the applicant academy before consideration of the application by the Council. In the event that a physical visit is not feasible, a virtual visit will be conducted. A summary report of the visit, including observations and recommendations regarding election and initial dues (if elected), will be prepared and provided to the Council prior to the Annual Meeting.
- d) During its regularly scheduled Annual Meeting the Council will vote on the application and, if approved, will vote to set the initial annual dues payable by the new member academy.
- e) Applicants elected by the Council shall contribute \$2,000 to the CAETS Reserve Fund within three months of election in order to be considered full members of CAETS.
- f) Payment of annual dues is initiated the year after election to the Council.

9) Secretariat

Relevant Governance (Bylaws)

Article 2 - Board of Directors; Section 3. Officers

Officers may be, but are not required to be, representatives of the member academies. Election of officers shall be by majority vote by the Council of member representatives.

c) The Secretary/Treasurer shall be nominated by the member academy selected by the Council to host the CAETS Office. The Secretary/Treasurer shall provide the administration and other support necessary for assuring the continuity and effectiveness of Council and Board policies and programs.

Article 2 - Board of Directors; Section 4. Terms

The terms of office for the officers of the Board, with the exception of the Secretary/Treasurer, shall be one year beginning January 1. The terms of office for the additional members of the Board shall be two years beginning January 1. The Council shall set the term of the Secretary/Treasurer.

Preliminary operating guidelines for the Secretariat are summarized below:

- a) Meeting Coordination and Support
 - i) The Secretariat works collaboratively with the annual meeting host to establish the structure and schedule of the annual meetings, with primary responsibility for schedules and agendas for the CAETS Board and Council meetings.
 - ii) The Secretariat supports Committee and Working Group Chairs as requested in coordination of their activities (for example: membership calls, meeting notifications, archival of information).
- b) Rotation Schedule

The Rotation Schedule is the basis of the rotation of member academies that determines the nomination of Officers (President-Elect, President, Past-President) and members of the Board of Directors.

- i) The Secretary maintains and updates the Rotation Schedule in January of each year, reflecting decisions of the Board and Council.
 - (1) Newly elected member academies are placed at the bottom of the Rotation Schedule.
 - (2) The member academy at the top of the list is rotated to the bottom (below newly elected members), and provides the Past-President for the new year.
- ii) The first member academy on the Rotation Schedule nominates the President and is responsible for hosting the Annual Meetings (normally filled by the President-Elect).
- iii) The second member academy on the Schedule nominates the President-Elect and hosts the annual meeting the following year.

- iv) Four member academies are designated each year to nominate Board members based on their position on the Rotation Schedule and how many years it has been since they have had Board representation.
- v) The proposed Rotation Schedule for the following year is provided to the Council for review and approval during its Annual Meeting.
- vi) Subsequent to approval, and no later than six months in advance of the Annual Meeting during which Board Members are to be elected, the Secretariat solicits nominees from the member academies as identified in the Rotation Schedule.
- c) Financial Matters
 - Annual Operating Budget The Annual Operating Budget is drafted and presented to the Board for review and approval during its Annual Meeting. A copy of the approved budget is provided to the Council and posted on the website.
 - ii) Annual Dues
 - (1) The Annual Dues Schedule for the following two years is presented to the Council for review and approval during its Annual Meeting each year.
 - (2) The Secretary transmits Annual Dues Invoices to all member academies no later than 1 December of the prior fiscal year; dues are payable no later than 31 January the fiscal year. Annual Dues Invoices are adjusted to account for any shortfall or overage in payment received the prior year.
 - (3) Member academies shall not pay dues for the fiscal year in which they were elected to membership.
 - (4) Member academies who are in arrears by July 1 of the fiscal year will have no vote until the dues are paid (*reference CAETS Operating Procedures Amended June 2010, Section 4 b*).
 - (a) A member academy behind in dues payments for an extended period (as agreed by the Board) shall be placed on inactive status by majority vote of the Board. Implications include: No vote, removal from the Rotation Schedule, not listed as members as CAETS (and should not represent themselves as members), no access to Members Only information on the CAETS website. Such academies will, however, receive general information regarding CAETS activities via email. Once dues payments restart (and funds are received), subject to email majority vote by the Board, the academy will be restored to full membership and will be placed at the bottom of the Rotation Schedule. (Reference CAETS Operating Procedures Amended June 2010, Section 4 b)
 - iii) Banking

The Secretary/Treasurer maintains the current CAETS Bank Account with the Bank of America. The US National Academy of Engineering provides a second signer on the

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account who can provide access by CAETS in the event of emergency; the designated individual is the NAE Director of Finance.

- (1) Operating funds are revenues received from annual dues receipts less expenses forecast by the annual operating budget; in general, the annual operating budget is less than the annual dues receipts forecast.
- (2) Reserve funds include any surplus revenues from each fiscal year plus contributions by newly-elected member academies, which are required contribute \$2,000 within 30 days of their election.
 - (a) The Board may approve the use of Reserve funds for special non-recurring activities or events, such as reimbursement for expenses incurred by Visiting Committees performing due diligence for membership applications or other purposes critical to strategy implementation.
 - (b) In general, projects and activities carried out by CAETS, or a team of experts appointed by CAETS at the request of governments, international organizations, etc., shall be financially self-supporting and shall not be dependent on CAETS for financial support.
- iv) Annual Audit
 - (1) An Audit Committee, consisting of two persons (e.g. an officer and staff) nominated by the member academy providing the Secretariat (US NAE) and a third person, nominated by another member academy shall be appointed by the CAETS President for a two-year term, and shall provide a written report to the Council in time for its Annual Meetings. (*Reference CAETS Operating Procedures* – Amended June 2010, Section 4 a)
 - (a) The committee shall not be chaired by members nominated by the US NAE.
 - (b) The Chair shall normally be a current or past member of the CAETS Board.
 - (2) The Secretary/Treasurer shall reconcile Operating funds (revenues and expenses) and Reserve funds (revenues and expenses) and prepare an Audit Book no later than 60 days after the end of each fiscal year. The Audit Book shall include:
 - (a) Financial Statements that include current year activity and a Balance Sheet showing assets and liabilities.
 - (b) Reconciliation of the CAETS Bank Account.
 - (c) Reconciliation of Dues Receipts against the Dues Payable Schedule.
 - (d) Copies of all required US Internal Revenue Service Tax Filings.
 - (e) Receipts for all Expenses (Operating and Reserve).
 - (3) The Audit Book shall be circulated first to the NAE members of the Audit Committee and then to the Chair for final review and approval.

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- (4) Summary results are provided to the Board and the Council during the annual meetings.
- (5) Annual Audit Books are retained by the NAE with an electronic copy retained by the Secretariat.
- d) Member Development
 - The Secretariat shall establish and maintain a list of prospective CAETS member academies as well as a record of correspondence for use by the Council, Board, and Annual Meeting Host.
 - ii) The Board and Council will be solicited annually for contributions to the list, which will be used to prioritize future engagements.
 - iii) The information is maintained on the CAETS website.
- e) Corporate Matters
 - i) Business Registration The Secretariat shall maintain a current Business License with the Department of Consumer and Regulatory Affairs (DCRA) in Washington, DC.
 - ii) Internal Revenue Service Filings The Secretariat shall prepare and file annually the forms and returns required to maintain the CAETS nonprofit corporation status in accordance with Section 501(c)(3) of the Tax Code.
- f) Website

The Secretariat is responsible for development and maintenance of the CAETS website, including both a public portion and a protected portion accessible by CAETS members only.

- i) The public CAETS website showcases both CAETS and CAETS member academy activities, and provides information regarding CAETS members as well as how to become a member of CAETS.
- The Members-Only portion of the site is a repository for the current Member Directory, CAETS meeting materials, committee/working group activities, and key administrative items (including Rotation Schedule, Dues Schedule, and Financials).
- iii) Depending on availability of resources, new features will be added to better support CAETS activities. Such improvements will be undertaken within the Operating Budget approved by the Board.
- iv) The Secretariat will work collaboratively with the Communications Committee to ensure that the content and style of the website is aligned with recommended practices.
- v) The Secretariat will routinely solicit CAETS members for featured content stemming from their individual (or collaborative) activities.

CAETS Operating Procedures

Amended June 2010

1) Admission of New Member Academies to the Council

Further to CAETS Bylaws, Article 2 - Council Membership, Section 4 - Procedures for Admission of New Members, the following apply.

- a) Applications for admission may be submitted to the Secretary/Treasurer and should present information that fully meets the items in Section3 Criteria for Membership.
- b) A Visiting Committee, appointed by the Executive Committee, shall visit the applicant academy before consideration of the application by the Council and report its observations to the Council.
- c) Council consideration of applications for membership shall take place only during a regularly scheduled Council meeting and only for those complete applications submitted to the Secretary/Treasurer at least 90 calendar days in advance of the meeting.
- d) Applicants elected by the Council shall contribute \$2,000 to the CAETS Reserve Fund within three months of election in order to be considered full members of CAETS.

2) Convocations, Annual Meetings of the Council, and Other Activities

Further to CAETS Bylaws, Article 2 - Council Membership, Section 5 - Meetings, the following apply.

- a) The member academy providing the president for the year normally shall host the CAETS oneday Symposium and the Annual Meeting of the Council for that year. That academy shall propose and the Council shall approve the theme of the Symposium at least one year before the event.
- b) From time to time, upon request of the then scheduled host academy at least two years in advance, the Council may approve a longer time (up to 2 ½ days) for a specific theme-based Convocation.
- c) For Convocations, Annual Meetings of the Council, and other meetings the host member academy may, in consultation with the Board of Directors, invite participation as observers by non-member organizations and individuals. Normally, consideration will be given to inviting representatives of engineering academies, particularly those considered potential future CAETS members, to Convocations, Symposia, and Annual Meetings of the Council. In addition, consideration will be given to inviting representatives of other, non-academy, engineering and related organizations. The Council or the Board of Directors may approve the hosting of other CAETS activities by member academies and, if so requested at least 12 months in advance, extend CAETS sponsorship to other activities.

3) Rotation Schedule

Further to CAETS Bylaws, Article 3 – Board of Directors, Section 5 - Selection, the following apply.

- a) The Rotation Schedule is the basis of the rotation of member academies that nominate officers and members of the Board of Directors and host Convocations, Symposia, and Annual Meetings of the Council. The Secretary, reflecting decisions of the Council and the Board of Directors, updates the Rotation Schedule each January.
- b) Normally for each year, the first member academy on the Schedule nominates the President and hosts the Symposium or Convocation and Annual Meeting of the Council. The second member academy on the Schedule nominates the President-elect; each fifth member academy following nominates a Member of the Board of Directors (up to a maximum of four Members). Newly elected member academies will be added to the end of the Schedule effective on the date of election, and in order of the date of receipt of their complete application for membership. On January 1 the member academy nominating the President for the previous year shall be placed at the bottom of the Schedule and nominate the Past President.

4) Financial Issues

Further to CAETS Bylaws, Article 5 - Expenses, the following apply.

- a) An Audit Committee, consisting of two persons (e.g.: an officer and staff person) nominated by the member academy providing the Secretary/Treasurer and a third person, nominated by another member academy, shall be appointed by the CAETS President, for a two-year term, and shall report to the Council in time for its Annual Meetings.
- b) At each Annual Meeting the Council shall approve the next year's expense budget and the dues for the year following next year. The dues for each fiscal year are payable in January of that year. Member academies that have not paid dues by the following July 1 (six months later) will have no vote until the dues are paid.
- c) For FY 2006 a 3-level annual dues structure of \$1,000, \$3,000 and \$6,000 was introduced with member academies placed at levels approved by the Council, with the understanding that these could be changed for subsequent years by agreement of the Council or by the Board of Directors between Council meetings.
- d) Member academies shall not pay dues for the fiscal year in which they were elected to membership.
- e) A Member Academy behind in dues payment for an extended period (defined by the Board of Directors) shall be placed on inactive status by majority vote of the Board. Inactive status includes: no vote; removal from the Rotation Schedule; no hard copy mailings; receipt of e-mails sent to all members and invitations to CAETS meetings; not listed as members of CAETS; and should not so list themselves. Once dues payments restart and the Secretary receives the funds, that academy would be placed at the bottom of the Rotation Schedule and considered a full member, subject to e-mail majority vote by the Board of Directors.
- f) Projects and activities carried out by CAETS, or a team of experts appointed by CAETS, at the request of governments, international organizations, etc., shall be financially self-supporting and shall not be dependent on CAETS for financial support.
- g) The CAETS Reserve Fund shall consist of \$2,000 from each newly elected member academy and dues receipts in excess of operating expenses for any fiscal year, plus accrued interest. The Board of Directors may approve specific disbursements from the Fund for special non-recurring activities or events.

Item 15. New Business

IVA Working Group on Cyber Threats to Nuclear Weapons Systems Elin Elliott, International Secretary

Key Points from Symposium/Framework for Statement Manuel Solanet

Royal Belgian Academy Council of Applied Sciences

> Canadian Academy of Engineering

> Chinese Academy of Engineering

> Croatian Academy of Engineering

> Engineering Academy of

Danish Academy of Technical Sciences

Council of Finnish Academies

National Academy of Technologies of France

the Czech Republic

Hungarian Germany Academy of National Academy

of Science and Engineering Engineering

Academy of

Academy of Engineering of Mexico

United States National Academy of Engineering

Netherlands Academy of

Technology & Innovation

National Academy of Engineering of Uruguay

Swiss Academy of Engineering Sciences

Spain Real Academia de Ingenieria

South African Academy of Engineering

Slovenian Academy of Engineering

Academy of Engineering Sciences of Serbia

Pakistan Academy of Engineering

Norwegian

Academy of Technological Sciences

Nigerian Academy of

Aparangi

Engineering

New Zealand Roval Society Te

Australian Academy of Technology &

Engineering

Royal Swedish **Engineering Sciences**

Indian

National

Academy of

Engineering

United Kingdom Royal Academy of Engineering



CAETS

International Council of Academies of **Engineering and Technological Sciences**

Founding Members

2021 CAETS Service Recognition

Oh-Kyong Kwon

National Academy of Engineering of Korea

2019 President-Flect

2021 Past-President

2020 President

Irish

Academy of

Engineering

Japan

Engineering Academy of

National Academy of Engineering

of Korea

Royal Belgian Academy Council of Applied Sciences

Chinese Academy of Engineering

Croatian Academy of Engineering

Engineering Academy of

Danish Academy of Technical Sciences

Council of Finnish Academies

National Academy of Technologies of France

Canadian Academy of Engineering

the Czech Republic

Germany National Academy of Science and

Engineering

Hungarian Academy of Engineering

Australian Academy

of Technology &

Engineering

Indian National Academy of Engineering

Irish Academy of Engineering

Founding Members

Academy of

Engineering

of Mexico

2021 CAETS Service Recognition

Hideaki Koizumi

The Engineering Academy of Japan

Board of Directors 2020-2021

Engineering Academy of Japan

National Academy of Engineering of Korea

United Kingdom

Royal Academy of

Engineering

Netherlands

Academy of Technology & Innovation

United States

National Academy

of Engineering

National Academy of Engineering of Uruguay

Swiss Academy of Engineering Sciences

Spain Real Academia de Ingenieria

South African Academy of Engineering

Slovenian Academy of Engineering

Academy of Engineering Sciences of Serbia

Pakistan Academy of Engineering

Norwegian

Academy of Technological Sciences

Nigerian Academy of

Aparangi

Engineering

New Zealand **Roval Society Te**

International Council of Academies of CAETS **Engineering and Technological Sciences**

Royal Swedish

Academy of

Engineering Sciences

Royal Belgian Academy Council of Applied Sciences

Chinese Academy of Engineering

Croatian Academy of Engineering

Engineering Academy of

Danish Academy of Technical Sciences

Council of Finnish Academies

National Academy of Technologies of France

Canadian Academy of Engineering

the Czech Republic

Germany National Academy

of Science and Engineering

Hungarian Academy of Engineering

Indian National Academy of Engineering

Irish Academy of Engineering

Founding Members

Engineering Academy of Japan

National Academy of Engineering of Korea

National Academy of Engineering of Uruguay

Swiss Academy of Engineering Sciences

Spain Real Academia de Ingenieria

South African Academy of Engineering

Slovenian Academy of Engineering

Academy of Engineering Sciences of Serbia

Pakistan Academy of Engineering

Norwegian

Academy of Technological Sciences

Nigerian

Aparangi

Academy of Engineering

New Zealand **Royal Society Te**

International Council of Academies of **Engineering and Technological Sciences**

2021 CAETS Service Recognition

David Thomlinson

The Royal Academy Engineering, United Kingdom

Board of Directors 2020-2021

CAETS

Australian Academy of Technology & Engineering

Royal Swedish Academy of **Engineering Sciences** Academy of Engineering of Mexico

United Kingdom Royal Academy of Engineering

United States National Academy of Engineering

Netherlands

Academy of Technology & Innovation

Royal Belgian Academy Council of Applied Sciences

> Canadian Academy of Engineering

Croatian Academy of Engineering

Engineering Academy of

Danish Academy of Technical Sciences

Council of Finnish Academies

National Academy of Technologies of France

Chinese Academy of Engineering

the Czech Republic

Germany National Academy of Science and

Engineering

Hungarian Academy of Engineering

Australian Academy

of Technology &

Engineering

Indian National Academy of

Engineering

Royal Swedish

Academy of

Engineering Sciences

CAETS

Irish Academy of Engineering

Founding Members

Academy of

Engineering

of Mexico

2021 CAETS Service Recognition

Jose Albarran

Academy of Engineering of Mexico

Board of Directors 2020-2021

Engineering Academy of Japan

International Council of Academies of

Engineering and Technological Sciences

United Kingdom

Royal Academy of

Engineering

National Academy of Engineering of Korea

Netherlands

United States

National Academy

of Engineering

Academy of Technology & Innovation

National Academy of Engineering of Uruguay

Swiss Academy of Engineering Sciences

Spain Real Academia de Ingenieria

South African Academy of Engineering

Slovenian Academy of Engineering

Academy of Engineering Sciences of Serbia

Pakistan Academy of Engineering

Norwegian

Academy of Technological Sciences

Nigerian

Aparangi

Academy of Engineering

New Zealand **Roval Society Te**

Royal Belgian Academy Council of Applied Sciences

Chinese Academy of Engineering

Croatian Academy of Engineering

Engineering Academy of

Danish Academy of Technical Sciences

Council of Finnish Academies

National Academy of Technologies of France

Canadian Academy of Engineering

the Czech Republic

Germany National Academy of Science and Engineering

Hungarian Academy of Engineering

Indian National Academy of Engineering

Irish Academy of Engineering

Founding Members

2021 CAETS Service Recognition

Peter Mascher

Canadian Academy of Engineering

Board of Directors 2020-2021

Engineering Academy of Japan

National Academy of Engineering

Academy of Technology & of Korea Innovation

National Academy of Engineering of Uruguay

Swiss Academy of Engineering Sciences

Spain Real Academia de Ingenieria

South African Academy of Engineering

Slovenian Academy of Engineering

Academy of Engineering Sciences of Serbia

Pakistan Academy of Engineering

Norwegian

Academy of Technological Sciences

Nigerian Academy of

Aparangi

Engineering

New Zealand **Roval Society Te**

International Council of Academies of **Engineering and Technological Sciences**

CAETS

Australian Academy of Technology & Engineering

Royal Swedish Academy of **Engineering Sciences** Academy of Engineering of Mexico

Engineering

United Kingdom Royal Academy of

United States National Academy of Engineering

Netherlands

