

International Union of Pure and Applied Chemistry

157th MEETING OF EXECUTIVE COMMITTEE

Alcala University, Madrid, Spain, November 17-18, 2018

APPROVED MINUTES

1. INTRODUCTORY REMARKS AND FINALIZATION OF AGENDA

Attendees: Prof. Qi-Feng Zhou (Chair), Prof. Christopher Brett, Prof. Natalia Tarasova, Prof. Richard Hartshorn, Mr. Colin Humphris, Dr. Lynn Soby, Prof. Mei-Hung Chiu, Prof. Christopher K. Ober, Prof. Javier Garcia Martinez

Guest: Ms. Minjie Huang

Secretary: Dr. Lynn Soby (Executive Director)

Prof. Qi-Feng Zhou welcomed all participants and members of the Executive Committee (EC) and thanked our hosts and Prof. Javier Garcia Martinez for the arrangements and support for IUPAC.

Prof. Zhou than asked Prof. Hartshorn to run the meeting.

One additional Agenda item is the ramifications of Plan S (EU) and impacts to IUPAC-to be discussed under item #16.

2. MINUTES OF 156TH (LONDON, 18-19 NOV 2017) 2016 MEETING OF EXECUTIVE COMMITTEE

The draft minutes of the 156th Executive Committee are included in the Agenda book for reference. The EC was asked to review and approve the minutes. The minutes were approved. The EC were requested to review and approve via email the IUPAC Privacy Policy that was developed as a result of GDPR Regulations.

3. MINUTES OF 101ST MEETING OF THE BUREAU (BRATISLAVA, 7 AND 8 APRIL 2018)

3.1 RECEIPT OF MINUTES BY EC

The draft minutes of the 101st Bureau meeting are in the Agenda book for reference. The EC was asked to approve the minutes. The minutes were approved.

3.2 MATTERS ARISING (NOT COVERED BY ITEMS ON AGENDA)

4. ACTION ITEMS FROM PREVIOUS MEETINGS

Prof. Hartshorn referred to the list of consolidated action items included in the Agenda book. The EC reviewed the outstanding action items from previous meetings and determined those that were completed and those still in progress. An updated list is included as an appendix to the minutes.

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5. VICE PRESIDENT'S CRITICAL ASSESSMENT

Prof. Brett provided an update on his Critical Assessment. He started by stressing that the topics included in the assessment were to examine the extent to which current activities are aligned with the IUPAC Strategic plan, mission and goals.

The topics included in the VP critical assessment, examined to what extent:

- IUPAC's activities are in line with its mission and goals
- the activities being carried out in the most efficient and effective way (project system, timelines, IUPAC internal bodies)
- the global outreach of IUPAC both to the general scientific community and for public awareness is sufficient or too widespread
- internal and external communications and dissemination effectiveness, including the website platform and social media
- IUPAC is serving its members, from NAOs, through CAs to individual affiliate members in the best way
- new sources of funding of activities can be sought, including new endowments or conferences
- the links to external organizations are sufficiently strong and should they be increased.
- we can project forward in the future to predict IUPAC's role and management model 10 years or more from now

More specific aspects are:

- improved and defined strategies for increasing IUPAC's role and visibility in countries and parts of the world where IUPAC has had less impact in the past, particularly Africa
- taking steps to ensure that the outcome of the IUPAC Centenary celebrations and of IYPT2019 strongly contribute to IUPAC's legacy and to IUPAC's future.

Comments of EC members on all these topics were requested and discussed. Given cash flow and current income sources with potential reductions was recognized and support for gaining income from other sources and stakeholders to support the work of IUPAC to continue its' relevance to society. Prof. Hartshorn discussed the need to review the governance of IUPAC and suggested a task group be formed to work on evaluation and suggestions for optimizing the work of IUPAC. He also discussed the need for a strategic approach to partnerships and goal setting to be improved to provide IUPAC enhanced strategic placement for better influence in the world.

ACTIONS RESULTING FROM THE CRITICAL ASSESSMENT: NONE STATED

6. FINANCE AND BUDGETS

Colin Humphris referred to the financial items in the Detailed Agenda and Agenda Book for details. *All financial information presented at the EC meeting and contained in the Agenda and documents is pre-Audit and is subject to change.*

The draft of the minutes from the 2018 Finance Committee (FC) was included for reference to the Financial items. Mr. Humphris stressed the need for the Executive Committee members to

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review and gain an understanding of the P&L, these as they provide a comprehensive review of the financial health and outlook for IUPAC.

6.1 AUDITED FINANCIAL STATEMENT FOR 2017

The 2017 Audit report and Management letter to the EC was included in the Agenda book which gave IUPAC a clean bill of health. The 2017 Audit was completed in record time (February 2018) and the schedule for the 2018 will be comparable.

6.2 REPORT ON CURRENT FINANCIAL SITUATION

The Income Statement and Balance sheet as of 31 September 2018 were included in the Agenda book. IUPAC continued reporting on a full accrual basis which continues to provide great insight into the financial performance of the Union and importantly its cash needs.

The Executive was asked to note the Main Messages looking at the P&L as of 31 September:

- The P&L indicates that we are ahead of Plan but with most income accounted for (82% of plan). Income from publications (PAC of upfront 100k for 2018-full year is captured in April 2019), royalties at end of the year will show up in final P&L. Outstanding National Subscriptions are nearly 80%.
- The investment Dividend and Interest income below plan, owing to the fact that the income was diverted to the Line of Credit payback.
- Big increase in income from CAs and AMP but still behind in relation to ambitious plan (comments below under Items 21 and 22)
- Secretariat operation expenses on or below plan, owing to cost controls and staff changes during April-September.
- Travel expenses are below budget
- Contracted Services above budget due to investment in IUPAC100 microsite development effort (~\$50,000)
- Balance Sheet shows significant cash flow problem end September \$73k in cash accounts and Payables at \$118k.
- Projects that the EC is following – Website costs \$158k (includes CI Digital, User Authentication, Integration with database and IUPAC100 development) and Database Project and integration of \$54k. Database will revert from Work in Progress (WIP) to depreciation end of 2018 due to completion. Budget for the database project was ~\$48,000. Website WIP will also be reverted to depreciation in either first or second quarter 2019.

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- 31 September 2018 Cash Flow position was discussed. Important to note that while September indicates a slight positive cash position, November is again negative owing to outstanding income from NS payments and a large backlog of claims.

6.3 PERFORMANCE OF INVESTMENT PORTFOLIO

[For information]

- Summary detail of the two accounts-primarily fixed assets and equities, as seen on page 2 of the quarterly report. Portfolio market value \$4.325 million, estimated income available \$106k which is an important part of our income. Recently the income (interest and dividends) was diverted to the Line of Credit (item below) payment.
- No real capital appreciation in 2018 (cf. gains in 2017)
- Remains under active management by Finance Committee (Quarterly reviews). Recommendations of changes in the portfolio from the investment management team are kept within the investment policy and are discussed and approved by the FC.
- FC set a target of reducing outstanding credit to zero from \$350k by year end given the expectation of 2019 as an expensive year. This is to give cash management flexibility that will be needed. Bonds that are maturing in 2018-2019 will be diverted to the LoC to assist in paying down the balance.

For detailed information, the EC was referred to Page 3 of the 30 September 2018 summary report in the Agenda book.

6.4 ESTABLISHMENT OF ENDOWMENT MECHANISM

- Core principles of an Endowment fund: A fund which contains a meaningful principal that remains intact and interest/dividend that provide income for use by the organization. We recommend a Management Board (Board of Directors) that includes external expertise in the management of such funds, high positioned individuals who have access to capital and possibly high net worth individuals and with effective links to the sources of funds in industry or the various foundations. For further information about Nonprofits and Fundraising as well as Endowments and Board of Directors: <https://www.thebalancesmb.com/non-profit-4161501> and the Council on Foundations site: <https://www.cof.org/>
- IUPAC Auditors, BB&T Investment managers and FC will be engaged. In addition, the legal establishment of an IUPAC Endowment will require legal services. We have received a recommendation from the investment team to meet with Manning, Fulton & Skinner to discuss IUPAC's intentions. <https://www.manningfulton.com/services/tax-wealth-preservation/>
- Items to be developed include tax status (we want to offer tax relief to investors), Endowment policy with regards to acceptance of funds (ethical sources) and Use of funds

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policy. The Endowment policy is the first document that needs to be developed. A Sample is included in the Agenda book for reference.

- Objective is to have preliminary proposals for FC in February, if possible, with a goal to seek approval by Bureau and Council in 2019.
- The Treasurer and Executive Director are Seeking EC approval to start search, obtain detailed information on costs, legal advice and implementation timing (not under our control in some cases).
- IUPAC Ability to accept donations: Work is currently underway to register IUPAC in the state of North Carolina (required) to be able to accept donations. This is also required for us to solicit donations on our website. Currently, all funds are accepted as directed sponsorships and accounted as such.

Motion: The EC was asked to approve further pursuit of formalizing an IUPAC Endowment fund. Motion was approved. The EC provided the Treasurer and Executive Director the permission to pursue development of detailed Endowment process, costs and other items currently unknown (i.e. establishment of a Board of Directors/Trustees and issue of current Governance.

Motion was approved.

6.5 NAO'S APPROACHING 12 MONTHS IN ARREARS

The 2018 National Subscription summary is in the Agenda book. The current outstanding 2018 NS expected balance due is \$243,400. As of 31 October, 12 NAOs have outstanding balance due which must be paid no later than 31 December 2018. The NAOs approaching 12 months in arrears: Bangladesh, Belgium, Brazil, Bulgaria, China/Beijing, Jordan, Mozambique, Puerto Rico, South Africa and Switzerland. Not shown on the table- Kuwait had paid both 2018 and 2019 NS mid-November.

Lynn Soby informed the EC that there were no new applications received for National Adhering Organization status and summarized the current "interest" of countries.

[For Decision]

Brazil (SBQ) A letter from SBQ (Brazil) is in the Agenda book for reference to a discussion and decision by the EC regarding the 2018 and 2019 National Subscriptions of Brazil. They are requesting an exemption of payment of their NS for these two years. Also, they are requesting an immediate drop to the new calculated NS of \$25,894 from their 2017 payment amount of \$39,280. Communications with SBQ throughout the early summer and through the NS task force Council voting period were consistent with their request.

As the 2018 NS were approved by Council, Council would have to approve any changes to their 2018 NS. Note that if both 2018 and 2019 were to be exempted, the loss of income would be totaling \$77,380.

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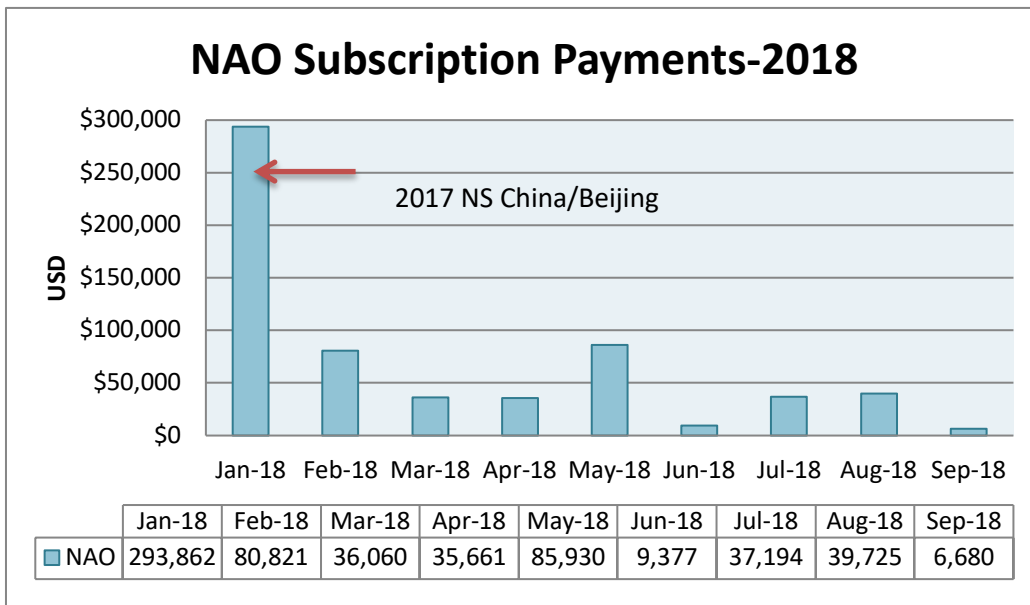
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The EC members discussed the SBQ request at length from the aspects of effects on the Union as well as the poor economic situation in Brazil.

EC Decision: As the current Statutes are very clear regarding National Subscriptions and requirements for membership as an NAO, the EC reaffirmed that the Statutes should be upheld and followed. The EC realized that this would be very difficult for Brazil (2108 NS payment pending; 2019 NS Payment invoiced) the current statutes for 12 months in arrears (2018) would therefore follow the statutes.

Approved: Reaffirm the Statutes and Bylaws by upheld in the response to Brazil’s request.

The 2018 NS inflows were presented. In late August through October, we had a serious issue with cash flow which forced us to call for the payments made against our \$350,000 Line of Credit (IUPAC had \$92,000 available).



Note: NS 2018 invoices sent in September 2017

6.6 BUDGET UPDATE FOR 2018-2019

[For information]

A brief review of current status of the 2018-2019 budget vs. actual was presented to the EC. Highlights of the discussion are summarized below:

2019 will be an expensive year given the Paris costs and the desire of members to travel to the main events. It is why the FC felt it so important that our line of credit is fully available to us.

Virtually no sponsorship income currently promised for 2019.

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The 2017/2018 comparative P&L were discussed. The detailed Comparative P&L was included in the Agenda book.

IUPAC Income Statement - Summary								
	Sep 2017 Actual	2017 Annual Budget	2017 Actual vs Budget Variance	Sep 2018 Actual	2018 Annual Budget	2018 Actual vs Budget Variance	Actual 2017 vs 2018 Variance	
Income								
Program Income	\$ 1,084,395	\$ 1,225,400	\$ (141,005)	\$ 1,069,882	\$ 1,291,319	\$ (221,437)	\$ (14,513)	
Direct Public Support	15,541	0	15,541	10,000	36,000	(26,000)	(5,541)	
Investments	340,089	140,000	200,089	107,554	141,000	(33,446)	(232,535)	
Sponsorship Revenue	0	0	0	15,765	0	15,765	15,765	
Merchandise Revenue - Pins	0	0	0	1,210	0	1,210	1,210	
Total Income	1,440,024	1,365,400	74,624	1,204,410	1,468,319	(263,909)	(235,614)	
Gross Profit	\$ 1,440,024	\$ 1,365,400	\$ 74,624	\$ 1,204,410	\$ 1,468,319	\$ (263,909)	\$ (235,614)	
Expense								
Awards, Grants & Contribution	27,745	0	(27,745)	30,551	0	(30,551)	(2,806)	
Fixed Costs - Salaries & Benefits	409,661	577,483	167,822	383,327	607,952	224,625	26,333	
Lease, Insurance & Bank Fees	70,705	82,370	11,665	70,883	83,832	12,950	(178)	
General & Administrative Expenses	31,912	42,911	10,999	32,296	60,795	28,499	(385)	
Contracted Services	46,045	59,300	13,255	81,404	63,750	(17,654)	(35,359)	
Depreciation Expense	28,843	36,570	7,727	30,581	46,104	15,523	(1,738)	
Other Expenses	27,240	25,850	(1,390)	28,138	28,100	(38)	(898)	
Travel & Meetings	460,871	654,399	193,529	317,066	423,559	106,493	143,805	
Miscellaneous Expense	0	0	0	0	0	0	0	
Total Expenses	\$ 1,103,021	\$ 1,478,883	\$ 375,863	\$ 974,245	\$ 1,314,092	339,847	128,775	
Net Ordinary Income / (Loss)	\$ 337,004	\$ (113,483)	\$ 450,487	\$ 230,165	\$ 154,227	\$ 75,938	\$ (106,839)	
Other Income & Expenses								
Other (Income)	(118)	0	118	(299)	0	299	181	
Other Expense	7,371	12,000	4,629	(19,559)	10,000	29,559	26,931	
Net Other Income / Expense	\$ 7,253	\$ 12,000	\$ 4,747	\$ (19,859)	\$ 10,000	\$ 29,859	\$ 27,112	
Nominal Income / (Loss) for the period	\$ 329,750	\$ (125,483)	\$ 455,234	\$ 250,024	\$ 144,227	\$ 105,797	\$ (79,727)	

6.7 BUDGET PREPARATION FOR 2020/2021

[For information]

The EC discussed the Treasurer's report on approaches to the development of the 2020/2021 Budget. The main messages were:

- With the adoption of the new NS formula we have a good fix on National Subscription data for 2020 and 2021 at around \$890k
- We have work to do to reach our targets for CAs and AMPs
- Publishing income remains under pressure and unlikely to grow
- We can hope to maintain investment income but world economic outlook uncertain
- Costs continue to inflate although hopefully Montreal will be less costly than Paris.

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- Secretariat under extreme workload pressure and has potential staff transitions to consider
- FC have a small working party considering “what if’s” in the event of a funding crisis
- Work underway following EC meeting with the objective of presenting draft budget first to FC in February 2019.

Prof. Hartshorn suggested that increased resources be committed to CPCDS, given the strategic emphasis on cheminformatics, Research Data Alliance efforts and the new SDS Subcommittee. He suggested that decreases in the Divisions and Committees in project allocations be redirected into the Project Committee (PC). He also suggested that the PC workflow and process be evaluated for strategic alignment and identification of process improvements needed.

The EC approved Prof. Hartshorn’s suggestions and asked the Treasurer and Executive Director to create the 2020-2021 budget proposal.

7. NATIONAL SUBSCRIPTION TASK FORCE

[For Information]

The National Subscription task force work to obtain Council approval of a new and modern National Subscription model was presented by Dr. Soby and Mr. Humphris.

Work was completed on schedule to present to Council for their approval in early September 2018. The NS task force obtained approval via GoToWebinar platform, which provided a “simulcast” of two live presentations and capability for on-line voting. Council approved a new model based on three factors averaged over five years – number of chemistry publications, Chemical Industry turnover and national GDP. These factors are weighted through a regression analysis that includes indicator variable to allow us to accommodate China and USA as outliers. A description of the model was included in the Agenda book.

The Council voting summary is included in the Agenda book. Council voted for (> 86 votes required for majority of a maximum of 169 votes):

1. The proposed model (102 votes)
2. Migration at 3% p.a. from 2018 to calculated subscription (106 votes)
3. To continue to charge minimum countries \$1000 (108 votes)
4. To immediately reduce Puerto Rico to the calculated subscription given the exceptional circumstance in PR following the hurricane (115 votes)
5. To employ the new calculation method for 2019 – 2023 subscriptions (105)

It is important to note the countries voting against the proposals as they represent as a group a significant proportion of our National Subscription income.

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EC was asked for their views on the use of electronic means to reach Council decisions as tried in this case. The EC expressed that an electronic Council meeting for non-scientific matters appeared to be very helpful in attaining a mid-biennium result which required Council approval. The EC noted concern for the countries, and specifically China, that voted against the new model and discussed potential issues for Council meeting in July 2019.

8. ELECTION PROCESS – TIMELINES AND UPDATE

8.1 STATUS UPDATE

Prof. Hartshorn presented an update to the EC regarding the status of the 2020-2021 elections process. He reported that Nominating Committee memberships have been submitted by most Divisions and Committees. One or two are still in discussion.

He noted that the by-law regarding the membership of a Nominating Committee is rather explicit:

"The Nominating Committee for each Division will be established before each election and will consist of not more than five people, of whom at least three must be from outside the Union."

The phrase "outside the Union" needed to be defined. According to Statute 6.7: "The Secretary General shall carry out the business of the Union as specified by the Council, by the Bureau, by the Executive Committee, or by the President, and be responsible for keeping its records and for the administration of the Secretariat."; with this decision being in the category of "specified by the Council".

Prof. Hartshorn asserted that the reasoning for having input from "outside the Union" was to ensure that there is outside involvement in preparation of our election slates and to help bring new people into our organization. Ensuring that new people are sufficiently/appropriately qualified is a responsibility of a Nominating Committee chair and should be managed by appropriately briefing the committee and by guiding the conversations.

Prof. Hartshorn defined "outside the Union" as outside the formal administrative/governance roles in IUPAC (as opposed to outside all the science and other activities). Thus merely being a member of a task group, or even a task group chair does not disqualify someone, particularly as projects are actively promoted as things that can be submitted by anyone (i.e. outsiders!). Equally clearly, any member of a Division Committee, or member of a standing or other committee that is established by statute or by-law must be inside the Union.

Prof. Hartshorn described the challenges around sub-committees and advisory committees, because some of these can be very large, thus ruling out lots of people, and they can have variable levels of input into the activities of the organization. Some are vital, and in some Divisions, it is actually the sub-committees that do most of the work. In others they barely have any existence at all. However, it was Prof. Hartshorn's interpretation that any chairs of sub-committees who are formally appointed and are expected to report to a Division Committee or Standing Committee are also considered to be inside the union. Merely being a member of such a sub-committee, on the other hand, does not place someone inside the union in the formal sense.

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The 2020-2021 Election Timeline and Guidance document was included in the Agenda book for reference and the status of the Nominating Committee approval reviewed.

8.2 ELIGIBILITIES AND SUCCESSION PLANNING ITEMS

The EC reviewed the status of Division and Standing Committee eligibilities and succession plans. The eligibilities of all Divisions and Standing Committees and ICTN, ICGCSD were compiled and sent to DPs and STCCs. The eligibilities were also sent to NAOs for consideration for their nominees. (31 October 2018) Those Divisions who had specific requirements for nominees was included in the communication. The nomination form was posted on-line where ALL nominations would be collected: <https://iupac.org/iupac-elections-for-the-2020-2021-term/>

During the evaluation of the eligibility of ICTNS, it was determined that Prof. Stohner (Chair), serving a four year term, beginning in 2018 (through 2021), will reach the 10 year maximum at the end of 2019. (2TM, 6 STCS+2Chair). An exception for continuation of his four year term until 2021 was therefore required. It was noted that as many of the current members are approaching the limit of service, it will be critical for ICTNS to develop a clear succession plan and implementation during the 2020-2021 election cycle.

Motion: The EC is asked to grant an exception which allows Prof. Stöhner, Chair of ICTNS, to continue his term until 2021.

Motion: Approved

8.3 INSTRUCTIONS FOR NOMINATING COMMITTEE CHAIRS

These were noted as being included in the election guidelines provided in the agenda book.

8.4 ELECTORATE

Prof. Hartshorn reminded the EC that the electorate for the 2020-2021 Elections, as approved by the EC in Beijing, 2017 would be the following:

- Division Committee members (Officers, TMs, AMs, NRs)
- Sub-Committee Chairs and Secretaries
- Commissions Chairs, Secretaries, and TMs (I.1, II.1 and JCBN)
- Task Group Chairs of current projects
- Members of the current Nominating Committee and that for the previous biennium, and Task Group Chairs of current projects pertinent to that Division (if spanning more than one Division, can vote in all Division elections).

8.5 INCORPORATION OF COMPANY ASSOCIATES/AFFILIATE MEMBERS NOMINATIONS

For the 2020-2021 elections for Division and Standing Committees, both Company Associates and Affiliate Members (AMPs) are eligible for nominations. CA's are eligible for TM positions on COCI (old ToRs) and AM positions while AMPs are eligible for AM positions only. The CAs who are to be eligible will need to have

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paid their subscription no later than 15 January 2019 and nominations must be submitted no later than 31 January. This will certainly be a significant change to the schedule of payments for both categories. The status of “Current” means that payment has been received for AMPs and CAs.

As AM elections follow after TM elections, there is more time to seek payment and nominations from the AMPs. (The TM elections end date is 10 May). Renewals for 2019 have begun for both paid and sponsored AMPs and the former ACS AMP program. The question is whether Sponsored AMPs should be eligible. Comments were solicited. No input was given from the EC members.

In order to address these two additional types of nominations, they will be collected separately from the NAO/NC nominations. It will also be critical that nominations of CAs and AMPs, coming both directly and through respective coordinators, are communicated to the NAOs for information, given that they may view as competitive to their nominations and/or they could be possible NR nominations from the NAO.

Lynn Soby included a list of the Paid (27 Countries) and Sponsored (35) countries that the AMPs originate from. (for information)

9. 2019 GA/CONGRESS, PARIS, FRANCE

[FOR DISCUSSION]

9.1 REPORT FROM ORGANIZING COMMITTEE

An updated report from the organizing committee (Jean-Pierre Vairon) was received and included in the Agenda book. A more detailed oral report following the site visit (LMS pre-EC Meeting) was given by the Executive Director.

9.2 GA SCHEDULE

A draft of the GA schedule was in the Agenda book for information and will be updated as further information becomes available.

9.3 WORLD CHEMISTRY LEADERSHIP MEETING (WCLM) 2019

The WCLM2019 Co-Chairs are Prof. Ober and Prof. Separovic. A draft outline of the plans for the WCLM was included in the Agenda book and was for the EC only-not to be distributed. The plans were reviewed during the site visit and an update provided to the EC.

9.4 YOS AND RYOS ENGAGEMENT

There will be a Young Observer reception held jointly with IYCN and a poster session on Monday evening, 8 July 2018. The YOs and RYOs will be invited to join IYCN/IUPAC for a speed networking session Monday prior to the reception.

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9.5 INTERDIVISIONAL MEETING RESOLUTION FROM DIVISION V AND OTHER INTERDIVISIONAL ACTIVITIES

10. IUPAC 100 - CENTENARY PLANNING STEERING GROUP

[For Decision] Prof. Garson and Dr. McConnell will join via GoTo Meeting

10.1 PROJECT ACTIVITY UPDATE/WEBSITE

An update on the various IUPAC100 Projects and status of the website, including a WIP Periodic Table Challenge was presented to the EC.

10.2 FUNDING AND RESOURCING

IUPAC was represented at the Chemicals Industry World Convention in Amsterdam in October by the Treasurer. Mr. Humphris stated that he focused on the year representing the IUPAC 100 activities as IUPAC contributions to IYPT. The distinctions are otherwise confusing to those not heavily involved. He focused on the engagement of the next generation of chemists and diversification of the community internationally and by gender. He stated that he exemplified this through the Breakfast networking, the Periodic Table of Younger chemists, and the Periodic Table Challenge as a mass engagement and competitive learning activity. He noted that there was also interest for UNEP in the African Summer School and form ICCA in the IUPAC Stories activity.

Mr. Humphris noted that very positive responses were received from the national chemical industry associations and it yielded a number of follow-up discussion centering on how they might help in their respective countries.

He also commented that responses from individual companies were more muted. The industry was far more focused on the issue of plastics waste and the uncertain world trade outlook including but not solely about Brexit. He stated that ICCA is sponsoring the opening of IYPT at a level that would have been approved by the ICCA board (the CEOs of the major and some smaller companies) and noted that Some felt that support was therefore already in hand.

10.3 IUPAC100 EVENTS FROM NAOs, REQUESTS AND POSSIBLE COMMITMENTS

The EC was asked by Prof. Hartshorn to discuss the requests for IUPAC Officer and member invitations to attend conferences. Canada has requested input as to who should be invited to participate from IUPAC at their conference. (Example is below) It is expected that others may request a letter of congratulations/endorsement and/or attendance. [This item is also relevant to item 11.3]

As an example, a question regarding the upcoming Canadian Chemistry Conference and Exhibition June 3-7, 2019 in Quebec City (CCCE2019). And a question on who in IUPAC

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leadership should be invited to attend.

[See more at www.ccce2019.ca]

11. INTERNATIONAL YEAR OF THE PERIODIC TABLE

PROF. TARASOVA/PROF. BRETT

[For Information and Discussion]

11.1 OPENING CEREMONY

A schedule of the opening ceremony of IYPT2019, to be held at UNESCO headquarters was in the Agenda book.

A request from the IYPT2019 for IUPAC to send Opening Ceremony invitations to our NAOs has been received. The Executive Director is to prepare the communication with the IYPT2019 Secretariat.

Discussions revolved around the lack of Budget for additional costs for IYPT2019 and IUPAC100 events and that IUPAC minimize costs and travel for special events. The upcoming IYPT2019 Opening Ceremony was discussed regarding the IUPAC volunteers who may desire to attend and the EC determined that a communication be drafted and sent to Bureau members to articulate that costs were their own responsibility (no IUPAC funds available).

The EC decided to limit the Officer attendance for the Opening Ceremony to Prof. Zhou (President), Prof. Brett (Vice President) and Prof. Hartshorn (Secretary General) who will be supported from IUPAC Funds. No decision regarding the planned Closing Ceremony in Japan was made.

11.2 CLOSING CEREMONY

An update on the closing ceremony was provided by Prof. Tarasova.

11.3 ACTIVITIES IN 2019 AND EXTENT OF OFFICER INVOLVEMENT

The EC discussed the requirements for all IYPAC2019 Events and expectations of the Officers' involvement in order to plan accordingly, both schedule and financial implications.

Discussions revolved around the lack of Budget for additional costs for IYPT2019 and IUPAC100 events and that IUPAC minimize costs and travel for special events. The upcoming IYPT2019 Opening Ceremony was discussed regarding the IUPAC volunteers who may desire to attend and the EC determined that a communication be drafted and sent to Bureau members to articulate that costs were their own responsibility (no IUPAC funds available).

11.4 FUNDING AND RESOURCING

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The Management Committee (MC) has indicated that the total funds received (including those directly for the Opening Ceremony, is 162,136 €. Of the five unions, IUPAC remains the largest contributor (Project funds of \$37,000), reported by Prof. Tarasova.

11.5 COLLABORATING ORGANIZATIONS

12. BID INTENTIONS FOR 2025

DR. SOBY

[For Information]

Dr. Soby updated the EC on the status of Bid Intentions for 2025. The Secretariat received and responded to inquiries from Poland, Manchester UK, and a non-NAO-United Arab Emirates. The EC recommended further reminders be sent to NAOs regarding the 2025 event, as is usual practice.

13. IYCN DEVELOPMENTS

PROF. HARTSHORN

[For Approval]

Prof. Hartshorn stated that there has been some e-mail discussion with IYCN people about how we can keep them more aware of developments in IUPAC, and us more aware of their progress (including something of a mentoring role). It is his recommendation that we offer them the opportunity to send an observer to the Bureau meetings, and that where possible, we should look to send someone to theirs. He would propose that it should be someone conveniently located in each case, in order to reduce costs to either organisation (and we should not fund their observer).

The EC approved having an IYCN Observer at Bureau meetings in the future.

14. 2021 GENERAL ASSEMBLY & CONGRESS, MONTREAL, CANADA

DR. SOBY

[For information]

Dr. Soby reported that the Canadian committee planning the WCC/GA is formalizing their application with a deadline for the April Bureau meeting. Several conference calls have been held to assist in their development of the Scientific Advisory Board and other details of the application. The Convention Center rooms have been reserved. They are preparing for their exhibition booth for 2019 and are aware that an update will be due for Council.

15. 15:00 STATUS REPORT ON IUPAC SECRETARIAT

DR. SOBY

A report on the following items will be provided to the EC. Given time constraints to release the EC Agenda book, written sections were not possible.

15.1 WEBSITE, INFORMATION SYSTEMS, SOCIAL MEDIA

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15.2 TRAINING FOR WEBSITE CONTENT MANAGERS

15.3 STAFF RESPONSIBILITIES

15.4 SUCCESSION PLANNING

16. PUBLICATIONS

MR. HUMPHRIS/DR. SOBY

[For Information and Discussion]

16.1 STATUS REPORT CI EDITORIAL BOARD CHEMISTRY INTERNATIONAL AND CI DIGITAL UPDATE

Mr. Humphris stated that the CI Board continues to meet approximately every 6 weeks to review future content for the revised 4 quarterly edition magazine. It has initiated a Top 10 Chemistry Technologies feature that we hope will become an important and regular annual event that may provide scope for wider engagement across the chemistry community.

An issue the Board has faced is the launch of regular *CI Digital* news and features feed. Bonnie Lawlor has provided a short paper that is in the Agenda Book. It explains why the *CI Digital* First task group recommended work on this be postponed due mainly to competing priorities for the Secretariat and our web/database developers.

The paper considers options moving forward that the task group will evaluate but it also poses the following questions that the EC is asked to discuss:

- Is *CI* primarily a member benefit or for wider communication with the chemistry community?
- Is it intended to be a revenue generator?
- Who should have free access?
- Should Digital *CI* reside behind the Firewall in the same way as *PAC* and *CI*?
- Should we revert to 6 editions if the numbers of those requiring print versions is reducing?
- Do the numbers wanting print versions warrant retaining print given the complexity of running a hybrid journal?
- Retaining print given the complexity of running a hybrid journal.

The EC was asked to review the report and provide written responses for feedback to the CI Board.

16.2 STATUS REPORT *PURE AND APPLIED CHEMISTRY*

PROF. HARTSHORN

[For Information]

A recent PAC citation report from Prof. Reedijk along with the minutes of September 2018 were included in the Agenda book. Prof. Hartshorn discussed the situation of “Plan S” as it related to

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PAC and Mr. Humphris emphasized that a material portion of the IUPAC income was from publishing. It was noted that Plan S is the EU plan that requires all government funded research publications to be published in non-revenue generating publications (free). Implications for PAC include concern if some articles (Conference Proceedings, perhaps) may describe original research and secondly, that some of IUPAC's NAOs receive publication income that supports their membership to IUPAC. Serious concerns had been communicated to both Prof. Hartshorn and Mr. Humphris about the impact on publications and therefore, income.

16.3 PAC EDITORIAL ADVISORY BOARD

PROF. HARTSHORN

[For Information]

The draft minutes of the most recent meeting and the report from the Editor were in the Agenda Book. Prof. Hartshorn discussed the situation of open access as it related to PAC and DeGruyters' stance and Mr. Humphris emphasized that a material portion of the IUPAC income was from publishing. This question will be addressed with DeGuyter during the quarterly meeting of the management committee.

16.4 VIRTUAL PUBLISHING AND DATABASES

DR. SOBY

16.4.1 IUPAC Standards On Line with DeGruyter

16.4.2 Solubility Data Series with American Institute of Physics (AIP)

17. NEW ELEMENTS WORKING PARTIES

PROF. TARASOVA

[For Information]

Prof. Tarasova reported that the IUPAC/IUPAP JWG report had been successfully accomplished and submitted for publication in PAC. It will be opened for public comments for five months. A Joint Preface from IUPAC and IUPAP for this report was included in the EC papers. Prof. Tarasova thanked Dr. Soby for her longstanding effort to insure IUPAC and IUPAP work seamlessly together on any activities related to the New Elements. She stated that a new Joint Working Party will be formed, should a discovery be reported.

18. IUPAC COMMITTEE FOR ISC

PROF. TARASOVA/PROF. ZHOU

[For Information]

18.1 UPDATE ON ISC

Prof. Tarasova and Prof. Zhou discussed the ISC Governing Board Communique and the paper on Priority Challenge Domains.

18.2 Prof. Chiu provided an update on ICSU Grant: "A Global Approach to the Gender Gap in Mathematical and Natural Sciences: How to Measure It, How to Reduce It?"

PROF. CHIU

19. MEMBERSHIP RELATIONS COMMITTEE (MRC)**PROF. TARASOVA**

[For Information]

Prof. Tarasova discussed the work of the MRC and recommended that a task group be formed to address issues with the Strategy alignment with the NAOs. Prof. Chiu added that this task force could also investigate the Gender Gap in IUPAC and work with the NAOs on their Gender Gap issues.

20. 16:45 STATUS OF COMPANY ASSOCIATES (CA) PROGRAM**MR. HUMPHRIS**

[For Information]

Mr. Humphris discussed the changes made to the CA program following the São Paulo Council approval to relaunch the Company Associates program. The objectives were to create a platform for greater engagement of companies in IUPAC work including the extension of rights to nominate representatives to elected positions and to create a meaningful income stream. To facilitate implementation, a progressive evolution of “heritage” CAs subscriptions was designed to ensure NAOs always gain by encouraging membership. The basis for budget for 2018/19 was the 57 CA’s currently members in 2016. Income in 2016 was \$5,950. Since then the financial performance has been:

Year	2017	2018	2019
IUPAC Income from CA’s	\$3,550	\$16,000	\$24,750*
Budget	\$6700	\$30,000	\$55,000

*Estimated on current membership and subscription escalation

Therefore, we have seen a material increase in income but short of ambitious plans.

In terms of member numbers, today we have 27 paid CAs and 4 permanent members as a result of their IYC support. It is important to note that we have little engagement with these permanent members. 10 companies notified IUPAC that they would not continue, whilst we are still seeking payment from 15 companies.

There is clearly work to do and we have to address the perception that companies have little to gain from membership of IUPAC. Our work and output have to be relevant to them. In the past the subscription was \$450 p.a., less than the discount CAs received on subscription to PAC. We were effectively paying them to be members!

We have feedback that CAs regard their subscription as membership of COCI only and this needs to be corrected. It will be essential to build a good understanding in companies of the breadth of IUPAC work and the value to them. IYPT and IUPAC100 are opportunities to engage industry more effectively.

21. STATUS OF AFFILIATE MEMBERSHIP PROGRAM

MR. HUMPHRIS

Mr. Humphris reported on the status of the 2018 revised Affiliate membership program (AMP) that was updated to include a price increase from \$35.00 to \$50.00 which includes a Digital only access to Chemistry International. Those wanting a print copy pay an additional \$25.00 to cover the costs. The total number of AMPs from Countries is ~686 (w/o final ACS numbers) and 77 Direct to IUPAC. In 2018, 27 Countries participated in the AMP Paid program. IUPAC also has Sponsored AMPs from either Countries or direct. He reported that IUPAC Sponsored Affiliates originate in 35 countries. Effect of change from Print to Digital: Most AMPs chose a Digital Access option (1,154) and 52 chose a "Digital plus Print" option. Previously, all AMPs whether paid or sponsored received a print copy of CI. The 2018 total income (w/o final ACS) is ~\$27,778. The cost savings from Print to Digital is ~\$25,070 for the AMP members. Income plus cost savings ~ \$60,848 with full year of ACS (estimate).

It appeared that the change from complimentary print copy of CI as a benefit to Affiliate members is not a key factor of membership. Rather, the most highly valued benefit is the 10% discount to conferences. This was noted by a high number of late end of year subscribers who need their membership card. Improvements in the systems and processes were discussed that enables IUPAC to feature the AMP members on the website and automate the documents as well as providing access to CI Digital via an authentication system. This has been a significant change for the AMPs and brings them into the IUPAC organization with visibility. At times, this is perceived by the AMPs as more important than any other benefit-to appear to belong to IUPAC.

Two countries who did not participate in the 2018 AMP were Brazil (#18) and Poland (#20). All others from 2017 participated in 2018 at similar levels of members.

The 2018 to 2019 transition of the USA AMP Coordinator, ACS, was discussed. Starting in 2019 the USA AMP program will be managed directly through IUPAC. This affords IUPAC the full membership subscription amount, as a direct AMP coordinator.

22. 9:00 PROJECTS IN REVIEW

DR. SOBY

[For Information]

22.1 PROPOSALS IN REVIEW

Dr. Soby reported that there were **9** proposals in review having a future financial commitment of \$53,500.

22.2 PROJECT AND FINANCIAL REPORT

Dr. Soby reported that IUPAC has **221** current projects of which only 18 are overdue on end date.

The EC determined that no action was needed.

23. EVALUATION COMMITTEE UPDATE

PROF. BRETT

[For Information]

23.1 FUTURE OF CHEMRAWN-STATUS UPDATE

Prof. Brett reviewed the current status of the evaluation of CHEMRAWN. Prof. Tarasova stated that “world needs” does not equate to the Sustainable Development Goals whereas the Interdivisional Committee on Green Chemistry and Sustainable Development is more aligned with IUPAC’s strategies. Another issue was brought up by Prof. Hartshorn stating that the leadership of CHEMRAWN was disappearing. The EC thanked the Evaluation Committee for their work to evaluate the effectiveness of CHEMRAWN over the past few years.

The EC decided unanimously to dissolve/disestablish CHEMRAWN and make a recommendation to Bureau. They asked that a formal letter be drafted and signed by Pres. Zhou and sent to the Chair and Secretary of CHEMRAWN.

The EC noted that the decision of dissolution of CHEMRAWN be considered in the 2020-2021 budget.

23.2 ADDITIONAL EVALUATION EFFORTS: ROLE AND CONTRIBUTIONS OF DIVISIONS

Prof. Brett reviewed the current status of evaluations of the Divisions, their replies on a number of issues and a snapshot of division’s activity that the Evaluation Committee was working on.

24. THE PHOSAGRO PROJECT

PROF. TARASOVA

[For Information]

Prof. Tarasova presented a report on the current status of the PhosAgro project.

25. INCHI TRUST

PROF. HARTSHORN

[For Information]

Prof. Hartshorn reviewed the current status of the InChI Trust and a report from the Editor. No action was proposed.

26. GO FAIR PROPOSAL FROM CPCDS

PROF. HARTSHORN

[For Approval]

Prof. Hartshorn presented a proposal from CPCDS seeking EC approval to continue the collaborative work in development of a Chemistry Implementation Network associated with the GO FAIR initiative. He endorsed this proposal, with the comment that Big Data is a critical area for IUPAC involvement.

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The EC Endorsed the GO FAIR Proposal as presented. A formal letter is to be sent to acknowledge this endorsement.

27. 2018-2019 IUPAC/SOLVAY AWARD

PROF. TARASOVA/DR. SOBY

[For Information]

The call for the 2019 IUPAC-Solvay International Award for Young Chemists was discussed and noted the steady increase in submissions in the past few years. Also noted was the generous funding from Solvay for the 2019 award to celebrate IUPAC's Centenary.

28. OPCW

PROF. HARTSHORN

28.1 REPORT ON 2017 WORKSHOP ON INNOVATIVE TECHNOLOGIES FOR CHEMICAL SECURITY

[For Information]

Prof. Hartshorn reported that the articles in PAC from the 2017 Workshop in Rio on Innovative Technologies for Chemical Security (not Remote Sensing), organized by OPCW, IUPAC, the US National Academies, and the Brazilian Chemical Society, have appeared in Vo. 90, Issue 10 of PAC: <https://www.degruyter.com/view/j/pac.2018.90.issue-10/issue-files/pac.2018.90.issue-10.xml>

He also discussed the findings from the report from this workshop that was prepared by the OPCW Scientific Advisory Board on the workshop and that it will be reported at the OPCW Review Conference for the Chemical Weapons Convention later this month.

The Workshop will be mentioned in an IUPAC Web Story that Jonathan Forman and Mark Cesa are preparing.

28.2 OPCW/IUPAC DEEPER/BROADER ENGAGEMENT PROJECT

[For Information]

Prof. Hartshorn reported that final preparations are in place for the IUPAC delegation, consisting of 13 members from IUPAC.

28.3 OPCW AND UNSDGs PROPOSAL FROM ICGCSD

[For Discussion and Next Steps]

The EC discussed the potential role of IUPAC's engagement with OPCW and UNSDG's and requested further details to be provided by Prof. Tundo. The e-mail thread and the file in the Agenda Book are relevant to a discussion with the Executive Committee to determine what role, if any, IUPAC may decide to engage with this effort.

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- what was said, and by whom
- how the IUPAC role may be shaped, and what it might involve
- what other organisations have said they will do
- how our relationships with them might be formalised
- possible problems and opportunities
- resource implications (financial and people)

No actionable decision was reached by the EC.

28.4 REGIONAL MEETING PROPOSAL FROM CCE [For Information]

Prof. Jan Apotheker presented an update via email communication regarding a proposal for regional educational workshops that would engage a broader participation, i.e. UNESCO be discussed at the upcoming OPCW-IUPAC meeting.

29. CONFERENCE ENDORSEMENT/SPONSORSHIP PROGRAM

DR. SOBY

[For Decision]

29.1 RATIFICATION OF ENDORSEMENT/SUPPORTED SYMPOSIA

The list of Endorsed and Financially supported symposia were reviewed and ratified by the EC as presented.

30. NEXT BUREAU MEETING

DR. SOBY/PROF. ZHOU

The 2019 Bureau meeting will be held virtually on April 6th, 2019. The officers will be in the Secretariat office to prepare for Council and GA.

30.1 PROCESS FOR HOSTING 2020 BUREAU AND 2019 EXECUTIVE COMMITTEE MEETING

A proposed process, similar to solicitation of bids from NAOs for selecting a host for the 2020 Bureau and 2019 EC meeting, was accepted.

31. ANY OTHER BUSINESS

ALL

A brief discussion regarding membership of the Bureau and how it relates to the Standing Committee Chairs resulted in asking the Secretary General to explore the background of membership and consideration of ICGCSD as a member of Bureau. The SG will report to the Bureau on his findings and membership recommendations. The meeting then adjourned.