Appendix

This document provides access to the primary supporting material, which provides insights into the conduct of the project.

App. 1A:   Summary of the Project Process and Conduct

App. 1B:   Working Group Composition

App. 1C:   Engagement Plan

App. 1D:   Analysis Phase Plan and Guidelines

App. 1E:   Outline Project Calendar

App. 1F:   Online Forum Evaluation Report
Appendix 1A: Summary of the Project Process and Conduct

1. Terms of Reference

The role of the Constitutional Reform Working Group (CRWG) is to conduct a deliberative, open and consultative process with the ACS membership, which is to culminate in a recommendation to Congress of the Constitution to be put before the membership for approval. The Constitution will establish governance structures, powers and responsibilities, incorporate appropriate checks and balances, enable efficient operation, and ensure legal compliance.

The CRWG was formed by Congress and operates as an advisory group for the ACS President. It is not a formal committee of MC or Congress and has no executive powers. Its scope is limited to provision of advice and proposals for specific actions, supported by the rationale underlying them.

The CRWG was so establish a process that fulfils its role, and that has the following specific features:

- initiates discussion among members by means of draft principles for the new constitution;
- after assimilation of members’ feedback, presents to members for a further round of consultation the possible features of a constitution to fulfil those principles;
- after assimilation of members’ further feedback, publishes a draft constitution; and
- after assimilation of members’ third round of feedback, recommends to Congress a Constitution to be put to the members for approval in General Meeting.

The Working Group is to consider undertaking wider consultation with members using one or more of the platforms and consultancies identified already during work in Project AURIS.

The Working Group is to ensure that consultation is achieved with all ACS members and other stakeholder groups, whether through Reference Groups or otherwise, including, but not limited to, younger members, individual members of the ADMA component Institute of Analytics Professionals of Australia (IAPA), ADMA corporate members, staff, and staff of start-ups in ACS Labs.

The CRWG is to take into account developments in parallel activities, particularly those relating to governance processes, strategy, branding and positioning.

The Working Group is to provide Congress and Management Committee with monthly progress reports, as well as an updated report prior to each Congress meeting that occurs during its lifetime, including progress against major project milestones and the identification of major issues.

The Working Group is to provide Congress with a final report and presentation on the outcomes of its activities.

The CRWG’s composition is in Appendix 1B.

2. The Establishment Phase

The project as a whole comprises an establishment phase and three consultation rounds.

The Establishment Stage ran from 1 July to 30 September, and required considerable planning and a great deal of negotiation to achieve the limited amount of support needed from ACS staff.

Key elements were the Engagement Plan, the Consultation Document, Guidance for Key Intermediaries in relation to events, Online Forum Functional Requirements and Use Cases, a Pre-Recorded Video explaining the consultation process, and a document-set to prime the consultation.

3. The Round 1 Consultation

The Round 1 Consultation process ran from 30 September to 30 October, to leave CRWG with the month of November for analysis, and the first 10 days of December for reporting. Because several delays occurred, input was gathered until 12 November. The channels available to members were:

- a Submission Form that supported free-test (a web-form) and attachments;
- 3 BEC events, 2 Branch events, 3 events of one of the national Boards, and 1 of the National SIG aSCSa;
• 15 national video-discussion sessions
• an online forum, supporting asynchronous but interactive postings

Some further details on the Engagement Plan are in Appendix 1C.

The online forum was a new undertaking for the ACS. An evaluation was accordingly undertaken, of both the suitability of the original requirements statement and use cases, and the extent to which the selected platform, groups.io, performed against those requirements. See Appendix 1E.

Various challenges arose because of high expectations by CRWG of agility on the part of ACS staff-members, the slowness of ACS processes, ongoing shortages of staff resources, and inadequacies of ACS’s IT platforms. Almost all of the project work was performed by CRWG members, including the preparation of all documents, and the selection, configuration, launch and management of the online forum.

The CRWG thanks ACS Governance Officer, Anthony Ellard, for his considerable and ongoing assistance in relation to management of c. 40 video-conferencing sessions, conception and execution of a booking-system for 17 hastily-arranged video discussion sessions for members, and a range of other such tasks.

The CRWG also thanks other staff-members for their work in relation to other tasks that required permissions that CRWG members have not been granted, viz. despatch of emails to members, publication of Information Age articles, publication of a landing-page and a feedback page, linking feedback to a CRWG member's email-account, and storage on the ACS web-site of files accessible from the landing-page.

4. Output

There were 206 participants across all channels, of whom 162 contributed in at least one channel. Active participation in each channel was as follows:
• 78 participants in 9 events organised by key intermediaries
• 53 participants in 15 national video discussion sessions
• 51 contributors in the Online Forum (of 116 who registered), providing c.400 postings
• 30 contributors of written submissions

The analysis and reporting process was facilitated by extraction of content from all channels, its encoding using the ultimately 38 Tags assigned in the Online Forum, and allocation of the comments made into files, one for each of the 38 Tags.

After explosion into Topics, the quantum of input was about 2200 comments on over 450 pp.

This was analysed, enabling the Report back to Members, supplemented by this Appendix, and a series of Annexes containing the members' comments, both in their raw form, and in the forms outlined earlier in this section.

Further details on the Analysis Phase are in Appendix 1D.
An outline Project Calendar is in Appendix 1E.
Appendix 1B: Working Group Composition

Membership

- Paul Campbell FACS (Qld)
- Cindy Chung MACS (NSW)
- Roger Clarke FACS (Cbr)
- Jo Dalvean MACS Snr CP (Vic)
- Tony Errington FACS CP (WA)
  - Jerome Chiew MACS Snr CP (WA) as Alternate
- Don Fraser FACS (Vic)
- Jacky Hartnett FACS CP (Vic)
- Nick Tate FACS CP (Qld)

Co-Convenors

- Roger Clarke
- Nick Tate

Support

The CRWG acknowledges the considerable assistance over an extended period of ACS Governance Officer Anthony Ellard.

The President, Ian Oppermann, and the CEO, Rupert Grayston, were observers and actively participated in several of the 20 CRWG meetings between June and November 2021. Several other staff-members attended from time to time, and several more performed communications and IT functions in support of the distribution of information to members.
Appendix 1C: Engagement Plan

Australian Computer Society
Constitutional Reform Working Group (CRWG)

Engagement Plan
Revised Draft of 20 August 2021
[Revisions to reflect all feedback up to and including Meeting #7 of 19 August 2021]

Introduction
The Constitutional Reform Working Group (CRWG) has been tasked by Congress to undertake consultation with members. The CRWG is to conduct three rounds of consultation, each stimulated by a seed-document seeking their views on, respectively, principles for a suitable constitution, possible features of a constitution, and a draft constitution. The purpose of this document is to express the plan for the engagement process, with primary emphasis on consultation with members, and discussion among them. The consultation process will accommodate the needs of all members, noting that they are highly diverse, and geographically highly dispersed, in CBD, suburban, regional, rural and remote areas, across all Branches, and in the Overseas Division.

Members' views on constitutional features are likely to reflect their personal experiences as Branch members.

In addition, several hundred Members currently hold, or have recently held roles within the Society, at Branch and national level, and many of them will have views about constitutional matters that arise from their experience in those roles.

Several other categories of stakeholder may have an interest in aspects of the ACS's constitution, and may wish to express views about those aspects. In at least some cases, it may be to the significant advantage of the Society and its Members to consider those views during the development of the new document.

The Engagement Plan
The process described in this document reflects guidance on engagement plans, in particular that published by Swerhun & Avruskin (2016) and AA1000 Stakeholder Engagement Standard 2015. The document is structured to reflect the following process:

Preparatory Steps:
1. Purpose
2. Stakeholder Analysis
3. Initiation

Consultation Steps:
4. Outbound Channels
5. Stimulus Documents
6. Submission Channels
7. Meetings
8. Electronic Interaction Channels
9. Analysis
10. Reporting

The final section of this Engagement Plan documents the outcomes of the risk assessment and the resulting risk management measures.
PREPARATORY STEPS

1. **Purpose**
The CRWG is required to conduct a deliberative, open and consultative process with the whole ACS membership.
This is to run in three Phases, aligned with those in Swerhun's generic process:

1. **Principles to Guide the Drafting of the New Constitution**
2. **Test Ideas about Key Features**
3. **Test Draft Clauses for the Key Features**
The outcome following completion of the three Phases is to be a comprehensive understanding of members' views, and a recommended Constitution that reflects those views and is therefore likely to attract a strong Yes vote at the General Meeting.

2. **Stakeholder Analysis**
The goals of this step are to:

- Identify relevant categories and segments of members and other stakeholders
- Determine the appropriate approach to engagement for each segment

**The Primary Participants**
The primary participants being targeted can be characterised as 'Members-Plus'. The aim is for active involvement by a wide variety of current members, but also access to the views of prospective members, comprising both those in the industry who have never been members, and ex-members.

Given the nature of a professional society, the appropriate approach to engagement is:

- the provision of information in a form designed to stimulate responses
- the receipt of comments and submissions
- the conduct of adequately-structured discussions
- complementary activities to enable interactive involvement by members

**Other Stakeholders**
A range of additional stakeholders exists. At least the more important among these stakeholders are to be notified of the process, in most cases by the CEO or President. In some cases, it may be appropriate to indicate openness to input from them, while in others the communication will be more of the nature of a polite notice of the activity being in train.

Detailed analysis of both categories is in Appendix A.

3. **Initiation**
An article in Information Age is to be the anchor-point for the project.

A preliminary draft is in the file: CRWG-AnnArticle-210724.doc
This is to be followed by an email from the President to all members to launch the event.

A preliminary draft is in the file: CRWG-AnnEmails-210724.doc
The possibility is to be considered of a Media Release to the ICT trade press.

The communications strategy is to be developed in conjunction with ACS staff, through the Executive Branch, and including the Information Editor Age, and possibly ADMA Division.

Sections 4-10 describe the activities to be undertaken three times, once for each of the three consultation phases.
CONSULTATION STEPS – APPLICABLE TO THREE SUCCESSIVE PHASES

4. Outbound Channels
   • The Primary Participants

   For each targeted segment, appropriate channels are to be identified, whereby information about
   the process can be disseminated, and feedback and other input stimulated.

   Particularly important channels to, from and among those segments that appear likely to provide
   valuable insights, have been identified as follows:
   • professional members
   • the various segments within the Associate grade
   • younger members
   • National SIGs (reaching many non-members)
   • recent ex-members
   • eligible non-members
   • IAPA members
   • staff-members who are also members of the Society

   Bespoke approaches are intended to reach:
   • PPP 'Trusted Sources' / sponsors / coordinators, e.g. an invitation to a roundtable
   • Skills assessment clients – which includes both members and prospective members,
     and both mature-age / experienced and early-career people

   Additional possible channels include supervisors of employers' graduate programs, tertiary
   institutions' accreditation contacts, academic members, internal IT societies, career advisors,
   ACS Foundation and CAUDIT.

   Detailed analysis of channels to the various segments is in Appendix A.

   The most appropriate channels are to be determined with the support of Executive Branch.

   This approach will inevitably result in multiple contacts with some individuals. It is important to
   avoid communications fatigue. Relevant measures are entry of the program into the in-house
   Communications Calendar, and care in the extraction of the mailing-list for each segment.

   However, some members will receive copies to two or more ACS personas (e.g. Branch, Chapter,
   BEC; Board, national committee, Congress), effectively inviting comments wearing various hats.

   The covering email is to be customised for each channel.

   The covering email is to make clear that members can pass the invite on to relevant non-member
   colleagues.

   • Key Intermediaries

   Gaining input from Branch members, and from members in their roles on national organs, is likely to
   be more effective with support from key intermediaries. These comprise:
   • Branch Chairs (8)
   • Board Directors (3)
   • National Committee Chairs (?14)
   • National SIG Convenors (2)
   • ...

   Establishing contact, briefing, and gaining feedback from the Key Intermediaries are early priorities.

   A discussion draft is in the file: CRWG-KIEmails-210807.doc

   • Other Stakeholders

   It is envisaged that these communications will be primarily from the CEO or President.

   Detailed analysis is in Appendix A.
5. **Stimulus Documents**

Discussion in each phase is to be based on a Consultation Document. Because each Consultation Document will be of necessity comprehensive, long and carefully-expressed, it is to be complemented by briefer, more accessible content, such as:

- A Summary
- A list of Key Questions
- An Introductory Webinar
- A Survey
  
  This necessarily requires a considerable degree of planning and structure, and hence is more likely to be appropriate in Phase 2 and/or 3, rather than in the necessarily more open-ended Phase 1.

  It may be appropriate to use professional services for survey design and/or analysis.

Consideration is to be given to the Consultation Document and/or the Summary or Key Questions containing hotlinks to explanatory information in text and/or video.

The documents are to be placed in a Repository, and the URL included in communications about the process.

Some segments may need different questions or framing, e.g. it may be useful to ask different questions of Ethics Committee members compared with Branch members.

The initial announcement to members is to be by means of an email from the President. Shortly afterwards, a second email is to announce the opportunity, is to be phrased so as to stimulate interest, and is to include links to the key documents and/or to a web-page (e.g. 'How to Participate in the Consultation').

The email launching the first Phase is intended to be independent from the periodic newsletter, in order to ensure that all members appreciate that the project is in train.

In the later Phases, it may be more appropriate for that to appear within the periodic newsletter. Consideration is to be given to the likely proportion of emails that will be opened, and whether some other, complementary channel is available and should be used for at least the first two emails.

Consideration is to be given to using social media posts to alert and remind members about the opportunity to provide input.

6. **Submission Channels**

Inbound Channels are needed, so that members and others can:

- submit feedback on the consultation materials; and
- submit input on aspects not dealt with in the consultation materials.

It is intended that an email-address, e.g. Constitution@acs.org.au be established, and included in all relevant emails and documents. This requires professional support to manage the traffic, and to deal with or refer queries.

Consideration is being given to provision of a web-site upload facility.

Submission by physical post is to be on request only, and fax not supported.

As the subject-matter is the constitution of a professional society, it is intended that Submissions will be declared default-public, and closed only if the submitter requests that.

Where structured surveys are used, the survey-administration facility is likely to include a submission channel. Consideration is needed re the openness / secrecy of individual survey-forms.

7. **Meetings**

A range of member meetings is to be stimulated, working through Key Intermediaries.
Given the diversity of venues and contexts, CRWG proposes this framework for meetings, with each Key Intermediary invited to adapt it to their particular circumstances.

The form of each meeting is to be developed in consultation with the Key Intermediaries:

- **Face-to-face** in some circumstances, e.g. for BECs, for a concentrated regional Chapter (e.g. Wollongong), or for a densely-populated CBD (e.g. Adelaide), or for a large satellite-centre (e.g. Parramatta, Macquarie Park, St Kilda)
- **Video-conference** in some circumstances, e.g. for highly-dispersed Branches, national member-segments, and national organs, and where COVID precludes face-to-face meetings
- **Hybrid**, in the common circumstance of a Branch with CBD, suburban, regional, rural and remote members, and/or COVID-induced lockdown or caution about large face-to-face events

The process for each meeting is envisaged as follows:

- **Conception**
  It is envisaged that each Key Intermediary will devise the nature of the event, or part of an event, in consultation with and supported by CRWG members as appropriate.

- **Organisation**
  It is envisaged that each Key Intermediary will utilise established mechanisms to bring the event, or part of an event, to fruition.
  Consideration needs to be given to audio- (or possibly video-) recording to be conducted, enabling replay and/or transcription of some or all of the event.

- **Motivation**
  It is envisaged that each Key Intermediary will stimulate attendance, in part utilising materials from CRWG.
  If desired, an introduction to the session can be provided by a CRWG member, if not in person then in pre-recorded form.

- **Conduct of the Meeting**
  It is envisaged that CRWG will provide a template agenda and script to assist in its conduct.

- **Discussion Facilitation**
  It is envisaged that each Key Intermediary will arrange facilitation in a manner appropriate to the context, by themselves, another BEC member, a Branch member, or some other person.
  Where a professional facilitator is preferred, a submission for budget approval can be made to the CEO, through the Branch Manager where appropriate.

- **Documentation**
  It is intended that a Meeting Secretary take notes and provide a copy to CRWG.
  The notes will desirably identify the topics and themes discussed, positions adopted and arguments made within each of them, consensual positions and agreement-to-disagree positions reached, and significant quotations.
  Where a professional resource is preferred, a submission for budget approval can be made.

The following categories of meetings are envisaged:

- At least one, possibly multiple, national live events are envisaged, by video-conference
- Branches are to be encouraged to, for each Phase, hold a BEC meeting, and at least one live event for members generally, preferably hybrid, perhaps by necessity video-conference only
- Depending on practices within the particular Branch, Branch Chairs may be more or less dependent on their Branch Managers and staff in relation to the meeting arrangements
- Branches are to be encouraged to also consider running events at Chapter-level, or otherwise on a regionally-dispersed basis, whether face-to-face, video-conference or hybrid
- Meetings within key member-segments are to be sought, where focal-points exist or can be devised (e.g. younger members, IAPA members)
- PPP ‘Trusted Sources’ / sponsors / coordinators, probably in the form of a roundtable
- National Organs (Boards, Committees, SIGs) are to be encouraged to hold a live event, or to stimulate members to consider making submissions from their particular perspective
8. Electronic Interaction Channels

Meetings, whether face-to-face, hybrid or video-conference, by their nature involve both input to the CRWG's deliberations and a degree of interaction with other members. However, contemporary expectations are of an online interactive platform to create the opportunity for members to interact, and cross-stimulate, and hence for the CRWG to gain access to additional, and quite possibly complementary input.

• Online Forum

An Online Forum is to be used, so that threads of discussion can evolve of their own accord. The discussion-space is to embody suitable structure (e.g. topics and themes, or focal questions), so as to achieve a reasonable degree of order within electronic discussions and the resulting text. Functional Requirements are in the following document: CRWG-ForumSvce-210709.doc

The possibility of making anonymous contributions is desirable. Some indication of the segment / perspective of commentators would assist interpretation.

Members may wish to make documents available, e.g. exemplars from other Societies. It is envisaged that members will be able to post files into a repository and publish the URL.

It appears that the Society's current platform, based on HiveBrite, fulfils the requirements.

It is of the nature of such fora that controversial comments may be made from time to time.

To address that, governance arrangements are to be established, taking into account current law and existing practice, including within existing ACS channels.

When any person joins the conversation, a Code of Conduct needs to be prominent. An FAQ will be needed, to explain the purpose, process and rationale underlying the governance arrangements, with a link to the Code.

The need for interactivity and hence minimal delay between posting and publication needs to be balanced against the risk of postings that breach of the Code and possible consequential harm.

Alternative forum management approaches include:

• As a minimum, there is a need for monitoring of postings by the Forum Management Team, including use of any available 'flaming' auto-monitoring facility, prompt switching-on of moderation for individuals who breach the Code, and a mix of off-list communications to individuals and on-list general reminders in order to interdict emergent problems.

This is consistent with the implementation of the relevant provisions of the Online Safety Charter, 1.1-1.3 and 3.2, within the context of the Society's existing arrangements https://www.communications.gov.au/file/48925/download?token=qih8NOGg

• An intermediate, contingency-management approach, whereby segments of the conversation (e.g. sub-fora or threads, depending on the platform), or the entire forum, can be promptly switched to moderated-mode for cooling-off periods.

• A moderation-always-on approach. This would doubtless be perceived by many members to be authoritarian, inconsistent with the nature of a membership-based professional society, and inconsistent with the declared purpose of a deliberative, open and consultative process with the ACS membership.

No evidence has been seen of any circumstances in which strict liability for content arises. The risks are at this stage entirely manageable through active monitoring, notification channels, and pre-planned, prompt and proportionate action as and when issues arise.

Consideration is to be given to the scale of effort involved in forum management, and appropriate resourcing of the Forum Management Team by staff, volunteer and/or casual resources.

• Social Media

The CRWG is to consider, in consultation with Executive Branch, actively seeking member input through one or more social media channels.

In addition, it is quite likely that members and perhaps others will use Social Media channels for comments or discussions without CRWG involvement. The intention is that such channels be monitored, for such content and readings of sentiment as the posts offer.
Consideration is to be given to the scale of effort involved in both categories of social media activities, the extent which this may increase the workload of the staff who manage this aspect of the Society’s operations, and whether additional casual resources may be needed.

9. Analysis
Input to the Analysis phase is to comprise text documents from:
• the Submission Channel(s);
• the Meetings; and
• the Online Forum.
In addition, the less formal Social Media channels on which discussions have occurred need to be reviewed, and relevant extracts taken and/or summaries written.
Additional sources may be added to the pool, such as communications sent to the Society prior to or independently of the current process, or media reports of substance.
To the extent practicable, text is to be consolidated into a single repository, retaining metadata that makes clear its provenance. The repository needs to support search-capabilities across all content.
The Analysis activities are to involve:
• sifting, searching and sorting;
• the identification of:
  • topics and themes additional to those in the consultation document;
  • within each topic and theme, positions adopted and arguments made;
  • consensual positions and agreement-to-disagree positions reached;
  • significant quotations that are clear and/or representative of views expressed;
• assessment of sentiment, and of sentiment-strength.
Consideration is to be given to the use of a text-analysis tool, in which case consideration is also to given to whether professional skills support is needed, whether from staff, contractors or consultants. The tool will need to be able to deliver insights into texts that are diverse in their origins and contexts, e.g. some will work within the topic-structure and framing provided in the consultation document whereas others will be of the nature of ‘advice freely-offered’; some will be written and some transcribed-oral; and some will comprise a member’s original words whereas other text will be second-hand reports from a meeting secretary or reviewer.

10. Reporting
A Report is to be prepared for publication in the Repository, and notification to members.
This may be supplemented by internal reports within the CRWG, to Congress, etc.
The open report is to provide information on the process that was conducted, the salient features of the input received, topics on which views are reasonably consistent, topics on which views are varied, and the key messages being carried forward to the next phase.
The open report is intended to be sufficiently brief to be digestible by members, and may be supported by appendices. Alternatively, it may prove more effective to write a longer report, but precede it with a short summary.

References
Risk Assessment and Risk Management Summary
The design of the Engagement Plan reflects the assessment of risks arising in relation to the process, in particular the following considerations:

- **The possibility of recriminations and inflammatory comments** rather than positive and professional discussion – addressed by making information available in advance and thereby providing some structure to live events, and having a Code of Conduct and moderation arrangements in place for the online forum
- **The possibility of a lack of input**, due to such factors as apathy, participation fatigue, or fear of consequences – addressed by an initiation email from the President, and design of the consultation document for each round so as to air the issues and stimulate input
- **The possibility of volunteer fatigue** resulting in a shortage of CRWG resources and slow progress – addressed by having a sufficient number of sufficiently committed CRWG members, clear intra-CRWG communications, clear task priorities and sequences, clear agendas for meetings, and short meetings
- **Unrealistic expectations** among members – addressed by including information in consultation documents, and where needed during meetings, about the constraints on constitutional options that arise from relevant law and governance guidelines
- **Distrust** among members of the motivations of the CRWG, office-bearers or staff – addressed by open processes, open consultation documents and reports, openness in discussions, and declarations of conflicts of interest
- **Barriers to engagement**, such as COVID-based closedowns and infrastructural inadequacies – addressed by using multiple channels including face-to-face, video-conference-based and hybrid events, and electronic submission and interaction fora
- **Barriers to the achievement of consensus**, such as irreconcilable differences in views – addressed by ensuring that CRWG members are present at key events, and that each event organiser adopts a professional, calming and collegial approach to the event’s conduct
- **Reputational damage** to the Society, internally or externally, arising from the appearance of internal division – addressed by the tenor of the consultation documents and the manner in which the events and online forum are conducted
- **Operational Efficiency and Flexibility Risk** to the Society, arising from constitutional features that are unjustifiably cumbersome or constraining – addressed by the conduct of scenario analyses, and by reviews by the CEO and staff, and by the Business Assurance Committee and Past Presidents
- **Contingent liability** in particular arising from postings on the online forum – addressed by means of governance arrangements and resourcing, including a Code of Conduct and FAQ communicated to participants, monitoring of the channels, and pre-planned, prompt and proportionate action where breaches of the Code occur or it appears they may occur
- **Excessive cost** – addressed by utilising the goodwill and professional commitment among members of the CRWG, Branch Chairs and other BEC members, and chairs and members of national Boards, Committees and National SIGs, acquiring professional services in a targeted and controlled manner, and utilising existing infrastructure wherever practicable
- **Excessive delay**, accumulating from various factors – addressed by maintaining momentum, engaging with key players at each stage, repeatedly reviewing the plans for excessive detail and duplications, avoiding the announcement of fixed-date, long-term commitments, and framing timelines as targets and aspirations
Appendix A: Stakeholder Segmentation and Outbound Channels

This section identifies categories of members, including prospective members, and other stakeholders. Within each category, segments and/or specific organisations are identified. In each case, potential communication channels are noted.

Membership

• Branch-Related Segments
  BEC Members BEC Mailing Lists
  Branch Members Branch Mailing Lists
  Chapter Members Chapter Mailing Lists
  Overseas Members Overseas Mailing List(s)
  Students ? Students Mailing List
  ...

• National Segments
  Congress Members Congress Mailing List(s)
  (current only? last 5 yrs?)
  Committee-members Committee Mailing Lists
  (current only? last 5 yrs?)
  Fellows Fellows Mailing List
  Young Members ? by excerpt from Membership Register ?
  National SIGs / Cols aSCSa (Safety Critical Systems), ACCE (Computers in Education)
  IAPA IAPA Mailing List
  ...

• Partnership Program (PPP)
  Responsible Execs PPP Responsible Execs List(s)

• Prospective-Member Segments
  Eligible Non-Members Past Event-Attendees Lists
  Non-Member Employees ACS Labs List(s)?
  of Tenants of ACS Labs
  Employed IT staff ? via inhouse Supervisors of Graduate Programs

  Ex-Members ? by excerpt from Membership Register ?
  Ex-Committee-Members ? by excerpt from Membership Register ?

  PY Clients PY Client List(s)
  Skills Assessment Clients Skills Assessment Client List(s)
  Tertiary Instn Students ? via staff who are ACS members
  ...

• ACS Staff
  Staff (All staff, or only Staff who are not also ACS Members?)
Other Stakeholders

• Related Professional Associations
It is envisaged that notice of the activity will be sent to relevant associations of a professional nature with which the Society has, or beneficially could have, some kind of relationship, including specifically ICT associations, e.g.:
  • ACS Foundation
  • Pearcey Foundation
  • FITT
  • TSA
  • ?Visual Arts
  • ?FinTech
  • ...
and adjacent professional associations such as CA ANZ, possibly IEEE, IE Aust.

• Industry Associations
Notice of the activity could be usefully sent to relevant industry associations, both internal:
  • ADMA
  • D+TC
  • DGA
and external, in particular:
  • AIIA
  • ...

• Other Organisations
Notice of the activity is likely to be appropriate to some other organisations:
  • Professional Standards Council
  • Professions Australia
  • Department of Home Affairs
  • Association of Deans in IT (via Caroline Chan)
  • CORE (via David Abramson)
  • Australasian Association for Information Systems (via Rodney Clarke)
  • IFIP (via Anthony Wong)
  • ACS Labs Tenants
  • ...
Appendix 1D: Analysis Phase Plan and Guidelines

Background
The later stages of the Round 1 Consultation required the following tasks to be taken:
1. Content Extraction
2. Content Encoding
3. Content Consolidation
4. Content Analysis
5. Review
6. Consolidation
7. Rationalisation
8. Reporting:
   - Monthly Report to Congress
   - Report back to Members
   - A document that draws out the implications for the Round 2 Consultation
This document defines the methods adopted for each of those tasks.

The possibility was considered of consultation momentum being sustained post c. 7 November.
The contingency plan was put into place to switch to two waves of report, on the planned date(s),
and some time later, noting that Congress had a 17-18 Nov Deadline for 24 Nov Congress, MC's
last meeting was 8 Dec, and the report needed to reach members by 10 Dec at latest, to beat the
Christmas wind-down.

1. Content Extraction
Input and feedback was, as planned, forthcoming in multiple channels. The content was acquired
from all channels, converted where necessary, and gathered into a common context.
The channels and their characteristics were as follows:
• Submission-form content in free text
  This was low volume, with 14 text submissions during the consultation month of October.
  It arrived in the crwg-submissions@acs.org.au mailbox, which Roger had access to.
• Submission-form attachments, in whatever format the participant sends
  This was low volume, with 5 submissions plus 6 emailed directly to CRWG members.
  It arrived in the crwg-submissions@acs.org.au mailbox, which Roger had access to.
• Meeting-notes
  This was moderate-volume.
  At 31 October, there were 15 national video discussion reports, plus 7 other reports from key
  intermediaries at national and Branch levels. 2 further Branch reports arrived by 12 Nov.
• Social media comments
  No reports of substantive content came to attention.
• Online Forum
  There was moderate-to-heavy traffic, with c.350 messages extracted on 1 November.
The only export capability found in groups.io is at Admin > Settings > Export Group Data.
  It generates .mbox format. A backup copy was extracted.
  A workable manual process was devised, whereby:
  • a file was created for each of the 38 Tags
  • each Topic within each Tag was accessed
  • the content (plus contributor’s identifier and date-time-stamp) was pasted into the Tag-file.
    Each of the 350 posts carried an average of 3.5 Tags, giving c.1250 post-copies

The extractions were performed between late Sun 31 Oct and late Mon 1 November.
A second and final round of extraction of late-arriving content of consequence was undertaken on 13 November. That resulted in:

- no further Submission-forms in free text making 14 in all
- 4 further attached Submissions making 15 in all (17 pp.)
- 2 further sets of Meeting-Notes making 24 in all (4 pp.)
- c.50 further posts on the Online Forum making c.400 in all (14 pp.)

2. Content Encoding

Content encoding comprised the following steps:

- Review of all content, highlighting all potential keywords or indicators of the theme that the contributor was addressing – by underlying the relevant passages
- Review of all content, highlighting all fluent expressions of points that had potential as 'quotable quotes' to illuminate points made by contributors – using bold-face type
- Review of all content, inserting cross-references to the 38 Hashtags that were provided to, or added into, the Online Forum, e.g. using [TT] where TT is the tag or a tag-abbreviation

This was performed:

- For the 15 session notes, progressively, as reports were written
- For the 9 meeting notes, progressively, as notes were received and reviewed
- For the 29 submissions, after extraction was undertaken
- For the Online Forum, content was already tagged, and the keyword and quotation identification was performed after extraction was undertaken

3. Content Consolidation

The consolidated form was designed to have the following attributes:

- Consistent format, with Word .doc(x) adopted
- Conveniently searchable across the corpus
- Conveniently extractable to enable quotations
- Conveniently publishable
- Sufficiently cross-referenced to assist in the detection of synonyms and closely-related themes, completeness-checking, and the replication / audit of extraction and analysis tasks

The content requiring consolidation was as follows (c.370 pp.):

A. Submissions
   A1. Attachments provided via the submission form [15, 24pp.]
   A2. Free-Text Comments via the submission form [14, 4pp.]
   A3. Attachments sent directly to CRWG members [6, 9pp.]

B. Meeting-Notes
   B1. National Video Discussion Sessions [15, 24pp.]
   B2. All Other Sessions [7, 15pp.]

C. Online Forum Content
   C1. Tag-Based Files [38, 300pp. – 32 range 3-14pp., outliers of 1, 1, 2, 17, 18 and 20pp.)

Consolidation comprised the following steps:

- A copy was made of each of the 38 Online Forum files
- For each Tag-based file in C1, the other files were inspected and the relevant passages appended to the Tag-based file. The sequence (small files first) was: A2 (text subs); A3 (attached subs); A1 (files emailed directly to us); B2 (7 meetings); B1 (15 sessions).
- The c. 700 raw comments exploded to in a total of c. 2,200 comments in 450pp.

Appendix 1 to this document provides further detail on the steps taken during extraction and consolidation. The 38 Raw Content files and 38 Consolidated files were placed on SharePoint.
4. Content Analysis

This was undertaken by CRWG members, commencing 2 November completed 26 November. It used the 38 Hashtags from the Online Forum, comprising:

- 13 Principles
- 14 Questions
- 5 further keywords added by participants (ACS-Spending, Chapters, Directors, SIGs, CLG).

The consolidation process had delivered 38 files, one for each of those Tags. Within each of the 38 consolidated Tag-files, the text was scanned, clusters were postulated, the passages were encoded, counts and sentiment-assessment were performed, and the results were summarised in counts and short textual summaries.

As part of that process, a semi-structured review of the consolidated content was undertaken, with a view to identifying any additional expressions significant enough that they needed to be established as additional keywords, and extracting the content associated with these additional keywords into appropriate files. However, no additional keyword contenders emerged.

On 13 November, the late-arriving content 1-12 November was appended to each of the 38 Tag-files. For those Tag-files that had already been analysed, it was necessary to do a supplementary analysis of the additional content, and make additions and amendments to the Tag-File. Appendix 2 to this document provides a more detailed description of the technique used to conduct the analysis.

5. Review

The Content Analysis of each of the 38 Tag-Files was conducted by a single CRWG member. After re-checking by the individual, a review of each Analysis-File was undertaken by at least one other CRWG member.

The aims of the Review step were to identify and address material instances of the following:

- misunderstandings or misinterpretations of members’ input;
- inappropriate omissions or inclusions of members’ input;
- inappropriate representation of members’ input; and
- excessive intrusion of personal views into interpretations.

The guidance provided was, for each assigned Topic:

1. Scan down the Analysis-File
2. Scan down the Tag-File
3. Pseudo-randomly select samples of contents within the Tag-File, and check whether the Analysis appears suitably selective of and consistent with that Tag-File content
4. To the extent that material issues are detected or suspect, enlarge the sample
5. Send a note back to the Co-Convenors, reporting what was found, and attaching any proposed revisions.

Modest numbers of relatively small problems were found, analysed, and addressed.
6. **Consolidation**

A chapter-structure was devised for the Report that clustered related Tags beneath a more abstract subject-heading. See Appendix 3 to this document.

For each of the 5 chapters, a StoryLine File was created.

For each Tag within each Chapter, the relevant Tag-File and Analysis-File were used to compose a 'story-line' of 50-500 words. The Tags within each chapter intersected in various ways. For example, there was a Tag for each Principle in the Consultation Document, and for most of the Principles 1 or 2 Questions were asked, each of which had its own Tag. The composition exercise therefore involved a considerable amount of rationalisation, including the selection and/or composition of text, followed by refinement to deliver a coherent presentation of the members' input.

Each of these Story-Line Files was distributed to CRWG members for review.

7. **Rationalisation**

The Story-Line Files contained multiple story-lines, one per Tag, of which there were between 6 and 9 in each chapter. A further process of consolidation and rationalisation was necessary, in order to express a coherent presentation of members' input to the chapter's subject.

The Rationalisation Phase was conducted by variously selecting and composing text, with the intention of reflecting both the commonalities and the depth and diversity of views expressed in each area, but doing so in a reasonably succinct manner.

The resulting drafts of each chapter were then reviewed by all CRWG members.

8. **Reporting**

The Report back to the Members was intended to balance comprehensiveness with accessibility and informativeness.

In Introduction and a Conclusions section were drafted, designed to prepare the reader to evaluate the 5 Chapters, and to draw out the content's implications.

The resulting drafts of each chapter were then reviewed by all CRWG members.

Finally, an Executive Summary was drafted, and reviewed by all CRWG members.

During December, implications for Round 2 will be drawn, based on Round 1 consultation.
Appendix 1: Articulation of the Extraction and Consolidation Phases

This Appendix provides a more detailed description of the technique used to extract and consolidate the content from multiple channels, and prepare it for analysis. This technique will be applied again in Rounds 2 and 3.

Preparation
Did a trial extract from each Channel other than the Online Forum.
From the Online Forum, extracted a control list of the 38 Tags, with Topic-counts. (Topic-counts subsequently updated).
From the Online Forum, extracted a control list of the 45 Topics, cross-referenced to Tags, and with message-counts. (Cross-references to Tags and message-counts subsequently updated).

Content Encoding
For each Channel A1-A3 and B1-B2
• scanned passages serially:
  • adding Tags to passages, to enable subsequent consolidation into Tag-based files
  • underlined key passages
  • marked-up contender passages for quotation (boldface-type)

Online Forum Clean-Up
Within the Online Forum
• for each of the 45 Topics
  • for each Message
    • tidied up the format
    • watched for any that needed deleting or editing (nil)
    • added in cross-references to Tags where appropriate (a moderate number)
    • created new Tags and added them in where appropriate (nil)

Establishment of the Consolidation Files
Within the Online Forum:
• for each of the 38 Tags
  • for each Topic in that Tag
    • extracted all Messages
    • stored a reserve copy with all content
    • stored a second copy as the basis for consolidation
  [Step considered, not needed:]
  • in the consolidation copy for that Tag
    • deleted passages that do not relate to that Tag

Consolidation
Applying the following process, trialling the smallest Channel (A2), then repeating for each of the other 4 Channels:
For each of the source-files A1-A3 and B1-B2
• for each Tag
  • scanned serially for occurrences of that Tag
    • for each occurrence
      • extracted the relevant passage
        • appended it to the consolidation, incl. metadata
Appendix 2: Articulation of the Analysis Phase

This Appendix provides a more detailed description of the technique used to conduct the analysis. Trials were conducted by WG members, to establish an appropriate process for the conduct of the analysis phase. This included both unstructured extraction and summarisation of text, and more structured approaches to provide some degree of quantification of the content.

The following is the approach to be adopted in respect of each Tag-file. It is suggested that the first analysis be conducted on a relatively small file. In the first instance, each WG member is allocated 3 files, the smallest of which is 6-7 pages. Alternatively, any of the 17 unallocated files (of variously 1-6 pp.) can be used for trial-run purposes. The process involves multiple passes over the content in the file, with each pass having a different purpose. This also assists in familiarising the analyst with the content.

**Preparation**

1. Make a copy of the relevant Tag-file – filename CRWG-Tag-TAG-INIT.doc(x)
   where TAG is the short identifier (e.g. Q09, KF), and INIT is the analyst's initials
2. Create a new file to contain the analysis – filename CRWG-Anal-TAG-INIT.doc(x)
   where TAG is the short identifier (e.g. Q09, KF), and INIT is the analyst's initials

   Use the Template at CRWG-Anal-TEMPLATE-INIT.doc

   See the sample files at CRWG-Anal-Q11-NT.doc and CRWG-Anal-Q13-DF.doc

**Analysis**

3. **Scan** the content in the Tag-file serially, reading superficially rather than deeply
4. **Scan** the content serially, but this time:
   - less superficially
   - paying some attention to the pre-indicated themes (underlined)
   - paying some attention to the pre-indicated quotations (in bold-face type)
   - noting multiple occurrences of content on similar themes
5. **Postulate some recurrent themes** noticed within the file.
   A 'theme' might:
   - reflect a sentiment (for or against, with a degree of strength); OR
   - reflect two or more viewpoints
   (with some kind of indicator of the frequency of occurrence of each viewpoint)
6. **Scan** the content serially:
   - inserting searchable **markers** for each recurrent theme
     e.g. [MM] for matrix management
   - adding and amending theme-underlining and bold-face quotes as appropriate
7. **Record** the number of responses and responders for each recurrent theme.
   Note that some themes or sentiments may have limited relevance to CRWG
8. **Scan** the content serially again, adding and refining themes and markers
9. **Repeat the scanning** until all unclassified comments have been dealt with
10. **Summarise** each recurrent theme in 1 or 2 lines
11. **Complete** the Analysis file
12. **Submit** the modified Tag-file and the Analysis file

**Non-CRWG Content**

13. **Identify** content of potential relevance outside CRWG
14. **Extract and consolidate** the content into one or more files, by theme
15. **Submit** the file, for discussion by CRWG and then onforwarding to the CEO / PMO
Allocation of Tag-Files to CRWG members for analysis

As a bias-control measure, WG members were not invited to choose which Tags they wanted to examine. Instead, a pseudo-random allocation method was applied. This used stratified random sampling to cater for the considerable variation in size among the files (ranging from 1 to 20 pp.).

At initial allocation, 7 CRWG members were available.

The Tag-Files were sorted by page-count. Pot A was allocated the file with the largest page-count in the first group of 7, and the smallest in the second group of 7; Pot B was allocated the second in each of those two groups; etc. The third largest group of Tag-files all had about the same page-count, so allocation was simply linear. Two variations were made to cater for the two trial analyses that had already been conducted.

This resulted in a range of page-counts between 32 and 35 (average file-sizes of 7, 11 and 15 pages), thereby satisfying both the randomness and fairness criteria.

Executive Summary

Introduction

1. ACS as a Professional Society
   Nat #Nature
   PS #Professional-Society
   Q01 #Q01 – Prof'l Society
   P00 #P00 – Meta-Principle
   Q04 #Q04 – Associate Grade
   Q05 #Q05 – Managers, Users

2. ACS Activities
   P01 #P01 – Values
   MP #Mission-Purposes
   Q02 #Q02 – 'ICT'
   Q03 #Q03 – Mission, Purposes
   KF #Key-Functions
   Q07 #Q07 – Key Functions

3. ACS Business-Lines
   P02 #P02 – Behaviour
   BL #Business-Lines
   Q09 #Q09 – Business / Values
   Q10 #Q10 – Surplus Allocation
   IA #Industry-Associations
   Q06 #Q06 – Indy Associations
   Q08 #Q08 – Innovation Labs

4. ACS Internal Structures
   P03 #P03 – Power Dispersion
   P10 #P10 – Branches
   Q11 #Q11 – Branches
   Sp #ACS-Spending
   Ch #Chapters
   P04 #P04 – Sub-Societies
   Q12 #Q12 – Umbrella Org
   SIGs #SIGs
   P11 #P11 – Governance

5. ACS Governing Committee
   Dir #Directors
   P05 #P05 – Open Nomination
   Q13 #Q13 – Director Nomination
   P06 #P06 – Dual-Electorate
   P07 #P07 – Delegations
   P08 #P08 – Acc / Transp/ Eng
   P09 #P09 – Key Documents
   Q14 #Q14 – Key Documents
   P12 #P12 – Legal Compliance

Conclusions

CLG #CLG

Appendix: The Project Process and Conduct
   incl. Terms of Reference, Method, Conduct, Output

Annex 1: The Unprocessed Input from Members
Annex 2: The Allocation of All Input into Tag-Files
Annex 3: The Analysis Files containing Summaries of the Tag-Files
Annex 4: The Story-Lines from the Analysis Files
Appendix 1E: Outline Project Calendar

26 May 2021  Resolutions by Congress to;
• establish a Constitutional Reform Working Group (CRWG), with a suitable composition, including a suitable convenor
• approve the CRWG’s Terms of Reference
• recommend the allocation of sufficient resources to enable the CRWG to fulfil its responsibilities
• empower the President to finalise the composition of the CRWG, taking into account the views expressed during the Congress meeting

30 Jun 2021  Finalisation of the Terms of Reference, Composition and Convenorship
Initial 1-hour meeting of the CRWG members

8 Jul 2021  1st regular weekly 1-hour meetings held (17/20 were held Jul-Nov)
All meetings Jun-Dec 2021 were by video (MS Teams, Zoom)
Many pairs of CRWG members have not had the opportunity to meet in the flesh

15 Jul 2021  1st monthly Report to Congress (also c. 15th of Aug, Sep, Oct, Nov)

21 Jul 2021  Establishment Meeting of 4-1/2 hours

27 Jul 2021  Finalised Online Forum Functional Requirements

12 Aug?  Finalised Engagement Plan, Online Forum Requirements

31 Aug 2021  Negotiations for participation from Key Intermediaries

10 Sep 2021  Guidelines distributed to Key Intermediaries

11 Sep 2021  Communications Plan agreed

18 Sep 2021  Finalised Consultation Document for Round 1

23 Sep 2021  Launch withheld by the staff team, without notice to CRWG

30 Sep 2021  Launch mostly completed

30 Sep 2021  National Video-Discussion Series launched, to cover for Key Intermediaries

1 Oct 2021  ACS Online Forum solution further delay advised, so CRWG cancelled

5 Oct 2021  CRWG launched the Online Forum independently of staff

30 Oct 2021  Nominal closure of the consultation period

1 Nov 2021  Analysis Method Description and Guidelines agreed

1 Nov 2021  Extraction of consultation content

13 Nov 2021  Extraction of late-arriving consultation content

30 Nov 2021  Completion of Analysis and Draft Report back to Members

7 Dec 2021  Publication of Report back to Members
Appendix 1F: Online Forum Evaluation Report

Background
The Working Group is required to undertake consultation with members. Three rounds of consultation are stipulated, each stimulated by a seed-document addressing respectively principles for a suitable constitution, possible features of a constitution, and a draft constitution.

A key element of the Engagement Plan is an open Online Forum, so that threads of discussion can evolve of their own accord.

A set of Functional Requirements for the Forum was prepared. See Attachment 1.

It was discovered that there were, among the various platforms that ACS has installed or has access to, several tools that could potentially satisfy the need. The one recommended to CRWG was HiveBrite.

Initial experiments with HiveBrite were not very satisfactory, but, with time running out, CRWG agreed to await its availability. The availability date kept walking away, until, a day after it was due to be launched, in the afternoon prior to the long weekend, the date was shifted further back, to a point after the scheduled completion-date of the Round 1 consultation period.

A member of CRWG implemented the Forum the following morning, using a publicly-available service, groups.io. The WG members alpha-tested it during the first half of the long weekend of 2-4 October, had it beta-tested during the Sunday-Monday, and launched it at BOB on the next business day, Tuesday 5 October.

The groups.io-based Forum was used for Round 1 of the consultation, from 5 October to 5 November. It attracted over 100 participants, and over 400 postings. This Report reflects on what has been learnt from Round 1 about the Online Forum design and implementation.

This Report addresses two topics:

• The adequacy of the Functional Requirements in Attachment 1; and
• The suitability of the groups.io service as a means of fulfilling those needs.
Evaluation of the Functional Requirements

This section briefly considers the extent to which the Functional Requirements were and are appropriate, and to which they need revision.

The twin aims were stated to be to enable members to both contribute and interact with one another, and to enable the Working Group members to analyse the input and feedback.

The first stated requirement was support for a nested tree-structure of discussions. A two-level structure proved to be sufficient, because the second dimension of categorisation, referred to as 'tagging', provided the requisite richness, without imposing further layers. (The groups.io service includes a feature called Subgroups, which would have enabled nesting if required).

It was stated that additional categorisations orthogonal to the stream structure could be needed, although as a lower priority than nested streams and separable threads. The tagging scheme proved to be vital, and more effective for semi-structured discussions like the Round 1 consultation process than a nested tree-structure without an orthogonal categorisation scheme.

It was specified that the capabilities of participants needed to include:

- Add a new posting to a specific stream or sub-stream
- Create a new thread and post to it
- Respond to a previous message within a stream, sub-stream or thread (default)
- Respond to a previous message but to the poster only

All of these facilities were available, and used. Other facilities were available, some preparatory and some supplementary. Some were used; but no other primary capabilities emerged.

It was stated that postings needed to include reference to the stream, thread and/or message, and any specific text or object, that the posting is responding to, preferably seamlessly or in an automated manner. This feature was largely, although imperfectly, available, and the several comments about the weakness in the design were confirmatory of the need for it.

For the user interface and customer experience, functionality and non-ugliness were prioritised over prettiness of formatting features or customisability. It was stated to be highly desirable for threads to be visibly apparent, e.g. by indenting, and readily expanded and contracted. The importance of this was borne out by the inadequately-clear link between a response and the posting it was responding to, and the absence of indenting and the ability to expand/contract sub-threads.

It was stated to be highly desirable that participants have an easy and obvious capability to hide, or unsubscribe from, busy threads and sub-threads that they did not wish to follow. The groups.io service does not have this feature, instead enabling participants to nominate all Topics (i.e. threads) that they want to follow. This caused a few participants some dissatisfaction, although no evidence was seen of participation or discussion being stultified as a result of it.

The notification of new contributions by other people to the forum was stated to be a necessary feature, with the access options at least including onforwarding of postings or periodic (typically daily) digests to the subscriber's email-address (or other habitat). This is a feature of groups.io, and the diversity of choices made by participants was confirmatory of its importance.

A further requirement was for a repository of documents, to initially contain the seed-document and supporting documents; but able to be added to by participants. This is available in groups.io. It proved to indeed be an essential capability for the Forum Manager. Although lightly used by participants, it was a valuable channel in those few instances.

A particular need was for the Forum Manager to be able to publish, and periodically bring to attention, a 'Code of Conduct', or more positively expressed a 'Participation Guide'. The groups.io feature was used, and, although slightly less well-designed than it could be, the importance of the requirement was confirmed. Overall, that facility was satisfactory-to-good.

It was stated that Item-identifiers were needed (i.e. for each message in a stream, sub-stream or thread, and for each document). These exist in groups.io, and were important to have.

It was stated that messages need to be able to contain hotlinks to external locations, to avoid unnecessary cross-loading of copies into the repository. That need was confirmed in practice.

It was stated that all parties who wish to contribute needed to be able to do so, i.e. members, ex-members, potential future members, staff-members of the ACS, of corporations and of industry associations, and interested members of the public. This required convenient login by anyone
whose attention was drawn to the forum and who wanted to access it and/or contribute to it. Comments about weaknesses in the registration scheme confirmed the importance of a simple and quick registration process.

The requirement was declared for administrative and supervisory capabilities. It was envisaged that all controls would be set to the lowest level initially, that the streams would be actively monitored, and that one or more administrators would communicate with all, some or individual participants as needed, and adjust settings on streams, threads or individual participants where necessary. The groups.io service contains multiple relevant features, some of which were used. For example, moderation can be imposed on all traffic, on specified participants, or on specific Topics (i.e. threads) – although not on sub-threads. No need arose to switch on moderation for either the whole Forum or any Topic. Moderation was imposed on one participant who posted an off-topic (and rather strange) message, and on another participant with a similarly scatological email-address. (But, in fact, neither address was used for any further postings). The requirement was confirmed as being necessary, and as being specified at a sufficient level of detail.

It was stated that the service needs to be either based on international open standards, or otherwise readily accessible from all device-types and OS. This is self-evidently important, but no further insights were achieved because groups.io runs in browsers, and no reports emerged of any difficulties with any browsers or browser-versions. (However, in one of the browser-versions used by the Forum Manager, a merely 2-year-old version of Safari fails to offer the HTML composition palette when creating a new message).

A search facility was required, globally, by stream and sub-stream, and by thread. Only a global search was available, but this did not loom as a critical issue for the Forum Manager or participants.

The requirement was declared that content needs to be readily extractable. This is self-evidently critical for the CRWG’s purpose. The groups.io facilities are less than wonderful; but, after experimentation, an efficient and effective extraction technique was quickly found.

It was stated that all content needed to be backed-up and recoverable. No test was contrived of the service, but a couple of interim backups were extracted as insurance, in .mbox format, and hence potentially both re-loadable to groups.io and cross-loadable to an alternative service.

It was stated that an archive needed to be readily drawn off at relevant times, and accessibility to, search within, and extraction from the archive must not be dependent on ongoing subscription to a particular commercial service. This is self-evidently essential for CRWG’s purposes. It was satisfied by convenient extraction into Word (or indeed any other proprietary format, or as raw text).

It was stated that any third-party service-provider must not be able to exploit content, metadata, profiles, social network data, etc. This is self-evidently important for CRWG’s purposes. The groups.io service has possession of the content. The Terms declare that "The Company will not use any User Content you provide to any email group for any purpose other than to provide the Services, for the operation of the Services and to otherwise improve or enhance the Services" (subject to conventional provisos relating to legal requirements and needs).

Finally, the Functional Requirements identified a set of 25 Use Cases. All were satisfied by groups.io, and all proved to be appropriate requirements, with the following qualifications:

- The capabilities for a logged-in ACS member to auto-generate an account, and for a visitor to log in as ACS member and auto-generate an account, are not supported by groups.io (and would have required onerous own-coding for HiveBrite). Provided that the registration arrangements are obvious and convenient, these two Use Cases are of little importance
- The capability for a participant to suppress / hide display of a Topic is, in groups.io, somewhat hidden, and suppression of sub-threads is not supported. This proved to be a minor weakness, and can be omitted from the lists of Mandatory and Highly Desirable Use Cases
- The requirement for the Forum Manager to be able to set moderation on thread (Topic), account-holder(s) and the whole Forum is essential. However, the absence of moderation being able to be set on a sub-thread has not transpired to be a feature of any importance
- The requirement that the Forum Manager be able to carry over any existing account-holders into a new forum (in particular from Round 1 to Round 2) has not yet been further investigated
Evaluation of groups.io as the Platform for the Online Forum

As shown in Attachment 1, a brisk environmental scan identified about 30 tools that were of potential relevance to the need. That scan identified no single, standout option – but given how superficial the survey was, that was no surprise. However, of the 30, three were highlighted as having reasonable prospects of satisfying the need: Discourse, groups.io and bangthetable.

A major problem with the large majority of the available platforms is that their perception of the user need is for a marketing-driven approach, with projection at and control over participants the main motivation. The CRWG’s need (and the need of ACS members) is for a Forum in which equals participate, rather than a provider / driver / central organisation dominating.

The brief experience experimenting with HiveBrite was ample to show that HiveBrite is a marketing-oriented platform, not a community-oriented tool. (It also has many apparent design deficiencies, and a remarkably high bug-quotient). It was an unattractive option, but, as it is supported in-house, it appeared appropriate that CRWG use it – until the availability date precluded it.

Quick passes across Discourse and bangthetable were not encouraging. The flavour of each of them is also not strongly related to the idea of a 'community of equals', and the costs involved appeared to be significant. In contrast, a quick pass across groups.io suggested its orientation was more attuned to the need, and its cost was trivial. (A CRWG member is paying $20 pmo for the Premium service. The Enterprise version is $200 pmo: https://groups.io/static/pricing).

The Forum Manager's experiences with groups.io were as follows:

• Familiarisation was brisk
• Creation of a 'Group', and configuration of the Forum, were straightforward
• Establishment of the Forum (invitation-link, welcome message, arranging for the Code of Conduct to display, creation of a Tag-set, creation of a small set of Topics/threads by posting initial, demonstrator-style postings, invitations to CRWG members) took a couple of hours to get to grips with, look up Forum Manager/Owner documentation, create, test and amend
• Joining Instructions and initial Explanations for the first few participants required a bit more learning, and some inventiveness, on the part of the Forum Manager than expected. (However, all of the above was completed in 5 hours, including breaks)
• Few mid-course corrections were necessary (e.g. two of the 30-odd configuration settings were adjusted after the first couple of days' experience)
• When quick-response action was needed (twice) to ensure new registrants were subjected to moderation, the relevant levers were very quickly located
• The Forum Manager's message-broadcast facility took a while to find, at: Admin / Members / select at least one Member / Actions / Send Message (Until you select at least one Member, the Action isn't visible) ('Send Message' doesn't do what it says; it enables you to compose a Message)
• The only extraction facility, at Admin / Members / Download, extracts a range of things, but the important content, the Messages, is only available in .mbox format. The most convenient extraction technique transpired to be to use: Messages / toggle top-left button to Topics / click on a Topic / copy-and-paste entire contents to an editor, manually edit to remove all except the content, poster-identifier, message-identifier and date-stamp (time is only available within current day – ?), copy to the target-file. The sequence in which Topics appear changes continually, and no sequencing tools are available; so a separate control-sheet needs to be maintained to ensure orderly extraction. (However, all of this took only an hour's learning, and a couple of hours' extra work to do)

Participants had variable first-experiences, from immediate comfort, via quick familiarisation, ongoing discomfort, to a very few people unable to break in. Presumably this reflected participants’ degree of familiarity with online fora, and the particular user interface norms the service uses.

The groups.io service satisfies the majority of the Functional Requirements in full, a number of the Requirements in part, and falls short on a very few Requirements. In rough terms (and no formal scoring exercise has been done), its impression score is 7-1/2 to 8 out of 10.

There is no benefit in even considering alternatives for Round 2.

Several aspects could be readily improved, however. See Attachment 2.
Attachment 1: Functional Requirements of the Online Forum
Revised Draft of 22 August 2021, adding in the Appendix

Background
The Working Group is to undertake consultation with members. Three rounds of consultation are required, each stimulated by a seed-document addressing respectively principles for a suitable constitution, possible features of a constitution, and a draft constitution.

The Engagement Mechanisms include:
- a Repository where members and others can access the consultation materials
- Live Events at which presentations and discussion can occur
- Inbound Channels so that members and others can:
  - submit feedback on the consultation materials
  - submit input on aspects not dealt with in the consultation materials
- an open Online Forum, so that threads of discussion can evolve of their own accord
- Analysis of the feedback and input

This document contains functional requirements for the open online/electronic forum. Perhaps 250 people might contribute by this means. Some people may do so once only, others sporadically, and some at length and/or repetitively. It is likely that some people will have a narrow focus on one or two specific topic-areas, while others may contribute on multiple topics.

The Requirements
This section outlines the nature of the consultation process, and the features that are needed of an online forum. The twin aims are to enable members to both contribute and interact with one another, and to enable the Working Group members to analyse the input and feedback.

Each round of consultation will have some inherent structure. The first round is to address the nature, mission, purpose and functions of the organisation, followed by principles for a suitable constitution. The second is to comprise a suite of key features of a constitution. The third is to be a draft constitution, broken into segments and clauses.

The online forum service therefore needs to support a nested tree-structure of discussions. For example, the first round could comprise separate streams as follows, with examples of subsidiary streams shown for one of them:
1. Process of the Consultation
2. Nature of the Society
3. Mission of the Society
4. Purposes of the Society
5. Functions of the Society
   5.1 Technical and Ethical Standards
   5.2 Membership Requirements
   5.3 Member Services
   5.4 Public Policy
   5.5 ... 
6. Principles for a Suitable Constitution

The capabilities of participants need to include:
- Add a new posting to a specific stream or sub-stream
- Create a new thread and post to it
- Respond to a previous message within a stream, sub-stream or thread (default)
- Respond to a previous message but to the poster only
Postings need to include reference to the stream, thread and/or message, and any specific text or object, that the posting is responding to. It is preferable that this be seamless or automated.

It is highly desirable for threads to be visibly apparent, e.g. by indenting, and readily expanded and contracted. Important considerations are the functionality of the user interface and customer experience, and non-ugliness. But there's no great importance in prettiness of formatting features or the ability to select or customise the appearance. (Well, maybe an ACS logo somewhere!)

Because discussions in a stream may give rise to particularly busy threads on very specific topics, it is highly desirable that people have an easy and obvious capability to hide, or unsubscribe from, busy threads that they do not wish to follow.

The notification of new contributions by other people to the forum is a necessary feature, but great sophistication may not help much. Of greater significance is that each participant be able to receive notifications in a way that suits their personal style. Although the mainstream is likely to be via mobile and by web-based interfaces, access options need to include onforwarding of postings or periodic (typically daily) digests to the subscriber's email-address (or other habitat).

It is possible that additional categorisations orthogonal to the stream structure could be needed – conventionally referred to as Tags as distinct from Topics. However, these are hard to enforce, so this appears to be a lower priority than nested streams and separable threads.

A further need is for a repository of documents to be created and extended. This would initially contain the seed-document and any supporting documents; but participants need to be able to contribute documents, e.g. some members may post copies of documents published by other professional societies. Some documents may need to appear in each occurrence of the forum. In particular, a 'Code of Conduct', or more positively expressed a 'Participation Guide' ** needs to be published and the link displayed sufficiently prominently.

Item-identifiers are needed (i.e. for each message in a stream, sub-stream or thread, and for each document), such that it can be linked to from any other message or document. Messages need to be able to contain hotlinks to external locations, to avoid unnecessary cross-loading of copies into the repository.

All parties who wish to contribute need to be able to do so. This extends beyond the current Society membership to include ex-members, potential future members, staff-members of the ACS, of corporations and of industry associations, and interested members of the public. This requires convenient login by anyone whose attention is drawn to the forum and who would like to contribute. No more than very simple registration details should be needed.

Sufficient administrative and supervisory capabilities are essential. It is envisaged that all controls would be set to the lowest level initially, that the streams would be actively monitored, and that one or more administrators would communicate with all, some or individual participants as needed, and adjust settings on streams, threads or individual participants where necessary.

The service needs to be either based on international open standards, or otherwise readily accessible from all device-types and OS.

A search facility is vital, globally, by stream and sub-stream, and by thread.

Content needs to be readily extractable into, for example, summary documents.

All content needs to be backed-up and recoverable.

An archive needs to be readily drawn off at relevant times, and accessibility to, search within, and extraction from the archive must not be dependent on ongoing subscription to a particular commercial service.

Any third-party service-provider must not be able to exploit content, meta-data, profiles, social network data, etc.

** Exemplars of different styles of Code of Conduct / Participation Guide are as follows:
https://try.discourse.org/faq
https://whirlpool.net.au/wiki/wp_rules
Options
A vast array of communication tools exists. The most widespread remains email and e-lists. Several generations of tools with better-looking interfaces and modestly different and/or modestly enhanced functionality have come, and in some cases gone again.

Available tools suffer from many deficiencies, including
• being proprietary islands with little or no inter-operability with other islands
• limited market-share
• manneristic user-interface styles
• operation by providers that are highly exploitative of their users
• designs whose purpose is to capture eyeballs rather than serve users’ needs
• narrow conceptions of human communications contexts and modes
• a focus on image and excitement rather than usefulness
• a focus on a particular category of users, such as software development teams

Categorisation is fraught with difficulties because all genres overlap. The following is an endeavour to group a number of mainstream tools with other tools with at least some common characteristics. Services that appear not to address the needs well enough are greyed-out. Services that appear to have some prospects of satisfying the need are underlined:

• Email-Lists such as Listman, GNU Mailman, phpList
• Old-Style BBS / Message Boards / Internet/Discussion Fora / Groups
  https://en.wikipedia.org/wiki/List_of_Internet_forums
  Yahoo! Groups (closed), Google Groups (ailing), Whirlpool
• Wikis, such as MediaWiki, BlueSpice MediaWiki
• Commercial Social Media, such as LinkedIn, Reddit, Discord
• Enterprise Social Media, such as Jive, Yammer (but what about “external communities”?)
• Collaborative Social Media, such as GroupSpaces (discontinued)
• Newer-Style Tools, such as Slack, Gitter, Discourse, Mattermost (platform)
• Enterprise-Oriented Tools, such as MS Teams, groups.io, Trello
• Community Consultation Fora, such as Vanillaforums, Verint | Telligent, bangthetable
• Project Management Tools, such as Gitter, Confluence, Trello, Zoho Projects (except for 'Team Collaboration': Feed, Chat, Forums, Pages, Documents)
• Content Management Systems, such as WordPress, Joomla, Drupal
• DIY Platforms, such as phpBB

Some Prospects To Be Evaluated
• Discourse
  https://www.discourse.org/features
  https://meta.discourse.org/docs?tags=getting-started
• groups.io
  https://groups.io/static/features
  https://groups.io/helpcenter/membersmanual
• bangthetable
  https://letstalk.cornwall.gov.uk/overview/forum_topics/what-are-the-changes-we-need-to-make-now
Functional Requirements of the Online Forum
Use Cases

Bootstrap (one-time)
• God creates an instance of HiveBrite
• God creates Forum Manager account(s) for that instance

Configuration (one-time)
• Forum Manager reviews and amends default settings

Establishment (once for each phase, i.e. trial, then 3 consultation phases)
• Forum Manager creates a space / forum
• Forum Manager reviews and amends default settings
• Forum Manager creates segments and any sub-segments (e.g. a dozen key questions)
• Forum Manager creates Repository
• Forum Manager posts to the Repository the Code of Conduct / Participation Guide, the seed documents for the phase, and any supporting documents
• Forum Manager carries over any existing account-holders into the new forum

Account Creation and Code / Participation-Guidelines Display (per user)
• Logged-in ACS member auto-generates an account
• Visitor logs in as ACS member and auto-generates an account
• Visitor creates an account
• Visitor creates an 'anonymous' account

Posting
• Account-holder accesses one or more files in the Repository
• Account-holder creates posting in segment / sub-segment / thread
• Account-holder posts a file to the Repository

Response to Posting
• Account-holder responds to posting in segment / sub-segment / thread

Notifications and Digests
• Account-holder sets auto-notification on segment / sub-segment / thread, to a target
• Account-holder sets frequency of despatch of periodic digests to a target

Thread and Segment Creation and Suppression
• Account-holder creates new segment / sub-segment / thread
• Account-holder suppresses / hides display of new segment / sub-segment / thread

Moderation
• Forum Manager sets moderation on account-holder
• Forum Manager sets moderation on thread, segment, sub-segment or whole forum
• Forum Manager receives notification of posting, reviews, rejects/responds/releases

Extraction
• Forum Manager extracts into a content-format suitable for analysis, maintaining structure by forum, segment, sub-segment and thread
Attachment 2: Important Opportunities to Improve groups.io

Menus
• The primary facilities – Messages, Hashtags, and New Topic, need to be in upper-case and a bright colour, with all other options de-emphasised.
• Topics should be an option at the top level, not just within Messages.

Page-Content Sequences
• Several pages require basic sorting capabilities (e.g. latest-first, earliest-first, alpha), particularly Messages / Messages and Messages / Topics.

Topic-Headers
• The Tags selected for a Topic should be kept out of the Subject-line and displayed separately.

Sub-Topics / Sub-Threads
• Critically, the concept of a Sub-Thread /Sub-Topic is needed, as follows:
  • Messages responding to a prior Message should establish a Sub-Thread
  • Messages responding to a prior Message should appear immediately after the Message they're responding to
  • Messages responding to a prior Message should be indented, to display the relationship
  • Sub-Topics should be expandable and contractable
  • Sub-Topics should be capable of being set for moderation, independently of the Topic
(Currently, nomatter which Message within a Topic a Message is replying to, the Reply is added to the chronological end of the Topic. It may contain 'replying-to' text – if the poster has highlighted that text before they reply; but even then it doesn't contain a link or Message-number to the relevant Message. And, in many cases, it lacks any indication of the Message that stimulated it).

Registration
• Vagaries and confusions arise in the registration process and its semi-programmed messages. The process needs re-analysis, simplification and improved obviousness.

Content of Emailed Versions of Messages
• Emailed versions of messages don't include any reference to whatever it is that the message is responding to. They need a link to the message, or at the very least a message-number.

The Forum Manager's message-broadcast facility took a while to find, at:
• Admin / Members / select at least one Member / Actions / Send Message (Until you select at least one Member, the Action isn't visible)
  ('Send Message' doesn't do what it says; it enables you to compose a Message)

Export Facilities
• An export of Topics, i.e. unique Subject-headers, is needed, with a link to the page, and basic statistics such as count of messages, count of Sub-Topics (i.e. messages that have replies)
• An export of Message within Topic is needed, including:
  • Member-Identifier/Email-Address
  • Date-Time-Stamp (i.e. time as well as date)
  • Message-Content
  • An end-of-Message marker
• An export of Message within Topic within Hashtag is needed (content as immediately above)