

Joint Mathematical Council of the United Kingdom

Minutes of the meeting held at the Royal Statistical Society on Tuesday 28 February 2017

Present

Officers

Chair	Paul Glaister
Honorary Secretary	Peter Thomas
Honorary Treasurer	Paul Harris

Representatives of Participating Societies

Adults Learning Mathematics	David Kaye (deputy)
Association of Mathematics Education Teachers	Sally Bamber (deputy)
Association of Teachers of Mathematics	Sue Pope
British Society for Research into Learning Mathematics	Sue Gifford
British Society for the History of Mathematics	June Barrow-Green
Conference of Heads of Departments of Mathematical Sciences	Catherine Hobbs
Edinburgh Mathematical Society	David Pritchard
Institute of Mathematics and its Applications	Chris Chipperton
London Mathematical Society	Alice Rogers
The Mathematical Association	Jennie Golding
Mathematics in Education and Industry	Charlie Stripp
National Association for Numeracy and Mathematics in Colleges	Sally Barton
National Association of Mathematics Advisors	Matt Lewis
National Numeracy	Derek Huby
NRICH representing the Millennium Mathematics Project	Ems Lord
Operational Research Society	–
Royal Academy of Engineering	–
Royal Statistical Society	Scott Keir (deputy)
STEM Learning	Stephen Lyon
United Kingdom Mathematics Trust	Bill Richardson
Wales Institute of Mathematical and Computational Sciences	–

Co-opted Members

Chair of the BCME Committee	David Martin
UK Representative to the International Commission on Mathematical Instruction	–

Representatives of Observing Societies

Advisory Committee on Mathematics Education	–
Department for Education [England]	–
Department of Education [Northern Ireland]	Julie Harris
Education Scotland	–
Higher Education Academy	–
National Centre for Excellence in the Teaching of Mathematics	Jane Imrie
National College for Teaching and Leadership	–
Office for Standards in Education	–
The Office of Qualifications and Examinations Regulation	Alison Tonkin (deputy)
The Royal Society	Rebecca Veitch

Visitor

Department for Education and Skills [Wales]	–
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1 Introduction

1.1 **Welcome** The Chair welcomed everyone to the meeting.

1.2 **Practical Arrangements** As the Honorary Secretary had read out the procedure for emergency evacuation as laid down in the contract for the booking of the premises at the General Meeting of The Joint Mathematical Council of the United Kingdom which immediately preceded the Council meeting, he did not read them out again.

- 1.3 **Apologies for absence** Apologies for absence were received from Jeremy Hodgen (ACME), Jeff Evans (ALM), Helen Farmery (AMET), Stuart Cathro (Education Scotland), Paul Steele (NCTL), Neil Sheldon (RSS) and Sofya Lyakhova (WIMCS).

2 Minutes of the meeting held on Tuesday 8 November 2016

- 2.1 **Approval** The minutes of the meeting held on Tuesday 8 November 2016 were approved after two corrections had been made:

3.3 paragraph 1 line 1 'add to' was inserted after 'to';

5.2 paragraph 3 line 2 'management group' was replaced by 'Management Group'.

2.2 Matters arising not elsewhere on the agenda

The Chair said that he was a member of NCTL's National Work Group on teacher subject specialism training (TSST) and that work was in hand on the quality assurance of TSST courses; he said that NCTL was keen that the JMC should be involved in the quality assurance of courses for Mathematics, paralleling the role of the Institute of Physics regarding courses for Physics.

3 Reports from JMC Executive Committee

- 3.1 **Chair** In response to the Chair's written report, Alice Rogers asked about the Chair's meeting with Les Ebdon, specifically in regard to widening participation in mathematics. The Chair said that he went to see Les Ebdon to make him aware what is happening in mathematics education, particularly the Smith Report; he learnt that Les Ebdon had already met Adrian Smith to discuss widening participation and that initiatives ensuing from the Smith Review were likely to be associated with the twelve Opportunity Areas. The Chair said that universities needed to be open and honest about the mathematics requirements of their courses, and to consider how to do this in a way consistent with widening participation. He concluded by saying everyone was waiting on the publication of the Smith Report and the government's response to it.

- 3.2 **Honorary Secretary** In addition to his written report, the Honorary Secretary encouraged more societies to provide reports on their activities; the request was supported by the Chair.

- 3.3 **Honorary Treasurer** The Honorary Treasurer reported that 3 Participating Societies and 6 Observing Societies had yet to pay their subscriptions for the current year; he said he would be sending reminders to the representatives of the societies concerned.

4 Reports from other committees and working groups

- 4.1 **BCME Committee** David Martin, Chair of the BCME Committee, highlighted key points from his written report, saying that:

- discussions with HMRC over VAT had now been resolved successfully;
- the BCME website was now up and running;
- in the next month there would be a call for people to lead sessions at BCME9;
- the next meeting of the BCME Committee would be on 27 April 2017.

The Chair welcomed the report and encouraged colleagues to support BCME9. He also mentioned his previous suggestion on rolling images on the front page of the BCME website to give a broader representation of the activities at a BCME. David Martin replied that the matter had still to be addressed and would be considered at the next BCME Committee meeting.

Jennie Golding asked about the reported size of the meeting expenses for the BCME Committee. David Martin said that BCME Committee met only once every six months but that travel expenses for the ten or so people attending were quite high; he also pointed out that the figure in the report was for three meetings, so the cost per meeting was between £800 and £900 per meeting. Jennie Golding expressed her gratitude for the explanation.

- 4.2 **ICME Bursaries Committee** The Chair said that the matter was in hand and that he would take action to ensure improved arrangement for bursaries for ICME14.

- 4.3 **GCSE Working Group** Sue Pope (Convenor of the Working Group) said that the Working Group had not met since the previous Council meeting. She said that Ofqual had produced three blogs relating to GCSE Mathematics and details would be circulated. Ofqual had also convened a small meeting on 7 March 2017 to talk about communicating the changes to GCSE in England. The big concern in schools was about the tier of entry. Sue Pope is to attend the meeting and will report back.

Alison Tonkin spoke further about the Ofqual blog and said that materials from the meeting on 7 March 2017 would be available for circulation after the meeting.

5 Reports from Participating Societies

- 5.1 **Institute of Mathematics and its Applications** Chris Chipperton said that there had been an encouraging number of applications for Mathematics Teacher Training Scholarships and it had been necessary to set up additional assessment centres. Marketing work was being done to promote the scholarships. Work was also being undertaken to support scholars, and past scholars, and to network with them.

The Chair enquired whether others might attend alumni events so embedding them in a wider community. Chris Chipperton said that this suggestion had been taken back to the Management Group and a response was awaited. The Chair observed, in passing, that Bobby Seagull, the captain of the Emmanuel College, Cambridge team on University Challenge, was a Mathematics Teacher Training Scholar.

Jane Imrie asked whether the scholars were actively encouraged to attend subject association conferences and whether there were financial incentives for them to do so. Alice Rogers, who is a member of the Management Group, responded that it would be a sensible thing and they can seek financial support from the LMS scheme to support teachers attending conferences such as those of ATM and the MA; the scheme was geared to early career teachers, so included the scholars. She added that all teaching scholars are offered free membership of IMA, LMS and MA. Jane Imrie said that she thought it would be worth looking for a way of promoting the engagement of the scholars in the community. The Chair said he thought it was an opportune time. Jennie Golding added that there was mileage in embedding the scholars in an ongoing career-long community. Sue Pope suggested that a satellite event might be arranged in connection with a subject association conference.

Scott Keir (who is a member of the Management Group) said that events were being organised by partner organisations, and all scholars received details of partner organisations and opportunities for engagement are signposted; he added that the community needs to take responsibility for welcoming the scholars. Jane Imrie agreed that we needed to provide opportunities for them.

Bill Richardson asked who can and cannot apply to be a scholar? He was told that the scheme was for England only. A scholar has to be intending to teach in a state school in England, not be employed but hold an offer of a training place. Sally Bamber asked if there was any mapping of who among the scholars is still teaching in the state sector. Chris Chipperton replied that it was difficult to maintain contact with the alumni. Sally Bamber asked if the IMA would be interested in AMET carrying out a sampling exercise. Scott Keir said that NCTL were trying to track them but were having problems so an initiative by AMET would be likely to be welcomed. Jennie Golding and Sue Pope observed that the scholarship is supposed to include fees but many scholars also took out loans and this can result in an effective salary cut when they get a teaching post.

- 5.2 **The Mathematical Association** Jennie Golding drew attention to the MA's initiative of carrying out online sixty-second surveys on issues but also to gather evidence to send out positive messages about teaching. The MA has tried to get the media to pick these up but they have not been interested and would welcome ideas of how to engender media interest.

Jennie Golding then brought to the Council's attention the growth of university entrance tests in mathematics; the loss of AS results seems to have been the stimulus for this. She said there were significant concerns about equity of access as all tests are susceptible to coaching. The online initiatives to support those preparing for these tests are a good contribution towards equity of access but face-to-face support is more valuable and schools' resources in this regard are not equal. Jennie Golding added that the issue had been raised with MMSA and there was particular concern that schools were having to choose which students would benefit from limited resources.

The Chair said he was also concerned at the costs to schools and students.

Charlie Stripp said that FMSP and MEI share these concerns; he said that universities should ask for AS Level results to get information about people's progress; he added that the test were a money-spinner for Cambridge Assessment.

Chris Chipperton said that both the IMA's education committees had discussed the issue and echoed what was said by Jennie Golding about the diversion and stretching of schools' resources. He asked if this was the direction of travel and whether other higher education institutions would jump on the bandwagon for status.

Sally Barton said that it was fine to ask for AS Level results for equity but AS is a demand on budgets and the new A Levels cost more than the old ones.

Charlie Stripp observed that if universities ask for AS then schools will have to do it.

Ems Lord said that widening participation is key. She said that Cambridge had run a STEP preparation programme with a correspondence course (and a residential Easter course) that had limited places and there were issues of tutor quality; this has been replaced by a free online course to

support any STEP applicants (and anyone interested in problem-solving). Also every applicant with a relevant offer at Cambridge is offered a day's face-to-face support and a helper. The programme is funded for three years and includes the cost of transport if needed. They are trying to word the resources used so as to build confidence and with awareness of gender issues.

The Chair expressed concern that some universities will jump on the bandwagon for marketing purposes. He said that he had discussed the issue with Catherine Hobbs but it was not felt that HoDoMS was well placed to take on the issue. He said he would like to talk to the DfE about the issue and he invited support for doing so. He added that the DfE would not be pleased if there became a complete free-for-all. He said that he also hoped that ACME would look at the issue and he will raise it with them.

Alice Rogers said that the LMS's Education Committee had discussed the matter at its meeting on 23 February 2017 and the committee was very concerned, especially about the effects on widening participation. The LMS was working on a statement to share with HoDoMS and the IMA. It was to be hoped that the Office for Fair Access would apply pressure. Alice Rogers mentioned that King's College London has an open scheme for Year 12 and Year 13 students that starts at the beginning of Year 12 (as one needs to start then).

The Chair said that he hoped, with Charlie Stripp, to make representations to DfE. He said he wanted as many voices as possible giving the same message to the DfE.

Catherine Hobbs said that HoDoMS cannot force its members to do anything. Durham has thought about equity but feels present information is not sufficient. For now the widening participation issue was the best way forward.

Scott Keir said that the MA's report raised two issues: lack of AS Levels and a lack of confidence in the new A Levels; he asked Catherine Hobbs which was the real reason. Catherine Hobbs replied that it was not about the new A Levels but making sure the students they actually get can do the course, as at present many are not sufficiently well prepared for university courses.

The Chair said the AS could be an excuse; the test could be an easier way of differentiating among applicants.

Sally Barton said that we must make sure universities did not use widening participation as a reason for having tests. Catherine Hobbs queried whether this would necessarily be a bad thing.

The Chair concluded the discussion by saying that the matter was clearly a concern shared by many.

- 5.3 **Mathematics in Education and Industry** Charlie Stripp said that the accreditation of the new A Levels was ongoing and he hoped that it would be completed by September; he said he also hoped that Ofqual would not crumble as September gets nearer.

The Further Mathematics Support Programme was monitoring the impact of the funding changes and the demise of AS. The Department for Business, Energy and Industrial Strategy strategy paper makes clearer than ever the importance of mathematics for the economy and we need to keep that as part of the political consciousness. Also, we still await the publication of the Smith Report.

Charlie Stripp drew attention to MEI's involvement in the new NCETM contract.

He also said that MEI has noticed how it is getting harder for teachers to get out of school for professional development despite the need. The Chair and Chris Chipperton commented on the effects of the funding squeeze on professional development; the issue was not so much course fees as teacher relief costs. Charlie Stripp added that there was also the fear for school leaders that teachers who had received professional development would be more attractive to other schools and harder to retain. He added that resources were needed to address this issue. The Chair said that any money was likely to go to further education. Charlie Stripp agreed that further education has the greatest need.

6 Reports from Observing Societies

- 6.1 **Advisory Committee on Mathematics Education** Rebecca Veitch gave details of ACME's new membership: Frank Kelly (Chair), Martin Bridson, Paul Glaister, Paul Golby, Jeremy Hodgen (continuing), Dame Jilian Matheson, Mary McAlinden (continuing), Lynne McClure, Emma McCoy and Sir David Spiegelhalter. She added that this was not yet the full membership of the committee that would not be completed until the autumn. The committee would meet on 2 March 2017 when it would be taking forward the discussions at the JMC meeting in November 2016, the implementation of the Smith Review and The Royal Society's Vision Report.

The Chair said that he will make sure the feedback at the November 2016 JMC meeting will be fed into the work of ACME and he will also raise the issue of the new university entrance tests. He also

asked about teacher input into the work of ACME; in this respect, he mentioned the Expert Panels for which JMC and CMS will have a responsibility to identify suitable people. Rebecca Veitch replied that on 24 March 2017 ACME would be holding an event for teachers to which would be invited applicants, members of the Outer Circle and Associate Schools and Colleges; the event would be an opportunity to get to know teachers working in schools and colleges who also had a policy interest. [*Post-Meeting Note: The Chair ran a session: "Developing the Society's response to the Smith Review of mathematics post-16" at the event on 24 March 2017.*]

David Pritchard said that he felt it was useful that the remit of ACME had been extended to the whole of the United Kingdom and asked whether there would be representation from Northern Ireland, Scotland and Wales. Rebecca Veitch said that discussions were taking place about the diversity of location of members of ACME as well as the experiences and skills that potential members might bring to the committee; she stressed that the intention was that ACME should be a UK body.

The Chair said that the reformed ACME would be bigger and more influential with ministers.

Scott Keir asked about the Expert Panels and whether there was anything the JMC needed to do at present. Rebecca Veitch said that the first meeting of ACME needed to take place first.

The Chair said that post-16 would be high on ACME's agenda.

Sue Gifford asked how the committee was appointed. Rebecca Veitch said that ACME was now appointed by the Education Committee of The Royal Society with the membership also having to be approved by the Council of The Royal Society; these stages followed an Open Call in November 2016. The Chair said that Alex Halliday (Physical Secretary and Vice-President, The Royal Society) and Tom McLeish (Chair of Education Committee, The Royal Society) had been responsible for making the recommendations to the Council of The Royal Society. Rebecca Veitch added that ACME was now firmly part of The Royal Society. The Chair further added that some Expert Panels may be standing groups that exist already.

- 6.2 **National Centre for Excellence in the Teaching of Mathematics** Jane Imrie said that she had nothing particular to add to the written report. She drew attention to the fact that the new contract for NCETM had now started. It had just had a recruitment round for three part-time positions to increase its primary capacity. Jane Imrie remarked how worrying it was that so many of those applying were heads and deputies.

The Chair said that on 3 March 2017, Adrian Smith will speak at a meeting at The Royal Society that has been organised by Further Mathematics Support Programme, NCETM, Maths Hubs and the Core Maths Support Programme for Level 3 Leads in the Maths Hubs on planning implementation of the Smith Report; this will be a significant event for bringing the community together.

Scott Keir asked if it was public knowledge that the Maths Hubs will be taking over the work of the CMSP. The Chair replied that funding for the CMSP ends at the end of July; since November 2016 the Maths Hubs had been picking up on what needs to be done but without specific funding. Charlie Stripp added that taking forward the promotion of Core Maths would be impossible without additional resources. The Chair remarked that at present there was no incentive for teachers to attend training for Core Maths; the DfE was well aware that things could not be left as at present or broad take up of Core Maths will not happen.

7 Report from a meeting

- 7.1 **National Maths Hubs Forum, 13 – 14 October 2016** The report was noted.

8 Discussion: Mathematics Education in the Early Years

Sue Gifford made a presentation and led a discussion on Mathematics in the Early Years. Her PowerPoint presentation can be found at

http://www.jmc.org.uk/documents/JMC_Council_20170228_8_Mathematics_Education_in_the_Early_Years.pptx and the handout for the session is given below.

Mathematics education in the early years

Sue Gifford University of Roehampton

What are the issues?

The curriculum: content, pedagogy and assessment

- dislocation between EYFS & primary (and nursery and reception?)
- **The workforce:** professional development

- diversity of pre-school settings, childminders etc.
Organisations: PACEY, PSLA, NCB, NDNA, Action for children, Early education
- Need for centralized guidance

What research tells us: *What predicts maths success?*

- parents' education and home learning (EPPSE)
- a balance of adult and child-led activities (REPEY, OfSTED)
- early number sense (APPG recommendation, TIMSS, EPPSE)

The EYFS Numbers Goal emphasises numbers to 20, adding and subtracting by counting on and back. These are not supported by research for 4 and 5 year olds.

Y1 focus recommended by NCETM textbook project: numbers to 10 and using number combinations rather than counting strategies.

Big Ideas of Number Sense Counting, Cardinality, Comparison, Composition

How do young children learn number sense? Routines, games, number rhymes & books, problem solving, playfulness, 'sustained shared thinking'

Predictors of later achievement: counting out a number from a group, subitising, numeral meanings, relative number size, predicting adding one / taking one, number combinations, finger gnosis, pattern awareness, spontaneous focusing on numerosity

Characteristics of Effective Learning

Playing and exploring -

Finding out and exploring, Playing with what they know, Being willing to 'have a go'

Active learning-

Being involved and concentrating, Keeping trying, Enjoying achieving what they set out to do

Creating and thinking critically -

Having their own ideas: Finding ways to solve problems, Finding new ways to do things

Making links: noticing patterns, Making predictions, Testing their ideas

Developing ideas of grouping, sequences, cause and effect

Choosing ways to do things, Planning, making decisions about how to approach a task, solve a problem and reach a goal, Checking how well their activities are going, Changing strategy as needed, Reviewing how well the approach worked **Ofsted** (2013).

Workforce qualifications

- Level 3 EY practitioners: GCSE required
If GCSE is normative, where do the bottom 30% work?
- Are functional skills appropriate for EY practitioners?
- Does ITE sufficiently cover early maths learning?
- How and where do practitioners learn about early maths?

Useful websites

Erikson early mathematics collaborative

<http://earlymath.erikson.edu/>

Foundation Years Mathematical Resources: Top Ten lists

<http://www.foundationyears.org.uk/mathematical-resources/>

NRICH <http://nrich.maths.org/early-years>

References

All Party Parliamentary Group *Maths and numeracy in the early years*

http://www.nationalnumeracy.org.uk/sites/default/files/imedia/appg_paper_-_eys.pdf

Davenall, J. (2015) *Developing Number Through Tidying Up* <http://nrich.maths.org/11528>

Davenall, J. (2015) Young children's mathematical recording <http://nrich.maths.org/12384>

Department for Business, Energy and Industrial Strategy: *Building our industrial strategy*

https://beis.gov.uk/citizenspace.com/strategy/industrial-strategy/supporting_documents/buildingourindustrialstrategygreenpaper.pdf

Emerson, J., and P. Babbie. (2010) *The dyscalculia assessment: Emerson House Mathematics* London: Continuum.

Effective Pre-School, Primary and Secondary Education project (EPPSE)

http://www.ioe.ac.uk/EPPSE_What_influences_English_and_Mathematics_attainment_at_age_11_Research_Bite.pdf

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- Teaching Schools Council** (2016) *Effective primary teaching practice* <http://tscouncil.org.uk/resources/effective-primary-teaching-practice-2016/>
- Trundle, R.** (2008). The value of two. *Mathematics Teaching*, 211, 17-21 <http://nrich.maths.org/11527>
- Williams, H.** (2013) Racing Usain Bolt: A social perspective on mathematical learning *Mathematics Teaching* 236 14- 17
- Young-Loveridge, J.** (1991). *The development of children's number concepts from ages five to nine*. Hamilton: University of Waikato

In addition to addressing many matters on her slides, Sue Gifford made several points in the course of her presentation.

- Games are valuable in early years learning but research in New Zealand found that children do not like taking turns, this can be addressed by giving each child a spinner or die, for example when working with number lines or number tracks.
- There is a backward projection of pedagogy from Year 1 to Reception that is not necessarily appropriate.
- Ability grouping is unknown abroad.
- Baseline testing at the beginning of Reception puts pressure on early years teachers
- Early years learning cannot just be child initiated play but needs appropriate intervention (that is not worksheets).
- Sue Gifford reviewed the current situation.
Content The learning goals for early years were reviewed in 2011; the new goals were felt by the profession to be overly ambitious but, the review having raised the goals, the government added more (the same happened for literacy); this was done without research support.
Pedagogy Although the goals have been increased, there has been no increased support for teachers.
Assessment There is now baseline assessment (six tenders were accepted but there is no consistency between them; also a one-off assessment is not reliable for a four-year-old) that does not align with the Early Years Foundation Stage profile and is in conflict with the early years goals.
- The early years workforce are often not keen on or confident in mathematics.
- Many teacher educators do not have expertise in early years.
- An ACME round table agreed that there was a need for greater professional development for those working in early years and for more central guidance. The National Children's Bureau has

mathematics champions, NCETM has a self-evaluation tool, other organisations have other things. There is a need for organisations to work together. An outcome of the ACME initiative has been the establishment of the Early Childhood Mathematics Group (ECMG); it includes NCETM as well as other mathematical bodies and Ofsted but not DfE.

- Research tells us that key to children's mathematical development are stimulating activities in the home environment, adult-and-child led activities (in some local authorities 80% of activities are solely child-led), and that in many countries there is a focus on number sense.
- The All Party Parliamentary Group has said there should be a national 'positive about mathematics' campaign and that number sense should be the primary focus in the early years.
- The DfE 2012 number goals for all four- and five-year-olds are only partially supported by research. Children need to meet the Early Years Goals to achieve a 'Good Level of Development' and this affects the behaviour of teachers and schools.
- Research says that counting and cardinality at this stage cause problems (number sequencing, one-number one-subject, keeping track, cardinal principle). In much learning of counting, numbers are rarely associated with their cardinality. Sustained shared thinking with adults is the most effective strategy for learning but there no examples of this for mathematics in the research.
- What is the role of generalising in the curriculum and is early algebraicisation the route to mastery?
- The shared thinking with adults can be in informal settings; this is not just with parents but also grand-parents, older siblings and others.
- To support those adults who want to help children in their learning but are unsure how, there needs to be a single go-to website with resources that is well publicised. This has been attempted but doing it in a sustained ways (including funding it) is challenging.

The Chair thanked Sue Gifford for leading the session.

9 Any other business not elsewhere on the agenda

None.

10 Conclusion

The Chair thanked everyone present for their contributions and closed the meeting.

11 Dates of future meetings

Friday 9 June 2017 (preceded by a Special General Meeting to consider winding up the Council)

Tuesday 14 November 2017 (if the Council has not been wound up by then)

Tuesday 13 February 2018 (if the Council has not been wound up by then)

These meetings will be held at the Royal Statistical Society and begin at 1100.

Summary Minutes of the Executive Committee meeting held at the Royal Statistical Society on Tuesday 28 February 2017

Present Paul Glaister (Chair), Peter Thomas (Honorary Secretary), Paul Harris (Honorary Treasurer), Sally Barton and Sue Pope.

In these summary minutes the following abbreviations are used:

uJMC the unincorporated Joint Mathematical Council of the United Kingdom
CIO the Charitable Incorporated Organisation which is The Joint Mathematical Council of the United Kingdom

1 Previous Business

1.1 **Previous Meeting** The minutes of the previous meeting were approved.

1.2 **Actions** The action points from the previous meeting were reviewed. These included the following.

- A draft of the paper on Secondary Mathematics Pedagogy for ITE had been reviewed and a revised draft was awaited.
- The Chair had been in contact with Paul Steele who had recently taken up post at NCTL and it was hoped to arrange a meeting in April 2017 between representatives of JMC and NCTL.
- Contact had yet to be made with the LMS to discuss concerns relating to the arrangements for ICME Bursaries but this will be pursued.

- Links and descriptions of the Participating Societies now appear on the homepage on the JMC website but difficulties have been experienced with displaying the societies' logos at an acceptable quality and technical help was being sought.
- It was noted that the practice of providing to Council summary agenda and minutes of Executive Committee meetings was due for review. It was noted that CIO is to consider how it conducts its business at its General Meeting on 9 June 2017 and it was felt that would be advantageous if the practice was reviewed at that time.

1.3 **Matters arising not elsewhere on the agenda** None.

2 Committees

2.1 **BCME Committee** The report from the Chair of the BCME Committee was considered. It was noted that the contract with the University of Warwick was about to be signed and that invitations to lead sessions were about to be sent out.

2.2 **ICME Bursaries Committee** This item was considered under item 1.2.

2.3 **GCSE Working Group** Sue Pope reported that a meeting, at which JMC would be represented, had been convened by Ofqual to discuss how the changes to GCSE Mathematics in England could be better publicised. It was agreed that the JMC should use its good offices to help disseminate information from Ofqual so that stakeholders received accurate information and were well informed about the changes.

3 Charitable Incorporated Organisation

3.1 **Report of the Honorary Secretary** The Honorary Secretary reported that the CIO was registered and incorporated by the Charity Commission for England and Wales on 20 January 2017 with Registered Charity Number 1171223 and Registered Office: De Morgan House, 57-58 Russell Square, London, WC1B 4HS. It was now time to take steps to wind up the uJMC and transfer its activities and assets to the CIO.

3.2 **Steps to be taken by the uJMC to implement the transition** The Honorary Secretary proposed a schedule for the transition, this complemented the schedule that would be presented to the meeting of the Trustees of the CIO which would follow.

- There would be a Special General Meeting of the uJMC on 9 June 2017 to consider motions to wind up the JMC and transfer its assets to the CIO.
- The meetings on 9 June 2017 would be the final meetings of the uJMC after which all outstanding liabilities would be settled as quickly as possible and the accounts closed by 30 September 2017.
- A final report and final accounts would be presented to the General Meeting of the CIO on 14 November 2017, that meeting would also consider for approval the minutes of the uJMC's AGM on 8 November 2016 and the uJMC's SGM and Council meeting on 9 June 2017.
- All activity would be transferred to the CIO by 1 August 2017.

It was agreed that the proposals above should be followed.

3.3 **Actions to be taken regarding the outstanding liabilities of the uJMC** The present commitments of the uJMC were reviewed and the following actions were agreed.

- The MoU with ATM and the MA regarding BCME should to be transferred from the uJMC to the CIO.
- The MoU with the LMS regarding the use of its address should to be transferred from the uJMC to the CIO.
- A final bill will need to be paid to Hewitsons LLP for legal advice regarding the establishment of the CIO and the transitional arrangements.
- Officers and representatives should be asked to settle their expenses as expeditiously as possible after the meetings on 9 June 2017.
- The bookings at the RSS for 9 June 2017 and 14 November 2017 should be transferred from the uJMC to the CIO.
- The JMC's insurance cover falls due for renewal on 1 June 2017 and the CIO would have cover from that time; the Honorary Treasurer would explore whether cover for the uJMC until it is wound up could be obtained at reasonable cost.
- The JMC's website account falls due for annual renewal in June, it and the registration with Nominet should to be transferred from the uJMC to the CIO at that time. The JMC website should also be revised to reflect the change from the uJMC to the CIO.

No other commitments were identified as needing to be transferred from the uJMC to the CIO.

4 Future Business

4.1 **Dates of future meetings** Meetings of the Executive Committee and the Council are to be held on Friday 9 June 2017 (together with a Special General Meeting to consider winding up the uJMC) and (if the Council has not been wound up by then) on Tuesday 14 November 2017 and Tuesday 13 February 2018.

5.2 **Future presentations and discussions at Council meetings** At the meeting on 28 February 2017 Sue Gifford will lead a discussion on Mathematics Education in the Early Years and at the meeting on 14 June 2017 it is intended that there will be a discussion of the Smith Report on 16–19 Mathematics Education in England.

6 Any other business not elsewhere on the agenda

None.