

To: Members of the Bureau of the UNECE Expert Group on Resource Classification

From: David MacDonald and Charlotte Griffiths

Conference Calls of the Bureau of the Expert Group on Resource Classification (EGRC)
7 October 2015
MINUTES

Present on 9am BST 7 October Call:

1. David MacDonald (Chair)
2. Karin Ask (petroleum sector)
3. Roger Dixon (CRIRSCO)
4. Michael Lynch-Bell (Chair ex-officio)
5. Jim Ross (petroleum sector)
6. Slavko Solar (European Commission)
7. Danny Trotman (financial reporting)
8. Charlotte Griffiths (UNECE)

Present on 3pm BST 7 October Call:

1. David MacDonald (Chair)
2. Sim Caluyong *representing* Adichat Surinkum (CCOP)
3. David Elliott (financial reporting sector)
4. Gioia Falcone (geothermal sector and academia)
5. Nathan Frisbee *representing* Fatih Birol (IEA)
6. Jim Ross (petroleum sector)
7. Brad Van Gosen (USGS)
8. Charlotte Griffiths (UNECE)

Observer:

9. John Etherington (TAG Chair, *observer*)

Apologies:

1. Tunde Arisekola (NGSA)
2. Fatih Birol (IEA)
3. Dan Diluzio (SPE)
4. Mucella Ersoy (Turkish Coal Enterprises)
5. Kjell Reidar Knudsen (NPD)
6. John Ritter (SPEE)
7. Igor Shpurov (First Vice Chair, GKZ Russian Federation)
8. Adichat Surinkum (CCOP)
10. Hari Tulsidas (IAEA)
11. Narendra Verma (petroleum sector)

Draft Agenda

Draft Agenda for EGRC Bureau Calls 7 October 2015

1. Approval of draft agenda
2. Draft minutes of Bureau calls of 25 August 2015
3. Bureau membership and elections 2016-2017
4. Progress on action items from EGRC Sixth Session
 - Guidance note on competent person
 - Guidance note on definition of a project in relation to UNFC-2009
 - Resourcing strategy

5. Preparations for EGRC Seventh Session
6. Technical Advisory Group update
7. Update on application of UNFC to nuclear fuel resources
8. Update on application of UNFC to injection projects
9. Update on application of UNFC to renewable energy resources
10. Update on E-axis Sub-group
11. Update on G-axis Review Working Group
12. Education and outreach
13. Cooperation with ISO
14. Date of next Bureau call
15. Any other business

Documentation:

1. Draft agenda for Bureau Calls on 25 August 2015
2. Draft Minutes of 25 August 2015 Bureau Meeting
3. List of events in 2015-2016 promoting UNFC *as at 28 September 2015*
4. Minutes of CSC Meeting, Geneva, 29 April 2015

Item 1. Approval of Draft Agenda

Documentation: Draft agenda for Bureau Calls on 7 October 2015

1. The agenda was adopted without amendment

Item 2. Draft minutes of Bureau Call, 25 August 2015

Documentation: Draft minutes of Bureau Call, 25 August 2015

2. A number of comments were received on the draft minutes:
 - (i) The last sentence of paragraph 16(vii) was amended to read “The Bureau noted that the mapping between the Chinese systems and UNFC in the uranium case studies issued for public comment in June-August 2015 might need to be updated. “
 - (ii) Clarification was provided in relation to paragraph 20, notably that the Uranium guidelines will be published without the case studies as either an IAEA publication or a joint IAEA and UNECE publication. The case studies will be issued separately as an electronic UNECE publication.
 - (iii) Clarification was provided that the case studies for minerals and petroleum based on Cuban data are for presentation at the Cuban workshop and not the SPE Applied Technology Workshop on Petroleum Reserves & Resources. The sentences were reordering accordingly.
3. The draft minutes as circulated on 23 September were adopted subject to the above amendments.

Item 3. Bureau membership and elections 2016-2017

4. The Chair noted that details of Claudia Wulz’s replacement on the Bureau has yet to be provided. The European Commission representative advised that the EC wishes to continue on the Bureau and is working to identify the appropriate expert.

5. Bureau elections will be held at seventh session. Members were requested to advise the secretariat should they wish to stand for nomination.

6. The Chair noted that the Bureau is currently at 21 members and is functioning well despite the large membership. Repeating the Bureau calls i.e, holding an am and a pm call appears to facilitate engagement by members.

Item 4. Progress on Bureau action items from EGRC Sixth Session

(a) Guidance note on competent person

7. David Elliott noted on the last teleconference, that the Association of Professional Engineers and Geoscientists of Alberta (APEGA) has been updating the professional standards for the determination of oil and gas reserves/resources, and now has a draft. The draft text was circulated to the Bureau on 7 October. David was thanked for his efforts in keeping the Bureau informed of this work.

8. The Chair advised that the draft guidance note is progressing and he hopes to share a text with the Bureau over the coming weeks. He will engage with the CRIRSCO representative to ensure input is provided in relation to the CRIRSCO Template.

(b) Guidance note on definition of a project in relation to UNFC-2009

9. Jim Ross advised that the guidance note is progressing and he hopes to circulate a draft to the full Bureau over the coming weeks.

(c) Resourcing strategy

10. The sub-group is working on this and hopes to circulate its results to the Bureau over the coming weeks. This needs to become a priority.

Item 5. Preparations for EGRC Seventh Session

11. The documents forecast for the EGRC seventh session has been submitted in line with the deliverables in the work plan for 2016–2017. The following list was submitted for translation into French and Russian:

- UNFC-2009 and Russian Federation petroleum classification of 2013 Bridging Document
- Draft generic specifications for the application of UNFC-2009 to geothermal resources
- Draft specifications for the application of UNFC-2009 to injection projects
- Draft guidance on accommodating environmental and social considerations in UNFC-2009
- White paper on application of G axis of UNFC-2009
- Best practices for UNFC-2009 uranium and thorium management
- Three UNFC Case Studies.

12. Together with the agenda and the meeting report, this is a total of 11 documents. It is highly unlikely all will be accepted for translation.

13. The document submission deadlines are:
- Agenda: **1 February 2016**. The Bureau will need to agree on the agenda by mid- to late- January 2016
 - All other documents: **15 February 2016**.
14. The Bureau discussed the provisional agenda for the seventh session, noting the earlier proposal from the TAG Chair to include the SWITCH project. The Bureau had agreed to include the SWITCH project as long as any presentation is not biased and supports all commodities. There was a request to screen the SWITCH film at an appropriate time during the seventh session.
15. Bureau members were requested to submit proposals for other issues to be included on the agenda to the secretariat by 2 November.
16. The Bureau discussed potential keynote speakers noting that last year's keynote speaker Tom Murley from HgCapital was well-received. There was general agreement that Scott Tinker, Director of the Bureau of Economic Geology at the University of Texas and producer of the SWITCH film should be invited.
17. The format of the UNFC workshop on 26 April was discussed. It was agreed that this should be the usual training workshop and a 'Train the Trainers' Workshop should be held at some stage during the Seventh Session and, if possible, for longer than one hour in line with feedback received from participants.

Item 6. Technical Advisory Group update

18. An update was provided by the Chair of the Technical Advisory Group (TAG):
- (i) TAG Meetings: A TAG teleconference was held on 14 September 2015. The new TAG members Jan Bygdevoll and Andrew Barrett participated.
 - (ii) Uranium Guidelines: The Uranium Task Force has completed the amendments to the Uranium Guidelines based on the public comments received. The revised document is currently under review by the TAG prior to submitting a final recommendation to the Bureau.
 - (iii) Russian Petroleum Classification Bridging Document: At the request of the GKZ, a working session with the TAG will be held in London, 12–13 October, to review progress on the new RF-2013 classification for oil and gas to UNFC-2009 bridging document. The Russian delegation will consist of seven representatives of the GKZ and associated organizations; the TAG will be represented by a sub-group of five members and the EGRC Chair. GKZ has provided three supplementary documents to assist the TAG review. It is GKZ's intent to finalize a bridging document prior to the April 2016 EGRC meeting.
 - (iv) Chinese Petroleum and Solid Minerals Classification Bridging Documents: The TAG is awaiting English translations of the current Chinese classification systems. The aim is to complete the UNFC-2009 bridging documents in 2017.
 - (v) E-axis and G-Axis Working Groups: The TAG is monitoring the progress of these two working groups. More detailed feedback on the work of these Groups is provided under agenda items 10 and 11.

(v) Specifications for the Application of UNFC-2009 to Injection Projects for the Purpose of Geological Storage: The public comment period on the draft specification document ended on 15 September. An amended draft will be submitted later in 2015 for TAG review.

(vi) Support Activities: In response to a request received on 2 September, the TAG is providing assistance to an expert from Soiltech (India) on application of UNFC-2009 to a minerals project.

19. The Chair of the TAG and the members were thanked for their continued efforts.

Item 7. Update on application of UNFC to nuclear fuel resources

20. The Task Force has reviewed all the comments received during the Public Comment and prepared a revised text of the guidelines and case studies, as well as documents that show action taken on (i) the TAG review; (ii) the review by the CRIRSCO representative and (iii) the Public Comments. All documents have been submitted to the TAG Chair.

21. A TAG recommendation will be submitted to the Bureau following which the Bureau needs to review the guidelines and approve the recommendation or not. The deadline for submission of the guidelines to the Committee on Sustainable Energy is 4 November. The guidelines will be submitted in English only. The Bureau requested to receive the TAG recommendation on or shortly after 19 October.

22. The concern of the CRIRSCO representative regarding the inclusion of non-EGRC approved mappings in the document was discussed. The key concern related to the inclusion of mappings to the Chinese, Ukraine and Australian systems since none of these systems have bridging documents to UNFC-2009 and are therefore not aligned systems. It was proposed to include a short caveat in the guidelines and the case studies in bold text clearly identifying that the mappings are preliminary and just an indication of how they might work and that they are in no way endorsed or approved by the EGRC. The currently aligned systems are the CRIRSCO Template, PRMS and Red Book. This proposal was accepted.

23. The Chair and other members of the Nuclear Fuels Task Force were thanked for their hard work.

Item 7. Update on application of UNFC-2009 to injection projects

24. The draft specifications public comment period closed on 15 September. The Task Force met on 22 September to start its review of the comments. Whilst relatively few comments were received, a number are fairly extensive. The Task Force Chair is of the view that the draft guidelines should not be changed throughout since many who commented were supportive of the existing text. The Task Force will prepare a document outlining all changes made and how the comments were dealt with.

25. One of the public comments related to ISO. The Task Force Chair advised that there are 5 or 6 ISO Technical Committees and Working Groups looking at issues of relevance to the draft specifications. Scott Frailey, a member of the Task Force, recently attended an ISO meeting in Norway hence ISO is aware of the UNFC work.

26. The previously advised new Task Force member, Neil Wildgust has been replaced by Benjamin Court, Senior Adviser – Storage for Europe Middle-East and Africa with the Global CCS Institute

27. The Task Force thanked the Chair and the other Task Force members for their hard work

Item 9. Update on application of UNFC-2009 to renewable energy resources

28. Good progress is being made on application of UNFC-2009 to geothermal. The Geothermal Working Group, which is led by Gioia Falcone, met in Reno, Nevada, 23-25 September. The meeting was hosted by the Geothermal Resources Council (GRC) and sponsored by the US Department of Energy (DOE) Geothermal Technologies Program. The Working Group is preparing a second white paper that it plans to issue at the end of October.

29. The Chair of the Geothermal Working Group noted that the International Geothermal Association (IGA) may consider maintaining and updating the geothermal specifications in the future.

30. The Chair of the Geothermal Working Group advised that case studies are being developed and will be submitted to the TAG for review in the near future. A Bureau member asked if the case studies would be included as part of the geothermal specifications and, if so, that this would not be in line with the normal practice. Clarification was provided that “application examples” that they are generated by (or approved in detail by) the same team that is generating the specifications themselves is, however acceptable. The reason is that “case studies” are often prepared by other groups and can sometimes reflect an interpretation of the system that was not exactly as intended, which would reflect a weakness in the system rather than providing helpful guidance.

31. The Chair of the Geothermal Working Group also noted that she is cooperating closely with the Bioenergy Work Group on introductory text for the specifications. Both the geothermal and bioenergy specifications are breaking new ground and, in particular, the geothermal specifications are being developed under the IGA MoU in which case how should the IGA and the Geothermal Working Group members be acknowledged etc. The EGRC Chair recommended to the Chair of the Geothermal Working Group that she liaise with the Chair of the Injections Projects Task Force to see how any of these issues might have been addressed in the draft injection projects specifications. The geothermal specifications – and also the bioenergy specifications – will not link directly to “UNFC-2009 and the Generic Specifications” but will need to be linked via the generic renewable specifications. This would need to be noted in the introduction of the geothermal and bioenergy specifications using common language and an additional sentence would need to be added to the current draft generic renewable specifications to establish the link both ways.

32. The Renewables Task Force provided responses to the comments and questions of the Geothermal Working Group members on UNFC-2009 and the Generic Specifications. A Note was written to explain the UNFC-2009 axes and commented upon by the Chair of the Geothermal Working Group. Issues related to the E, F and G axes for geothermal projects were also identified.

33. Good progress is being made on bioenergy. The Bioenergy Working Group is led by James Primrose. The Working Group has produced a first working draft of the bioenergy-specifications. There has been good discussion on the Bioenergy Specification: “Extension of scope to cover Renewable Fuels produced from non-biological sources”. A decision to include this or not has yet to be taken as the Renewables Task Force Chair requested more information.

34. Communications: the Renewables Task Force Chair will present the work of the Task Force to the UNECE Group of Experts on Renewable Energy on 13 October. The purpose is to make the Group of Experts aware of the progress made, the work plan, highlight the importance of a globally adopted classification for Renewable Energy, and use the opportunity to invite interested attendees to join the Task Force.

35. The Task Force is looking at its work methods for end 2015 and 2016: an agreement on the frequency of Task Force and working group teleconferences has been made. Teleconferences to maximize synergies between the working groups and to optimize interfaces will be held.

36. The G-Axis Working Group reports to the Renewables Task Force – an update on this is provided under agenda item 11.

37. The Chair and the other Task Force members were thanked for their continued efforts.

Item 10. Update on E-axis Sub-Group

38. A draft “for discussion” document was circulated for comment on 7 August. Bureau members were invited to comment by 14 September. A limited number of comments received so far.

36. One comment questioned the ability to determine whether socio-environmental issues were under “active” consideration. It should be possible to do this in the same way that other issues in evaluation and classification are handled by asking for proof of action, such as documentation, status of regulatory applications, etc. The details of this would be part of any guidelines that are developed.

39. Other responses were supportive of the approach that was described in the note.

40. The next step will be to build on the note and provide more detail and perhaps a first pass at some guidelines.

41. A Bureau member shared his concern that the Sub-group might be focusing on issues beyond providing *guidance* on the incorporation of environmental and social criteria in the application of UNFC-2009 to a project. It was agreed that these concerns and comments on areas where a refocus might be needed would be shared with the Sub-group Chair.

42. The Chair of the Geothermal Working Group advised that the Group had reviewed the discussion note circulated and a number of members of the Group had already attempted to implement the sub-categories proposed in the note.

43. The Chair and Sub-group members were thanked for their continued efforts.

Item 11. Update on G-axis Review Working Group

44. Meetings of the Working Group are held every three weeks. A G Axis WG Dropbox Shared Folder has been set-up containing approved minutes, working and other reference documents.

45. The Working Group has discussed the background to the development of the current G Axis, in particular focusing on the different approaches between PMRS and the CRIRSCO Template in terms of assessing uncertainty under the G Axis, and the potential application of the G Axis to bioenergy. Both discussions have been supported by briefing papers prepared by the Working Group.

46. The next step is to discuss the potential application of the G Axis to geothermal, which is provisionally scheduled for 15 October 2015. Thereafter the Working Group will move to consider potential refinements to the current G axis, informed by the above discussions.

47. The Bureau discussed if it wishes to receive a copy of the minutes of this Working Group. In its Terms of Reference the Working Group reports to the Renewables Task Force which means the Task Force would need to review the minutes prior to them being circulated to the Bureau. The Bureau agreed that it will receive an update on the Working Group via the Task Force.

48. The Bureau thanked James Primrose for establishing the Working Group and all the members for their efforts to date.

Item 12. Education and Outreach

Documentation:

- List of events in 2015-2016 promoting UNFC *as at 28 September 2015*
- Minutes of CSC meeting, Geneva, 29 April 2015

49. The list of events as at 28 September was circulated as part of documentation for call.

50. A productive Communications Sub-Committee (CSC) call was held on 29 August. The next teleconference of the CSC will be held end-October or early November.

51. There has been a membership change: Jan Roelofsen has stepped down following his retirement from IHS.

52. A number of upcoming events were discussed:

- (i) IAEA-UNECE Regional training course on “Regional training course on UNFC-2009 for Evaluation of Uranium and Thorium Resources and to Leverage Transparent and Effective Communications”, will be held in Luxor, Egypt, 18–22 October 2015
- (ii) UNFC Cuba Workshop: will be held in Cuba, 7–9 December 2015. Edmundo Tulcanaza will represent CRIRSCO. ECLAC (UNECE’s sister regional commission) will also be represented.

(iii) The Nordic UNFC Project is progressing – a Workshop will be held at the Geological Survey of Norway in Trondheim, 13 October 2015 followed by another meeting in Stavanger on 5 November. Presentations on UNFC in Norway and on application of UNFC to injection projects will be delivered.

(iv) Slavko Solar is organizing an EU Minerals Conference in Brussels, 15–16 October. Michael Lynch-Bell will present on UNFC at this event.

(v) The EGRC Chair will provide an update on the work of the EGRC at the 24th Meeting of the Committee on Sustainable Energy, Geneva, 18–20 November.

(vi) Carolina Coll is organizing a Workshop on “Renewables including Carbon Capture, Storage and Disposal” at the EUROPEC SPE/EAGE 78th Annual Conference & Exhibition in Vienna, Austria, 30 May 2016. The workshop will include a focus on UNFC. Contact will be made with the Chairs of the Renewables Task Force and the Injection Projects Task Force.

(vii) The date for the presentation on UNFC to the Canadian Society of Petroleum Geologists is still to be confirmed.

(viii) The SPE Applied Technology Workshop on Petroleum Reserves & Resources will now be held in Dubai, 18–19 April 2016.

53. The Colombian National Mining Agency has been in contact with the secretariat. The Agency is in charge of the mineral resources owned by the state. The Agency is currently working on a project entitled "Resources and Reserves of the Nation", which has the following objectives: (a) Develop and implement the Colombian Standard for Estimation, Certification and Reporting of Exploration Prospects, Mineral Resources and Coal Reserves of the Nation; (b) Adopt UNFC-2009, and classify the Colombian mining projects according to UNFC-2009; (iii) Promote together with the different actors involved, the establishment of the regulation and individual in Colombia of a "competent professional" and the establishment of the "Assessment Committee". Technical assistance is being sought from the EGRC. Organization of a national UNFC workshop and/or technical assistance visits to be funded by the Agency have been recommended. It was noted that the petroleum agency in Colombia has previously participated in the EGRC.

54. The representative of CCOP provided details of CCOP events at which UNFC was presented, discussed and applied by its member countries. CCOP has also formed a working group (with members from 10 member countries of CCOP) for the application of UNFC-2009 to energy resource/reserves reporting and to follow the main discussions within the Bureau. Next year, the working group will be expanded to include minerals.

55. The Communications Sub-Committee Co-Chairs and the other members were thanked for their work.

Item 13. Cooperation with ISO

56. The ISO Technical Committee 82 which focusses on Mining has a new work proposal to develop a reporting template for the public reporting of Exploration Results, Mineral Resources and Mineral Reserves.

57. The Chair held a conference call on 5 October 2015 with the Secretary of the ISO Technical Committee 82 Mining (Hans Blasgude, who is based in Germany) and the Project

Leader, Steven Carpenter (Director of the Enhanced Oil Recovery Institute of the School of Energy Resources at the University of Wyoming in the US). The CRIRSCO representative, Jim Ross, Sigurd Heiberg and the secretariat also participated. The call served as a constructive and positive first contact. A longer follow-up call or meeting will be organized to provide a detailed briefing on UNFC since the ISO representatives were not familiar with the system. How to ensure effective engagement was discussed. An invitation was extended to both ISO representatives to attend the EGRC seventh session. The project has only just been established and the first plenary meeting will be held towards the end of 2016.

58. It was noted that ISO should be interested in the full work of the EGRC, including petroleum renewables, and injection projects. UNECE has an MoU in place with ISO in the field of electronic business, in which the onus is on ISO to develop the standards and UNECE to promote and disseminate them.

59. This is an opportunity to establish good cooperation with ISO to avoid duplication and any inconsistencies with UNFC and to ensure the work of the EGRC meets the needs of ISO in its work developing standards.

60. The Chair of the Geothermal Working Group asked for assistance in understanding what work if any ISO has undertaken on geothermal of relevance to the geothermal specifications

61. Bureau members agreed that cooperation with ISO should be included as an agenda item for the seventh session. Consideration could eventually be given to ISO joining the Bureau but not before the seventh session.

Item 14. Date of next Bureau call

62. The next Bureau calls are planned to be held during the week commencing 30 November. The usual availability notice will be circulated.

Item 15. Any other business

(i) World Bank study

63. The World Bank has recently issued a Study "[The Extractive Industries Sector: Essentials for Economists, Public Finance Professionals, and Policy Makers](#)" which makes reference to UNFC. It was agreed that the web link to the study should be circulated to the Bureau. The study also refers to the "System of Environmental-Economic Accounting 2012" (SEEA) which is the classification framework for the reporting of stocks of natural resources" and covers both renewable and non-renewable natural resources. It is based very closely on UNFC-2009, but is not exactly the same. SEEA-2012 is a product of the UN Statistics Division which has subsequently been adopted by OECD. A presentation on the SEEA was delivered by a representative of UN Statistics at the EGRC meeting in 2011. A reference to UNFC was also included by this expert in his presentation to the IEA InterEnerStat meeting in Paris in early September. Members agreed that an update on the SEEA-2012 at the seventh session would be useful.

64. In the context of SEEA-2012 being similar to but not identical to UNFC, when references are made to UNFC the importance of having references or links that go back to the UNFC was highlighted. Amending or agreed UNFC definitions or texts should be avoided.

(ii) Invitation to CRIRSCO Annual Meeting

65. The CRIRSCO representative extended an invitation to the Bureau to the CRIRSCO Annual meeting in Brasilia, 30 November–1 December 2015.

66. No other issues were raised.
