

**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)  
29-30 January 2015  
FINAL MINUTES

Present on 3pm GMT 29 January Call:

1. David MacDonald (Chair)
2. Tunde Arisekola (NGSA)
3. Karin Ask (petroleum sector)
4. Nathan Frisbee *representing* Fatih Birol (IEA)
5. John Ritter (SPEE)
6. Jim Ross (petroleum sector)
7. Hari Tulsidas (IAEA)
8. Brad Van Gosen (USGS)
9. Charlotte Griffiths (UNECE)

Present on 9am GMT 30 January Call:

1. David MacDonald (Chair)
2. Dan Diluzio (SPE)
3. Roger Dixon (CRIRSCO)
4. Kjell Reidar Knudsen (NPD)
5. Jim Ross (petroleum sector)
6. Anand Sahu *representing* Narendra Verma (India) (from 9.30–9.40am)
7. Claudia Wulz (European Commission)
8. Charlotte Griffiths (UNECE)

Observer: Slavko Solar (European Commission)

Apologies:

1. Fatih Birol (IEA)
2. David Elliott (financial reporting sector)
3. Mucella Ersoy (Turkish Coal Enterprises)
4. Gioia Falcone (geothermal sector and academia)
5. Michael Lynch-Bell (Chair ex-officio)
6. Igor Shpurov (First Vice Chair, GKZ Russian Federation)
7. Adichat Surinkum (CCOP)

Draft Agenda

1. Approval of draft agenda
2. Draft minutes of Bureau calls 4 December 2014
3. Bureau membership
4. UNECE Resource Classification Week
  - EGRC sixth session draft annotated agenda
  - Draft revised CRIRSCO Bridging Document
  - EGRC draft work plan for 2016-2017
  - Resource Classification Week overview
  - sponsorship opportunities
5. Technical Advisory Group update
  - TAG review and recommendation on solid minerals case study

- TAG recommendation on draft Specifications for the Application of UNFC-2009 to Injection Projects for the Purpose of Geological Storage
- Minutes of TAG call of 11 December 2014
- 6. Update on application of UNFC-2009 to injection projects
- 7. Update on application of UNFC-2009 to nuclear fuel resources
  - case studies for EGRC sixth session
- 8. Update on application of UNFC-2009 to renewable energy resources
  - Minutes of RE Task Force Calls of 28 Nov and 18 Dec 2014
- 9. Education and outreach
- 10. Any other business
- 11. Timing of next meeting

Documentation:

1. Draft agenda for Bureau Calls on 4 December 2014
2. Draft Minutes of 4 December 2014 Bureau Calls
3. List of EGRC Bureau Members
4. EGRC sixth session draft annotated agenda
5. Draft Bridging Document between CRIRSCO Template 2013 and UNFC-2009
6. UNECE Resource Classification Week Overview
7. TAG Recommendation on Solid Minerals Case Study
8. Revised TAG Review of Solid Minerals Case Study Clean
9. Revised TAG Review of Solid Minerals Case Study Track Changes
10. Minutes of TAG Call of 11 December 2014
11. Minutes of Renewables Task Force Call of 28 November 2014
12. Minutes of Renewables Task Force Call of 18 December 2014
13. List of Conferences Promoting UNFC in 2014 and 2015 (as at 26 January 2015)
14. TAG Recommendation on the Specifications for the Application of UNFC-2009 to Injection Projects for the Purpose of Geological Storage
15. Draft Specifications for the Application of UNFC-2009 to Injection Projects for the Purpose of Geological Storage
16. TAG Recommendation on the Generic Specifications for the Application of UNFC-2009 to Renewable Energy Resources
17. Draft Generic Specifications for the application of UNFC-2009 to Renewable Energy Resources
18. Feedback received during the Renewable Specifications Public Comment period (June-September 2014)
19. Revised Terms of Reference for the E-axis Sub-Group

**Item 1. Approval of Draft Agenda**

Documentation: Draft agenda for Bureau Calls on 29 and 30 January 2015

1. The Chair proposed that the work on environmental and social guidance be discussed under Any Other Business. The proposal was accepted and the agenda was adopted.

**Item 2. Draft minutes of Bureau calls 4 December 2014**

Documentation: Draft minutes of Bureau Calls of 4 December 2014

2. Following a request for clarification of the RWE case study mentioned in paragraph 23, the draft minutes as circulated on 16 December were adopted.

### **Item 3. Bureau membership**

Documentation: List of EGRC Bureau Members

3. The Chair introduced Nathan Frisbee, who Fatih Birol has nominated as his alternate. Nathan is on secondment to IEA from Schlumberger. Mr. Frisbee provided a brief overview of his professional background which includes working in the oil and gas sector in North America and the Middle East.

4. An updated list of Bureau members and their alternates with contact details was circulated. Members were requested to advise the secretariat of any needed changes

### **Item 4 UNECE Resource Classification Week**

Documentation:

- EGRC sixth session draft annotated agenda
- Draft Bridging Document between CRIRSCO Template 2013 and UNFC-2009
- UNECE Resource Classification Week Overview

#### **(i) EGRC sixth session draft annotated agenda**

5. Members reviewed the draft annotated provisional agenda for the EGRC sixth session. No comments were received. The agenda will be submitted for translation on 2 February.

6. The Chair advised that under Item 4 “Opening Remarks”, the intent is for the UNECE Executive Secretary to deliver remarks followed by a keynote presentation from Mr. Tom Murley, Head of Renewables for HgCapital. The Chair is meeting with Mr. Murley in February to agree on the message to be conveyed during the keynote to ensure that it is relevant for and of interest to all UNFC stakeholders.

7. The CRIRSCO representative requested to be one of the speakers during the session on Competent Person.

8. The revised list of official documents for the Sixth Session was provided:

- |                          |   |
|--------------------------|---|
| ECE/ENERGY/GE.3/2015/1:  | Provisional Agenda  |
| ECE/ENERGY/GE.3/2015/2:  | Report of the Sixth Session   |
| ECE/ENERGY/GE.3/2015/3:  | Draft work plan for the Expert Group for 2015-2016  |
| ECE/ENERGY/GE.3/2015/4:  | Revised Bridging Document between UNFC-2009 and CRIRSCO Template  |
| ECE/ENERGY/GE.3/2015/5:  | Generic specifications for Application of UNFC-2009 to Renewable Energy   |
| ECE/ENERGY/GE.3/2015/6:  | Public comments to draft renewable commodity-specific specifications  |
| ECE/ENERGY/GE.3/2015/7:  | Draft specifications for Application of UNFC-2009 to Injection Projects   |
| ECE/ENERGY/GE.3/2015/8:  | Guidelines on Application of UNFC-2009 to Uranium and Thorium Projects  |
| ECE/ENERGY/GE.3/2015/9:  | Guidance on accommodating environmental and social considerations in UNFC-2009 – Draft ToR for Phase II Sub-Group |
| ECE/ENERGY/GE.3/2015/10: | Education & Outreach & Activities of the Communications Sub-Committee   |

ECE/ENERGY/GE.3/2015/11: Norwegian Petroleum Directorate case study

ECE/ENERGY/GE.3/2015/12: Uranium case study

ECE/ENERGY/GE.3/2015/13: Thorium Case Study from US

9. The following two documents will no longer be issued:

- Draft renewable commodity-specific specifications for UNFC-2009
- Financial Reporting Update

**(ii) Draft revised CRIRSCO Bridging Document**

10. The Bureau reviewed the draft revised CRIRSCO Bridging Document (BD) which was intended to bridge to the revised Template of November 2013.

11. During the first Bureau call on 29 January there was agreement that the draft BD could not be accepted in its current form, for the following reasons:

(i) The revised BD has not been reviewed by the TAG. Members indicated that provided that the deletion proposed in point (iii) below is implemented, the changes would be sufficiently minor that a TAG review would not be considered necessary.

(ii) The Template version referenced in the BD is the November 2013 version, which was reviewed by the TAG. However, the version of the Template currently on the CRIRSCO website is dated October 2014.

(iii) In Section D of the BD, covering Exploration Targets, the proposal to define three sub-categories of G4 was highlighted to be in conflict with the existing generic definitions (Specification P) for those same sub-categories (G4.1, G4.2 and G4.3). Three reasons were raised in support of the conflicting definitions being removed:

- (a) It is not workable to have two different sets of definitions for the same sub-categories of UNFC-2009, especially where these have already been defined and agreed at a generic level. A number of Bureau members emphasized the need for consistency between classes and definitions.
- (b) Since the Template does not currently have any sub-classes of Exploration Target and the purpose of a BD is to map that system to/from the current version of UNFC-2009, this section is hence superfluous. It was though noted that if CRIRSCO decides in the future to define some sub-classes of Exploration Target within the Template, these could then be mapped to the UNFC (as it then exists) in an updated BD.
- (c) Modifying the existing generic UNFC-2009 sub-category definitions would constitute a significant change and the TAG recommendation is not to make any major changes at this time (possibly later, once there is more experience of its application).

12. One member additionally indicated that it would be useful to include guidance on how to classify (under the current version of UNFC) the low and high values quoted for the range of uncertainty in an Exploration Target.

13. During the second Bureau call on 30 January, members discussed the issues raised in paragraph 11 and there was general agreement that the BD could not be accepted in its current form.

14. The CRIRSCO representative advised that whilst there are no substantive changes in the October 2014 version of Template posted to the CRIRSCO website (the key amendment was to include Mongolia), he would ensure that the CRIRSCO website is changed to reflect the November 2013 version of the Template.

15. The CRIRSCO representative further advised that there would be significant changes to the Template, possibly by late this year or early next year in order to reflect the changes made to the underlying Codes e.g. JORC, SAMREC. The goal is to create an updated version of the Template that reflects the best practices across all the NROs. Bureau members encouraged the CRIRSCO representative to keep the Bureau informed as and when the update progresses.

16. The CRIRSCO representative indicated that he would prepare a revised version of the BD to reflect the feedback provided by Bureau members. He explained the rationale for including the three sub-categories of G4 which was to assist users of UNFC-2009 but indicated there would be no problem to remove them. The CRIRSCO representative indicated that in his view there is an inconsistency between the renewables generic specifications and the Bureau position of removing the different definitions for G4.1, G4.2 and G4.3.

17. A revised version of the BD will be prepared and circulated prior to the next Bureau call.

**(iii) EGRC draft work plan for 2016–2017**

18. Bureau members were requested to put forward items for inclusion on the work plan for 2016-2017. The Chair indicated he would prepare a first draft based on input from members and circulate for comment.

19. The ECE Executive Committee (EXCOM) will be invited to approve the Committee on Sustainable Energy's endorsement of the extension of the EGRC Work Plan for 2013–2014 to end 2015 at its meeting on 10 February.

**(iv) Resource Classification Week 2015 overview (27 April – 1 May)**

20. The Chair summarized the events scheduled to take place during the Resource Classification Week 2015:

- IAEA Consultancy on the Uranium Projects Guidebook (27-28 April)
- UNFC Workshop (28 April)
- TAG meeting on 28 April which will also include a meeting with GKZ in the morning to advance the Russian bridging document and a meeting of the TAG in the afternoon
- A UNFC Train the Trainers Workshop will be organized during the lunch break on Thursday 30 April – this is an initiative of the Communications Sub-Committee.

**(v) Sponsorship opportunities**

21. The Chair drew attention to the sponsorship opportunities available during the EGRC sixth session:

- Cocktail Reception – either full sponsorship or co-sponsorship is possible (total cost approx CHF 3,500)
- Coffee breaks (cost per break approx. CHF 650).

22. Members were requested to advise the secretariat of their interest in taking up any of the sponsorship opportunities.

#### **Item 5. Technical Advisory Group update**

##### Documentation:

- TAG Recommendation on Solid Minerals Case Study
- Revised TAG Review of Solid Minerals Case Study Clean
- Revised TAG Review of Solid Minerals Case Study Track Changes
- Minutes of TAG Call of 11 December 2014

##### (i) TAG review and recommendation on solid minerals case study

23. The Chair summarized the revised TAG recommendation of 21 January on the solid minerals case study undertaken by Stephen Henley. He noted that there was consensus within the TAG to defer any changes to the UNFC-2009 publication (ECE Energy Series No. 42) based on the solid minerals case study and to monitor the issues raised in the case study as UNFC-2009 application is expanded beyond the current aligned systems (CRIRSCO and PRMS). It was noted that the revised TAG review of the case study (both clean and track changes versions) had also been circulated.

24. The representative of the EC noted that the issue of competent person is very relevant in discussions at the EU level and urged that if there is any possibility to strengthen the wording in the UNFC this would be extremely useful at the EU level.

25. Following discussion, the Bureau supported the TAG recommendation.

26. The Bureau thanked and commended both Stephen Henley for the study and the TAG for its excellent review. The Chair noted that the review undertaken by the TAG demonstrated the need to have a fully functioning Technical Advisory Group.

##### (ii) TAG recommendation on draft Specifications for the Application of UNFC-2009 to Injection Projects for the Purpose of Geological Storage

27. The recommendation dated 27 January was circulated to the Bureau on 28 January. The Chair proposed that this be discussed under item 6.

##### (iii) Minutes of TAG call of 11 December 2014

28. The minutes of the TAG call of 11 December were circulated.

29. The TAG is reviewing its Terms of Reference and will revert to the Bureau with any proposals to amend them. The Bureau needs to report to the EGRC in April on the status of the TAG ToR.

30. The TAG responded to its first technical query received from an expert in India. The query related to the economic axis of UNFC. The TAG will develop a database of Q&As which will be posted to the UNFC web pages once there is a critical mass.

31. The Chair thanked the Chair of the TAG and the other members for their time and efforts.

## **Item 6. Update on application of UNFC-2009 to injection projects**

### Documentation:

- TAG Recommendation on the Specifications for the Application of UNFC-2009 to Injection Projects for the Purpose of Geological Storage
- Draft Specifications for the Application of UNFC-2009 to Injection Projects for the Purpose of Geological Storage

32. Task Force has been progressing well on development of Specifications for the Application of UNFC-2009 to Injection Projects for the Purpose of Geological Storage, the latest version of which was circulated to the Bureau by the Task Force Chair on 29 January. The TAG has reviewed the latest draft and prepared a recommendation which was circulated to the Bureau on 28 January.

33. The Chair of the Task Force advised that in its review, the TAG raised a number of issues and questions, three of which are still outstanding for the Task Force to reach agreement on:

(i) The TAG suggests that the terms “pore space” and “storage space” are too restrictive and may not embrace the full range of potential storage methods. This does not account for volumes that might be dissolved in aquifer water, be trapped by chemical reaction with minerals or absorbed onto the carbon in coal bed methane recovery methods.

(ii) It should be clarified throughout the document that the term “Screening Project” applies only to undiscovered reservoirs.

(iii) Generic Specification “T” now titled “Injection quantities that may not be stored” may be better termed “Quantities delivered for injection and storage that may not be stored”. This accommodates quantities delivered to the facility that are lost through leaks prior to injection and storage.

34. The Task Force Chair indicated that the Task Force prefers to resolve the issues raised by the TAG prior to circulating the final draft text to the Bureau. She advised that the Storage Space issue, in particular may take some time to resolve. The Task Force is divided on using the term “Storage Capacity” proposed by the TAG, as are other stakeholders and authors of storage atlases etc. It is not yet clear whether the document will be ready in time to submit for translation on 16 February. The Bureau advised the Task Force Chair to use simple language and provide a clear definition of what is meant by the term in a footnote. The use of simple language is important since the document will be translated into a range of other languages.

35. The representative of CRIRSCO drew attention to the definitions in Figure 3 on page 8 under the Supporting Explanation for G1, G2 and G3. He noted that the first paragraph states that “estimates are categorised as G1, G2 and G3” and the second paragraph states that the estimates “are usually categorised on the basis of three scenarios equivalent to G1, G1+G2 or G1 +G2+G3” and questioned whether both definitions can be included.

36. The Bureau reviewed the TAG recommendation of 27 January noting the TAG’s opinion that, if the three outstanding issues highlighted in para 33 are resolved, the final document should be approved by the EGRC as a valuable supplement to UNFC-2009 classification for fossil energy and mineral reserves and resources guidance. The Bureau supported the TAG recommendation.

37. The Chair thanked the Chair of the Task Force and the other members for their time and efforts.

#### **Item 7. Update on application of UNFC-2009 to nuclear fuel resources**

38. The Chair of the Uranium Task Force advised that work is progressing on the Guidebook for Application of UNFC-2009 to uranium and thorium projects. The draft text will be discussed in detail at a consultancy meeting organized by IAEA in Geneva, 27-28 April. Participation at this meeting is anticipated by experts from Argentina, Brazil, Cameroon, Malawi, Namibia, Nigeria, South Africa, Tanzania and United States. The Task Force Chair noted that the guidebook is currently running at over 100 pages so efforts will be made to remove any repetitive or redundant material. A first draft should be available by end March.

39. The Guidebook will include seven case studies, two of which will be issued as official documents for EGRC sixth session. An IAEA/UNECE UNFC training course in Egypt in October will focus on African case studies.

40. The Chair thanked the Chair of the Task Force and the other members for their efforts in progressing the Guidebook and developing the important series of case studies.

#### **Item 8. Update on application of UNFC-2009 to renewable energy resources**

##### Documentation:

- Minutes of Renewables Task Force Call of 28 November 2014
- Minutes of Renewables Task Force Call of 18 December 2014
- TAG Recommendation on the Generic Specifications for the Application of UNFC-2009 to Renewable Energy Resources
- Draft Generic Specifications for the application of UNFC-2009 to Renewable Energy Resources
- Feedback received during the Renewable Specifications Public Comment period (June-September 2014)

41. An overview of the work of the Renewables Task Force was provided. The Task Force continues to have regular calls and be extremely productive as highlighted by the minutes of the Task Force Calls of 28 November 2014 and 18 December 2014 circulated to Bureau members.

42. In cooperation with the TAG, the final draft of the generic renewables specifications has been prepared – this was circulated to the Bureau on 28 January together with the spreadsheet showing how the feedback received during the Public Comment period was addressed by the Task Force. Both will be turned into official documents for the EGRC Sixth Session.

43. The Task Force has also finalized the table of contents for the Commodity Specific Renewable Specifications. This document will be circulated to the Bureau.

44. The Bioenergy Working Group, which is led by Raffaella Cristianetti of DuPont and James Primrose of BP, is established and progressing well. In addition to frequent conference calls, the Working Group is organizing a workshop in Washington in the second half of February.



45. The Geothermal Working Group is now established and also progressing its work well under Gioia Falcone's leadership. The Working Group has a membership of 11 experts, who were selected through an open and transparent process. The Working Group has good cooperation with IGA and ESMAP (the Energy Sector Management Assistance Program is a global, multidonor technical assistance trust fund administered by the World Bank) and is planning to hold a Workshop with the support of ESMAP in Washington in early March.

46. Due to the volume of work, Task Force has agreed to put work on development of specifications for wind/hydro and solar on hold.

47. The TAG recommendations of 27 January on the Generic Specifications and the Table of Contents for the Commodity Specific Renewable specifications as circulated to the Bureau on 28 January were reviewed. Bureau members requested more time to review the documents. The agreed deadline for comments was 9 February.

48. The Chair thanked the Chair of the Task Force and the other members for their time and efforts.

#### **Item 9. Education and outreach**

Documentation: List of Conferences Promoting UNFC in 2014 & 2015 (as at 26 Jan 2015)

49. The Chair drew attention to the list of events in 2015 circulated prior to the call. The Communications Sub-Committee met on 18 December 2014 and then again on 29 January 2015. The CSC has prepared its annual report on its activities for submission to the EGRC.

50. The Chair provided an overview of the UNFC Workshop held in New Delhi, India on 10 January 2015. The Chair delivered all the presentations. There was good participation by some 50 Indian experts, largely from the oil and gas sector. The Managing Director of ONGC presented certificates to attendees at the end of the event.

51. Attention was drawn to a number of UNFC workshops being planned in 2015:

- SOCAR plan to organize a national workshop in Azerbaijan
- Cuba hopes to organize a national workshop in Havana with financial support from NORAD
- UNFC Workshop, Geneva, 28 April
- Train the Trainers Workshop, Geneva, 30 April
- UNFC and Renewables Workshop, Geneva, 14 October
- IAEA and UNECE regional training workshop, Luxor, Egypt, October
- CCOP is planning two UNFC-related events in 2015, the first of which will be in April.

52. The Chair thanked the Communications Sub-Committee for its time and efforts.

#### **Item 10. Any other business**

(i) Update on work on Environmental and Social Guidance

Documentation: Revised Terms of Reference for the E-axis Sub-Group

53. The revised version of the Terms of Reference for the Environmental and Social Sub-group was circulated to the Bureau on 28 January. The Chair of the Sub-group has looked to

incorporate all the feedback to date from Bureau members in this revised text. The Chair of the Sub-group is also finalizing a detailed background paper for the Phase 2 Sub-Group members.

54. There were no additional comments on the Terms of Reference and it was agreed that they will be submitted to the EGRC Sixth Session for approval.

55. The Chair noted that the President of the International Council on Mining and Metals (ICMM), Anthony Hodge, has agreed to join the Phase-2 Sub-group in view of the importance ICMM places on environmental and social issues. The CRIRSCO representative was thanked for his assistance in securing the engagement of Mr. Hodge.

56. The Chair thanked the Chair of the Sub-group and the members of both Phase I and II of the Sub-group for their hard work and time.

(b) Minventory Project

57. The representative of the European Commission advised that the Minventory Project is nearing completion. The results of the project will be published online and a database will be prepared. She drew attention to a key finding of the project that reporting standards for solid minerals vary significantly across EU Member States and a number of countries do not have any standards at all. There is also a lack of data in a number of countries. The EC representative agreed that a presentation on the findings of the Project would be delivered at the EGRC sixth session.

**Item 11. Timing of next meeting**

58. The next Bureau call will be held during the last week of February 2015. An availability message will be circulated as per usual practice.

59. It is proposed to hold a call early to mid-April to finalize preparations for the EGRC Sixth Session.

60. A meeting of the Bureau will be organized over dinner on Wednesday 30 April after the cocktail reception. Additional meetings of the Bureau will be organized during the EGRC Sixth Session as may be needed.

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