Organisation for Economic Co-operation and Development Nuclear Energy Agency WPEC 2016 Meetings

Agenda

SG-38

OECD Headquarters Conference Center2 Rue André Pascal, Paris 75016

Room CC 18

Starting at 09:00 am - Ending at 06:00 pm

Please note: Only registered participants with a valid ID card or passport will be allowed access to OECD premises.

Monday, May 9, 2016		
Room CC 18		
9:00 – 9:30	 Introduction What has SG38 accomplished, and what still needs to be accomplished before closing out the subgroup? Proposed path forward (new subgroup proposals to pick up where SG38 leaves off) 	Dennis P. MCNABB
9:30 – 10:00	Summary of LLNL/LANL/ORNL/ANL discussions. - Reasonable time slot to make these teleconferences work for participants from outside the US?	Caleb MATTOON
10:00 – 10:45	 Top-level hierarchy requirements Discussion / feedback on the requirements document. Review recent changes to the document. Highlight any changes to be made before finalizing the document and including it in the final report. 	David BROWN
10:45 – 12:00		Bret BECK
12:00 – 13:30	Lunch Break	

13:30 – 14:30	 Specifications for Particle Properties Database Discussion / feedback on the document, review recent changes and go over example. What still needs to be done before the document is ready to be finalized and included in the final report? Summary and discussion of recent proposal by A. Hurst (ENSDF evaluator, Lawrence Berkeley N.L.) for reorganizing the ENSDF format in XML. 	Caleb MATTOON
14:30 – 15:30	 General Purpose Data Containers requirements and specifications Review recent changes to the specifications document, including examples from GND-1.7 (and counterproposals if available) Discussion: how will I/O routines be implemented by different institutions? Pseudo-code examples showing how to interact with each data container would be very useful. Are further changes to requirements/specifications needed before publishing the document with SG38 report? Topics to be covered during this section: Storing 1-d functions (e.g. cross sections), single region vs. multiple regions Angular probability distributions stored as Legendre 	Jeremy Lloyd CONLIN and Bret BECK
	expansions, as tables of mu, P(mu), or as a combination of Legendre and tables - Uncorrelated energy/angle distributions Double-differential distributions, stored either as pointwise or as Legendre expansions	
15:30 – 16:00	Coffee Break	
16:00 – 18:00	Continue General Purpose Data Containers discussion	

Tuesday, May 10, 2016			
	Room CC 18		
9:00 – 10:45	- Top-level hierarchy specifications	David BROWN	
	 Summarize the status of the specifications document. Some parts of the format are fully specified, but other important parts remain unwritten. Whose input do we need to complete unspecified parts of the format? When will the document be complete? Discussion: should the specifications document be included in the final SG38 report, even if it is incomplete? Possible advantage of releasing the existing specifications document: the format becomes more of a concrete product, so codes can start focusing on implementation. Also discuss when each institution expects to start adding GND support to their codes, how much time and effort they expect the transition to take, and potential obstacles that future WPEC sub-groups could help overcome. 		
10:45 – 11:00	Coffee Break		
11:00 – 12:00	 Concluding discussion Review status: what work still must be completed before finishing SG38? Make writing assignments for remainder of Tuesday + Wednesday. Review proposals for new subgroups (to be submitted at the main WPEC meeting on Thursday/Friday). - Closing statements 	Dennis P. MCNABB	
12:00 – 14:00	Lunch Break		
	Tuesday, May 10, 2016 Room MB2022		
	(Marshall Building)		

14:00 – 15:30	Writing session: SG38 moves to the smaller conference room after lunch on Tuesday. Members are invited to continue working, although we realize that many will need to attend other SG meetings as well. The primary emphasis Tuesday afternoon and Wednesday will be on writing, in order to comple the requirements documents and as much as possible of the specifications documents (see page 6 for an overview of documents). Along with a summary document, these will make up the final report for SG38. Once documents are finalized, this time may also provide an opportunity to work together implementing simple codes to read and write data in the new format.	
15:30 – 16:00	Coffee Break	
16:00 – 18:00	Writing session	

Wednesday, May 11, 2016 Room MB2022		
(Marshall Building)		
9:00 – 10:30	Writing session	
10:30 - 11:00	Coffee Break	
11:00 – 12:00	Writing session	
12:30 – 13:30	Lunch Break	
13:30 – 15:30	Writing session	
15:30 – 16:00	Coffee Break	
16:00 – 18:00	Writing session	

Participants in SG-38 Meeting (May 4, 2016)

#	SG-38 Participants
1	Dr Michal Wladyslaw HERMAN
2	Mr Oscar CABELLOS DE FRANCISCO
3	Bret BECK
4	Dr Andrej TRKOV
5	Dr Jeremy Lloyd CONLIN
6	Mr Dennis P. MCNABB
7	Fausto MALVAGI
8	Dr Oleg T. GRUDZEVICH
9	Caleb MATTOON
10	Dorothea WIARDA
11	David BROWN
12	Dr Mark CHADWICK
13	Dr Danila ROUBTSOV
14	Dr Osamu IWAMOTO
15	Mr Kenji YOKOYAMA
16	Dr Morgan C. WHITE
17	Dr Mireille COSTE-DELCLAUX
18	Luca FIORITO
19	Dr Wim HAECK
20	Mr Michael DUNN
21	Dr Cedric JOUANNE
22	
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Status of Requirements and Specifications documents:

Particle database: requirements and specifications are combined in a single document. The document seems to be stable, with no major changes since the May 2015 SG38 meeting. However, some questions are still unanswered and need some further discussion.

General-purpose data containers: requirements and specifications are combined in a single document. The requirements are mostly complete, but the specifications are out of date and need to be reviewed. We have multiple competing proposals for some sections of this document.

Top-level hierarchy requirements: mostly complete, thanks especially to major effort by D. Brown. The document lists out the kinds of data that must be supported by the new format, and suggests guidelines for how those data should be organized. Remaining work: search for all occurrences of 'FIXME' and 'Discussion point' to see if questions are still unanswered or if additional work is needed. Also check for consistency between figures and text (some figures may be old and not reflect the latest text).

Top-level hierarchy specifications: still lots of work to be done here. This document needs to give explicit details about how data will be organized in the new format, and what child elements and attributes are allowed or required at each level of the hierarchy. Some sections of this document are nearly complete, but other sections still need lots of effort, including:

- all of section 2.1 (specifications for 'documentation' and 'functionDef' sections, hyperlinks and reaction designations).
- section 3.2 (the 'metaEvaluation')
- section 3.3 and large portions of section 11 (describing covariance matrices)
- section 5 resonances, partly complete but needs more work.
- sections 8.2 and 8.3 need review, only partly complete. Thermal neutron scattering sections still TBD
- section 9: need definition of kinematic types (two-body, uncorrelated, correlated, etc.). Also, there are two proposals for handling reactions that produce more than one of the same particle (i.e. fission neutrons and capture gammas), may need to document both proposals.
- section 10: still TBD
- section 11 (covariances): partly complete, needs more work.
- sections 12 and 13 (special cases like photo-atomic data, fission product yields, thermal neutron scattering, etc.): still TBD.