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Title:	Report on Foreign Travel to Ljubljana, Slovenia for participation in the 2025 International Criticality Safety Benchmark Evaluation Project (ICSBEP) Technical Review Group (TRG)
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Los Alamos NATIONAL LABORATORY

Memorandum

To: Dr. Angela Chambers, Nuclear Criticality Safety Program Manager, National Nuclear Security Administration / NA-ESH
Thru: Joetta Goda, LANL NCSP Task Manager
From: John D. Bess, NEN-2
Symbol: NEN-2:25-013
LA-UR-25-#####
Date: April 21, 2025

Subject: Report on Foreign Travel to Ljubljana, Slovenia for participation in the 2025 International Criticality Safety Benchmark Evaluation Project (ICSBEP) Technical Review Group (TRG)

Meeting Details

Attendees on behalf of NCSP from LANL

Kelsey Amundson, John Bess, Peter Brain, Joetta Goda, Jesson Hutchinson, Cole Kostelac, Geordie McKenzie, Alex McSpaden, David Shepherd, Kristin Stolte, and Nick Whitman attended in person.

Jeff Favorite, Miriam Kreher, Zach Lemke, and Akito Oizumi (JAEA Guest Scientist at LANL) attended remotely from LANL for select benchmark reviews.

Meeting Title

2025 Meetings of the ICSBEP, IRPhEP, SFCOMPO Technical Review Groups and the SINBAD Task Force

- ICSBEP = International Criticality Safety Benchmark Evaluation Project
- IRPhEP = International Reactor Physics Experiment Evaluation Project
- SFCOMPO = International Assay Data of Spent Nuclear Fuel Database
- SINBAD = Shielding Integral Benchmark Archive and Database

Meeting Location

Jožef Stefan Institute (JSI)
Reaktorski center Podgorica, Brinje 40, 1262 Dol pri Ljubljani, Ljubljana, Slovenia

Meeting Dates

April 14-18, 2025

Meeting Objective

The meetings provided a forum for the review of ICSBEP, IRPhEP, SINBAD, and SFCOMPO evaluations by a Technical Review Group (TRG) comprised of international experts.

Purpose of Travel

Attendees from Los Alamos National Laboratory (LANL) traveled from the US to Slovenia to attend the meetings in-person at the Jožef Stefan Institute. They were invited to serve on the TRG to review submitted benchmark evaluations prior to their approval for publication in the ICSBEP Handbook.

Kelsey AMUNDSON presented as the evaluator for HEU-MET-FAST-106, “Cerberus: A Zeus Configuration with HEU and Copper Reflected by Copper”. Zach LEMKE is the co-evaluator and provided remote support; Theresa CUTLER was the internal reviewer.

John BESS and David SHEPHERD presented as the evaluators for PU-MET-FAST-050, “The Jupiter Experiments: High-240 Plutonium Metal Plates Separated by Lead and Reflected by Copper”. This benchmark represents a collaborative effort between NCERC and NCS at LANL. Akito OIZUMI provided remote support and served as Independent Reviewer, along with Masahiro FUKUSHIMA as part of collaboration on this project with JAEA.

Peter BRAIN is currently working on the DEIMOS and THETA benchmark evaluations for submission within the next two years.

Joetta GODA manages the experiment and benchmark activities at LANL and ensures that NCERC efforts are credited appropriately.

Jesson HUTCHINSON is an expert on subcritical benchmarks. He is providing mentoring on the MUSIC and NeSO subcritical benchmarks and the TRG reviewer for the LLNL and SPR/CX subcritical benchmark.

Cole KOSTELEC is performing work focused on reactor measurements such as would be contributed to IRPhEP and is designing the molybdenum-sensitive experiment (MOBY DICK) which he will evaluate for a future meeting. He also participated in the LANL subcritical measurements at SPR/CX similar to those evaluated by LLNL.

Geordie McKENZIE is the internal reviewer for the Godiva benchmark revision to be submitted next year. He also participated in the LANL subcritical measurements at SPR/CX similar to those evaluated by LLNL and provided expert review of

Alex McSPADEN participated as the internal reviewer for PU-MET-FAST-050. He submitted the original Jupiter benchmark and is currently leveraging his prior experience with the MUSIC critical experiment as an evaluator of the MUSIC subcritical benchmark. He is also a co-evaluator of the PFUNS benchmark evaluation for future submission.

Kristin STOLTE submitted the Flattop benchmark last year and is currently working on the DEIMOS and THETA benchmarks for submission within the next two years.

Nick WHITMAN is performing work focused on reactor measurements such as would be contributed to IRPhEP.

Meeting Benefits to the NCSP

Out of the ten ICSBEP evaluations presented, there were two criticality-alarm/shielding benchmarks, two fundamental physics benchmarks, and six criticality benchmarks.

Of the ten benchmarks, six were supported either fully or in part by the Nuclear Criticality Safety Program (NCSP):

- three criticality benchmarks were performed at the National Criticality Experiments Research Center (NCERC),
- one criticality benchmark and one fundamental physics benchmark were performed at the Sandia National Laboratories (SNL) SPR/CX Facility, and
- one fundamental physics benchmark was performed at Lawrence Livermore National Laboratory (LLNL).

As described in the US DOE NCSP Mission and Vision, Five-Year Execution Plan, and CEdT Manual, the ICSBEP remains an important element of information preservation and dissemination. The meeting also allows a forum that fosters international collaboration between attendees.

Meeting Summary

Monday, April 14, 2025 (SINBAD Task Force Meeting)

- This meeting was led by the OECD/NEA Secretariat, Oliver Buss, and the SINBAD Chair, Thomas Miller (ORNL). The welcome/introductions were followed by an update on activities since the prior meetings.
- A key move in SINBAD activities is to use GitLab to host benchmark evaluations and data to enhance collaborative activities in review and dissemination of data more efficiently. A concern was brought up regarding the vetting of scripts developed for code processing for cybersecurity. The OECD/NEA runs codes in a segregated sandbox environment to protect their systems; the current thought is that users of SINBAD GitLab data would perform their own cybersecurity reviews.
- A new activity within SINBAD was driven by user requests at a recent SATIF (Shielding aspects of Accelerator, Targets, and Irradiation Facilities) to also develop numerical benchmarks that allow for code-to-code comparison amongst the community.
- With increasing interesting in shielding type benchmarks, the current SINBAD Task Force (TF) has received approval to be upgraded to TRG status and is actively developing an official mandate.
- The status of various ongoing and future shielding benchmarks was presented and discussed.

Tuesday, April 15, 2023 (SFCOMPO TRG)

- This meeting was led by the OECD/NEA Secretariats, Oliver Buss and Julie Sprenger, and the SFCOMPO Chair, Germina Procop (ORNL). The welcome/introductions were followed by an update on activities since the prior meetings.

- The SFCOMPO database is to also be modernized following the example of SINBAD in moving to a GitLab environment. Updates to SFCOMPO are currently performed with coupled Excel spreadsheets. Movement to a GitLab repository will increase efficiency and reduce the time burden on NEA staff. The NEA is starting an initiative, AIxpertise (AI platform for nuclear research and education), to investigate the impact of AI (artificial intelligence) and ML (machine learning) upon scientific computing in nuclear engineering. GitLab databases are more usable within AI/ML environments. The primary goal of the NEA is to make all data FAIR (findable, accessible, interoperable, and reusable). A decision will be made in two months regarding the move of the SFCOMPO database to GitLab.
- The status of various SFCOMPO benchmark activities were discussed, with four benchmark reports currently undergoing the final NEA publication process.
- There is growing interest in having benchmarks that support decay heat validation. An ongoing SFCOMPO action is investigating the possibility to evaluate BWR and PWR samples.

Wednesday, April 16, 2025 (IRPhEP TRG Meeting)

- This meeting was led by the OECD/NEA Secretariat, Ian Hill, the IRPhEP Chair, Mark DeHart (INL), and Vice-Chair, Laurent Buiron (CEA). The welcome/introductions were followed by an update on activities since the prior meetings.
    - Both DeHart and Hill have announced that they will be vacating their positions within the next two months.
- École Polytechnique Fédérale de Lausanne (EPFL), the Swiss Federal Technology Institute of Lausanne, presented a benchmark on intra-pin reaction rate experiments in CROCUS. These and other experiments are of interest for future collaboration in developing measurement capabilities at NCERC. The benchmark was accepted for publication and a subgroup was formed to support its final review pending resolution of comments provided. Nick Whitman provided expert unput regarding this evaluation.
- The status of various ongoing and future reactor physics benchmarks was presented and discussed.
- A lunchtime presentation was provided by Nick Woolstenhulme (INL) regarding a proposed horizontal split table (HST) funded by the DNCSH (DOE/NRC Collaboration for Criticality Safety Support for Commercial-Scale HALEU for Fuel Cycles and Transportation) to be built and operated at Idaho National Laboratory (INL).

Wednesday, April 16, 2025 (ICSBEP TRG Meeting)

- This meeting was led by the OECD/NEA Secretariat, Ian Hill, and the ICSBEP Chair, Catherine Percher (LLNL). The welcome/introductions were followed by an update on activities since the prior meetings.
    - The prior Vice Chair, BJ Marshall (ORNL), had stepped down. Two new co-Vice Chairs were announced: Mathieu Dupont (ORNL) and Luke Yaraskavitch (CNL)
    - Kelsey Amundson (LANL) will be taking a leave of absence from LANL to become the new NEA Secretariat for ICSBEP.
- The first evaluation discussed was PU-MET-FAST-050, a Jupiter Pu/Pb experiment, with higher ^{240}Pu content, **performed at NCERC** in collaboration with JAEA. Various

comments were provided requesting simultaneously to make the evaluation both longer and shorter. A small subgroup was formed, and the benchmark was approved for publication pending resolution of the comments provided per subgroup satisfaction. Mariya Brovchenko from ASNR, the Nuclear Safety and Radiation Protection Authority in France, has provided MORET sample calculations to be included in the benchmark.

- The next evaluation was HEU-MET-FAST-106, the CERBERUS experiment with HEU/Cu that was **performed at NCERC**. Its review was completed in record time and passed without needing a subgroup.

Thursday, April 17, 2025 (ICSBEP TRG Meeting)

- The morning began with FUND-SNL-U-HE3-MULT-001, a LLNL evaluation **performed at SPR/CX**. A lively discussion ensued that benefitted from the expertise driven by both LANL and EPFL measurement experts. The key concern was the suitability of the methodology at the measured multiplications and that additional methods should be used to support both the determination of the benchmark quantities and the uncertainty and bias analyses. A sizeable subgroup was established to ensure benchmark suitability as a contingency to its approved publication. This benchmark, like others with the same fuel, is very sensitive to the uncertainty in the UO_2 stoichiometry of the 7uPCX fuel at SNL. The benefit of performing a characterization of this fuel was reiterated.
- The next evaluation was LEU-COMP-THERM-112, a SNL evaluation **performed at SPRC/CX** using 7uPCX fuel with tantalum rods for nuclear data validation. This evaluation was a relatively smooth review discussion and passed without needing a subgroup. Peter Brain (LANL) was asked to run calculations using the new ENDF/B-VIII.1 tantalum cross sections for inclusion in the evaluation.
- Lunch was followed by FUND-LLNL-DT-H2O-PNDA-001 **performed at LLNL**. The discussion included various questions and discussions to improve the quality of the evaluation. A small subgroup was formed, and the benchmark was approved for publication.
- The last benchmark for the day was HEU-MET-FAST-107, provided by a student from the University of Tennessee, Knoxville, for HEU metal annuli surrounded by thick graphite reflectors historically performed by John Mihalczo (ORNL). A lot of discussion ensued with even more constructive comments provided. A subgroup including Bess, Favorite, and McKenzie (LANL) was formed to support continued work on this benchmark; however, the benchmark was deferred for review at the TRG meeting next year. The evaluator desires to successfully complete their benchmark despite their upcoming graduation.

Friday, April 18, 2025 (ICSBEP TRG Meeting)

- The morning sessions consisted of the evaluations of ALARM-CF-PTFE-SHIELD-001 and ALARM-CF-AL-SHIELD-001, fast neutron leakage measurements with the activation of polytetrafluoroethylene (PTFE) and aluminum, respectively, that were performed at the Research Centre Rez in the Czech Republic. Comments were provided on both and they were both approved for publication with small subgroups. Brain (LANL) was asked to run calculations PTFE using the new ENDF/B-VIII.1 fluorine cross sections for inclusion in the evaluation.

- A lunch presentation was provided by EPFL regarding BLOOM pile-oscillation measurements performed as a follow-up to the PETALE critical experiments at the CROCUS reactor. These measurements measure reactivity flux, local flux perturbation, and sample activation using an array of 160, millimeter-scale, MiMi neutron detectors mapping the core couple with their SAFFRON detector used for local measurements via nine additional MiMi detectors. A total of 25 materials (40 samples) are measured, which includes Fe, Ni, Cr, 304L steel, Si, Mn, Mo, V, Zn, W, Ta, Y, 316 steel, Inc-800, Au, D_2O, H_2O, ^{6}Li, and ^{10}B. There was much interest expressed from the community regarding the successful measurements, and hopefully soon, f a benchmark evaluation of these experiments will be submitted.
- The next evaluation was IEU-COMP-THERM-007, an evaluation by ORNL of the Brazilian IPEN/MB-21 reactor after its conversion to U_3Si_2-Al (19.75 wt.% ^{235}U/U) fuel plates. Discussion comments were provided to improve benchmark quality; many useful comments were provided by Brain. Ultimately the TRG recommended that the benchmark be improved and resubmitted next year for consideration.
- The final evaluation was HEU-MET-THERM-038, a LLNL evaluation of TEX-CI **performed at NCERC**. Numerous useful comments were provided by LANL and other TRG participants during a lengthy discussion. It passed with a large subgroup. Voting occurred after LANL, and more than half the TRG participants, needed to leave to catch a bus back to the city.

Closing Discussion

- The date and location for next year's TRG was brought up.
    - ~20 benchmarks are currently proposed for next year, which impacts the co-location of all TRG meetings. Overlap exists with IRPhEP for some evaluations.
    - Possible dates and locations for 2026:
        - OECD/NEA in Paris, France the week of April 13th
        - JAEA in Tokai or Mito, Japan the week of April 27th
            - Tour STACY (Static Experiments Critical Facility)
        - EPFL in Switzerland in April
            - Tour CROCUS Facility
    - Possible locations for 2027 or 2028
        - EPFL in Switzerland in April
        - JAEA in Tokai or Mito
        - **Las Vegas hosted by LANL**
            - **Tour of NCERC Facility**
    - A survey will be distributed to discuss location, dates, and other logistics.

Additional Optional Activities

- Excursions
    - Sunday, April 13, 2025: Meeting participants had the opportunity to collaborate, and team-build with international colleagues during a tour of the Postojna Cave and Predjama Castle. This tour included discussions of local history, culture, language, and cuisine.
    - Friday, April 18, 2025: Meeting participants had the opportunity to participate in a walking tour of downtown Ljubljana and see the Ljubljana Castle after the

technical reviews. This tour included discussions of local history, culture, language, and cuisine.

- Git and GitLab Hands-On Tutorial
  - Breakout sessions were provided the afternoons of Monday, April 14 and Tuesday, April 15, 2025, for NEA Git and GitLab training. With the movement of the OECD/NEA to open use of GitLab repositories for benchmark data, this session was helpful for participants not as familiar with its capabilities.

- Technical Tour
  - Tours of the JSI reactor facility and hot cells were provided the afternoons of Tuesday, April 15 and Wednesday, April 16, 2025. These tours provided opportunities for technical discussions and nuclear history education.

- No-Host Dinner
  - Wednesday evening, April 16, 2025: Meeting participants took a mid-week moment to share company and (attempt) to take a break from technical discussions during a no-host dinner at the Gostilna na Gradu in the Ljubljana Castle.

Attachment(s): Meeting Agendas

Copy: Doug Bowen, ORNL, bowendg@ornl.gov
Johnna Marlow, LANL, jmarlow@lanl.gov
John Miller, SNL, millerj@sandia.gov

Overview of the schedule of the week

	Sun 13 April	Mon 14 April	**Tue 15 April**	Wed 16 Apr	Thu 17 Apr	Fri 18 Apr
Morning		SINBAD Task Force – Annual Review Meeting 2025	**SFCOMPO-TRG**	IRPhEP TRG	ICSBEP TRG	
Afternoon	Excursion			IRPhEP TRG/ ICSBEP TRG		
		Optional: Git and GitLab Hands-On Tutorial	Optional: Git and GitLab Hands-On Tutorial	Technical Tour		
Evening				No-host dinner		

Monday, April 14: SINBAD

Agenda Item	Start Time [CEST]	Topic	Speaker	Duration (incl. discussion)
	08:45	Welcome and connection check for remote participants		
1	**09:00**	**Welcome and Introduction of participants**	**Chair/ Secretariat**	**00:15**
2	**09:15**	**Opening Formalities**		**00:10**
		- Adoption of the Agenda	Chair	
		- Actions from previous meeting	Secretariat	
3	**09:25**	**Updates from the Secretariat** - Establishment of a SINBAD TRG - Release of SINBAD V2 - Proposal of Aixpertise platform	**Secretariat**	**00:15**
4	**09:40**	**SINBAD Updates since previous meeting** - Process Updates - Major and minor dataset maintenence efforts - Status of maintenance subgroups (AEEW Cranked Duct, KFK N-Gamma, FNG-Copper, LLNL Spheres)	**Chair/ Secretariat**	**00:30**
5	**10:10**	**Session on new benchmark developments**		
5.1	10:10	The FNG Helium Cooled Lead Lithium (HCLL) benchmark	P. Ortego, SEA	00:20
	10:30	COFFEE BREAK & Group Picture		00:30
5.2	11:00	Experiments at the Oak Ridge National Laboratory (ORNL) Health Physics Research Reactor (HPRR)	M. Dupont, ORNL	00:30
5.3	11:30	Experiments at the Research Centre Rez	M. KOSTAL, REZ	00:30
5.4	12:00	Application of a Polaris/PARCS/Serpent vessel fluence calculation methodology to the Turkey Point 3 reactor	D. Timpano, M. Hursin, EPFL	00:30
	12:30	LUNCH		01:00
5.5	13:30	Overview on CERN shielding benchmark activities	R. Froeschl, CERN	00:30
5.6	14:00	Status of SINBAD Benchmarks ACC-ATN-BLK-STR-PNT-005-N-CERF and FUS-SDR-BLK-STR-PNT-001-DPR-FNG-ITER-Dose-Rate-Experiment-fng_dose	D. Tommaso, CERN	00:30
5.7	14:30	HB Robinson & TVA WB1 Benchmarks	K. Ivanov, NCSU A. Alpan, ORNL	00:30
5.8	15:00	SINBAD Benchmarks at TerraPower	R. Migliore, TerraPower	00:20
5.9	15:20	SATIF Numerical Intercomparisons	Y. Senel, O. Buss, NEA	00:20
	15:40	COFFEE BREAK		00:30
6	**16:10**	**Review of the SINBAD process** - Machine Readable Data Format - Options/Architectures - Round table discussion		***00:45***

Agenda Item	Start Time [CEST]	Topic	Speaker	Duration (incl. discussion)
7	**16:55**	**Mandate discusion** - Establishing a SINBAD TRG		***00:20***
8	**17:15**	**Closing**		**00:30**
		- List of Actions	NEA Secretariat, All	
		- Date and place of next meeting	All	
		- Any other business	All	
		- Closing remarks	Chair	
	17:45	End of Meeting		

Tuesday, April 15: SFCOMPO

ID	Time (CEST)	Topic	Speaker	Duration
	08:50	Welcome & connection checks		00:10
1	09:00	Opening session & administrative items		00:30
		Welcome and practicalities	Oliver Buss (NEA)	
		Welcome, opening remarks	Germina Procop (chair)	
		Self-introduction of participants	All	
		Adoption of the agenda	Oliver Buss (NEA)	
		Approval of the summary record of previous meeting	Oliver Buss (NEA)	
		Review of actions from the previous meeting	Germina Procop (chair)	
2	9:30	SFCOMPO modernization		02:00
2.1	9:30	Database maintenance and distribution Overview other NEA database projects NEA efforts towards FAIR data Continuous testing & integration	Oliver Buss (NEA)	00:45
	10:15	Coffee break		00:15
2.2	10:30	SFCOMPO data management proposal	Julia Sprenger (NEA DB)	00:30
2.3	11:00	TRG feedback on proposed modernization; Q&A's	All	00:45
3	11.45	Other efforts of relevance to SFCOMPO		00:50
3.1	11:45	ML-informed investigation of reported power and void fraction adequacy for BWR spent fuel data evaluations	Ugur Mertyurek (ORNL)	00:30
3.2	12:15	Eurad-2 WP17 Task 6: Experimental basis for validation of depletion and criticality codes for post-closure criticality safety (PCCS)	Anna Alvestav (SKB)	00:20
	12:35	Lunch		01:00
4	13:40	SFCOMPO evaluation effort		02:10
4.1	13:40	TRG approval of Ariane BM1 draft evaluation report	Germina Procop (chair)	00:10
4.2	13:50	Fukushima Daini Fukushima 8x8-2 1 & 2 cycles draft evaluation: status and TRG feedback		01:00
4.3		Recap of previous actions – reviews, revisions, discussions	Germina Procop (chair) Ugur Mertyurek (ORNL) Alain Rivada Rodriguez (ENRESA) Pedro Ortego (SEA)	
4.4		TRG review comments to last draft revision, path forward	All	
4.5	14:50	Fukushima Daini 8x8-4 assemblies 2F2D3 & 2F2D8 draft evaluation: status	Pedro Ortego (SEA)	00:15
4.6	15:05	Ariane BM5 draft evaluation: status and independent review	Pedro Ortego (SEA) Pablo Romojaro (SCK)	00:15
4.7	15:20	Approved evaluation reports: publication & PRG review status	Oliver Buss (NEA)	00:10
	15:30	Coffee break		00:15

ID	Time (CEST)	Topic	Speaker	Duration
5	15:45	SFCOMPO evaluation guidance		01:00
5.1	15:45	Executive summaries: discussion of feedback from Task force on guidance	All	00:30
5.2	16:15	Feedback and endorsement by the TRG of previously discussed updates recommended by the Task Force on guidance (review checklist, reviewers' roles and responsibilities); other suggestion for guidance updates and evaluation considerations	All	00:30
6	16:45	Updates on ongoing SFCOMPO action & and related efforts		00:45
6.1	16:45	Outlook of future data addition to SFCOMPO database: RCA, decay heat	Germina Procop (chair)	00:15
6.2	17:00	Effect of operator vs. adjusted burnup on predicted nuclide concentrations: validation based on North Anna RCA data	Germina Procop (ORNL)	00:15
6.3	17:15	Fast spectrum decay heat measurements	Christopher Keckler (TerraPower)	00:15
7	17:30	Update of SFCOMPO Mandate	Oliver Buss (NEA)	00:10
8	17:40	Closing session		00:20
		Next meeting	Oliver Buss (NEA)	
		Any other business	All	
		Review of actions	Oliver Buss (NEA)	
		Closing remarks	Germina Procop (chair)	
9	18:00	End of meeting		

Wednesday, April 16: IRPhEP

Wednesday, 16th April 2025 (IRPhEP)			
Agenda Item	**Start Time (Duration)**	**Topic**	**Speaker**
Welcome and Updates			
1	8h30 (10 min)	Welcome & Introduction	NEA Secretariat, Vice-Chair, Chair
2	8h40 (10 min)	Self-introduction of Participants	All
3	8h50 (5 min)	Adoption of the Agenda	Chair
4	8h55 (20 min)	Update from the Secretariat • Handbook Updates	NEA Secretariat
Review of New Evaluations			
5	9h15 (1h30)	CROCUS/NECTARE	M. Hursin (EPFL)
	10h45-11h00	*Coffee break*	
6	11h00 (30 min)	BERENICE/SEFOR	L. Buiron (CEA)
7	11h30 (30 min)	ZED2	J. Atfield (CNL)/L. Yaraskavitch
8	12h00 (30 min)	SPERT-III	D.Price, M. DeHart (INL)
	12h30-13h30	*Lunch break / Presentation on new Horizontal Split Table project development*	N. Woolstenhulme
Updates on Evaluations in Progress (ICSBEP may begin in parallel)			
9	13h30-15h00	MSRE	Z. Wu (VCU)
	15h00 (15 min)	*Coffee break*	
10	15h15 (30 min)	Potential CEFR Benchmark.	H. Xingkai
11	15h45 (30 min)	TVA-WB	K. Ivanov (NCSU)
12	16h15 (15 min)	MPCMIV	M. Avramova (NCSU)
13	16h30 (5 min)	Review of Actions	NEA Secretariat
14	(16h35 5 min)	Next Meeting	Chair
15	(16h40 5 min)	Closing Remarks	Chair and Vice-Chair
Close of Meeting			
Technical Tour Begins 16h45 (Tour option will also be available April 15th)			
19h00 External Dinner For TRG Participants (self-paid)			

Wednesday, April 16: ICSBEP

Duration	#	Time	Topic	Speaker
01:000		12:30	IRPhEP Lunch Talk: Plans for New Horizontal Split Table at Idaho National Laboratory	Nick Woolstenhulme
00:10		13:20	Welcome & connection checks	
00:30		**13:30**	**Opening session & administrative items**	
	1		Welcome and practicalities	Ian Hill (NEA)
	2		Welcome, opening remarks	C. Percher (chair)
	3		Self-introduction of participants	All
	4		Adoption of the agenda	Ian Hill (NEA)
	5		Approval of the summary record of previous meeting	Ian Hill (NEA)
	6		Review of actions from the previous meeting	C. Percher (chair)
			Review of new ICSBEP Evaluations	
01:45	7	14:00	**PU-MET-FAST-050:** The Jupiter Experiments: High-240 Plutonium Metal Plates Separated by Lead and Reflected by Copper	John Bess David Shephard
00:15		15:45	Coffee break	
01:45	8	16:00	**HEU-MET-FAST-106:** Cerberus: A Zeus Configuration with HEU and Copper Reflected by Copper	Kelsey Amundson Zach Lemke
		17:45	**Adjourn day 1**	

Thursday, April 17: ICSBEP

Duration		Time	Topic	Speaker
00:10		08:20	Welcome & connection checks	
		08:30	**Review of new ICSBEP Evaluations (ctd)**	
01:45	9	08:30	**FUND-SNL-U-HE3-MULT-001:** HiMu: High Multiplication Subcritical Measurements of Water-Moderated Square-Pitched Low-Enriched Uranium Dioxide Fuel Rod Lattices (Fundamental Physics Benchmark)	Jesse Norris
00:15		10:15	Coffee break	
01:45	10	10:30	**LEU-COMP-THERM-112:** Fully-Reflected Water-Moderated Triangular-Pitched U(6.90)O2 Fuel Rod Lattices with Central Tantalum Test Region	David Ames
01:00		12:15	Lunch	
01:45	11	13:15	**FUND-LLNL-DT-H2O-PNDA:** Pulsed-Neutron Die-Away Experiments with Water Targets (Fundamental Physics Benchmark)	Ruby Araj
00:15		15:00	Coffee break	
01:45	12	15:15	**HEU-MET-FAST-107:** High-Enriched Uranium (93.14) Metal Cylinders and Annuli of 15-inch Outer Diameter with 10-inch Graphite Reflectors	Katy Worrell
		17:00	**Adjourn Day 2**	

Friday, April 18: ICSBEP

Duration		Time	Topic	Speaker
00:10		08:20	Welcome & connection checks	
		08:30	**Review of new ICSBEP Evaluations (ctd)**	
01:45	13	08:30	**IEU-COMP-THERM-007:** Critical Core Loading Configuration of the IPEN/MB-01 Reactor with 19.75% Enriched U_3Si_2-Al Plate Type Fuel	Adimir dos Santos
00:15		10:15	Coffee break	
01:45	14	10:30	**HEU-MET-THERM-038:** TEX-Cl Assemblies: Highly Enriched Uranium Plates with Sodium Chloride Absorbers using Polyethylene Moderator and Polyethylene Reflector	Eric Aboud
01:00		12:15	Lunch	
01:45	15	13:15	**ALARM-CF-PTFE-SHIELD-001:** Fast Neutron Leakage and Spatial Distribution of Activation in a Polytetrafluoroethylene (PTFE) Block with a 252Cf (s.f.) Source in the Center	Michal Kostal
00:15		15:00	Coffee break	
01:45	16	15:15	**ALARM-CF-AL-SHIELD-001:** Fast Neutron Leakage and Spatial Distribution of Activation in a Aluminum Block with a 252Cf (s.f.) Source in the Center	Michal Kostal
00:15		**17:00**	**Closing session**	
00:05	17	17:00	Next meeting	C. Percher (chair)
00:05	18	17:05	Review of actions	Ian Hill (NEA)
00:05	19	17:10	Closing remarks	C. Percher (chair)
		17:15	**End of meeting**	

Note: The order of reviews was changed from the above to accommodate travel schedules of the presenters; evaluations numbered 15 and 16 were switched with 13 and 14, respectively.