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**NEA/SEN/SIN/IAGE/A(2016)1**

Organisation de Coopération et de Développement Économiques  
Organisation for Economic Co-operation and Development

**29-Mar-2016**

**English text only**

**NUCLEAR ENERGY AGENCY  
COMMITTEE ON THE SAFETY OF NUCLEAR INSTALLATIONS**

**Cancels & replaces the same document of 10 March 2016**

**Working Group on Integrity and Ageing of Components and Structures (IAGE WG)**

**39th MEETING OF THE INTEGRITY AND AGEING OF COMPONENTS AND STRUCTURES  
WORKING GROUP (WGIAGE)**

**OECD Conference Centre, Paris, France  
11-14 April 2016**

**JT03392885**

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**39<sup>th</sup> MEETING OF THE INTEGRITY AND AGEING  
OF COMPONENTS AND STRUCTURES WORKING GROUP (WGIAGE)**

**OECD Conference Centre  
2 rue André Pascal – 75016 Paris, France  
11-14 April 2016**

The 39<sup>th</sup> meetings of WGIAGE and its subgroups will be held on 11-14 April 2016 at the OECD Conference Centre, 2 rue André Pascal, 75016 Paris, France.

The WGIAGE meeting will begin at 13:00 hours on Wednesday, April 13 **in Room CC5 in the OECD Conference Centre** and is expected to finish by 16:30 hours on Thursday, April 14. The three sub-group meetings are in rooms CC5, CC7 and CC15 before WGIAGE meeting.

Delegates wishing to present papers, proposals, etc., are requested to transmit a copy of the paper to the NEA Secretariat (Olli Nevander and Olivia Stefanuto) **before 3 April 2016**, at the latest. Please note that due to the timing and location of this meeting the Secretariat cannot guarantee that copies will be available for distribution or in the working group webpage if received after this date. Alternatively, delegates are invited to bring 20 copies of documents with them for distribution at the meeting.

Delegates participating are advised that the security arrangements in force at the OECD include the obligation to present an identity document bearing a photograph. This document may be requested at the time of issuing delegates' cards for the meeting. It should also be presented subsequently together with the card every time OECD premises are entered from the outside. It is desirable that the delegates are aware of this requirement in order to avoid any difficulty in obtaining entry.

It is imperative that the names and addresses of designated participants be communicated to the NEA Secretariat as soon as possible, **but not later than 25 March 2016**.

Contact Information:

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*For information and planning*

<b>WGIAGE Concrete sub-group meeting</b>	<b>Monday, 11 April (10 am to 5 pm) - Tuesday, 12 April (9 am to 12)</b>	<b>OECD Conference Centre: Room CC5</b>
<b>WGIAGE Seismic sub-group meeting</b>	<b>Tuesday, 12 April (9 am to 5 pm) – Wednesday, 13 April (9 am to 11 am)</b>	<b>OECD Conference Centre: Room CC15 and CC5</b>
<b>WGIAGE Metal sub-group meeting</b>	<b>Monday, 11 April (start at 10 am) - Wednesday 13 April (end at 11 am)</b>	<b>OECD Conference Centre: Room CC7</b>
<b>WGIAGE Meeting</b>	<b>Wednesday 13 April (13:00 pm to 5:30 pm) - Thursday 14 April (9 am to 4:30 pm)</b>	<b>OECD Conference Centre: Room CC5</b>

<http://www.oecd-nea.org/download/iage>

**LOCATION OF THE MEETING**

The address is

OECD Conference Centre  
2 rue André Pascal  
75016 Paris, France

More information at [www.oecd.org/conferencecentre](http://www.oecd.org/conferencecentre)

**EQUIPMENT AVAILABLE FOR THE PRESENTATION**

The meeting room is equipped for overhead projection directly from a computer (available in the meeting room).

**TRANSPORTATION**

The OECD is close to metro, RER, Tram and bus lines. All information can be found at <http://www.oecd.org/conferencecentre> or at [www.ratp.fr](http://www.ratp.fr)

**ACCOMMODATION**

Participants have to make their own reservation.

A list of hotels is available at <http://www.oecd.org/conferencecentre>

**MATERIAL DISTRIBUTED PRIOR TO THE MEETING:**

All material sent to the secretariat before 3 April 2016 is available at <http://www.oecd-nea.org/download/iage> (NEA username and password required)

Note: Please delegates should be aware that before use in OECD computers the USB keys should be scanned by the dedicated computer in the Conference Centre.

## WGIAGE AGENDA 2016

The 39<sup>th</sup> WGIAGE Main Group meeting will begin at **Wednesday 13 April (13:00 pm to 5:30 pm) - Thursday 14 April (9 am to 4:30 pm) 2016 at the OECD Room CC5**. The following agenda for the meeting is proposed.

<p><b>1.0 Opening and introductory remarks</b></p> <p>1.1 Opening of meeting</p>	<p>WGIAGE Chairman J. Sievers</p>
<p><b>2.0 Adoption of the Meeting Agenda [NEA/SEN/SIN/IAGE/A(2016)1]</b></p> <ul style="list-style-type: none"> <li>• <b>Checking of the list of participants</b> (official representatives of countries should be indicated in the list)</li> </ul>	<p>NEA/O. Nevander</p>
<p><b>3.0 Approval of the 38<sup>th</sup> Meeting Summary Record [NEA/SEN/SIN/IAGE(2015)1]</b></p>	<p>NEA/O. Nevander</p>
<p><b>4.0 Report by Secretariat</b></p> <p>4.1 NEA general remarks</p> <p>4.2 Report on relevant NEA CSNI and CNRA activities (including especially CSNI projects and activities relevant to WGIAGE)</p> <p>4.3 Structure of WGIAGE webpages</p>	<p>NEA/O. Nevander</p>
<p><b>5.0 Long Term Operation (approval of the BTP report)</b></p> <p>5.1 Report: Results on questionnaire on Buried and Underground Tanks and Piping (BTP)</p> <p>5.2 Comments and conclusions of the BTP report</p>	<p>R. Tregoning-USA</p>
<p><b>6.0 Components and Structures under Severe Accident Loading (COSSAL)</b></p> <p>6.1 Status and schedule of the COSSAL activities</p>	<p>J. Sievers - Germany</p>
<p><b>7.0 Round table discussion</b></p> <p>All member countries are invited to present items of interest for R&amp;D related to (for example):</p> <p>7.1 Recent component failures or degradations, long-term operation and licence renewal issues of NPPs including components and structures of the spent fuel storages/pools</p>	<p>ALL</p>

7.2	Implementation of Fukushima lessons learned.	
<b>Report from Sub-Group Chairpersons</b>		
<b>8.0 Integrity and Ageing of Concrete Structures</b>		Concrete Sub-group Chair F. Tarallo
8.1	Report on the status of the programme of work	
8.2	Report on the new activities proposed and reports to be approved	
<b>9.0 Seismic Behaviour of Components and Structures</b>		Seismic Sub-group Chair P. Labbé
9.1	Report on the status of the programme of work	
9.2	Report on the new activities proposed and reports to be approved	
<b>10.0 Integrity of Metal Components and Structures</b>		Metal Sub-group Chair R. Tregoning
10.1	Report on the status of the programme of work	
10.2	Report on the new activities proposed and reports to be approved	
<b>11.0 Cooperation with other international organizations (JRC, IAEA, others)</b>		
11.1	IAEA Generic Ageing Lessons Learned Programme (IGALL) – Phase 2 Tasks and Working groups	R. Krivanek - IAEA
	<i>International organisations are invited to make a brief update about their current and planned activities accompanied by a tabled presentation to be distributed</i>	
<b>12.0 WGIAGE Planning</b>		WGIAGE Chairman
12.1	Review the current programme of work and proposals for new activities <i>Proposals for new tasks, workshops, etc., should be prepared in writing, with clear objectives and participation requirements and be distributed prior to the meeting. A proposal form, adopted by the CSNI PRG, is attached to this notification and should be used when submitting proposals.</i>	
12.2	Discussion on the WGIAGE Integrated Plan	
<b>13.0 Any other business</b>		
<b>14.0 Next Meeting (main agenda items, dates and places)</b>		
14.1	Discussion on the dates and schedule of next meeting on April 2017	
<b>15.0 Closure of meeting</b>		

## 21<sup>TH</sup> WGIAGE CONCRETE SUB-GROUP MEETING - TENTATIVE AGENDA

The 21th WGIAGE Concrete sub-group meeting will be held on Monday, 11 April at 10 am to Tuesday, 12 April (end at 12 am) 2016 at **the OECD Room CC5**. The following tentative agenda for the meeting is proposed:

<b>1.0 Opening and introductory remarks</b>	
<b>2.0 Adoption of the Meeting Agenda [NEA/SEN/SIN/IAGE/A(2016)1]</b>	NEA
<b>3.0 Approval of the 20<sup>th</sup> Meeting Summary Record [Appendix 2 of the NEA/SEN/SIN/IAGE(2015)1] and status of last meeting actions</b>	NEA/Y. Choi
<b>4.0 New CAPS proposals discussed during last meeting</b> 4.1 Preliminary CAPS proposal 2015 by GRS: Probabilistic Methods in Structural Analysis of Building Structures of Nuclear Facilities 4.2 Preliminary CAPS proposal 2015 by EDF for VERCORS tests	WGIAGE Concrete Sub-group Chair
<b>5.0 Round table discussion. Delegates are invited to present any development in programmes and policies, including presentations on items of interest</b> <i>(Please send your presentations in advance to the Secretariat, if any)</i> 5.1 Update on any development in programmes and policies in member countries	All
<b>6.0 Cooperation with other international organizations (EC, IAEA, others)</b> <i>(Please send your presentations in advance to the Secretariat, if any)</i>	IAEA, EC, ITER
<b>7.0 Improving Robustness Assessment Methodologies for Structures Impacted by Missiles (IRIS Phase 3)</b> 7.1 Report on the status and schedule of the programme of work	G. Hervé- France
<b>8.0 Assessment of Structures subject to Concrete Pathologies (ASCET)</b> 8.1 Approval of the report on ASCET phase I work 8.2 Scope and schedule of ASCET phase 2 benchmark	A. Blahoianu, N. Orbovic

**9.0 WGIAGE Concrete Sub-group Programme of Work**

9.1 New proposals to be discussed

*Proposals for new tasks, workshops, etc., should be prepared in writing, with clear objectives and participation requirements and be distributed prior to the meeting. A proposal form, adopted by the CSNI PRG, is attached to this notification and should be used when submitting proposals.*

9.2 Discussion of the Medium term strategy of the WGIAGE Concrete Sub-group and prioritisation of activities

WGIAGE Concrete  
Sub-group Chair

**10.0 Any other business**

**11.0 Closure of meeting**

## 21<sup>TH</sup> WGIAGE SEISMIC SUB-GROUP MEETING - TENTATIVE AGENDA

The 21<sup>th</sup> WGIAGE Seismic sub-group meeting will be held on Tuesday, 12 April (9 pm to 5 pm) at the **OECD room CC15** and on Wednesday, 13 April (9 am to 11:30 am) at **Room CC5**. The following tentative agenda for the meeting is proposed:

<b>1.0 Opening and introductory remarks</b>	WGIAGE Seismic Sub-group Chair
<b>2.0 Adoption of the Meeting Agenda [NEA/SEN/SIN/IAGE/A(2016)1]</b>	
<b>3.0 Approval of the 20<sup>th</sup> Meeting Summary Record [Appendix 4 of the NEA/SEN/SIN/IAGE 2015]</b> 3.1 Status of last meeting actions 3.2 Brief summary of results on the additional meeting/teleconference on 18 September 2015, Paris	NEA/ O. Nevander and T. Koganeya  NEA/Chair
<b>4.0 Nuclear facilities that have experienced an earthquake</b>  Report on information about earthquakes in Member countries from 1st January to December 31, 2016, plus all past earthquakes not previously reported.	All
<b>5.0 MECOS (Metallic Component Margins under High Seismic Loads)</b> 5.1 Interim report on results 5.2 Status and Schedule of the Benchmark activity	J-M Rambach  F. Moreau  France
<b>6.0 CASH seismic CAPacity of reinforced concrete SHear walls</b> 6.1 Interim report on results 6.2 Status and Schedule of the Benchmark activity	A. Torre  France
<b>7.0 Methodology development for improved assessment of the SSE robustness against on-site observations</b> 7.1 Schedule, scope and objectives of the work 7.2 Discussion on the sites, which are included to the assessment 7.3 Discussion on the working methods	E. Viallet  France
<b>8.0 Comparison of probabilistic seismic hazard analysis (PSHA)</b> 8.1 Schedule, scope and objectives of the PSHA work 8.2 Questionnaire on PSHA methodology and its comments	P. Välikangas  Finland



<p><b>9.0 Round table discussion. Delegates are invited to present any development in programmes and policies.</b>  <i>(Please send your presentations in advance to the Secretariat, if any)</i>  Update on any development in programmes and policies in member countries</p>	All
<p><b>10.0 Cooperation with other international organizations (EC, IAEA, others)</b>  Report on the status of the database on NPP that experienced earthquakes as part of the ISSC  <i>(Please send your presentations in advance to the Secretariat, if any)</i></p>	ISSC (IAEA), EC, ITER O. Coman - ISSC
<p><b>11.0 WGIAGE Seismic Sub-group Programme of Work</b></p> <p>11.1 New proposals and two proposals discussed at the last meeting</p> <ul style="list-style-type: none"> <li>○ <b>New CAPS: Training Course on Specific Issues of Accident Management of Seismic Events</b> - (CSNI WGRISK discussion on this subject was done in their meeting on March 2016)</li> </ul> <p><i>Proposals for new tasks, workshops, etc., should be prepared in writing, with clear objectives and participation requirements and be distributed prior to the meeting. A proposal form, adopted by the CSNI PRG, is attached to this notification and should be used when submitting proposals.</i></p> <p>11.2 Discussion of the Medium term strategy of the WGIAGE Seismic Sub-group; prioritisation of activities</p>	L. Pecinka - Czech  WGIAGE Seismic Sub-group Chair
<p><b>12.0 Any other business</b></p>	
<p><b>13.0 Closure of meeting</b></p>	

## 21<sup>TH</sup> WGIAGE METAL SUB-GROUP MEETING - TENTATIVE AGENDA

The 21<sup>th</sup> WGIAGE Metal sub-group meeting will be held on Monday, 11 April (start at 10 pm) to Wednesday 13 April (end at 11 am) 2016 **at the OECD Room CC7**. The following tentative agenda for the meeting is proposed:

<b>1.0 Opening and introductory remarks</b>	WGIAGE Metal Sub-group Chairman
<b>2.0 Adoption of the Meeting Agenda</b> [NEA/SEN/SIN/IAGE/A(2016)1]	
<b>3.0 Approval of the 20<sup>th</sup> Meeting Summary Record</b> [Appendix 3 of the NEA/SEN/SIN/IAGE(2015)] <b>and status of last meeting actions</b>	NEA/O. Nevander
<b>4.0 Fatigue tests on structures</b> 4.1 Discussion on the available tests on structures and databases on fatigue experiments during the metals group meeting on the fatigue topic 4.2 Proceedings of the fatigue conference in Seville, Spain, September 2015: <u>Results and conclusions of the report</u> 4.3 Technical Note on Fatigue of components and structures (old CAPS 2009/4): <u>Results and conclusions of the report</u>	R. Tregoning - USA  O. Nevander/NEA  O. Nevander/NEA
<b>5.0 Benchmark on the analytical evaluation of the fracture mechanic parameters K and J</b> 5.1 Status report on the benchmark study 5.2 Results and conclusions of the report	Y. Kayser - France
<b>6.0 Leak-before-break (LBB) research</b> 6.1 Report on the results of the LBB survey and questionnaire 6.2 Results and conclusions of the report 6.3 Pending 2015 CAPS of LBB issues: <u>Benchmark Analyses of Leak-Before-Break in Piping Systems</u>	R. Tregoning - USA
<b>7.0 Questionnaire on regulatory or other guidance related to vibration limitations</b> 7.1 Pending 2015 CAPS of vibration: <u>Evaluation of design and monitoring requirements for vibrations in safety related fluid systems</u>	L. Junek - Czech
<b>8.0 Hydro-proof pressure test</b> 8.1 Status of the work with hydro-pressure tests approaches 8.2 Preparations and schedule for provide a report on the work to the CSNI for approval	C. Castelao Chairman

<p><b>9.0 Reactor Pressure Vessel Integrity</b></p> <p>9.1 Final report on PROSIR activity</p> <p>9.2 Conclusions and recommendations of the report</p>	B. Brickstad - Sweden
<p><b>10.0 Report on results of questionnaire on Buried and Underground Tanks and Piping (BTP)</b></p> <p>10.1 Results and conclusions of the BTP report</p>	R. Tregoning - USA
<p><b>11.0 Round table discussion</b></p> <p>11.1 R&amp;D programmes to support ageing management (AM) research</p> <p>11.2 Operating experience in each member country including last year events related to AM</p> <p><i>All member countries are invited to present their R&amp;D programmes (past, underway or planned) as well as their operating experiences</i></p>	All
<p><b>12.0 Cooperation with other international organizations (EC, IAEA, others)</b></p> <p><i>(Please send your presentations in advance to the Secretariat, if any)</i></p>	IAEA, EC, ITER
<p><b>13.0 WGIAGE Metal sub-group Programme of Work</b></p> <p>13.1 Discussion items and proposals for new tasks including the issues of last meetings:</p> <ul style="list-style-type: none"> <li>• In-service inspections of the reactor internals and bottom-mounted instrumentation nozzles.</li> <li>• Operational and functional the design rules for systems only used for plant accidental conditions</li> <li>• Activities related to information on xFEM.</li> </ul> <p>13.2 Proposal on the Medium term strategy of the WGIAGE Metal Sub-group</p> <p><i>Proposals for new tasks, workshops, etc., should be prepared in writing, with clear objectives and participation requirements and be distributed prior to the meeting. A proposal form, adopted by the CSNI PRG, is attached to this notification and should be used when submitting proposals.</i></p>	NEA and Metal Chairman
<p><b>14.0 Any other business</b></p>	
<p><b>15.0 Closure of meeting</b></p>	

**CSNI Activity Proposal Sheet (CAPS) for a Proposed New Activity**

<b>Project/Activity Title</b>	
<b>Objective</b>	
<b>Scope</b>	
<b>Justification</b>	
<b>Expected results and Deliverables</b>	
<b>Users</b>	
<b>Relation to other projects</b>	
<b>Safety significance/ priority (see priority criteria in Section IV)</b>	
<b>Technical Goal(s) covered</b>	
<b>Knowledge Management and Transfer covered</b>	
<b>Milestones (deliverables vs. time)</b>	
<b>Lead organisation(s) and coordination</b>	
<b>Participants (individuals and organisations)</b>	
<b>Resources</b>	
<b>Requested action from PRG/CSNI</b>	
<b>PRG Recommendation</b>	
<b>CSNI Disposition</b>	