## ISO/IEC JTC 1/SC29/WG1 (ITU-T SG16)

**Coding of Still Pictures**

<table>
<thead>
<tr>
<th>JBIG</th>
<th>JPEG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Bi-level Image Experts Group</td>
<td>Joint Photographic Experts Group</td>
</tr>
</tbody>
</table>

### TITLE:
List of AhGs established at the 85th JPEG meeting

### SOURCE:
WG1 Convenor

### PROJECT:
All WG1 projects

### STATUS:
Final

### REQUESTED ACTION:
For information

### DISTRIBUTION:
Public

### Contact:
ISO/IEC JTC 1/SC29/WG1 Convenor – Prof. Touradj Ebrahimi
EPFL/STI/IEL/GR-EB, Station 11, CH-1015 Lausanne, Switzerland
Tel: +41 21 693 2606, Fax: +41 21 693 7600, E-mail: Touradj.Ebrahimi@epfl.ch
1. Ad Hoc Group on JPEG XS
2. Ad Hoc Group on JPEG Website, Branding, Sponsorships & Celebration
3. Ad Hoc Group on JPEG Pleno - Light Field
4. Ad Hoc Group on JPEG Pleno - Point Cloud
5. Ad Hoc Group on JPEG Pleno – Holography
6. Ad Hoc Group on High Throughput JPEG 2000 (HTJ2K)
7. Ad Hoc Group on JPEG XL
8. Ad Hoc Group on software and documentation best practices
9. Ad Hoc Group on Blockchain and Distributed Ledger Technologies
10. Ad Hoc Group on Learning-based Image Coding
11. Ad Hoc Group on JPEG Systems 4-5-6
12. Ad Hoc Group on JPEG Reference software

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Coding, Test and Quality</th>
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</thead>
<tbody>
<tr>
<td>Status</td>
<td>Moderated</td>
</tr>
<tr>
<td>Name</td>
<td>Ad Hoc Group on JPEG XS</td>
</tr>
<tr>
<td>Chair</td>
<td>Antonin Descampe (<a href="mailto:a.descampe@intopix.com">a.descampe@intopix.com</a>)</td>
</tr>
<tr>
<td>Co-chair</td>
<td>Thomas Richter (<a href="mailto:thomas.richter@iis.fraunhofer.de">thomas.richter@iis.fraunhofer.de</a>)</td>
</tr>
</tbody>
</table>

**Mandates/ Objectives**

- Run Core Experiments according to the timeline specified in WG1N85031
- Prepare CDAM Study text for ISO/IEC 21122-1 AMD1
- Prepare CDAM Study text for ISO/IEC 21122-2 AMD1
- Organize an expert-viewing session during the 86th WG1 meeting in Sydney (AU)
- Register missing JPEG XS boxes in MP4RA
- Submit updated defect report by 2019-11-25 for documents WG1N85053 and WG1N85058

**Deliverables**

- Results of Core Experiments on AMD1 of ISO/IEC 21122-1 and ISO/IEC 21122-2
- CDAM Study text for ISO/IEC 21122-2 AMD1
- CDAM Study text for ISO/IEC 21122-1 AMD1

**Meetings**

- Online meeting on Thursday, December 12, 2019, 9am-10:30am CET
- AHG meeting on January 19th, 2020, to be held in Sydney (AU)
- Other online interim meetings as determined by the AhG with at least one week’s notice.

**How to join**

E-mail reflector: jpeg-xs@jpeglists.org

To subscribe to the reflector, please visit http://jpeg-xs-list.jpeg.org or in case of problems contact lists@jpeg.org

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Communication</th>
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<tbody>
<tr>
<td>Status</td>
<td>Moderated</td>
</tr>
<tr>
<td>Name</td>
<td>Ad Hoc Group on JPEG Website, Branding, Sponsorships &amp; Celebration</td>
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<tr>
<td>------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Chair</td>
<td>Frederik Temmermans (<a href="mailto:ftemmerm@etrovub.be">ftemmerm@etrovub.be</a>)</td>
</tr>
<tr>
<td>Co-chair</td>
<td>Antonio Pinheiro (<a href="mailto:pinheiro@ubi.pt">pinheiro@ubi.pt</a>)</td>
</tr>
</tbody>
</table>
| Mandates/ Objectives | ● Maintain JPEG website and update content  
● Prepare 20 years celebration of JPEG 2000  
● Review JPEG branding and provide recommendations  
● Publish JPEG Emerging Technologies Workshop proceedings  
● Publish the press release & calling notice  
● Request access to Google Suite for non-profit organisations  
● Create folders for AHGs and projects on LiveLink for collaborative documents  
● Discuss sponsorship proposals |
| Deliverables | ● JPEG branding recommendations  
● Sponsorship proposal |
| Meetings | ● Online interim meetings may be organized. |
| How to join | E-mail reflector: [jpeg-website@jpeglists.org](mailto:jpeg-website@jpeglists.org)  
To subscribe to the reflector, please visit [http://jpeg-website-list.jpeg.org](http://jpeg-website-list.jpeg.org) or in case of problems contact [lists@jpeg.org](mailto:lists@jpeg.org) |

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<tr>
<td>Status</td>
<td>Public</td>
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<tr>
<td>Name</td>
<td>Ad Hoc Group on JPEG Pleno - Light Field</td>
</tr>
<tr>
<td>Chair</td>
<td>Cristian Perra (<a href="mailto:cperra@ieee.org">cperra@ieee.org</a>)</td>
</tr>
<tr>
<td>Co-chair</td>
<td>Eduardo A. B. da Silva (<a href="mailto:eduardo@smt.ufrj.br">eduardo@smt.ufrj.br</a>)</td>
</tr>
</tbody>
</table>
| Mandates/ Objectives | ● Run exploration studies #6 on JPEG Pleno Light Field defined in WG1N85033  
● Run exploration studies #1 on JPEG 2000: Part 17 defined in WG1N85050  
● Run core experiment #1 on JPEG 2000: Part 17 defined in WG1N85049  
● Maintain and update Verification Model software  
● Maintain and update Reference software  
● Prepare candidate text of CD JPEG Pleno Part 3 Conformance Testing  
● Prepare candidate text of CD JPEG Pleno Part 4 Reference software  
● Prepare candidate text of WD 2.0 JPEG 2000 Part 17  
● Collect new test data |
| Deliverables | ● JPEG Pleno Exploration Studies #6 Report  
● JPEG 2000: Part 17 Exploration Studies #1 Report  
● JPEG 2000: Part 17 Core Experiments #1 Report  
● Updated Verification Model software  
● Updated Reference software  
● Candidate text for WD Part 3  
● Candidate text for WD Part 4  
● Candidate text of WD 2.0 JPEG 2000 Part 17 |
| Meetings | ● Online interim meetings may be organized  
● AhG Meeting on 2020-01-19 in Sydney, Australia |
| How to join | E-mail reflector: [jpeg-lightfield@jpeglists.org](mailto:jpeg-lightfield@jpeglists.org) |
To subscribe to the reflector, please visit [http://jpeg-lightfield-list.jpeg.org](http://jpeg-lightfield-list.jpeg.org) or in case of problems contact lists@jpeg.org

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<tr>
<th>Subgroup</th>
<th>Requirements</th>
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<tr>
<td>Status</td>
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<tr>
<td>Name</td>
<td>Ad Hoc Group on JPEG Pleno - Point Cloud</td>
</tr>
<tr>
<td>Chair</td>
<td>Stuart Perry (<a href="mailto:stuart.perry@uts.edu.au">stuart.perry@uts.edu.au</a>)</td>
</tr>
<tr>
<td>Co-chair</td>
<td>Luis Cruz (<a href="mailto:lcruz@deec.uc.pt">lcruz@deec.uc.pt</a>)</td>
</tr>
</tbody>
</table>
| Mandates/ Objectives | ● Apply and validate the CTC protocols (coding conditions, rate points, objective metrics, subjective quality assessment protocols) with the selected anchors in Exploration Study #2  
● Produce a revised Requirements versus Solutions document with input from WG11  
● Produce a Draft Call for Evidence on JPEG Pleno Point Cloud Coding |
| Deliverables | ● Analysis of Exploration Study #2 results  
● Updated Common Test Conditions document  
● Draft Call for Evidence on Point Cloud Coding  
● Updated Requirements versus Solutions document |
| Meetings | ● AhG meeting in Sydney on 2020-01-18  
● An online meeting will be scheduled on 2019-11-25  
● Other online interim meetings may be organized |
| How to join | E-mail reflector: jpeg-pointcloud@jpeglists.org |

To subscribe to the reflector, please visit [http://jpeg-pointcloud-list.jpeg.org](http://jpeg-pointcloud-list.jpeg.org) or in case of problems contact lists@jpeg.org

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<tr>
<td>Name</td>
<td>Ad Hoc Group on JPEG Pleno - Holography</td>
</tr>
<tr>
<td>Chair</td>
<td>Kwan-Jung Oh (<a href="mailto:kjoh@etri.re.kr">kjoh@etri.re.kr</a>)</td>
</tr>
<tr>
<td>Co-chair</td>
<td>Peter Schelkens (<a href="mailto:Peter.Schelkens@vub.ac.be">Peter.Schelkens@vub.ac.be</a>)</td>
</tr>
</tbody>
</table>
| Mandates/ Objectives | ● Prepare updated use cases and requirement document on JPEG Pleno Holography  
● Update common test conditions (CTC) document on JPEG Pleno Holography  
● Prepare draft call for proposals (CIP) on JPEG Pleno Holography  
● Update the Numerical Reconstruction Software for Holography (NRSH)  
● Manage and execute Exploration Studies #6 as contained in WG1N85028  
● Collect new test data for holographic microscopy/tomography and bi-level holograms |
| Deliverables | ● Updated use cases and requirements document on JPEG Pleno Holography |
- Updated common test conditions (CTC) document on JPEG Pleno Holography
- Draft call for proposal (CfP) document on JPEG Pleno Holography
- Report on Exploration Studies 6.0
- Updated version of Numerical Reconstruction Software for Holography (NRSH)
- New holographic microscopy/tomography data and bi-level holograms

**Meetings**
- AhG meeting in Sydney on 2020-01-19
- Two teleconference meetings will be planned after consultation with the JPEG Pleno Holography AHG members

**How to join**
E-mail reflector: jpeg-holo@jpeglists.org
To subscribe to the reflector, please visit http://jpeg-holo-list.jpeg.org or in case of problems contact lists@jpeg.org

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**Subgroup** Coding, Test and Quality

**Status** Public

**Name** Ad Hoc Group on High Throughput JPEG 2000 (HTJ2K)

**Chair** Pierre-Anthony Lemieux (pal@sandflow.com)

**Co-chair** David Taubman (d.taubman@unsw.edu.au)

**Mandates/ Objectives**
- Develop a candidate CD of 2nd edition to ISO/IEC 15444-16 (Encapsulation of JPEG 2000 Images into ISO/IEC 23008-12)
- Complete DAM of AMD 1 to ISO/IEC 15444-5 by the end of the editing period
- Complete DoCR of CDAM to AMD 1 to ISO/IEC 15444-5 by the end of the editing period
- Complete report on testing result of HTJ2K reference software against conformance testing by the end of the editing period
- Maintain HTJ2K GitLab repositories

**Deliverables**
- Candidate CD of 2nd edition to ISO/IEC 15444-16 (Encapsulation of JPEG 2000 Images into ISO/IEC 23008-12)
- DAM of AMD 1 to ISO/IEC 15444-5
- DoCR of CDAM to AMD 1 to ISO/IEC 15444-5
- Report on testing result of HTJ2K reference software against conformance testing

**Meetings**
- Teleconference on 2019-11-15 at 4 PM PT
- AHG meeting on 2020-01-19 in Sydney, AU
- Online interim meetings may be organized

**How to join**
E-mail reflector: jpeg-htj2k@jpeglists.org
To subscribe to the reflector, please visit http://jpeg-htj2k-list.jpeg.org or in case of problems contact lists@jpeg.org

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**Subgroup** Coding, Test and Quality

**Status** Public

**Name** Ad Hoc Group on JPEG XL

**Chair** Jan Wassenberg (janwas@google.com)
### Co-chair
Jon Sneyers (jon@cloudinary.com)

### Mandates/ Objectives
- Continue development of verification model software (XLM)
- Perform core experiments 5
- Produce candidate DOCR for CD ballot by 2019-12-09
- Produce candidate text of DIS by 2019-12-09
- Prepare JPEG XL white paper
- To prepare for IANA registration of codestream and file format

### Deliverables
- Updated verification model software (XLM) suitable for open sourcing
- Report on Experiments 5.0
- Candidate DOCR for CD ballot
- Candidate text of DIS
- JPEG XL white paper

### Meetings
- Online meeting 2019-11-25 at 16:00 CET to discuss in particular final configuration of validation experiments
- Online meeting 2019-12-16 at 17:00 CET
- AHG meeting in Sydney on 2020-01-18 and 2020-01-19
- Other online interim meetings may be organized

### How to join
E-mail reflector: [jpeg-xl@jpeglists.org](mailto:jpeg-xl@jpeglists.org)
To subscribe to the reflector, please visit [http://jpeg-xl-list.jpeg.org](http://jpeg-xl-list.jpeg.org) or in case of problems contact lists@jpeg.org

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### Subgroup
Coding, Test and Quality

### Status
Moderated

### Name
Ad Hoc Group on software and documentation best practices

### Chair
Antonin Descampe (a.descampe@intopix.com)

### Co-chair
Jan Wassenberg (janwas@google.com)

### Mandates/ Objectives
- Detail guidelines on code update workflow and CI/CD setup in the document on best practices for software maintenance
- Continue collecting additional inputs on usage of collaborative platforms for document editing, and develop document templates for these platforms
- Follow-up with GitLab to obtain a free full-featured version
- Follow-up with ISO about usage of ITU Software Copyright Guidelines
- Collect feedback on new LiveLink workplace usage

### Deliverables
- Updated version of the report on the exploration of collaborative document editing tools
- Updated version of the Proposed recommended practices for software development and maintenance

### Meetings
- Online interim meetings may be organized

### How to join
E-mail reflector: [jpeg-bp@jpeglists.org](mailto:jpeg-bp@jpeglists.org)
To subscribe to the reflector, please visit [http://jpeg-bp-list.jpeg.org](http://jpeg-bp-list.jpeg.org) or in case of problems contact lists@jpeg.org
## Ad Hoc Group on Media Blockchain

**Status**: Public  
**Name**: Ad Hoc Group on Media Blockchain  
**Chair**: Frederik Temmermans ([ftemmerm@etrouvub.be](mailto:ftemmerm@etrouvub.be))  
**Co-chair**: Deepayan Bhowmik ([d.bhowmik@ieee.org](mailto:d.bhowmik@ieee.org))

### Mandates/ Objectives
- Refine use cases and requirements document  
- Prepare the open, interactive on-site session at Sydney meeting on 2020-01-21, and coordinate with JPEG Webmaster to publish announcement in particular targeted to Australian experts  
- Engage with community to get more people involved in the media blockchain activities

### Deliverables
- Updated use cases and requirements document  
- Announcement for interactive session at Sydney meeting

### Meetings
- AHG online meeting on 14:30 CET 2019-12-11 to review the interactive session preparation, revised use cases and requirements, and other items as agreed  
- Other online interim meetings may be organized

### How to join
E-mail reflector: [jpeg-blockchain@jpeglists.org](mailto:jpeg-blockchain@jpeglists.org)  
To subscribe to the reflector, please visit [http://jpeg-blockchain-list.jpeg.org](http://jpeg-blockchain-list.jpeg.org) or in case of problems contact lists@jpeg.org.

## Ad Hoc Group on Learning-based Image Coding

**Status**: Public  
**Name**: Ad Hoc Group on Learning-based Image Coding  
**Chair**: João Ascenso ([joao.ascenso@lx.it.pt](mailto:joao.ascenso@lx.it.pt))  
**Co-chair**:  

### Mandates/ Objectives
- Perform JPEG AI dataset characterization and revise the images contained in the dataset based on the results  
- Identify/collect more learning-based image coding and anchor solutions that can be used in exploration studies  
- Perform subjective testing with DSIS and other subjective assessment methodologies with learning-based image codecs and suitable anchors  
- Preparation of the text for a call for evidence to be issued in the future  
- Revise common test conditions for learning-based image coding solutions based on the exploration studies key conclusions  
- Create a publicly accessible section on jpeg.org with information about current JPEG AI activities, such as short description and access information to JPEG AI datasets

### Deliverables
- Fully documented JPEG AI dataset for the evaluation of learning-based image coding solutions
- Report on the subjective studies with objective and subjective assessment of anchors and learning-based image coding solutions
- Preliminary draft of the call for evidence

Meetings
- Online interim meetings may be organized
- AHG meeting in Sydney on 2020-01-19

How to join
E-mail reflector: jpeg-ai@jpeglists.org
To subscribe to the reflector, please visit http://jpeg-ai-list.jpeg.org or in case of problems contact lists@jpeg.org
NOTE: this reflector has moved from Google Groups to jpeglists.org, all members should re-subscribe!

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Systems &amp; Integration</th>
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<tbody>
<tr>
<td>Status</td>
<td>Public</td>
</tr>
<tr>
<td>Name</td>
<td>Ad Hoc Group on JPEG Systems</td>
</tr>
<tr>
<td>Chair</td>
<td>Andy Kuzma (<a href="mailto:andy.kuzma@intel.com">andy.kuzma@intel.com</a>)</td>
</tr>
<tr>
<td>Co-chair</td>
<td>Frederik Temmermans (<a href="mailto:ftemmerm@etruvb.be">ftemmerm@etruvb.be</a>)</td>
</tr>
<tr>
<td>Mandates/ Objectives</td>
<td></td>
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<tr>
<td></td>
<td>Review Part 4 Privacy &amp; Security IS text, and coordinate with ISO Editors for finalized text</td>
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<tr>
<td></td>
<td>Prepare editable figures for JPSearch Part 2 text, dependent on Jaime</td>
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<tr>
<td></td>
<td>Review WD of Part 5 AMD1 wrt definition of new Embedded File Content Type</td>
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<td></td>
<td>Prepare CDAM Part 6 AMD1 text</td>
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<td></td>
<td>Update the draft text for Part 7 (JLINK)</td>
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<tr>
<td></td>
<td>Define the top-level structure for a GitLab repository for the 4-5-6 software implementation, and create accordingly</td>
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<tr>
<td></td>
<td>Define next steps in Software Implementation development</td>
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<tr>
<td></td>
<td>Resolve source code restrictions for Software Implementation, if possible</td>
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<tr>
<td></td>
<td>Develop a draft whitepaper on JPEG Systems for review at 86th meeting</td>
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<tr>
<td></td>
<td>Provide updated content for JPEG Website to JPEG Webmaster, as needed</td>
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<tr>
<td></td>
<td>Determine if there are types to register with MP4 Registration Authority needed to support Parts 4, 5, 6, and 7</td>
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<tr>
<td></td>
<td>Review the JPEG Best Practices and apply for development of 4-5-6 software implementation</td>
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<tr>
<td></td>
<td>Coordinate with JPEG Best Practices for use by JPEG Systems</td>
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</table>

Deliverables
- JPSearch Part 2 figures completed
- Part 4 IS text to ISO Editor for publication
- Part 5 AMD1 working draft text
- Part 6 AMD1 CDAM text
- Part 7 JLINK updated draft text
- Draft JPEG Systems whitepaper
- Proposed development for 4-5-6 software implementation
- Update on JPEG activities, as required
- Update to JPEG Website to JPEG Webmaster, needed
- Review and apply JPEG best practices as needed
- Identified types to register with MP4RA, if any
Meetings

- AhG online meeting on 15:00 CET 2019-12-12 on software implementation development plan, and JLINK WD, JUMBF AMD1.
- AhG online meeting on 15:00 CET 2020-01-09 to review interim mandates and progress towards goals, set agenda for 86th JPEG meeting in Sydney
- Other online interim meetings may be organized
- AHG meeting in Sydney on Saturday (2020-01-18) if needed, and definitely Sunday 2020-01-19

How to join

E-mail reflector: jpeg-systems@jpeglists.org

To subscribe to the reflector, please visit http://jpeg-systems-list.jpeg.org or in case of problems contact lists@jpeg.org

Subgroup

Coding, Test and Quality

Status

Public

Name

Ad Hoc Group on JPEG Reference software

Chair

Thomas Richter (thomas.richter@iis.fraunhofer.de)

Co-chair

Mandates/ Objectives

- Prepare and update JPEG reference software
- Prepare draft AMD1 for the ISO/IEC 10918-7

Deliverables

- Updated software implementations
- Draft ISO/IEC 10918-7 AMD1

Meetings

- Other online interim meetings may be organized

How to join

E-mail reflector: jpeg-reference@jpeglist.org

To subscribe to the reflector, please visit http://jpeg-reference-list.jpeg.org or in case of problems contact lists@jpeg.org