IOAG 14-c Teleconference
20 September 2011

FINAL DRAFT

Attendance:

Chair: Jean-Marc Soula
Secretariat: Barbara Adde, Stephanie Wan

Members:
CNES: Jean-Marc Soula
DLR: Martin Pilgrim
ESA: Michael Schmidt, Gian-Paolo Calzolari
JAXA: Hiroshi Inoue
NASA: Phil Liebrecht, John Rush, Roger Clason, Ken Perko, Les Deutsch, Wallace Tai, Jeffrey Volosin, Madeline Butler
ASI: Luca Salotti

Observers:
SFCG: Enrico Vassallo
OSLG: Klaus-Jurgen Schultz

Liaison:
CCSDS: Adrian Hooke, Mike Kearney, James Afarin

Agenda:
See Attachment 1. The agenda is also available on the IOAG website (www.ioag.org).

Introduction/Openning:
The Chair opened the meeting and welcomed all participants. The agenda, which focuses on progress of different Action Items (AI) in preparation for IOAG 15, CCSDS Committee Meeting in November, and minutes of the 14b, was accepted without comment. The Chair also noted that announcements can be made on the IOAG home page, and the delegations can contact the Secretariat for uploading. CCSDS Liaison, Mr. Adrian Hooke, noted that the CCSDS Fall meeting and the opening of registrations can be announced.

2a) E-poll results and definition of IOAG priorities

The Chair noted the e-poll results on the definition of priorities for standards development, and asked whether all delegations were satisfied with the definitions. ESA and JAXA, who had previously formulated comments, concurred.
2b) Service Catalogue priorities: IOAG-CCSDS ICD (Now Product Agreement)

CCSDS Liaison, Mr. Kearney, presented on the IOAG-CCSDS Product Agreement, seeking approval of the concept, not the content, and provided a live demo. The Chair asked for comments on the prototype. Discussions were raised on adding a 6th, 7th, and 8th column for the IOAG to insert priorities, dates, and comments. Other suggestions included having an IOAG edit button to be placed at the top, with icons on the far left, print capability, and a normal view button at the top.

Mr. Gian-Paolo Calzolari suggested adding a link to retrieve Service Catalogue documents. Mr. Kearney noted he will ask the tech support to add the necessary features, and they would have to change anything that comes directly from the database. He also noted that there will be cases where a service may not have a document, yet the CCSDS webmasters can add rows. Mr. Wallace Tai agreed that mapping was the most important component, as it will later be a baseline to the documents.

CNES noted the TBW standards were answered by previous comments, as standards are not directly mapped to Service Catalogues. CNES noted that the security in SC #1 needs to be verified and that comments in the CCSDS field can be responded by IOAG and allow for revising of the Service Catalogues. Furthermore, the names of CCSDS and IOAG standards are currently different and should be aligned more closely in the future Service Catalogue version to clearly correspond with both standards. The delegations agreed that “IOAG may consider side standards for agreements” and will need to identify correspondence as long as it is not the same name.

Mr. Kearney asked what headers should be placed on columns to reflect the correspondence. The Chair agreed that CCSDS has the final word on the names and the IOAG Service Catalogue should be modified to align with CCSDS headers.

The Chair noted that mapping may take some time, as IOAG-CCSDS updates from Working Groups occur often.

The Chair thanked Mr. Calzolari and Mr. Kearney for the good work. He approved for the Product Agreement to be filled with 2 Service Catalogues, and any other concerns be marked in the columns as appropriate.

He polled the IOAG Delegates for approval of the Product Agreement format and inquired if they have further comments from the IOAG.

DLR had provided comments and approves the format assuming changes will be made. After Mr. Kearney responded to ASI’s inquiry on the flexibility of adding new rows, ASI’s response was positive on the Product Agreement. JAXA had no comments, and agreed that IOAG should start populating the Product Agreement. ESA noted that while editing is limited, they agreed the layout is nice. NASA also agreed and expressed thanks to Mr. Kearney and his team, and concurred with JAXA’s recommendation to start populating and time the inputs as appropriate. CNES agreed with NASA’s recommendation and suggested aggregating comments for background. He concluded that the format of the Product Agreement was approved pending on the changes that were just discussed.
and further suggested ESA/Calzolari to take the first step to verify mapping of the standards and services.

**AI 14C-01:** ESA/Calzolari to aggregate comments to finalize the Product Agreement format and, in coordination with CCSDS counterparts, to start populating the table with relevant services and standards. **Due date:** November 16, 2011

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2c) **IOAG Top Priorities**

The Chair summarized the IOAG Top Priorities inputs provided by 4 agencies. Mr. Tai questioned whether the priorities were for the infusion table or standards development. The Chair confirmed that the presented table was from the IOAG-14 proposed Top priorities, which may include both, and from the infusion tables for what regards the standards in the service catalogs; the discussion on the priorities for standards began last year but were never concluded due to missing inputs from delegations. Since not all agencies provided inputs, then it was not possible for the IOAG to discuss agreements, nor share with their management. NASA concurred, and the Chair proposed an action to have all delegations provide inputs and follow-up with a discussion. Mr. Les Deutsch pointed out that agencies that mark “0” should be defined as abstaining. The Chair, Mr. Michael Schmidt, and Mr. Phil Liebrecht concurred that “0” should be removed as it puts the calculations of average and deviation in error. A different convention would help differentiate from agencies that have priorities blank, and have not voted.

**AI 14C-02:** All delegates to provide top priorities for standards being produced or to be produced. **Due date:** October 18, 2011

The Chair proposed to move the due input dates ahead of the CCSDS meeting in November, and to have another teleconference focused on establishing priorities prior to the IOAG-15. DLR, ASI, NASA, and ESA concurred.

**AI 14C-03:** Secretariat to set up an additional teleconference meeting (IOAG 14d) to discuss the establishment of priorities. (Target date: October 25, 2011). **Due date:** September 30, 2011.

The Chair requested comments from SFCG/Mr. Enrico Vassallo since mission models were not part of the IOAG 14-c agenda. Mr. Vassallo noted that SFCG was still waiting for the mission model. The Chair responded that what IOAG current has today is not complete. He requested that all delegates provide their inputs to the IOAG reference tables long in advance to the IOAG-15 meeting.

3) **CCSDS liaison report**

CCSDS Liaison, Mr. Hooke, reported that there is not a lot of CCSDS activity since the last IOAG meeting and there has been a downsizing of the working groups at the Berlin meeting. He reported on the current CCSDS document progress, and noted that there will be, technical meeting in Boulder, Colorado from October 31-November 5, 2011 and a fall management meeting on
November 15-17, 2011 in Moscow, Russia. He noted that CCSDS will be having their 30th anniversary during their spring 2012 technical and management meetings in Darmstadt, Germany from April 16-25, 2012.

The Chair requested whether there would be SSI architecture for IOP-3 scheduling status. Mr. Hooke noted that NASA resources have already started on the project. The first draft of the standards document will be reviewed at the fall meeting. Since it is a high level document, it will be 40-50 pages at most. The Green Book could be available in the summer 2012.

The Chair questioned whether the IOAG and the CSTS working group priorities on standards development are still currently misaligned. Mr. Hooke replied that it is still chaotic due to budget constraints on both sides; therefore they are not completed and they are still working to meet unmet requirements.

4) OLSG status report

OLSG liaison, Mr. Klaus-Juergen Schultz, provided a presentation in updating the IOAG on the optical working group. Mr. Schmidt questioned the working group’s activities after December. Mr. Schultz explained the study group is concluded at IOAG-15, and the report would be available at the end of November, therefore it is unclear what would happen with the group. The Chair asked about the participation of other agencies. Mr. Schultz noted that NASA, DLR, CNES, ESA will have a face to face meeting on 27-29 September. JAXA and KARI will be unable to attend and there was no response from ASI or FSA. Mr. John Rush noted that the group did an excellent job.

The Chair asked whether the working group connected with CCSDS. Mr. Hooke noted that they were not going to meet at the fall meeting. Mr. Schultz noted it was on hold, as the proper working group in the spring will be formed if one was needed after the IOAG report.

OSLG will present final report at IOAG-15, and to provide an executive summary with recommendations and expected decisions prior to the full report if possible. A slot of 2 to 2 ½ hours should be reserved for OLSG report.

5) IOP-3 preparation

The Chair reminded the IOAG of the IOP-2 resolutions and IOAG response since then, inviting to see what remains to be done.

The Chair noted that after IOP-2, progress has been made with products, but there is still work to be done and would require the summer and input from all members. There was a discussion for IOP-3 to be held in January/February 2013 time frame, and that the subject of mission ops should be discussed during IOAG 15 in Toulouse in preparation for IOP-3. Mr. Liebrecht suggested planning for the IOP-3 now, one year ahead of time. The Chair responded this should be decided at the IOAG-15.

AI 14C-04: All delegates to provide comments on the IOP-3 table presented by the Chairman, this in preparation for IOAG-15. Due date: November 16, 2011
6) IOAG membership
The Chair noted that he has sent letters to ISRO and RFSA in regards to IOAG meeting attendance, however he has not received a reply. NASA volunteered to informally talk with those agencies through their international relations department. The Chair pointed out that CNSA was at CCSDS, however during their discussions, China did not intend to become member of IOAG; therefore should they be kept as observers? ASI questioned how this characterized the IOAG membership. Mr. Schmidt agreed with NASA’s suggestion to talk with non-participating IOAG agencies bilaterally.

The Chair indicated he will ask the non-participating members whether they wish to continue membership in the IOAG, while coordinating with them for attendance to the IOAG-15 if they require visas. He hoped that the agencies would still talk on a bilateral basis if possible. In regards to ISRO, RFSA, and CNSA, NASA pointed out that agencies talk to other agencies’ leadership and will try to include this issue into the meetings with Associate Administrator Gerstenmaier.

AI 14C-06: Chair to write to ISRO and RFSA to invite the agencies to participate in IOAG-15.
Due date: September 30, 2011.

7) IOAG-15 preparation/logistics
The Chair noted that he will prepare a list of hotels and maps on the IOAG website. He is currently finalizing the site of the three day meeting. He further requested sending any new topics to himself and the Secretariat.

A draft agenda will be elaborated by the Chair and Secretariat, and be distributed for review one month prior to IOAG-15.

8) Any other business/announcements
CNES raised a question on whether there will be papers presented on behalf of IOAG at the SpaceOps 2012 conference. Abstracts must be submitted by November 4th, and the call for papers has already opened. All agencies are free to report individually or as an IOAG representative.

Mr. Schmidt suggested for an IOAG/CCSDS presentation on architecture. Mr. Liebrecht suggested an overview of IOAG in the past 12 years, and to provide a management paper rather than technical.

AI 14C-07: NASA/Liebrecht to assist Chair to prepare IOAG overview and perspectives SpaceOps abstract on IOAG overview and perspectives. Due date: October 28, 2011.
**AI 14C-08:** CCSDS/Kearney (with Mario Merri/Paolo Ferri) to prepare SpaceOps abstract on IOAG/CCSDS mission ops. **Due date:** November 4, 2011

The Chairman adjourned the meeting.

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**Attachment 1**

**IOAG-14c Teleconference**  
**Tuesday, 21 September, 2011**  
**12:00 – 15:45 UTC**

**FINAL AGENDA**

<table>
<thead>
<tr>
<th>Time (UTC)</th>
<th>Presenter</th>
<th>Agenda Item</th>
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| 12:00 – 12:15 | Soula     | 1. Introduction/opening  
|             |           | 1a. Approval of IOAG-14b minutes  
|             |           | 1b. Announcements on public website  
|             |           | 2. Priorities  
| 12:15 – 12:25 | Soula, Adde | 2a. AI 14b-06: E-poll results and definition of IOAG priorities  
| 12:25 – 13:00 | Soula, Adde | 2b. AIs 14-23, 14a-05, -06  
|             | Hooke or | 14b-03, -04 and -05: Service Catalogue priorities  
|             | Kearney  | IOAG-CCSDS ICD (Now Product Agreement)  
| 13:00 – 13:20 | Soula     | 2c. AIs 14-26 and -27: IOAG top priorities  
| 13:20 – 13:45 | Hooke     | 3. AI 14b-08: CCSDS liaison report  
| 13:45 – 14:30 | Schulz, Rush | 4. AI 14a-02: OLSG status report  
| 14:30 – 14:45 | Soula     | 5. AIs 14b-01, -02, -07 and -10, 14a-04: IOP-3 preparation  
| 14:45 – 15:15 | Soula, Adde | 6. AIs 14b-09, 13-11: IOAG membership  
| 15:30 – 15:40 | Any       | 8. Any other business/announcements  

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IOAG-14c Action Items

**AI 14C-01**: ESA/Calzolari to aggregate comments to finalize the Product Agreement format and, in coordination with CCSDS counterparts, to start populating the table with relevant services and standards. **Due date**: November 16, 2011

**AI 14C-02**: All delegates to provide top priorities for standards being produced or to be produced. **Due date**: October 18, 2011

**AI 14C-03**: Secretariat to set up an additional teleconference meeting (IOAG 14d) to discuss the establishment of priorities. (Target date: October 25, 2011). **Due date**: September 30, 2011.

**AI 14C-04**: All delegates to provide comments on the IOP-3 table presented by the Chairman, this in preparation for IOAG-15. **Due date**: November 16, 2011

**AI 14C-05**: Secretariat to invite the ICG Liaison/Mr. JJ Miller to the next IOAG meeting. **Due date**: November 16, 2011.

**AI 14C-06**: Chair to write to ISRO and RFSA to invite the agencies to participate in IOAG-15. **Due date**: September 30, 2011.

**AI 14C-07**: NASA/Liebrecht to assist Chair to prepare IOAG overview and perspectives SpaceOps abstract on IOAG overview and perspectives. **Due date**: October 28, 2011

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