

meeting date <i>date de la réunion</i>	20/08/2002	ref./réf.	page/page	1 / 7
meeting place <i>lieu de la réunion</i>	ESTEC	chairman <i>président</i>	D. Texier	
minute's date <i>dates de minute</i>	22 August 2002	participants <i>participants</i>	A. Parmar, D. Texier, P. Maldari, M. Schmidt, L. Hansson, R. Walter, P. Strada, A. Mc Donald, G. La Rosa, S. Fahmy, J. Sternberg (p.t.), N. Dean (p.t.) E. Kuulkers (p.t.), P. Barr (p.t.), J. Nolan (p.t.), A. Jeanes (p.t.)	
subject/objet	Integral co-ordination meeting #2	copy/copie	M. Kessler, C. Winkler, R. Much, R. Carli, T. Courvoisier, P. Ubertini, J. P. Roques, N. Lund, E. de Miguel, N. J. Westergaard, M. Mass-Hesse,	

description

1. Approval of agenda

The points # 5.4 & 10.3 were added to the agenda distributed before the meeting and it was decided to start with point 4.2 ("Outcome from the Long Term Simulation of 16-19/08/2002").

2. Review of actions

AI CO_01/01 on P. Maldari : To give to D. Texier the e-mail address to be used for IT-GS interactions.
Closed. E-mail address is integralogs@esa.int.

AI CO_01/02 on L. Hansson : To write a TN (or to point toward already available document(s)) describing the ISOC FTP site to be used for the IT-GS interactions.
Closed. No FTP account needed. Site specified in OMC's delivery note.

AI CO_01_03 on all Operations Managers : To send detailed comments on the draft 5 of IT-GS-ID to DT.
Still open on MOC, ISDC, IBIS, SPI & JEM-X. New due date 15/09/2002.

AI CO_01_04 on D. Texier : To issue the v1 of IT-GS-ID. Still open. Needs completion of previous action.

AI CO_01/05 on G. di Girolamo & F. Dregger : To issue the v1 of the ISOC-MOC Planning Messages ICD.
Still open. New due date 31/09/2002

AI CO_01/06 on L. Hansson : To re-send the comments on the IFTS ICD. Closed.

meeting date	20/08/2002	ref/réf	page/page	2
date de la réunion				7

AI CO_01_07 on G. Di Girolamo : To provide a date for the availability of the updated ICD. Closed. ICD updated

AI CO_01_08 on P. Maldari : To issue the updated MOUT/MOUTP ICD. Closed. Discussed in point 3.1 of the agenda.

AI CO_01_09 on M. Schmidt : To investigate if it is possible to provide to ISOC the list of modifications of the IODB instead of the complete ODB. Closed. The answer is yes.

AI CO_01_10 on R. Walter : To investigate if the TPF information is needed at ISDC. Closed. The answer is no.

AI CO_01/11 on SPI : To provide a description of the SPI monitoring activities at ISDC during the Commissioning phase. Closed. Discussed in point 5.1 of the agenda.

AI CO_01_12 on all Operations Managers : to send detailed comments to D. Texier on (a) the updated FOP Vol 1 Book 4, (b) the list of multi-site CIs and (c) The procedure for implementing a Change Request involving several sites. Closed. Superseded by IFAR RID 7759. Discussed in point 7.1 of the agenda.

AI CO_01_13 on D. Texier : To re-issue (a) the updated FOP Vol 1 Book 4, (b) the list of multi-site CIs and (c) The procedure for implementing a Change Request involving several sites, after including the received comments. Closed. Superseded by IFAR RID 7759. Discussed in point 7.1 of the agenda.

AI CO_01_14 on G. di Girolamo : To investigate the capability of TDRS to handle the access/retrieving from ISOC, ISDC, ALENIA & ITs. Still open. Access to TDRS provided to ISOC, ISDC & ALENIA. Will be provided to the Instrument Teams after a first assessment. New due date end of check-out phase.

AI CO_01_15 on R. Walter : To look at the possibility to make available to the ITs the raw HK data from IOSM. Closed. The answer is : it is possible.

AI CO_01_16 on the Instrument Teams : To define their need to access HK data during the routine phase. Still open. New due date in 15/09/2002.

AI CO_01_17 on all Operations Managers : To provide a summary of "Who is doing what, when & where" to D. Texier. Still open on ISOC, ISDC, IBIS & SPI. New due date 15/09/2002.

AI CO_01_18 on D. Texier : To distribute a note merging all the inputs (due date 15/07/2002). Still open. Needs completion of previous action.

3. Documentation

3.1. Custodianship for MOUTP/MOUT ICD

Since all the MOUTPs are generated by ISOC it was decided that ISOC will be the custodian of the MOUTP ICD. For the custodianship of the MOUT ICD it is first needed to know how many of the MOUTs are generated by ISOC.

AI CO_02_01 on L. Hansson : To provide the list of MOUTs generated by ISOC. (due date 23/08/2002).

4. Simulations

4.1. Outcome from the Instruments Commissioning simulations of 16/07 & 05/08

IBIS : There was a problem with the connection of the workstation. It will be re-checked during the AFT.

SPI : Happy with the simulation of 16/07. No need to change the setup for the next simulation and the real-life. (inputs provided before the meeting)

MOC : Another portacabin and two meeting rooms will be available to accommodate the expected people. The meeting room will have telephone ports. Note that these people will not have access to the control rooms.

4.2. Outcome from the Long Term Simulation of 16-19/08

Summary of the simulation :

MOC

- The simulation started on Friday 16/08 at 12:30L with revolution 52.
- The RPOS (rescheduled POS after introduction of a ToO) was received from ISOC as expected.
- The attitude at the end of the RPOS for rev 52 was inconsistent with the attitude at the start of rev 53.
- ISOC re-delivered rev 52 & 53 to solve the attitude mismatch.
- Problems during the night Saturday 17 to Sunday 18 when the number of products to be provided by the FDS went above the limit of 99. FD came on Sunday morning and fixed the problem.
- Monday morning at the beginning of rev 53 the IMCS Workstations hanged. S/W support diagnosed a memory leak on the IMCS workstations. The simulation resumed at 11:00 L.
- The first pointing of rev 53 was commanded manually since it was not present in the timeline.

ISOC

- Problems occurred during the scheduling. It was decided to generate the schedules from the Office network.
- MOC found that more RWB were needed during the GPS.
- Scheduled were re-delivered from the Operations network (the previous problem was found and fixed).
- The RWB was inserted but MOC found that the keywords were not written in the POS.
- The revolution 53 did not contain pointing requests because the attitude at the perigee between rev 52 and 53 was found not acceptable for the start of 53.

ISDC

- The simulation was very successful. The software demonstrated to be robust. Only few little things were found.
- In two cases the PID transitions are not as expected.
- The attitude snapshot file can indicate errors in attitude up to 1 deg w.r.t. the expected pointing.
- The CCCF MOUT is always available. It is therefore difficult to know which CCCF are executed.
- There was no science data in revolution 52.

Detailed list of the problems and result of the discussion :

1/ FDS EPOS generation unable to find a valid wheel profile for rev 52

It was decided that Reaction Wheel Biases will be manually inserted by ISOC :

- In case of ToO, the re-scheduling will always start with a RWB
- For the GPS a RWB will be inserted every 10 pointings

2/ IMCS timeline generation fails to accept the 3 parameters SOPS_OPEN (WHEEL_BIAS)

Problem solved by MOC.

meeting date	20/08/2002	ref/réf	page/page	4
date de la réunion				7

3/ *IMCS timeline generation fails to accept the 3 parameters RSOPS (RMU_CAL)*
Problem solved by MOC

4/ *IMCS timeline generation fails to accept change guide star ED AECGS before start of SOPS WHEEL_BIAS window*
Problem solved by MOC

5/ *IMCS timeline generation failure due to overlapping AOCS EDs*
The "dead-time" after a CSL is currently 0 sec in the ISOC database. If the CSL is followed by a OSL or a Hand-Over window there must be a wait time. MOC provided the value to be used by ISOC in the future.

6/ *IMCS timeline generation failure due to ED overlapping a window END / START*
The RMU calibration currently needs to be scheduled in a SOPS window. It is proposed to change its implementation. This is a new requirement on ISOC.
AI CO_02_02 on Lars Hansson : To give a timeline for the implementation and test of this new requirement (due date : 31/08/2002).

7/ *Attitude at the end of revolution 52 not acceptable for the beginning of rev 53*
Test performed at ISOC showed that it seems to come from the FD routine. Will be investigated at ESOC.

8/ *Number of FD products > 99*
Problem solved by MOC.

9/ *IMCS Workstation memory leak*
Fix being tested today. A report will be available on Friday 23/09.

10/ *RWB keywords not written in POS*
Problem solved by ISOC.

11/ *PID transition in the telemetry before re-pointing*
ISDC found two such cases. Off-line investigations showed that this is indeed the ISOC implementation during Ground Station Hand-Over.

12/ *Snapshot file in exposure > 1 deg away from expected pointing*
Checks made by MOC confirm that these cases are for a snapshot made after an OSL. OMC exposures made after an OSL can therefore have problems.

13/ *Unexpected sequence of slews for the implementation of a "dog-leg" slew.*
ISOC schedule a "dog-leg" slew with the sequence of slews : OSL → CSL → OSL → CSL while MOC expected : OSL → OSL → CSL. This implementation by ISOC is to ensure that the 2nd OSL would not cross a forbidden region due to the inaccuracy of the 1st OSL. It was decided to keep the current ISOC implementation for the beginning of the mission and to see later if these 15 min of CSL after the 1st OSL are really required.
AI CO_01_03 on FD : To check if the intermediate pointing provided by the FD software for the "dog-leg" slew already cater for this inaccuracy of the 1st OSL (due date 15/09/2002).

14/ *No science data in rev 52.*
This was due to a problem with the simulator. Science data was received properly during revolution 53.

It was decided to perform a test before the S/W freeze of 16/09 to make sure that the problems are fixed and demonstrate the capability of the scheduling system to ingest POSes generated by ISOC to create a timeline without manual intervention. The date of the test depends on the schedule for the implementation of the fixes for the above points.

4.3. Status/Update of the remaining simulations

The new dates for the Instrument Commissioning simulations are 12/09/2002 for SPI & JEM-X and 27/09/2002 for IBIS & OMC.

5. Commissioning phase

5.1. Update of the Commissioning phase timeline

The timeline for revolutions 1 - 13 has been updated and distributed last week. From revolution 14 onwards it is expected that all activities will be timeline driven.

All the POSes are expected from ISOC by beginning of September and the Timelines from MOC by mid-September.

5.2. IBIS and SPI activities at ISDC during Commissioning phase

The IBIS activities have been discussed at Rome end July and a split of responsibilities between IBIS and ISDC agreed.

A draft version of the SPI activities has been written by ISDC. It will be discussed with R. Diehl from SPI.

5.3. Status of the Observation Template

Not covered in the absence of R. Much.

5.4. Setup for the Commissioning phase

The timing of some interactions between MOC and ISOC has to be clarified. M. Smith will contact R. Much when back from holidays next week.

6. Routine Phase

6.1. SPI monitoring activities at ISDC during routine phase

Inputs have been received from SPI, but only on the definition of the activities related to the DFEE. In order to close that outstanding issue SPI proposes to come at ISDC to discuss & provide the missing inputs. ISDC is to contact SPI (C. Larigauderie & J.P. Roques) to setup the meeting.

7. Configuration Control

7.1. Description of the GS-CCB in the TN "Configuration Control Concept for the Integral GS"

The TN could be improved in two directions :

- a) To provide a clearer indication of who is responsible for the contents of the CIs : a new column will be added to the list of CIs (sections 4.2 & 4.4).

- b) To clarify the responsibility of the "owner" of a CI : a sentence will be added to indicate that the responsibility of the "owner" of a CI is spelled-out in the procedure in section 5.

AI CO_02_04 on D. Texier : To re-issue the TN with these two modifications (due date 31/08/2002).

8. Actions from the GSRR & FAR

8.1. RID OP-07-M : Planning System Requirements imposed by FOP

The list of assumptions used by the ISOC planning system has been provided to MOC. MOC will check all these assumptions and will make sure that the FOP Volume 2 Book 1 will contain all the information required by ISOC.

8.2. RID OP-08-M : Interactions between GS parties

Because of lack of resources, MOC proposes to update the FOP Volume 3 at the beginning of the Routine Phase. ISOC will look at the items that must be updated before.

AI CO_02_05 on J. Nolan : To identify the critical RIDs/comments that need to be implemented in the FOP before (due date 31/08/2002).

8.3. POS Control Board Procedures

It is proposed to have the statistics made by MOC reviewed on a monthly basis in order to see if a change of strategy is needed.

9. Anomaly Reports

9.1. Status of the ISDC Instrument Anomalies Reports

Five ISDC Instruments Anomaly reports have been raised so far :

IA-001 : Problem coming from the AOCS simulator during SVT-F. Nothing to change for operations.

IA-002 & IA-003: Unknown "feature" of JEM-X on-board S/W. ISDC S/W updated to cope with it.

IA-004 : Unknown "feature" of IBIS on-board S/W. IBIS monitoring procedures will be updated.

IA-005 : Unknown "feature" of the OMC on-board S/W. OMC User Manual will be updated.

9.2. Status of the Instruments Opened NCRs

There are no Instruments NCR opened (The only open instrument NCR is on JEM-X1, which is not going to fly).

9.3. Status of the ARTS' Instrument Anomalies

The Anomaly Reports 001085, 001326, 001351 & 001407 can now be closed since the relevant information is available.

AR 001409 concerns the missing S/W images from IBIS periphery. It will be closed after the delivery foreseen on 02/09/2002 (as discussed in agenda point 10.3).

meeting date 20/08/2002
date de la réunion

ref/réf

page/page

7

7

10. AOB

10.1. Generation of the FITS version of the IBIS context tables

It was decided to have the program to convert IBIS on-board S/W images from the OBSMS format into the FITS format written by the IBIS team and then handed-over to ISDC. The IBIS team will then deliver only the OBSMS version while the FITS version will be generated by ISDC "on behalf" of IBIS. IBIS is looking at the resources available to write these programs.

10.2. Not enough RWBs in POS

Covered by the discussion in point 4.2.

10.3. Pending deliveries from PIs

The missing IBIS on-board S/W images will be delivered by 02/09/2002.

AI CO_02_06 on G. La Rosa : To deliver the missing IBIS on-board software images in OBSMS format (due date 02/09/2002).

10.4. Date and place of next meeting

It was proposed to have the first GS-CCB second half of September - i.e. after the S/W freeze - with the aim to look at :

- 1/ The GS configuration at launch
- 2/ The pending Change Requests.

It was therefore agreed to submit from now on all the Change Requests impacting "multi-site" CIs following the procedure in the TN "Configuration Control Concept for the Integral GS".

The next coordination meeting could take place at ESOC after the end of the LEOP.