



Secretariat of ISO/TC20/SC13

our date
03 May 2006
your date

our reference
N377
your reference

To: ISO/TC20/SC14 Chair and Secretariat

Subject: ISO Technical Committee 20 Subcommittees SC 13 – SC 14
Cooperation Activity for the Development of Standards for Orbit
Descriptions and Orbit Determination Processes

INTRODUCTION

This document summarizes the main aspects related to the status of the existing cooperation activity between two different ISO/TC 20 SC13 and SC14 Subcommittees, aimed to the development of standards for orbit descriptions and orbit determination processes.

COOPERATING WORKING GROUPS:

- 1) CCSDS/CESG/MOIMS/NAVWG - Navigation Working Group, Chaired by Felipe-Flores Amaya, acting as the Representative of this cooperation on behalf of ISO/TC20/SC13/MOIMS(Mission Operations & Information Management) related activity
- 2) ISO/TC20/SC14/WG3 - Operations and Ground Support, Representative: David Finkleman

GENERAL DOCUMENT OF REFERENCE FOR COOPERATION:

Terms of Reference for ISO Technical Committee 20 SC 13 - SC 14 Liaison (**ANNEX A**)

MAIN TOPIC FOR COOPERATION:

Development of Orbit Data Standards

CURRENT TECHNICAL DOCUMENTS OF REFERENCE:

- For CCSDS/CESG/MOIMS/NAVWG, acting on behalf of ISO/TC20/SC13/MOIMS activity:
Orbit Data Messages (ODM) document ISO 22644 (CCSDS 502.0-B-1)
- For ISO/TC20/SC14/WG3:
 1. Orbit Determination and Estimation - Process for Orbit Information Data Exchange;
 2. Orbit Determination and Estimation - Process for Describing Techniques.


PRELIMINARY AND PLANNED ACTIONS:

- Initial discussions already occurred between David S. Berry/NAVWG and David Finkleman/WG3, partially joined by Nestor Peccia/MOIMS/CCSDS, and held in March 28, 2006. A specific report resulting from those discussions was produced by both parties;
- CCSDS/MOIMS/NAVWG representatives acting on behalf of ISO/TC20/SC13/MOIMS activity are invited by ISO/TC20/SC14/WG3 Representative (D. Finkleman) to make a presentation on their current documents under development, at the coming ISO/TC20/SC14 meetings, to be held in Colorado Springs, CO, in May 16-17, 2006;
- ISO/TC20/SC14/WG3 representatives are also being invited to participate in the CCSDS/MOIMS/NAVWG meetings, to be held in Rome, Italy; in June 12-16, 2006; the prior approval of an urgent action for the enhancement of the ODM document by the CCSDS/MOIMS/NAVWG, acting on behalf of the ISO/TC20/SC13/MOIMS activity, is found to be highly desirable by both parties, for the effectiveness of this participation;


MAIN NEAR TERM STEPS

- Seek the authorization for CCSDS/MOIMS/NAVWG, acting on behalf of the ISO/TC20/SC13, for working on an upgrade of the current ISO/DIS 22664 (ODM) Document, aimed to the compliance with the expectations for the planned interfacing in its cooperation work with ISO/TC20/SC14/WG3;
- Conclusion of a first, comprehensive Plan of Activities between CCSDS/MOIMS/NAVWG acting on behalf of ISO/TC20/SC13/MOIMS activity and ISO/TC20/SC14/WG3, tentatively, at the end of July 2006.

Sincerely,



John D. Kelley
ISO/TC20/SC13 Secretary



Eduardo W. Bergamini
ISO/TC20/SC13 Chairman

Enclosures:
Annex A

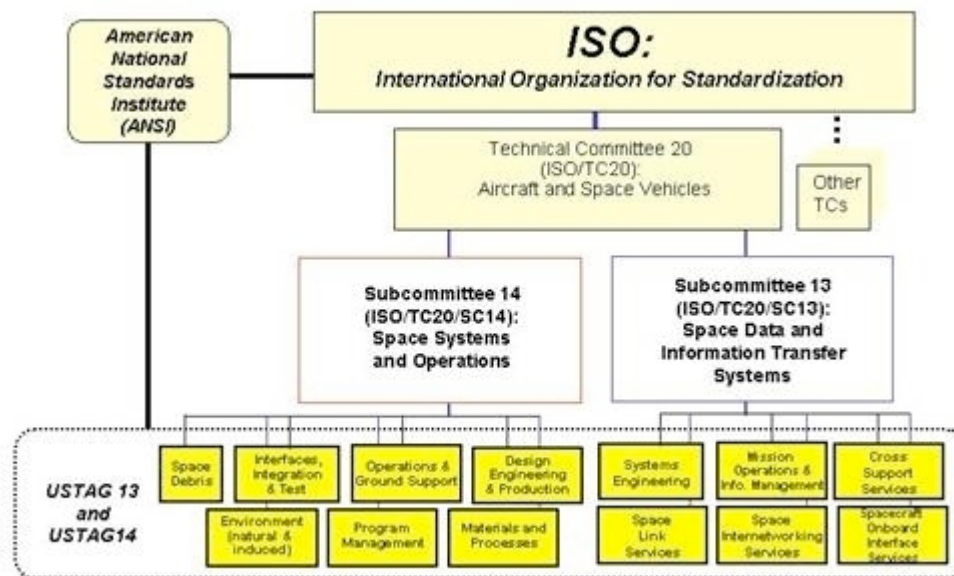
- ANNEX A -

**Terms of Reference
For
ISO Technical Committee 20
SC 13 – SC 14 Liaison**

Objective: The objective of these terms of reference (TOR) is to establish a framework for interaction SC 13, Space Data and Information Transfer Systems, and SC 14, Space Systems and Operations, and their working groups.

Statement of Intent: Recognizing the interactions between Space Systems and Space Data and Information Transfer, SC's 13 and 14 herewith establish mechanisms for collaborating and coordinating standards that bridge responsibilities.

Scope: Diagram 1 depicts the organizational relationship of SC 13 and SC 14 and their subordinate working groups. Matters of mutual significance exist between all working groups in both subcommittees. Principal matters that would benefit from collaboration and coordination reside in SC 13, WG 2.2, Navigation, and SC14, WG 3 Operations and Ground Support.



Justification: Systems and activities within the scope of SC 14 are often an essential element of the “physical layer” in the ISO Open Systems Interconnection (OSI) hierarchy¹. These systems and activities also generate and consume the data and information that systems within the scope of SC 13 transport. Interaction between these

¹ ISO/IEC 7498-1:1994, Information technology – Open Systems Interconnection – Basic Reference Model: The Basic Model.

subcommittees assures that data transport processes and data synthesis or application are mutually consistent.

Procedures:

1. SC 13 and SC 14 shall designate an individual (liaison representative) each to execute coordination and collaboration.
2. These individuals shall be currently knowledgeable of both subcommittees work plans.
3. These individuals shall collaboratively determine which work items should be coordinated within both subcommittees, bringing those items to the attention of the subcommittee conveners.
4. Each of the designated liaison representatives shall apprise the other of subcommittee documents and meetings relevant to coordination or collaboration items and assure the opportunity to examine such documents or to participate in meetings. Examination or participation shall be limited to providing comments or suggested modifications that the principal parties may consider.

Implementation: SC 13 and SC 14 shall appoint liaison representatives immediately upon accepting these terms of reference.