

JOIDES OPERATIONS COMMITTEE MEETING

**THE WASHINGTON MONARCH HOTEL
WASHINGTON, D.C.**

16 FEBRUARY 2000

Members

Nils Holm	Department of Geology and Geochemistry, Stockholm University, Sweden (ECOD)
Alastair Robertson	Department of Geology and Geophysics, University of Edinburgh, United Kingdom
Thomas Shipley	Institute for Geophysics, University of Texas, USA
Nick Piasias (Acting chair)	College of Oceanic & Atmospheric Sciences, Oregon State Univ., Corvallis, USA
Keir Becker	School of Marine & Atmospheric Science, University of Miami, USA

Liaisons

Jack Baldauf	Ocean Drilling Program, Texas A&M University, USA
John Diebold	Lamont-Doherty Earth Observatory, Columbia Univ., USA (SSP Chair)
Thomas Janecek	Antarctic Research Facility, Florida State University, Tallahassee, USA
Paul Dauphin	National Science Foundation, USA
Kathryn Moran	Joint Oceanographic Institutions, Inc., USA
Mary Reagan	Lamont-Doherty Earth Observatory, Columbia University, USA

Guests

Tom Davies	Ocean Drilling Program, Texas A&M University, USA
David Goldberg	Lamont-Doherty Earth Observatory, Columbia University, USA

JOIDES Office

Warner Brückmann	GEOMAR Research Center, University of Kiel, Germany
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A. Welcome and Introductions

Nick Pias welcomed members and guests of the JOIDES Operations Committee meeting. He briefly explained to new and ad-hoc members of OPCOM that he had been asked to chair this meeting because Bill Hay had to attend the EXCOM running parallel to this meeting.

B. Approval of agenda

As Kate Moran had to make a presentation to the EXCOM meeting, there was a consensus that agenda item D (Update on the Budget for Upcoming Legs) should be moved up. There were no further changes or additions to the agenda.

C. Update of items from August Meeting

Warner Brückmann reported that there were no issues from the August OPCOM meeting relevant to this meeting.

D. Update on the Budget for Upcoming Legs

Kate Moran updated OPCOM regarding the budget for currently scheduled FY01 cruises. There are Legs in the drilling plan for FY01 that require additional funds, mainly because of costly non-standard tools. Legs 193 (Manus Basin), 196 (Nankai II), and 198 (Hydrate Ridge) will require special operating expenses for LWD and A-CORKS. She stressed the point that JOI requires advice from OPCOM on the proposed change of schedule with regard to Hydrate Ridge (Leg 198) already presented to EXCOM. She went on to explain that the proposed change could significantly help to match the target budget, primarily because the switch would defer LWD costs to FY 2002 and because the change in the port call from Dutch Harbor to Honolulu would save up to \$160,000. In addition to this a couple of days would be added to Hydrate Ridge. The budget impact of not switching Legs 198 and 199 would therefore mainly arise from higher port call costs and from having to pay for LWD tools out of the FY 2001 budget.

Paul Dauphin requested clarification about the size of the budget shortfall. Nick Pias asked for clarification about scheduling procedures and inquired why the cost issue was not addressed at the scheduling meeting of OPCOM.

Kate Moran replied that the current schedule would exceed the available budget by about \$500,000. If the schedule were not changed there would not be enough packers available for Leg 196, Nankai II. She maintained that a budgetary situation like this would become increasingly typical for the rest of the program.

Nick Pias asked how the scheduling process could be improved, so that a situation like this could not happen again. In reply Jack Baldauf briefly explained to the new members how the scheduling meeting last August was conducted. After SCICOMs discussion and ranking OPCOM was given the charge to develop three alternate schedules and presented these as options to SCICOM.

Nick Pias reiterated his question whether this process could be optimized for the next meeting. In reply Jack Baldauf explained the „Project A“ strategy, by which the operator tries to assist OPCOMs scheduling decisions. It involves the preparation of an in-depth analysis of costs and logistics for all relevant proposals under consideration at the August meeting. The operator prepares a set of operational options that usually focus on the perceived top set of proposals. In the preparation of possible scheduling options the following operational issues are considered:

- Environment (weather windows, sea state)
- Special Operational Expenses
- Minimization of the transit times
- LRP

However, because of the multitude of possible program combinations leg-related costs for an entire fiscal year of drilling can not be calculated in great detail in advance of the scheduling meeting. The final leg related budget is known only a couple of months after the schedule has been set. There is also the issue of „leg creep“, i.e. incremental increases of leg costs occurring over time.

Kate Moran then reminded OPCOM of two important other issues that should be addressed at this meeting. One issue is the testing of the HYACE tool, now scheduled for Leg 191, which should be deferred to Leg 192. The second issue is the question of long-term responsibility for ION-type equipment, which is not clearly identified at this point.

E. Review of ongoing and upcoming cruise (Legs 188 – 192)

Jack Baldauf briefly reviewed the operational status of the ongoing and scheduled cruises. Mary Reagan contributed information whenever logging issues were concerned.

Leg 188 Prydz Bay is underway, it has completed one site (12B), and is currently steaming to next site. Two more sites are planned for the cruise, one of which is currently under a thick pack ice cover (2A). It seems unlikely that it will be possible to drill 2B.

Jack Baldauf updated the committee on operational issues for **Leg 191**, an ION hole for which broadband seismometer instrumentation is planned. Since this would require bare rock reentry and bare rock drilling, it is planned to use HRCB for better performance. Currently a total of 58 days of operation are scheduled. The one critical issue is the planned testing of the HYACE tool during leg 191, which is suffering from poor communication between Hans Amanns group and the TAMU staff. There is also a problem of how to prioritize time, the operator currently has no clear understanding of how much time would be required. Originally 2 * 18 hours were requested but due to the lack of communication it is unknown if this is still the plan.

Keir Becker requested information what exactly would be tested, if it would require only a wireline trip. Kate Moran replied that tool will probably need less time than required. Alastair Robertson asked if Amann's group was given a firm timeline. Jack Baldauf replied that a deadline was probably set, but again, since there was no communication, it was unclear what the problem was. Therefore it was unclear if a shift to leg 192 would at all be helpful for them. Kate Moran explained to OPCOM that a percussion corer is also being developed by Amann's group, a tool which may be very valuable for ODP in the future. Alastair Robertson requested clarification how the testing could be integrated into the leg program. Jack Baldauf replied that the testing would most likely occur at the end of the leg (1.5 days). There was a consensus not to change the current plan for testing on leg 191.

Leg 192 (Ontong Java Plateau)

Baldauf explained that the co-chiefs of Leg 192 sent a letter to the chair of SCICOM requesting eight additional days for the cruise, and Hay has forwarded that letter to OPCOM requesting advice to the operator. The original proposal called for a two-leg program involving 200-300 m of basement penetration at each of four sites. It identified the primary objectives of determining the age, composition, and temperature of the mantle source of the Ontong Java Plateau basalts, and secondary objectives of characterizing the depositional environment and subsidence history of the plateau. To fit the leg into a standard length of 56 days, the planned basement penetration was reduced to 100-150 m at all sites. The co-chiefs have requested permission to wash through the sedimentary section at all sites and reduce the logging program (logging of basement at two sites, no logging of the overlying sediments at all four sites).

OPCOM discussed the issue with regard to maximizing the scientific return. Several OPCOM members (Robertson, Shipley, Piasias) expressed the opinion that "if drilling and coring basement is the most important objective then they should be allowed to do so to maximize their science." Reagan noted that cutting the logging program for the overlying sediments would not significantly reduce logging time. Robertson and Piasias questioned whether this represented an operational issue or a scientific issue perhaps better addressed by SCICOM. Moran reminded OPCOM that the time constraints had already arisen as an issue at the previous OPCOM meeting in August. Reagan remarked that Leg 192 stems from a relatively old proposal that did not go through the SSEP nurturing and review process.

OPCOM then discussed the operational issues related to Leg 192, specifically how to honor the request by the co-chiefs, and suggested adding three days to the cruise as a possible solution. Baldauf noted that ODP cruises generally have maximum limit of 60 days. Shipley and Piasias asked about flexibility in the length of cruises. Moran and Baldauf replied that normal cruises have a target length of 56 days, not 60 days, and that flexibility centers on the 56-day target length. The upper limit of 60 days relates to the rotation balance for TAMU and ODL personnel.

Moran reminded OPCOM that testing of the HYACE tool would have to shift to another leg if enough time did not remain for testing on Leg 192. Piasias asked about the time penalty with HYACE. Moran replied that the co-chiefs would probably decide to wash the sedimentary cover if given that option. She said that HYACE is

compatible with XCB, which would be used in washing, so it would not take much time. Moran also stressed the importance to ODP of HYACE and its developer because of their newly designed percussion corer. She proposed to look at the issue again and return to OPCOM with a new suggestion regarding the testing of HYACE.

Pisias proposed the following consensus decision for forwarding to SCICOM:

- 1.) the operator should add 3 days of transit time to Leg 192,
- 2.) the co-chiefs of Leg 192 should make the ultimate decision on how to use the extra time to fulfill their objectives.

This consensus was based on the following rationale: as basement characterization was essential for the success of this leg logging was needed in case of incomplete of basement recovery. OPCOM's intent was to provide maximum time for basement studies, thus don't worry about sediments. Basement studies in this case meant coring and logging.

Jack Baldauf briefly reviewed the current plan for **Leg 200, H2O**. The leg will drill a reentry hole near the Hawaii-2 cable for an observatory (H2O) site in the eastern Pacific with the intent of installing a broadband seismometer in the hole. This seismometer will be a component of the worldwide ION seismometer network. The exact location of the site has not been determined, but it should be within 2 km of the existing H2O junction box, a device which provides access to the Hawaii-2 cable (H2). The original drilling target of 400 m basement had been revised to 150 m at the last meeting in August. From available single channel data and 3.5 kHz profiles the proponents have determined that the sediment thickness is about 75 m and that there may be a shallow, strong reflector at a depth of 20 mbsf. This reflector is interpreted as a possible chert layer which, if it exists, would require as much as 13 days of additional drilling efforts. The co-chiefs are concerned about a possible rubble zone above basement.

John Diebold stated that SSP had not seen the seismic data with the site fixed, because the determining factor is the location of the junction box, which has only recently been installed. Alastair Robertson wondered how likely the occurrence of chert at this shallow depth is. Nick Pisias inquired if there was an urgent need to reach a decision now? The leg would not exceed the 60 day limit, so SSP should be given the opportunity to search for a better site. Kate Moran stated that if SSP would determine that there is indeed a chert layer, one could think about getting a piston core. Nick Pisias suggested to let SSP look at it first, before further discussion. Keir Becker stated that there had no previous drilling been in the area.

Nick Pisias proposed to let SSP look at the problem and not to make any further recommendations right now. SSP will have two meetings before the August OPCOM meeting, so there should be a better basis for decision making in August.

Returning to the issue of re-scheduling **Leg 198, Hydrate Ridge** Jack Baldauf described the proposed change in the schedule. By switching the currently scheduled legs 198 (Hydrate Ridge) and 199 (Paleogene) costs for LWD tools can be deferred into the next fiscal year FY 2002. By switching the port call from Dutch Harbor to Hawaii another \$160,000 could be saved. The switch would also result in significantly reduced transit times, leading to more drilling time for Hydrate Ridge, possibly for a second reentry site. The only drawback is the more difficult weather window.

Nick Pisias requested for information on potential weather problems. Jack Baldauf stated Leg 146 (Cascadia) was exactly in the same weather window as 199 would be. Leg 146 encountered several days of weather related delays („waiting on weather“), although mostly off Vancouver Island. Jack Baldauf conceded that the later date is clearly less than ideal, but he maintained that it is still doable if the LWD part can be accommodated at the end of the leg. Keir Becker suggested that the cruise may have a little additional time for pre-drilling surveys. Nick Pisias stated that from his experience October was acceptable in terms of weather, but November could be dicy, with potentially high swells. Tom Shipley requested more information about the billing for extra tools, especially why costs couldn't be at least partially transferred into the next fiscal year. Mary Reagan replied that this could not be done due to contractual obligations between LDEO and the owner of the tools.

Kate Moran expressed her view that the proposed change would not pose a significant risk especially when only drilling and coring is concerned. Nick Pisias voiced his concern that the weather window could be too risky and other options should be explored. Keir Becker declared that he was conflicted because he is a co-chief for Nankai II. Tom Shipley indicated that he was not convinced that the costs could not be deferred into FY 2002 with different accounting procedures. There was a consensus to approve the proposed switching the legs 198 and 199.

G. Site changes in Leg 190 and Leg 196

Keir Becker, co-chief of Leg 196 reported that the co-chiefs for Nankai I, Greg Moore and Asahiko Taira had requested to reprioritize the drilling sites after recently completing a 3-D seismic survey in the area. They have identified new high-priority sites located further upslope which intersect thrust faults that are connected to the décollement zone at a much deeper level. At the other high-priority site, WNT-O3B, the revised strategy calls for reducing the amount of coring in the upper section and instead sampling the expanded section off the frontal thrust. Becker stressed that these proposed changes would not affect the overall amount of time required for Leg 190 (Nankai I) but would benefit Leg 196 (Nankai II). Alastair Robertson requested clarification about what was lost by the reprioritisation. Keir Becker replied that one deep site would be cored to a shallower depth and that the Kuroshio current would be much less of a problem. By taking advantage of site 582, coring of a parallel sequence would be avoided, and by coring below the depth of site 582, an expanded decollement section would be collected. There was a consensus that the requested reprioritisation should be approved.

H. Update on Drydock

Jack Baldauf briefly reviewed the activities that took place during the Singapore which fall into three categories:

- (1) repairs and upgrades of the ship and its equipment, necessary for the five year contract extension through FY2003 which were supported by funds from NSF and ODL.
- (2) repairs and upgrades to the scientific infrastructure
The two major projects in this category were the addition of the new 7th level and the modification of the core handling and description area on the 6th level.
- (3) technical projects to improve drilling capabilities: installation of the Active Heave Compensation (AHC) system, installation of the Rig Instrumentation System (RIS), both handled by ODP. Another project was carried out by ODL to improve fuel efficiency: installation of a power management system (synchronous condenser).

Ship Safety, Maintenance and Upgrades

The first, and by far the most extensive, drydock activities included repairs and upgrades of the ship and its equipment to ensure continued safety and maximum performance for the remainder of the program. The projects included the following:

- * Refurbishment to the ship's hull, thrusters, thruster wells, tanks, propulsion gear box, and rudder;
- * Replacement of all sanitary piping within the accommodations;
- * Thorough inspection of the drilling equipment;
- * Installation of a data management system to better regulate the ship's power, to reduce fuel costs;
- * Installation of a new automatic station keeping (ASK) system providing the capability to maintain station under a greater range of environmental conditions;
- * Installation of a new breathing system in the core lab, the core handling catwalk area and the drill floor to facilitate safe handling of H₂S-containing sediment cores;

Shipboard Laboratory Enhancements

The new 7th level laboratory includes wet and dry laboratories, a new conference room, and enhancement to the downhole measurements facility. This additional space will serve to establish a permanent microbiology facility in the lab stack, as well as to improve downhole tool handling.

The 6th floor core laboratory was redesigned to better manage core handling and flow, and to more effectively mitigate the affects of dangerous fumes by installing a better venting system in the core splitting area.

Technology Upgrades

During the dry dock period a new active heave compensation (AHC) system was installed. The new rig instrumentation system Fusion replaces the 25-year old analogue technology that displayed drilling parameters on charts and/or dials in the operations shack by a digital system. This data is displayed at key locations throughout the ship and recorded for later analysis and integration into drilling results.

Dry Dock Creep

Jack Baldauf then went on to explain that the complexity of some of the projects had been underestimated in the planning phase of the project. Replacing the plating in the thruster wells took 2-3 weeks longer than expected, replacement of sanitary piping exceeded the plan by 2 weeks, AHC installation took an extra 2-3 weeks.

Alastair Robertson asked if TAMU expected more problems with plating, that need to be replaced. Jack Baldauf expressed confidence that this was not the case, although slightly higher costs were incurred during dry dock.

F SciMP Report

Tom Janecek presented a report from the very successful recent SciMP meeting in Freemantle, where the panel had an opportunity to visit the ship and interact with technicians and the scientific parties. He guided OPCOM through SciMP recommendations and provided additional background information where necessary.

Personnel issues

SciMP is very aware of the personnel problems ODP is faced with as the program is nearing its end and tried to address these in their recommendations 00-1-1 and 00-1-2.

SciMP Recommendation 00-1-1: SciMP is keenly aware of, and concerned about, the high risk of significant technical attrition on the *JOIDES Resolution* as ODP approaches its conclusion in 2003. SciMP strongly recommends that JOI and IPSC develop a plan that will assure the preservation of all critical technical skills towards the end of ODP. This plan should be in place and communicated to all ODP staff by 1 January 2002.

SciMP Recommendation 00-1-2: SciMP recommends that ODP-TAMU provide the necessary shore-based training for all ASPP employees in a manner that appropriately compensates them for their time.

There was unanimous and strong support for both motions from OPCOM.
Approved by OPCOM.

Laboratory Issues

SciMP felt that further development of the hard rock Applecore software should be ceased, until a recommendation from a dedicated advisory group becomes available.

SciMP Recommendation 00-1-3: SciMP recommends that ODP-TAMU cease further development of Hard-Rock AppleCore and await a recommendation by the Core Description Lab Working Group on development of a new application.

Approved by OPCOM.

SciMP discussed the state of digital imaging on the *JOIDES Resolution*, especially the newly developed archive multi sensor track (AMST). Janecek explained that SciMP recommended removing the archive- or split-core multi-sensor track that includes the Minolta spectrophotometer, now redundant with the line-scan camera, the point-source magnetic susceptibility unit, which has seen little or no use, and the frame camera. SciMP felt that there should be no time devoted to further development of a new system other than GEOTEK digital imaging system, the critical issue here is the integration of data into the JANUS data model, other options should not be followed anymore by TAMU at this point.

SciMP Recommendation 00-1-4: SciMP applauds ODP-TAMU's decision to purchase a digital imaging system from GEOTEK. Due to the high priority of this measurement on upcoming legs, we reiterate our request that the new GEOTEK system be deployed and operational by June 2000 as specified in SciMP Recommendation 99-2-12 (SCICOM-approved). Appropriate resources should be focused on integrating the GEOTEK line-scan camera into the ODP infrastructure, including deployment of required resources, data storage and archive procedures, JANUS data model, and a post-cruise image distribution plan.

To alleviate space concerns in the post-drydock core lab, the AMST should be removed to provide space for placement of the GEOTEK track. Sensors from the existing AMST should be retained aboard the *JOIDES Resolution* for use by the shipboard scientific party, if needed. No resources should be spent on further development of the alternatives to the GEOTEK line-scan camera system.

Approved by OPCOM.

SciMP recognized a tremendous benefit in reorganizing the lab stack and putting the microbiology and chemistry labs on the same floor. The XRF is seen as redundant now that the chemistry lab has a new ICP-ES. Therefore the XRF should be removed from the ship, and space should be utilized for microbiology. It was noted that SciMP intends to discuss further the overall merits and necessity of the shipboard XRD before recommending whether to purchase a new one. The science petrologist community is being polled and there seems to be a consensus to stick with an ICP. The strategy now is to remove the XRF from the ship in Hobart.

SciMP Recommendation 00-1-5: SciMP recommends that ODP-TAMU remove the XRF from the *JOIDES Resolution* during the Leg 189/190 transit and portcall.

Approved by OPCOM.

SciMP Recommendation 00-1-6: SciMP recommends that TAMU expeditiously (i.e., during the Leg 189/190 transit) move the existing thin-section, hard-rock sample preparation, and XRD laboratories into the new space on the 7th floor of the lab stack. The microbiology laboratory, including the existing apparatus and the expanded apparatus purchased by ODP-TAMU and LExEn, should be installed in the F-deck space vacated by this move.

Approved by OPCOM.

The need for determining cat walk core temperatures arises from the necessity for detecting and sampling gas hydrates immediately after core has come on deck. Possible methods range from simple temperature sensitive tape placed along the outside of the core liner to a sophisticated infrared video system that would provide a whole-core image. SciMP discussed this after a request by the Gas Hydrates PPG and felt that this type of primary data should be entered into the JANUS database whenever possible.

SciMP Recommendation 00-1-13: SciMP recommends that ODP-TAMU investigate the capability to measure spatial variations in core temperature on the catwalk. These non-intrusive measurements should lead to integration into JANUS and should be coupled to measurements made in the physical property laboratory. The results of this investigation should be presented to SciMP before ODP-TAMU purchases or develops any equipment.

Approved by OPCOM.

Underway Geophysics

SciMP reviewed the status of underway geophysics onboard the *JOIDES Resolution*. SciMP concluded that although routine seismic data acquisition is working well when required, the support staff has little or no expertise or training in data processing so that data tend to stay in relatively crude format unless a more refined version is required on a specific leg, eg. to tie logs to seismic data. SciMP made two recommendations pertaining to underway geophysics on board *JOIDES Resolution*.

SciMP Recommendation 00-1-7: SciMP recommends that the pending purchase or lease of the new seismic gun arrays for the *JOIDES Resolution* be deferred pending full evaluation of the *JOIDES Resolution* underway geophysical operations by the SciMP U/G sub-panel. The evaluation will be completed and presented at the next SciMP meeting and a full recommendation on U/G operations will follow.

Approved by OPCOM.

Two magnetometers are on board *JOIDES Resolution*, both are currently not working and there is no support personnel available to repair or use them. SciMP feels that the need for magnetic data should be evaluated and be weighed against the cost for repairing the tools.

SciMP Recommendation 00-1-8: SciMP recommends that ODP-TAMU determine the cost to repair both magnetometers and properly maintain and service them for the remainder of ODP. These data will be incorporated into the SciMP evaluation of U/G operations. Any repairs or other expenses should be deferred pending the U/G report.

Approved by OPCOM.

Integration of wireline, seismic, and core measurements

SciMP discussed a report prepared by the data integration subcommittee about the future of wireline, seismic, and core measurements on the *JOIDES Resolution*. The report recommended following a two-step procedure: Level One: capability to integrate basic core sonic, log sonic, VSP and seismic data together with synthetic seismogram; and Level Two: capability to integrate all shipboard data with seismic data in one computer system. Currently ODP-LDEO is conducting a pilot study of the formatting procedures for digital seismic data, which are required for the use by IESX software. There was a consensus to move forward on this recommendation, i.e. approve it. OPCOM should encourage pilot study and review the results later, but this recommendation will not be forwarded as stated in SciMP report. It was suggested that SSP should be involved in the evaluation of the results of this study.

SciMP Recommendation 00-1-9: SciMP recommends that:

- 1) Shipboard facilities for seismic/log/core integration include a separate workstation dedicated to this effort.
- 2) The IESX software be able to plot directly to large-scale (36") plotters and printers and that this capability be implemented by the June 2000 SciMP meeting.
- 3) ODP-LDEO and ODP-TAMU provide a plan for integrating the Unix network on the ship.

Approved by OPCOM.

SciMP Recommendation 00-1-10: SciMP recommends that LDEO develop a procedure for creating IESX project files for each ODP drill site that will include the digital seismic profiles so that these data can be visualized interactively with the log and core data during and after the drilling of each site. The project file should be the basis for the seismic/log/core integration and time-depth conversion capabilities defined in SciMP Recommendations 99-1-11 and 99-1-12 (SCICOM-approved).

Approved by OPCOM.

SciMP Recommendation 00-1-11: SciMP recommends that LDEO also create a tutorial and training project file with seismic/log/core integration for the shipboard „cookbooks“ so that technicians and scientists can improve their skills with IESX, GEOFRAME, and the integration process while at sea. This training project and documentation should be available for SciMP review by June 2000.

Approved by OPCOM.

SciMP Recommendation 00-1-12: SciMP recommends that JOI modify the site-survey data requirements for seismic profiles in the Data Submission Guidelines (DSG). The modification will include the following:

- (a) For each final processed seismic profile submitted with a proposal, digital seismic data and navigation data and supporting documentation of the processing stream used must be provided to the data-bank manager in industry standard SEG-Y format on 8-mm tape. The data-bank manager will advise the appropriate SSEP when these data are received. This data submission requirement should be rigorously enforced and proposals should not be considered for scheduling by OPCOM until this requirement is met.

(b) The data bank manager will maintain the digital seismic data and support documentation, and these data will be treated as ODP proprietary information as specified in the current DSG.

OPCOM decided to wait for the results of the ongoing ODP-LDEO pilot project before moving forward on this recommendation and presenting it to SCICOM. There was a general consensus that a change of the Data Submission Guidelines at this time would be premature and that a more cautious approach should be taken. While recognizing the potential benefits of the submission of fully digital site-survey data OPCOM felt that such a requirement would overburden proponents.

G. Responsibility for the equipment

OPCOM briefly considered the question of long-term responsibility for ION-type equipment. Precedent are the CORKs, which are provided by ODP. There was agreement that this is not an issue for OPCOMs discussion, but should more appropriately be considered by SCICOM or EXCOM. However as a facilitator for other programs ODP needs to be aware of potential risks associated with certain types of equipment. If there are risks involved with equipment proposed this should be considered along with other risk factors. As a policy issue, it should therefore be flagged to SCICOM before the ranking. The issue will be deferred to SCICOM for their consideration.

Adjourn