Setting the Scene
SOUTHERN OCEAN OBSERVING SYSTEM (SOOS)
Council of Managers of National Antarctic Programs (COMNAP) 2013 Workshop • Seoul, South Korea 7 July 2013

Dr Rob Wooding, General Manager Support Centre • Australian Antarctic Division

COMNAP SOOS Project

- October 2012: COMNAP Executive Committee approves a SOOS Project for 2012-13

- Workshop on 7 July 2013 on the margins of the COMNAP AGM in Seoul, Republic of Korea

- Dr Rob Wooding from Australia appointed to co-ordinate the project and chair the workshop

- COMNAP represented at SOOS Scientific Steering Committee Meeting in Shanghai, May 2013 by representatives from AAD, PRIC and KOPRI.

- Joint letter from Presidents of SCAR and SCOR seeking support for SOOS priorities.

COMNAP SOOS Project

- Project objective:

"to develop a systematic cooperation among National Antarctic Programs to coordinate and maximise the operational support and optimise efficiencies for integrated physical and biological observations that SOOS and other monitoring programs in the Antarctic Treaty System will require to be conducted across all areas of the Southern Ocean"

How can COMNAP help SOOS?

- COMNAP can provide support by co-ordinating **at the operational level** the logistical and other resources of its 28 member nations to:

    - deliver regular and sustained multi-platform observations;

    - help to facilitate multi-national/multidisciplinary research campaigns to particular areas of the Southern Ocean

    - achieve the deployment of remote devices for data collection and monitoring in the parts of the Southern Ocean that are the most difficult to access;

    - co-operatively develop modular, transferrable scientific technical equipment that can be shared among all COMNAP nations; and

    - mobilise the existing satellite resources available to researchers and collectively seek out new ones.
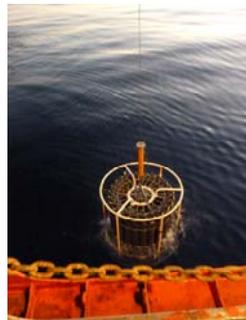
Southern Ocean Logistical Resources

- Between October and April each year, COMNAP members deploy between 20-30 vessels in the Southern Ocean for operational and scientific work

  - collectively these vessels traverse a large swathe of the Southern Ocean and many could be collecting more data in transit with little or no disruption to their planned activities;
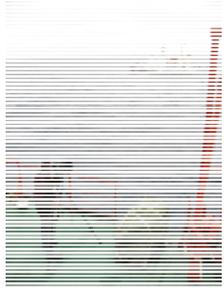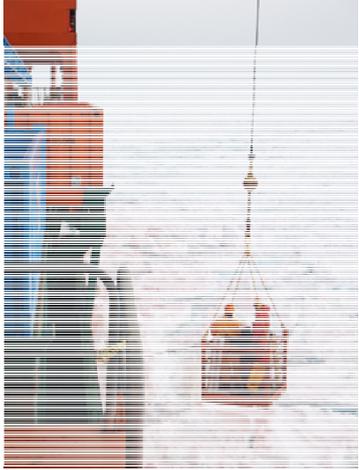

Southern Ocean Logistical Resources

- many of these have relatively fixed annual schedules which would facilitate regular incidental support for research at specified locations such as the deployment and retrieval of monitoring devices);

Southern Ocean Logistical Resources

- some vessels capable of marine science research currently have spare capacity.

Southern Ocean Logistical Resources

- There are also approximately 20 tourist vessels operating in the Southern Ocean: mostly in the Peninsula area and the Ross Sea

  - Through close links between the organisations, COMNAP is well placed to work with IAATO to arrange incidental support for scientific research from some of these vessels

Southern Ocean Logistical Resources

- A number of COMNAP members, along with the private Dronning Maud Land Aviation Network (DROMLAN) operate frequent intra-continental flights across parts of the Southern Ocean

  - Deployment of remote sensor systems on large aircraft is steadily becoming more feasible: the US National Science Foundation use of the SABIR pod system on LC130H aircraft

Southern Ocean Logistical Resources

- Most COMNAP members use satellite communications for operational purposes and there is a growing use of satellite services as platforms for remote data collection and monitoring
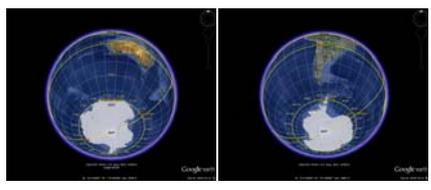
Conclusion

- SOOS-COMNAP collaboration is potentially a new model for co-ordinating operational support for multi-national multi-disciplinary scientific research

- If successful, aspects of this model could also be applied to cryosphere and terrestrial research in Antarctica

- COMNAP's potential role is as a conduit for communication and collaboration between the SOOS Executive Committee, Steering Committees and Project Office and COMNAP members