



**Thirtieth Meeting of the
Informal South Pacific Air Traffic Services
Coordinating Group**

Record of Meeting

14-17th March 2016
Gold Coast, Australia

1. Opening Remarks

ISPACG Co-chairs Harrie Copeland, Federal Aviation Administration (FAA) and Tim Boyle, Airways New Zealand (ACNZ) opened the meeting and thanked the delegates for their attendance. Simon Godsmark, Airservices Australia (Airservices) welcomed the delegates and paid respect to the traditional custodians of the land upon which the meeting was taking place. Tim thanked Airservices for hosting the meeting.

Housekeeping and administrative matters were addressed. The draft Agenda was reviewed and accepted by the meeting with the FIT presentation being deferred until later in the day. The Agenda was published on the ISPACG website as WP-01.

Tim acknowledged Blair Cowles, IATA, and thanked him for attending.

2. Updates from States

2.1 Airservices Australia

Simon Godsmark advised that Airservices has appointed Jason Harfield as CEO, after the resignation of Margaret Staib. Mr Harfield had been acting in the role and has been with Airservices for 27 years in various roles including Head Air Traffic Controller.

Airservices is undertaking a Business Diagnostic Review which will enable the business to focus more on its core ATC and ARFF requirements. The International Programs team will now report to the Oceanic and Transcontinental Services (OTS) branch within ATC.

Priorities for OTS include increased use of ADS-B and ADS-B data sharing, Flight Plan Safety Net Alerting (FPSNA) enhancements and increasing the availability of UPR's and Flex Tracks.

Simon provided an update on the CMATS (Civil-Military Air Traffic System) which will replace the current ATM platform.

2.2 Service d'Etat de l'Aviation Civile en Polynesie Francaise (SEAC-PF)

Joel Laulan (SEAC-PF) advised that the DARP project will be ready to trial following a software update to allow the new route to be displayed to the controller. Initially the trial will involve ANZ29/29 and QFA7/8, but is anticipated to be available to all users by 2017.

ABS-B/VHF implementation and extension in New Caledonie, French Guiana and Reunion Islands will be carried out as part of the modernisation plan. There is also a project underway to provide ADS-B within existing VHF coverage in Tahiti as well as extending VHF coverage further. Installation is scheduled for 2017 with commissioning in 2018.

Airlines are asking to cease the requirement for HF SELCAL checks when CPDLC is established. This will require approval from the administration in France.

SEAC-PF would like to establish AIDC with DGAC.

SEAC-PF is having issues with the airspace to the east of the Tahiti FIR and beneath the Mazatlán FIR. Tahiti is sometimes asked to track flights leading to confusion as to who has responsibility for maintaining communications and providing services to aircraft.

2.3 **Airports Fiji Limited (AFL)**

AFL was unable to attend the meeting. Iaitia Tabakauoro, Civil Aviation Authority of Fiji (CAAF) provided a brief update on behalf of AFL.

- Nadi will support ADS-C CDP and RNP2 implementation.
- ADS-B ITP is not in the current works plan.
- The requirement to report enroute speed variation was moved from a NOTAM to AIP SUP.
- Nadi will introduce STAR's at Nadi airport.

Mark Shepherd, Air New Zealand (ANZ) and Adrian Slootjes, Virgin Australia (VOZ) advised that they would support the introduction of an ICAO standard RNP AR approach to RWY 02.

2.4 **Direccion General de Aeronautica de Chile (DGAC) (IP-09)**

Juan Carlos Rojas (DGAC) advised the meeting that during the second quarter 2015 (2Q), AIDC testing began between Santiago - Lima and Santiago - Tahiti FIR. All test messages failed due to CRC, and a software update is expected to resolve the problem in the Oceanic Area Control in 2017.

During the fourth quarter 2015 (4Q) ADS-C/CPDLC service is provided in AWY UL401, expanding FANS 1A out of Easter Island FIR.

During the fourth quarter 2015 (4Q) a NOTAM was sent according to the agreement in ISPACG 29, in order to request speed changes reports, in AWYs UL780 and UL302.

During the second quarter (2Q) 2017, RNP4 is expected to be established in the Easter Island FIR

2.5 **Airways New Zealand (ACNZ)**

Paul Callahan (ACNZ) provided an update on the HF replacement project. The required software is being developed and the project is expected to be completed in late 2016. ACNZ is looking to replace both ATM systems; Skyline and OCS. Skyline will be replaced first and the new system will need to have some Oceanic capacity for future consolidation.

Auckland centre will move to a new building in 2019, and domestic radar sectors will be relocated from Christchurch to improve contingency response.

ACNZ will implement ADS-C CDP, and RNP2 separation for parallel tracks in 2016, in conjunction with improvements in offset procedures. RNP4 latsep will be reduced from 30nm to 23nm in 2017 after completion of the safety assessment.

At this stage ACNZ have no intention of introducing ADS-B ITP due to many airspace users not being equipped with ADS-B 'In'. Jean-Francois Bousquie, AIRBUS advised that ADS-B ITP should be supported by ANSPs as much work has gone into the development and fitment of the capability in modern aircraft. Blair Cowles advised that while IATA is supportive of ADS-C CDP, they haven't been promoting ADS-B ITP in the South Pacific due to low traffic density. Gene Cameron, United Airlines (UAL) advised that while their crews liked ADS-B ITP, the ADS-C CDP was favoured by their business. Mark Shepherd said that this view was supported by ANZ as ADS-B ITP equipage is expensive and therefore difficult to justify. Adam Watkin, Airservices took an action to update the meeting on Airservices position on ADS-B ITP and ADS-C CDP.

2.6 Papua New Guinea Air Services Limited (PNG ASL)

Phil Irvine, (PNG ASL) provided an update on the PNG ADS-B MLAT ATM System (PAMAS) project. Progress with PAMAS stalled in late 2015 during acceptance testing when system vendor, Comsoft, declared itself insolvent. PNG ASL already have the hardware which is ready to be installed and are now trying to source a new software vendor who can utilise the purchased hardware. This requirement is adding to the cost of the project.

MLAT was a feature of the Comsoft system, so the MLAT receivers will now be used as ADS-B sensors. Mode S radar, VHF, HF and domestic air route structure projects are still underway as these were not dependant on Comsoft.

2.7 Federal Aviation Administration (FAA)

Dustin Byerly, (FAA) informed the meeting that ADS-C CDP and ADS-B ITP would be available in June 2016 following a software update. Oakland Center has partnered with Anchorage Center in a UPR trial which will offer high level UPR's as an alternative to PACOTS tracks. IATA thanked the FAA for facilitating more UPR's.

Dustin advised the meeting of some of the difficulties that Oakland had encountered when it came to other airspace users conducting operations in the North Pacific without suitable consultation.

Oakland has commenced a DARP trial with Vancouver ACC and data analysis shows that the overwhelming majority of DARP requests are being approved.

Data indicates that the issue with reporting speed variations has not improved since the last ISPACG meeting.

AIDC messaging between Oakland and Mazatlán was established in March 2015.

2.8 Civil Aviation Bureau Japan (JCAB)

Natsuki Ibe, (JCAB) provided an update on high level Pacific UPRs starting a trial down allowing a lower level of F380 to be used. The detailed procedures for this trial have not been finalised.

Natsuki advised the meeting that ADS-C CDP and ADS-B ITP will be available in 2018, as previously advised at IPACG. JCAB is working with Japanese airlines to maximise the benefits that may be achieved by these procedures. This implementation will be reliant on transitioning to a new Oceanic ATM system being by early 2018.

JCAB is consulting with their stakeholders regarding the implementation of a PBCS framework and these preparations will be completed by the end of 2016.

2.9 Servicios a la Navegación en el Espacio Aéreo Mexicano (SENEAM)

Bruce Magallon, (SENEAM) advised the meeting that they had signed a contract with ARINC to provide third party HF communications. SENEAM are upgrading their ATM platform to TopSky which is expected to be completed in late 2016, but this is competing for resources with the Mexico City International Airport project.

AIDC messaging with Oakland Center is successful about 85% of the time.

3. Review Relevant Work Conducted Since ISAPCG/29

3.1 Update on ICAO (IP-01)

Harrie Copeland presented IP-01 regarding the ICAO APAC Regional Office promoting an initiative in the framework of the No Country Left Behind programme. This initiative is a five day workshop in late 2016 for the South Pacific Islands in the area of air navigation services and ANS safety oversight. While the workshop is still subject to funding, the ICAO APAC Regional Office welcomes feedback on the tentative agenda. The proposed venue is Auckland, New Zealand from 12-16 December. ACNZ will support the meeting although they haven't been formally involved yet.

Blair Cowles said that IATA were not aware of the proposed workshop and raised concerns about duplication of forums. Blair suggested that the workshop could be combined with ISPACG and that the proposed timing was less than ideal given the proximity to the holiday season.

Adrian Slootjes said that for the workshop to be worthwhile the objectives would need to be more concise and participation by all relevant states observed would be required.

Joel Lulan said that a detailed workshop would take longer than 1 week, so the proposed workshop would just be about communicating issues.

Tim Boyle agreed to provide feedback to the regional office outlining the views of the ISPACG members.

3.2 Report on ISPACG/PT19

Matt Fraser, ACNZ updated the meeting on PT19. The PT19 minutes will be published on the ISPACG website.

Allan London and Dustin Byerly provided an update on the implementation of a Volcanic Ash action plan, following the Volcanic Ash tabletop exercise held at PT18. It was suggested that a Critical Event Contact List (CECL) would be a good idea for the South Pacific as there is already a CECL established for the North Pacific.

There was discussion regarding the height at which the upper reported level of a VA cloud should be a trigger for using the CECL to hold a Contingency Planning Conference. IATA has an action item to survey North Pacific airspace users to establish an appropriate level. Gene Cameron, United Airlines (UAL) suggested that geographical variations and existing numerous low level eruptions would require frequent conferences.

Mark Shepherd said that because aircraft could descend to A100 in an emergency event, A090 would be the appropriate level to trigger the CECL. Steve Smith, American Airlines (AAL) said that altitude and lateral variation in ash and differences in procedures would suggest that these conferences are only necessary where they affect multiple users or have a widespread impact on air routes, and therefore F240 or F250 might be an appropriate trigger level.

Harrie Copeland suggested that the meeting agree on a level and review at a later date. The meeting agreed on F240 being the trigger for CECL CP conferences for VA in oceanic areas.

3.3 Report on FIT/23

Brad Cornell, Boeing provided an update on the FIT/23 meeting. The FIT/23 minutes will be published on the ISPACG website.

The importance of performance monitoring was reiterated as this is vital to identifying and resolving issues. Other ANSP's were encouraged to implement performance monitoring procedures.

4. Review Open Action Items (ISPACG/29 Appendix A)

4.1 AI 25-1 RNP-4 Equipage

The majority of FANS-1A aircraft using Oakland airspace are now planning RNP4.

Item Closed

4.2 AI 25-2 Speed Variation Concern (WP-02)

Dustin Byerly presented WP-02. Drastic speed changes pose the most risk to derogating longitudinal separation. To quantify the number of unannounced speed changes from the filed flight plan, the FAA analysed two 15-day periods of Oakland Air Route Traffic Control Centers (ARTCC) flights. The results are concerning and can be reviewed in the WP.

The two main causes of unannounced speed variations are:

- Aircraft adjusting speed when adverse weather is encountered, and
- When changes of level are approved, there is often an associated speed change which is not notified/requested.

The FAA NOTAM regarding advice of speed change will be reissued in April 2016.

Allan London said that this has been an ongoing problem since 2005 and the data presented suggests that efforts to date are not making an improvement. Allan asked for assistance from IATA to improve the situation, and warned that without improvement service enhancements such as reduced separation will not be possible. Blair Cowles took an action for IATA to follow up with individual operators as well as a collective reminder to industry.

Adam Watkin advised that the speed variations in Australian Oceanic airspace occur because inbound flights are being received without speed updates from upstream ATSUs. An additional cause of changes in groundspeed is aircraft entering/leaving the Jetstream near the East coast of Australia. Co-chair Harrie Copeland asked that all ANSPs keep monitoring this issue.

Item Open

4.3 AI 25-3 Central Reporting Agency (CRA) website

Paul Radford advised that an update to the CRA website would be finished by June 2016. Part 2 of the AI was to encourage more airlines onto the website. Only 35% of airlines using the airspace have registered for the website and, of these, only a small proportion actually uses the website. The campaign to encourage use of the CRA website will resume following the June 2016 upgrade.

Item Open

4.4 AI 27-1 SATCOM Voice Capability in Flight Plan

The new PBCS manual has a section on SATVOICE so this action doesn't need to be

managed through ISPACG but may be monitored. No states had any issues which they needed to advise PARC CWG.

Brad Cornell advised that the FAA requires SATCOM availability to be published by AIP to enable flight dispatchers to utilise the functionality. This is already published in New Zealand AIP.

Item Closed

AI 27-2 SATCOM Voice Capabilities in AIP

A new action will be raised for those states that have not already published SATCOM Voice capabilities and requirements in state documentation to do so.

4.5 AI 27-3 New ICAO Flight Plan Format

Keith Dutch, FAA, advised there was no update available and the FAA would follow up. Awaiting advice from ICAO as to the correct use of wake turbulence category J and a better way to plan RNP2 without using RMK. There were regional directives from ICAO regarding the use of the letter J.

Item Open

5. Review Work Programs

5.1 Implementation of Automatic Dependent Surveillance-Broadcast (ADS-B) In-Trial Procedure (IP-02)

Keith Dutch provided an update on the development of automation and procedures to support use of the ADS-B ITP in the FAA's Oceanic Flight Information Regions (FIRs). The ITP trial was largely a manual process but will become more automated for future use.

ATOP determines aircraft eligibility, sends request and displays the appropriate message to the controller. The required software will be installed by April 2016.

All required Safety Management System (SMS) work is completed and the draft procedure is currently under review by the FAA Air Traffic Safety Oversight (AOV) organization to approve this reduced separation standard.

ATOP automation is expected to be delivered in the March-April timeframe of 2016 to all three FAA oceanic FIRs. Further testing and controller training will need to be conducted at each facility prior to implementation. Implementation of the procedure is expected in mid-2016.

5.2 Implementation Automatic Dependent Surveillance Contract (ADS-C) climb/descent procedures (CDP) (IP-03)

Keith Dutch presented a paper regarding the development of automation and procedures to support use of the ADS-C CDP in the FAA's Oceanic Flight Information Regions (FIRs). The CDP trial used a two page manual checklist and since then the FAA have been working on automating this checklist into ATOP.

The ATOP automation is expected to be delivered in the April timeframe of 2016 to all three FAA Oceanic FIRs. Further testing and controller training will need to be conducted at each facility prior to implementation.

Full implementation of ADS-C CDP is dependent upon receipt of an ICAO State Letter that approves ADS-C CDP as a global standard or upon publication of the procedure in PANS-ATM Doc. 4444 in November 2016. The FAA anticipates that it should have receipt of a State Letter prior to November 2016 and will be able to fully implement the procedure mid-2016.

5.3 Lost Fuel savings due to lack of RNP 4 and FANS 1A equipage (IP-04)

AI 25-1 described the situation where operators were not flight planning RNP4 and FANS/1A equipage in order to reduce the cost of more frequent ADS-C reports. As this Action Item was closed this paper was not presented.

5.4 SASP consideration of contingency and weather deviation events in a reduced horizontal separation environment (IP-05)

Paul Radford provided the background of this issue; the FAA were reviewing the content of PANS ATM to determine pilot actions in aircraft contingencies such as turn-backs, diversions etc. and presented to SASP in October 2015.

The FAA presented attachment IP-05A, and invited the meeting to note the information contained, particularly the invitation for the SASP to review and revise, as necessary, ICAO Doc 4444, paragraph 15.2 (Special Procedures for In-Flight Contingencies In Oceanic Airspace) and any other ICAO documents that may be affected as it develops reduced horizontal procedural separation standards.

5.5 Unmanned free balloons/other operations in the United States (IP-06)

Braks Etta (FAA) presented IP-06. At ISPACG/29, ACNZ gave a briefing on the Google Loon project. At that time the FAA said it would send a letter to ICAO stating concerns and requesting guidance. To date, no response has been received from ICAO.

The rules for UFB's are more than 50 years old and much has changed, which requires a change in regulations. The FAA acknowledges that the incident reporting definitions for balloons need to improve. The FAA is reviewing its regulations and associated procedures.

The FAA would like other ANSP's to work together with the FAA and ICAO to ensure harmonisation in the development standardisation of global SARP's. In support of a previous ISPACG request to relay pertinent information about UFB/other operations (that may assist in harmonizing efforts to update regulations and/or supporting procedures), please note that Paul Eure (Paul.Eure@faa.gov) is the U.S. subject matter expert for further information.

5.6 Variations in airspeed in controlled airspace (WP-09)

Adam Watkin presented WP-09 which referenced the issue recorded in AI 25-2 regarding reporting speed variations.

The Civil Aviation Safety Authority of Australia (CASA) advised Airservices that as speed reporting procedures were already described in AIP, a NOTAM could not be issued with potentially conflicting information. The correct method of promulgation would be via AIP SUP. During the development of the wording of the Australian AIP Sup, a number of issues were discussed at length, including:

- What 'speed' the flight crew were expected to report? and
- What CPDLC report was required for the notification of a change in speed?

An additional consideration was the baseline or reference speed that the changes were to be applied to? It was considered that the only way that this common datum could be obtained was by obtaining the aircraft's speed at the FIR boundary entry position. However, neighbouring ANSPs do not require a speed report at the FIR boundary, which was believed to be important to establish a baseline.

Mark Shepherd (ANZ) expressed his disappointment with this outcome. Whilst he supports reporting requirements, this rule increases pilot and controller workload and reduces the benefits of FMC WPR, unless speed reporting could be included.

Adrian Slootjes (VOZ) stated that the AIP SUP has unintended consequences as it currently applies to all airspace, not just OCA. This rule is impossible to comply with in certain situations, particularly when aircraft are on descent to their destination. The increased reporting has also increased HF congestion on the Tasman frequencies.

Simon Godsmark (Airservices) suggested that this issue needs to be followed up with CASA. Adrian has asked Airservices for enhanced guidance to provide to their crews. It was also suggested that short-haul flights could be omitted from this requirement as the biggest issue is with long-haul flights.

5.7 ADS-C CDP Usage (IP-07)

Gene Cameron (UAL) presented IP-07 on behalf of United Airlines and IATA. Historically, United Airlines flights from San Francisco and Los Angeles to Sydney have been adversely affected by an inability to climb through one or the other flight's level due to separation of less than 30nm. The primary reason is the arrival slots in Sydney are 5 minutes apart and result in both aircraft flying the same optimum routing to Sydney. They frequently join the same route with more than seven hours of onward flight time, within 1000 feet of each other and less than 30nm lateral separation.

Gene acknowledged the work that ACNZ and the FAA have done in implementing ADS-C CDP and encouraged other ANSP's to enable ADS-C CDP in their regions.

5.8 ATS Interfacility Data Communications (AIDC) Performance (IP-08)

The content of this paper was previously covered in the Planning Team meeting.

5.9 AIDC Performance for Brisbane (IP-13)

The content of this paper was previously covered in the Planning Team meeting.

6. Other Business

6.1 Introduction to SWIM

Pierre Truter, (Airservices) provided the meeting with a briefing on System Wide Information Management (SWIM). Pierre is also the Chairman of the ICAO Information Management Panel (IMP) and he detailed some of the benefits of SWIM, particularly for the current Aviation Data Exchange Modules and in areas such as NOTAM and Met. SWIM is one of the four essential modules in the ASBU program.

Adrian Slootjes, (VOZ) stated that from an industry wide perspective we need to focus more on how we use Met information and not just on better ways of sharing it.

Brad Cornell, (Boeing) raised concerns about how the transition plan will be managed and suggested that the ICAO IMP needs to consider the cost to manufacturers if implementing changes on the flight deck and that industry should first focus on updates to ground based systems.

Pierre advised the meeting that the publication of a ‘roadmap’ is a deliverable of the next meeting and that a first draft of ‘SWIM for the cockpit’ has just been drafted for comment.

Mark Shepherd, (ANZ) suggested that we should be focussing more on fixing current problems rather than problems of tomorrow, or the day after tomorrow.

Braks Etta, (FAA) advised that ICAO will be holding a SWIM workshop in Bangkok and with so many stakeholders it would be difficult to focus the workshop. Pierre advised that the first meeting will be focussed on helping states move towards becoming SWIM compliant; whatever that may look like. Braks asked that as each stakeholder currently has its own version of SWIM, how would these be integrated? Pierre said that the SWIM registry defines the services that must be provided and this will allow for integration.

Adam Watkin, (Airservices) asked about Flight Object; where is the data held and what happens to a flight that goes through a non-SWIM FIR? Pierre advised that the question was too technical for him to provide an accurate answer.

Paul Radford, (ACNZ) asked about the future of AIDC and how much effort should be put into maintaining and improving AIDC with Flight Object and SWIM on the horizon? Paul asked where to look for guidance about the transition plan for the next 10 to 15 years? Pierre stated that the comms panel and the IMP needed to do a lot of work as the same questions are being asked from many areas of the industry and there were no answers yet.

Tim Boyle, (ACNZ) raised concerns about who owns the information and who will have to pay for it. SWIM information should be shared freely and not be owned by third parties. Pierre advised that Airline partners are raising the same concerns; SWIM should remain free and stakeholders will need to work to keep it free.

Adrian Slootjes, (VOZ) said that data agreements should never be barriers and regulations shouldn’t restrict an airlines ability to manage its own data.

In closing, Pierre said that there is a lot of work to do but we need to start small and establish and follow the roadmap.

6.2 **Performance based communication and surveillance (PBCS) (PT WP-10)**

Natsuki Ibe (JCAB) presented WP-10 from the Planning Team meeting on behalf of JCAB and the FAA regarding PBCS implementation in the Pacific Oceanic airspace. It was proposed that the meeting adopt the Pacific FIR’s Seamless PBCS Planning Chart. The content of the chart was taken from the PBCS manual and endorsed by IPACG.

The states agreed to adopt the “Pacific Seamless PBCS Planning Chart” and each state took an action to provide Natsuki with updated information for the chart by 13 April 2016.

6.3 **Contingency planning task force update**

This item was left over from last year’s agenda and was closed.

6.4 RNP2/GNSS lateral separation

This matter had been discussed extensively and was closed.

6.5 Sydney Early Morning Arrivals Procedure (SEMAP)

Gene Cameron, (UAL) advised that the SEMAP procedure was causing problems for long-haul flights due to the impact of variables such as wind, weather and traffic disposition. Airservices' National Operations Centre (NOC) is responsible for generating the SEMAP program each day and this is provided to airlines and controllers in Brisbane Centre for dissemination as necessary.

Gene requested that an update be provided to crews as they enter the Brisbane FIR and asked the meeting to note a request for more collaboration between the Sydney Traffic Manager (SYTM) and East group (ATC) in managing the airborne delay programme. Gene advised that when Airservices reviewed the previous season's effectiveness there was no consultation with or feedback requested from long-haul carriers.

Adrian Slootjes, (VOZ) advised that Virgin Australia flights are frequently penalised despite complying with the procedure and acknowledged that Airservices are trying to address the issues. Adrian said that the underlying issue is with non-compliance from some airlines which results in penalties for those that are complying. Adrian requested that:

- IATA do more to enforce compliance from Asian carriers,
- The Sydney Airport Corporation do more to increase capacity, and
- ANSPs improve information flow across FIR boundaries.

Adam Watkin, (Airservices) explained that some of the difficulty in managing airborne delays was that airlines utilised different methods to achieve delays, i.e. gradual or last-minute speed reduction.

6.6 Future of ISPACG and ISPACG PT meetings

Allan London, (ACNZ) discussed options for the meeting to consider regarding the future of the PT, as workload in recent times has reduced. The PT could be conducted remotely or combined with ISPACG proper.

Blair Cowles, (IATA) advised that IATA's ongoing attendance is not guaranteed as they have finite resources and use them where the biggest issues are. Blair asked that the meeting considered combining with ASPIRE as there is some duplication of agenda items.

The meeting agreed that we should encourage more operators to attend. Tim Boyle, as ISPACG co-chair agreed to talk to ASPIRE about the possibility of combining the two meetings.

7. Review and Establish Terms of Reference for Working Groups and Task Forces

7.1 None have been formed since the last meeting.

8. Closing Remarks

8.1 Arrangements for ISPACG/31

Harrie Copeland, (FAA) advised the meeting that the FAA is next up in the rotation to host ISPACG/31. The meeting will be held in March 2017 at a venue to be decided.

8.2 **Closing Remarks**

On behalf of FAA, Harrie Copeland thanked Airservices Australia for hosting the ISPACG delegations. Tim Boyle thanked the ANSPs, regulators, industry partners, airlines, and IATA for attending. The co-chairs asked that the Airservices delegates pass on their thanks to Tara Janssen for organising the meeting.