CNS Infrastructure Team Meeting N°7
(12th and 13th of May 2015 Meeting Room Europa)
Conclusions, Recommendations, Actions
and Summary of discussions

Chairman: Fausto SIMONI (ENAV)
Vice Chairmen: Pascal DIAS (NMD/NS) and Anthony van der VELDT (IATA)
Secretary: Michel BORELY (DPS/TEC)

Item 0: Administration

**Item 0.1:** Welcome and round table (Verbal)

Summary of discussions:
Fausto SIMONI welcomed the attendees and invited them to briefly introduce themselves.
Fausto also highlighted that the CNS Team meetings are not only a means of providing information to stakeholders but are also a means for the stakeholders to express their needs and provide their feedback.

**Item 0.2:** Approval of agenda (AP01)

Summary of discussions:
The agenda version 1.2 was approved.

Conclusions and recommendations:
The CNS Team members:
a) Approved agenda v1.2.

**Item 0.2:** Review and approval of recommendations and conclusions of meeting No 6 (Michel BORELY verbal)

Conclusions and recommendations:
The CNS Team members:
a) Approved the conclusions, recommendations and summary of discussions of meeting No 6 v1.1.

**Item 0.3:** Review and update of actions (Michel BORELY PPT01)

Summary of discussions:
The remaining open actions are the followings:

- CNS-T 1-07 – Compatibility of Mode 5 and Mode S / Mode A/C operations. The draft for review by the Team should be available at CNS Team meeting No 8 (November 2015)
- CNS-T 6-03 – To define a date for the forthcoming VoIP workshop.

Conclusions and recommendations:
The status of the actions was updated. See action table at the end of the document.
Item 1: CNS Team Management

Item 1.1: CNS Team framework documents (Michel BORELY PPT12)

Summary of discussions:

The presented documents were approved. It was agreed to work on the basis of the agreed ways of working and templates for a couple of meetings and to review them at this point in time.

The Terms of Reference and the Work Programme will be submitted to the AAB for approval. The other documents will be forwarded to the AAB for information.

Conclusions and recommendations:

The CNS Team members:

a) Approved the proposed versions of Terms of Reference, Work Programme 2015 onwards, Ways of Working and Action and Information paper templates.

Item 1.2: AAB/11 feedback (Michel BORELY PPT01)

Conclusions and recommendations:

The CNS Team members:

a) Took note of the conclusions of the AAB/11.

Item 1.3: Satisfaction survey feedback (Michel BORELY PPT02)

Conclusions and recommendations:

The CNS Team members:

a) Noted the results of the satisfaction survey and the improvements shown.
b) Confirmed to continue with annual satisfaction survey.

Item 2: Stakeholder corner

Item 2.1: IATA NAV infrastructure enhancement (Ton van der VELDT PPT03)

Summary of discussions:

IATA presentation highlighted the following points:

- PBN implementation is an important subject.
- In addition to the management of PBN deployment at the various locations there is a complementary need to ensure resources and means are available at those places to ensure appropriate PBN implementation (e.g. overlaying PBN procedures on top of existing Navaids-based procedures should not be a final solution).
- The PBN toolbox proposed by EUROCONTROL is supporting this approach but is not deemed sufficient. A proper management function also needs to be established.

Conclusions and recommendations:

The CNS Team members:

a) Congratulated IATA for the highlighting this important subject
b) Supported IATA’s position on the need to manage PBN harmonisation and implementation
c) Stressed the need for more stakeholders to contribute to the ANSP corner.
Item 2.2: EUROCONTROL Civil-Military Working Arrangements Supporting Civil-Military CNS Interoperability (Thomas OSTER PPT04)

Summary of discussions:
Thomas provided the apologies of Jorge PEREIRA (Head of ATM/CMC/CNS) for not being able to present the agenda item and presented on his behalf the presentation.

Conclusions and recommendations:
The CNS Team members:
a) Took note of the presentation

Item 2.3: Implementing Rules (IRs) corner (Fausto SIMONI PPT05)

Summary of discussions:
Fausto highlighted the importance of the implementing rules to achieve the objectives of the single European sky. Fausto recognised that today is a start and that results are not expected today.

Egon KOOPMAN noted that the encountered issues are not purely technical but are most of the time a mix of operational and technical issues.

It was agreed that these discussions could be considered as pro-active preparation of forthcoming EC workshops on the CNS implementing rules.

It was agreed to keep this agenda item for the next meeting provided that stakeholders propose specific items to be presented and discussed.

Conclusions and recommendations:
The CNS Team members:
a) Agreed to continue IR corner agenda item at next meeting
b) Agreed to provide inputs for this agenda item at next meeting
**Item 3: Steering Groups Submissions**

**Item 3.1: COMSG submission (Jacky POUZET AP03 + PPT06)**

**Summary of discussions:**

Jacky POUZET presented the different issues reported by the COMSG to the CNS Team.

The current precise responsibility of the Deployment Manager with regards to DLS implementation remains unclear (i.e. monitoring of DLS deployment).

**Agreed actions:**

Jacky POUZET to address with DFS the case of double transmission (VoIP).

**Conclusions and recommendations:**

The members of the CNS Team:

a) Recommend 8.33 States to finalise their detailed implementation plans and provide them to 8.33 ISG.

b) Advise the Deployment Manager to consider AeroMACS for deployment.

c) Recommends state/ANSP to assign sufficient resources to RFF - or ask for NM support - to improve processes defined in RAFT.

d) Agreed to expand the duration of the FMTP/(OLDI) ISG for two years including the ETIC tool maintenance.

e) Recommend keeping the DLISG “on-hold”, waiting for EC guidelines on datalink with however an ad-hoc meeting on PA-abort.

f) Stressed the importance of the SESAR-JU ELSA study with respect to any DLS deployment on multi-frequency or on anything outside the current DLS framework.

g) Agreed to comment within 2 weeks, and support the new VOTE ToRs including AGVN (cf. ToR in AP06).

**Item 3.2: NSG submission (Gerhard BERZ ATM/RDS/NAV IP03 + PPT08)**

**Summary of discussions:**

Gary BERZ presented the different issues reported by the NSG to the CNS Team.

Gary clarified that the majority of GNSS outages reported through EVAIR where outside ECAC and in general located near-by areas of conflict.

Globally the rate of reported occurrences of such events is much lower than the rate of reported COM interference.

**Conclusions and recommendations:**

The CNS Team members:

a) Thanked Gary for the comprehensive review of NAV infra subjects of importance

b) Took note of the draft NSG21 meeting report with respect to:
   - ILS Critical and Sensitive Areas (CSA)
   - A-PNT
   - GNSS RFI Mitigation
   - GNSS Monitoring & Oversight
   - Relevant Operational Aspects from NSG Report
   - Meeting arrangements (ICAO EUR PBN TF).
Item 3.3: SUR SG submission (Robert STEWART NMD/NS/SCC AP06 + PPT05)

Summary of discussions:

Rob Stewart presented the different issues reported by the SUR SG to the CNS Team.

The discussion was mainly focussed on the EASA report on detection losses and on the associated recommendations.

Post-meeting clarification:

Concerning the reporting of surveillance avionics anomalies, there are currently two options in place:

1) Any occurrences of transponder anomaly have to be reported to the EUROCONTROL Airborne Monitoring Team generic email address sur.avionics@eurocontrol.int (for Mode S anomaly and ADS-B 1090 ES anomaly Eric POTIER and Stelios ADAMOPOULOS should be respectively put in copy as well).

2) Request from Philippe BRUN (philippe.brun@eurocontrol.int) access privileges to MANTIS- our Avionics Fault recording database- from where stakeholders can

   (1) input new faults and data directly,
   (2) monitor our fault analysis progress from start to resolution;
   (3) survey other submissions, faults and their resolutions for similarities to what they may be observing in their own environment.

Conclusions and recommendations:

The CNS Team members:

a) Supported extension of SASS-C UG Work Cells 20 & 21 until end of 2015
b) Supported the organisation of a Wind Turbine Workshop in Q4
c) Took note of the Surveillance Products & Tools Strategy Roadmap
d) Recommend stakeholders to refine their needs on work actions re SPI IR compliance (through their SUR SG member).

Item 4: CNS content

Item 4.1: CNS Strategic Objective (SO8) of the Network Strategy Plan – SO8- Optimise CNS resources allocation and cost (Pascal DIAS AP05 + PPT09 – Ton van der VELDT PPT15)

Summary of discussions:

Pascal DIAS presented the item; he expressed that strong involvement of stakeholders working together is essential for the project. Pascal justified the timeframe of the project (RP2) as EUROCONTROL is the nominated NM up to the end of RP2, he also reminded the attendees that each of the presented projects has a civil-military dimension.

Stakeholders may be interested in contributing to projects, in accessing to the deliverables of projects or both.

8.33 kHz channel spacing coordination:

The main objective of this project is to strengthen the role of the 8.33ISG with the NM support, to get resources from the contributing stakeholders to speed up the work and to gather and share binding plans for the channel conversions among stakeholders.

The provisions of guidance on how to accommodate non-8.33 equipped state aircraft in a harmonised way (e.g. based on UHF) could be a deliverable of the project.

The project was supported.
Voice over IP (VoIP) implementation coordination:
Jacky POUZET clarified that, to his knowledge, the EC has no intention to initiate rule making activities on VoIP.
The project was supported.

1030-1090 MHz RF band congestion mitigation project:
Eric POTIER reminded the attendees that the losses of detection that occurred last year in June were due to 1030/1090 MHz RF band congestion and caused major en-route delays which degraded the performance of the network.

A number of recommendations expressed in the EASA report are under the responsibility of the Member States, but the report also demonstrated that the issue cannot be fully resolved at the level of a single member State or at the level of a single FAB and should be addressed at network level.

The project will take into account the recommendations of the EASA report and will report to the NMB for the implementation of collective actions. It might include review of the ICAO material related to the subject.

It was reminded that all stakeholders operating in the 1030/1090 MHz RF band both civil and military are to be involved.
The project was supported.

Surveillance coverage and data use enhancements:
Christos REKKAS presented the project. Christos clarified that the full ADS-B airborne implementation will provide sufficient responses to WAM systems so that they do not need to perform active interrogations.

Following suggestions from the attendees it was agreed to:
- Envisage any cooperative surveillance technology (Mode S, WAM and ADS-B)
- Address also the non-cooperative surveillance coverage enhancement
- Involve RPAS surveillance aspect

The project was supported with the above amendments.

CNS Security:
Following suggestions from the attendees it was agreed to:
- Better clarify the proposed activities and its coordination with other security activities (SESAR, ICAO, etc.)
- Address CNS security with a holistic approach and take into account that the threat coming from the human operators of the CNS infrastructure.

The project was supported with the above amendments.
SUR Infrastructure optimisation:

Ton van der VELDT presented a set of slides to discuss whether this sub-project should be moved to category A or remain in category B.

Rob STEWART noted that the actions resulting from the mitigation of 1030-1090 RF band congestions risk may require some form of rationalisation of the surveillance infrastructure.

Gary BERZ explained the approach that was used in SESAR for assessment of NAV rationalisation potential in ECAC states and proposed using a similar approach for SUR.

It was also noted that for the time being the infrastructure remains managed at ANSP/State level and that it is currently difficult to initiate CNS infrastructure rationalisation actions at an upper level (FAB or above).

It was clarified that the cost of ATM/CNS can be found in the annual Performance Review Report (PRR), in the PRR 2013 it is located in Chapter 6 and more precisely in section 6.10.

It was agreed to keep this project in category B and to review it at the next meeting in November.

Agreed actions:

- Stakeholders to declare their interests to contribute to the various projects by the end of July 2015.
- EUROCONTROL and SJU to coordinate bi-laterally to ensure that there is no overlap and proper coordination between the SO8 sub-projects and the SESAR activities.

Conclusions and recommendations:

The members of the CNS Team:

a) Approved the scope of the strategic project by accepting proposals in category A (incl. agreed modifications detailed above);

b) Will declare their interest to participate in various sub-projects by 31/07/2015 (process to be define soon);

c) Requested NM to further develop project plan and present a progress report at next CNS Team;

d) Recognised the importance of projects in category B and the need to reconsider them at later stage.

Item 4.2: SESAR CNS

Item 4.2.1: SESAR WP 15.1.7 (Emilien ROBERT ATM/DSR/NAV PPT10)

Conclusions and recommendations:

The members of the CNS Team:

a) Took note of the presentation by Emilien;

b) Agreed to review mature versions of TAD and roadmap.
**Item 4.2.2:** SESAR 2020 PJ 14 CNS project (Gerhard BERZ Verbal)

**Summary of discussions:**

Gary highlighted in the case of infrastructure it is sometimes difficult to link the proposed solutions with Operational Improvement (OI) as there may be several OI’s related to a solution, a solution may not provide operational improvement but is selected to provide the same service at a cheaper cost, etc.

SESAR 2020 Description of Work (DoW) v 1.0 should be finalised by the end of May 2015 by the S-JU. Partners will then submit their proposals by September 2015 and first projects are expected to kick-off early 2016.

**Conclusions and recommendations:**

The members of the CNS Team:

- Took note of the update provided by Gary.

**Item 5: Dates of next meetings** (not presented see PPT10)

**Summary of discussions:**

It was agreed to investigate if the date of next meeting (No 8 on 17-18/11/2015) could be delayed by one day as 17/11 is a bank holiday in a Member State.

The agreed dates of the 2016 meetings are:

- CNS Team No 9 18-19/05/2016 (Europa)
- CNS Team No 10 22-23/11/2016 (Europa)

**Item 6: Agreed conclusions and recommendations** (Michel BORELY PPT13)

**Summary of discussions:**

The agreed conclusions were presented in PPT13 and were modified online as necessary to correctly reflect the point of views of the attendees.

**Item 7: Presentations of IP02 Surveillance Products Roadmap** (Jean Marc DUFLOT NMD/NS/SRS IP02 + PPT17)

**Summary of discussions:**

Jean Marc DUFLOT stated that a call for funding has been submitted for Surveillance Products in the frame INEA/CEF.

It was clarified that taking into account the design of SASS-C VERIF its adaptation to process MSPSR data is feasible (e.g. it already processes WAM data).

Concerning the improvements of surveillance products (i.e. ARTAS and SASS-C) to support and assess surface movement system data, it was agreed that stakeholders have to express their needs so that the CNS Team can agree and issue a recommendation to the Agency for the inclusion of these improvements in the SRS work programme.

**Conclusions and recommendations:**

The CNS Team members:

- Took note of the presentation provided by Jean Marc Duflot on the surveillance products roadmap which is further detailed in IP02.
- Agreed to provide their needs with respect to the capability of surveillance products to support/process surface movement surveillance systems.
- Expressed their support to maintain SASS-C VERIF as Means of Compliance for surveillance chain performance assessment.)
**Item 8:** Conclusions and closure of the meeting

**Summary of discussions:**

The Chairman thanked all the attendees for their participation, reminded them that the CNS Team is for them and that their active contributions are essential to achieve Team’s objectives and closed the meeting.
# CNS Team actions closed since Meeting No 6

<table>
<thead>
<tr>
<th>Action number</th>
<th>Description</th>
<th>Actionee</th>
<th>Comments</th>
<th>Related paper</th>
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</thead>
<tbody>
<tr>
<td>5-01</td>
<td>To update the Team’s ways of working in accordance with the agreed proposals.</td>
<td>CNS Team Secretariat</td>
<td>Closed at CNS Team meeting No 7</td>
<td>AP02 - CNS Team Framework Documents (proposal with annexes) V1.0</td>
</tr>
<tr>
<td>5-02</td>
<td>To consider the need and requirements for an SLA template for FMTP links, to develop a proposal if necessary and to present the outcome of the action at the latest at CNS Team No 7.</td>
<td>COMSG</td>
<td>FMTP ISG agreed that there was no need to develop an SLA template.</td>
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<tr>
<td>5-08</td>
<td>To identify, by CNS Team meeting No 6, possible means of compliance for those requirements where there is not yet one available.</td>
<td>SUR SG</td>
<td>Transferred to SUR SG and closed at CNS team level (CNS Team meeting No 7)</td>
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<tr>
<td>5-12</td>
<td>To clarify Article 5.1 and 5.3 of the standard end-user licence template for EUROCONTROL tools to ensure that it does not limit the added-value that such tool could potentially provide.</td>
<td>EUROCONTROL Agency</td>
<td>The new templates for ARTAS, SASS-C and SDDS user licenses are available via the “related paper” link. Any new license is published on the basis of these templates. The points raised in the action are addressed in the Article 8 of each license template.</td>
<td>User license templates</td>
</tr>
<tr>
<td>5-13</td>
<td>To clarify the quality assurance policy applicable to the tools developed by EUROCONTROL</td>
<td>EUROCONTROL Agency</td>
<td>Closed at CNS Team meeting No 7</td>
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<tr>
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<td>Comments</td>
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<tr>
<td>5-14</td>
<td>To provide at next SUR SG meeting a global strategy for the surveillance tools and products.</td>
<td>Jean Marc DUFLOT</td>
<td>See CNST7/IP02. Action closed</td>
<td>IP02 - Surveillance Products and Tools Strategy and Roadmap V1.0</td>
</tr>
<tr>
<td>5-18</td>
<td>To propose a new organisation of the CNS Team meetings by next CNS Team meeting.</td>
<td>Chairmanship Team</td>
<td>Closed at CNS Team meeting No 7.</td>
<td></td>
</tr>
<tr>
<td>6-01</td>
<td>To allocate resources in their respective states/ANSPs to develop local plans and to coordinate these plans in the context of the 8.33 ISG.</td>
<td>CNS Team Members</td>
<td>Closed at CNS Team meeting No 7.</td>
<td>COMSG Submission to CNS Team No 7</td>
</tr>
<tr>
<td>6-02</td>
<td>To propose new ToRs for the VoTE in line with its agreed expanded scope</td>
<td>COMSG</td>
<td>Closed at CNS Team meeting No 7.</td>
<td>AP06 - VOTE updated activies and ToRs</td>
</tr>
<tr>
<td>6-04</td>
<td>To formally forward to the SJU the CNS Team recommendation on LDACS R&amp;D</td>
<td>Pascal DIAS</td>
<td>Closed at CNS Team meeting No 7.</td>
<td></td>
</tr>
<tr>
<td>6-05</td>
<td>To formally forward the CNS team concerns to the EC on the amendment of (EC) regulation No 29/2009 (DLS IR) and the agreement to suspend the functioning of the DLSISG</td>
<td>Pascal DIAS</td>
<td>Done</td>
<td></td>
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<tr>
<td>6-06</td>
<td>To provide feedback on ARAIM to the Agency (responses to the 8 questions in the PPT, especially questions 4 &amp; 5 on ISM dissemination via datalink or database) by the end of 2014.</td>
<td>CNS Team Members</td>
<td>Feedback received</td>
<td></td>
</tr>
<tr>
<td>6-07</td>
<td>To express, by the end of November, any new requirements on these products and tools</td>
<td>CNS Team Members and Users of EUROCONTROL Surveillance products and tools</td>
<td>Feedback received via discussion thread and by email</td>
<td></td>
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<tr>
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<td>6-08</td>
<td>On the basis of the expressed user needs, to assess which users objectives can be met with the current AWP 2015-2019 efforts and costs predictions.</td>
<td>Jean Marc DUFLOT (NMD/NS/SRS)</td>
<td>See action 5-14</td>
<td></td>
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<tr>
<td>6-09</td>
<td>To nominate participants by 15/12/2014 (email to secretary) to an ad-hoc NM CNS SP drafting group which will be charged with defining and scoping NM CNS SP.</td>
<td>CNS Team Members</td>
<td>Members nominated</td>
<td></td>
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CNS Team actions open after meeting No 7

<table>
<thead>
<tr>
<th>Action number</th>
<th>Description</th>
<th>Actionee</th>
<th>Due Date</th>
<th>Related paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-07</td>
<td>To provide information on further interoperability testing between IFF Mode 5 operations and SSR/Mode S</td>
<td>Agency</td>
<td>17-11-2015</td>
<td>CNST5/IP12</td>
</tr>
<tr>
<td>6-03</td>
<td>To define a date for the forthcoming VoIP workshop maximising the participation and expected outcomes</td>
<td>Jacky POUZET</td>
<td>12-05-2015</td>
<td></td>
</tr>
<tr>
<td>7-01</td>
<td>To address the case of double transmission with DFS (cf. VoIP).</td>
<td>Jacky POUZET</td>
<td>17-11-2015</td>
<td></td>
</tr>
<tr>
<td>7-02</td>
<td>To clarify the process to resolve detection losses due to transponder anomalies (action is in progress with EASA in the frame of the SUR SG and related to SPI Article 4(4)).</td>
<td>EUROCONTROL Agency</td>
<td>31-05-2015</td>
<td></td>
</tr>
<tr>
<td>7-03</td>
<td>To coordinate with SESAR-JU on the SO8 proposed activities.</td>
<td>EUROCONTROL Agency</td>
<td>01-09-2015</td>
<td></td>
</tr>
<tr>
<td>7-04</td>
<td>To express their interest in contributing to SO8 project activities.</td>
<td>CNS Team stakeholders</td>
<td>31-07-2015</td>
<td></td>
</tr>
<tr>
<td>7-05</td>
<td>To express their needs on SUR products to support/process SMS.</td>
<td>CNS Team stakeholders</td>
<td>17-11-2015</td>
<td></td>
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</tbody>
</table>