

Agenda Item 7b

ASTERIX Status

SURICG #9

Alexander Engel (alexander.engel@eurocontrol.int)

EGSD/PCS/SCS/STAN

07 May 2024

TLP: GREEN

Supporting
European
Aviation



NETWORK
MANAGER



ASTERIX Governance



- ASTERIX = **All Purpose Structured EUROCONTROL Surveillance Information Exchange**
- Bit-Level definition for the encoding of surveillance related information (and beyond)
- Development and Evolution executed by the ASTERIX Maintenance Group (AMG)
- EUROCONTROL Working Arrangement under ICAO umbrella
- Open globally to surveillance experts

ASTERIX Library



- EUROCONTROL ASTERIX Website
 - <https://www.eurocontrol.int/asterix>
 - All specifications publicly available free of charge
 - Overview: <https://www.eurocontrol.int/publication/list-asterix-categories-and-their-statuses>
- Part 1
 - Basic Rules for ASTERIX Implementations
 - Latest version: Revision 3.1, published 23 November 2021
- Parts 2 ff.
 - Specifications for the ASTERIX Categories
 - Each Category dedicated to a specific application
 - Category 048: Monoradar Target Reports
 - Category 021: ADS-B Target Reports
 - Category 020: Multilateration Target Reports
 - ...

ASTERIX JSON Publication

- AMG requested a publication of ASTERIX Specifications in a machine readable format
- JSON was selected as the format to be used
- Phase II contract finalised, final touches to be applied
- In future maintenance on the JSON files
- JSON to PDF transfer – both versions will be available from the EUROCONTROL ASTERIX website

ASTERIX Categories Under Development

- **Important Note:** ASTERIX Evolution is performed in a backwards compatible way facilitating the implementation of new revisions of existing categories
- Category 053 (ADS-B Target Reports)
 - Full Implementation of ADS-B Version 3
 - Completely new Development, already started
 - Performed as a joint activity with EUROCAE WG-51/SG-4 (ED-129/ED-142)
 - Discussion is challenging with a broad spectrum of experts from varying areas
 - Target date: not before middle of 2024
- Categories 062/063 (SDPS Output)
 - Various new Data Items proposed by DFS (German ANSP)

ASTERIX Categories Under Development

- Category 237 (NOTAMS)
 - Initiated by German Air Force
 - Means to communicate information published in the form of NOTAMS
 - Mature draft available, submission to AMG for final review in the coming weeks
- Category 048 (Mono-radar Target Reports)
 - New Transponder MOPS ED-73F/DO-181F: New Capabilities
 - Phase Overlay
 - Basic Dataflash
 - Interrogator Reply Monitoring
 - Mode 5 Capabilities
 - Additional ACAS Version indications
- Category 004 (Safety Net Messages)
 - Non Transgression Zone Warning Messages

Supporting
European
Aviation



Thank you!

Alexander Engel (alexander.engel@eurocontrol.int)

EGSD/PCS/SCS/STAN

07 May 2024

TLP: GREEN



NETWORK
MANAGER

