MICA Website Presentation

Surveillance/MICA Workshop

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26-28 February 2019

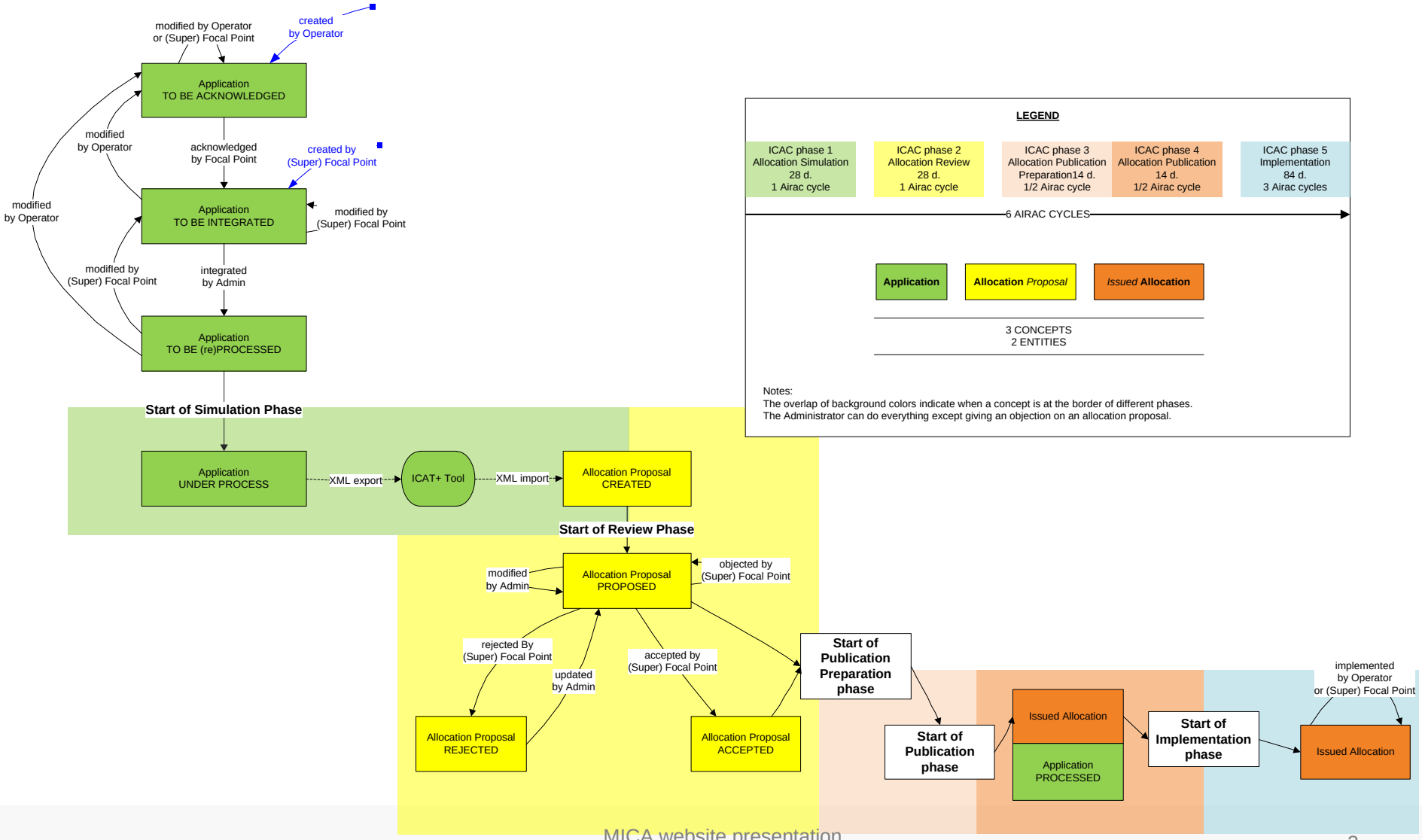
MICA website overview

- The Mode S Interrogator Code Allocation (MICA) website is used to coordinate and manage the allocation of IC and coverage maps to Mode S radar in the ICAO EUR region and in the ICAO MID region.
  - submit IC applications
  - review IC allocation proposals
  - retrieve issued IC allocations with coverage maps
  - report IC conflict

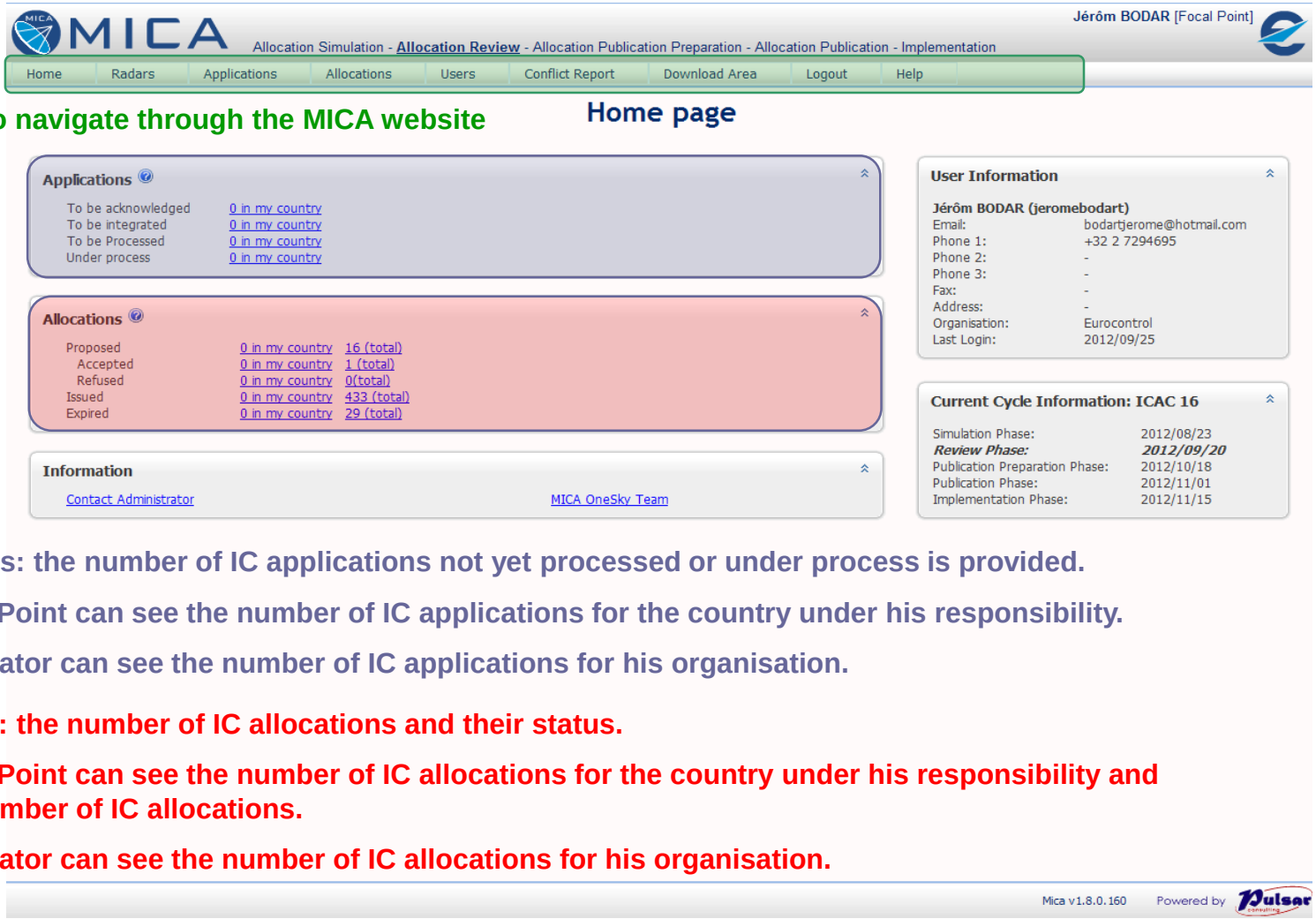
- The MICA website provides a graphical representation of the coverage maps provided with the IC allocations
  - online on Google Map or through download in Google Earth.

- The access to the MICA website is managed through the Eurocontrol OneSkyOnline portal.

Mode S IC Allocation Flow



MICA website Home Page



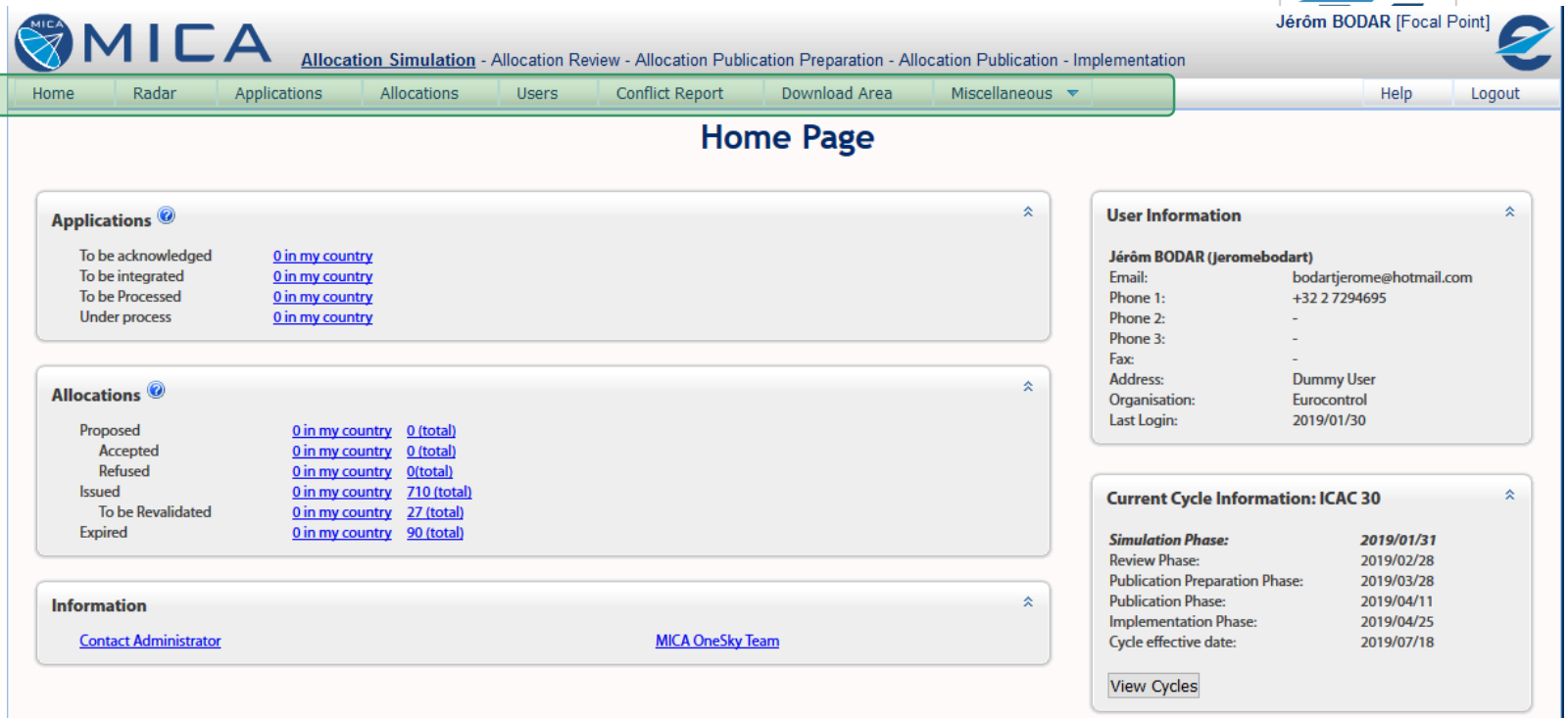
Menu bar to navigate through the MICA website

Applications: the number of IC applications not yet processed or under process is provided.

- **A Focal Point can see the number of IC applications for the country under his responsibility.**
- **An Operator can see the number of IC applications for his organisation.**

Allocations: the number of IC allocations and their status.

- **A Focal Point can see the number of IC allocations for the country under his responsibility and the total number of IC allocations.**
- **An Operator can see the number of IC allocations for his organisation.**



Menu bar to navigate through:

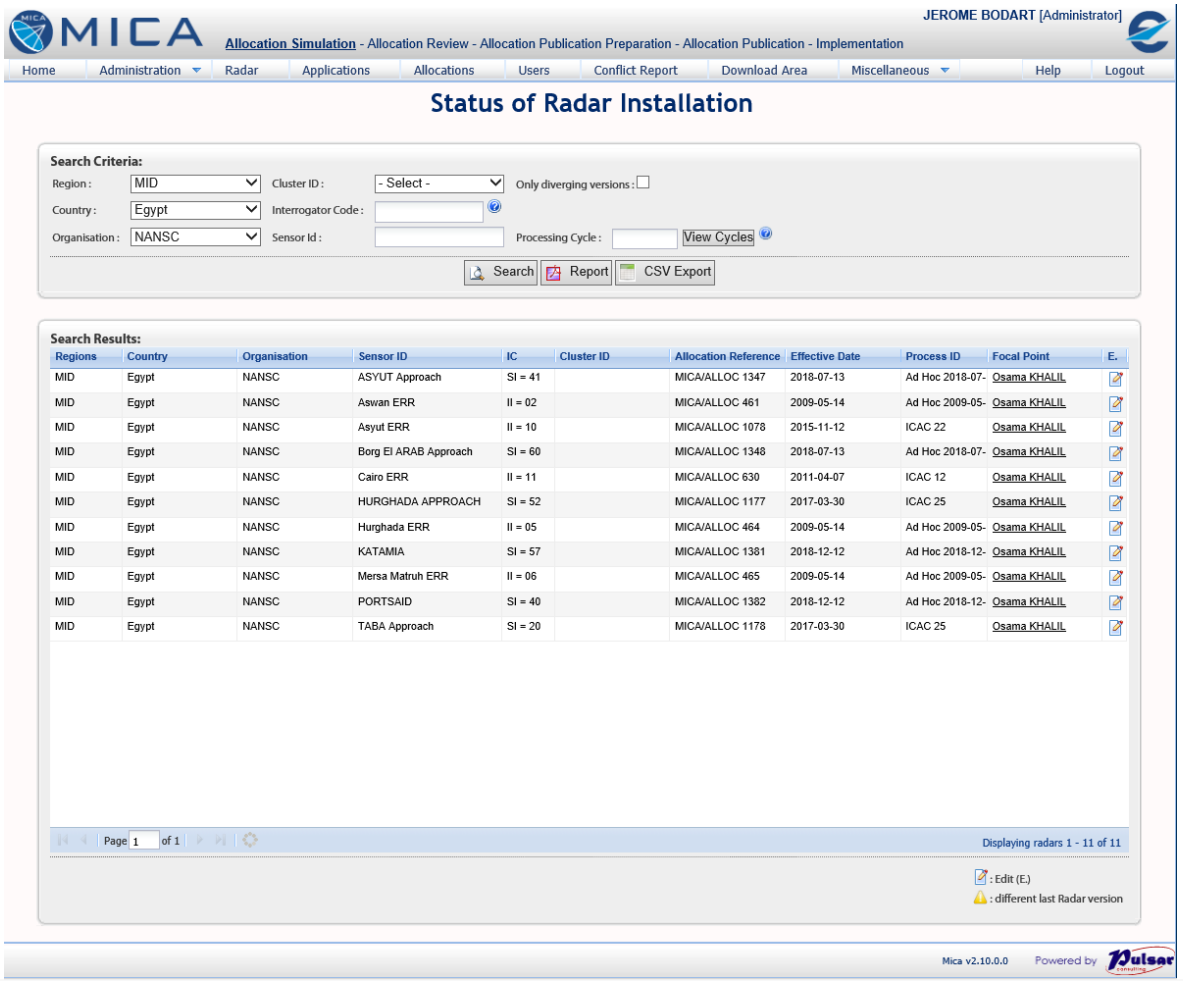
- **Radar menu: list of Mode S radars for which an IC allocation is issued**
- **Applications menu: to access the existing IC applications or to create a new one**
- **Allocations menu: to access the existing IC allocations (proposed, issued, expired…)**
- **Users menu: to access the contact details of registered users**
- **Conflict Report menu: to report a new IC conflict, to add information about an existing IC conflict, to consult current and past IC conflicts**
- **Download Area menu: to download document stored on the MICA website**
- **Miscellaneous menu**

List of Mode S Radars (‘Radars’ button)

- “Radar” button on the menu bar to display the list of Mode S radars for which an IC allocation is issued

- “Search Criteria” frame to refine the displayed list of radar
- Export in PDF or CSV the list of radar

- Edit button only for Admin



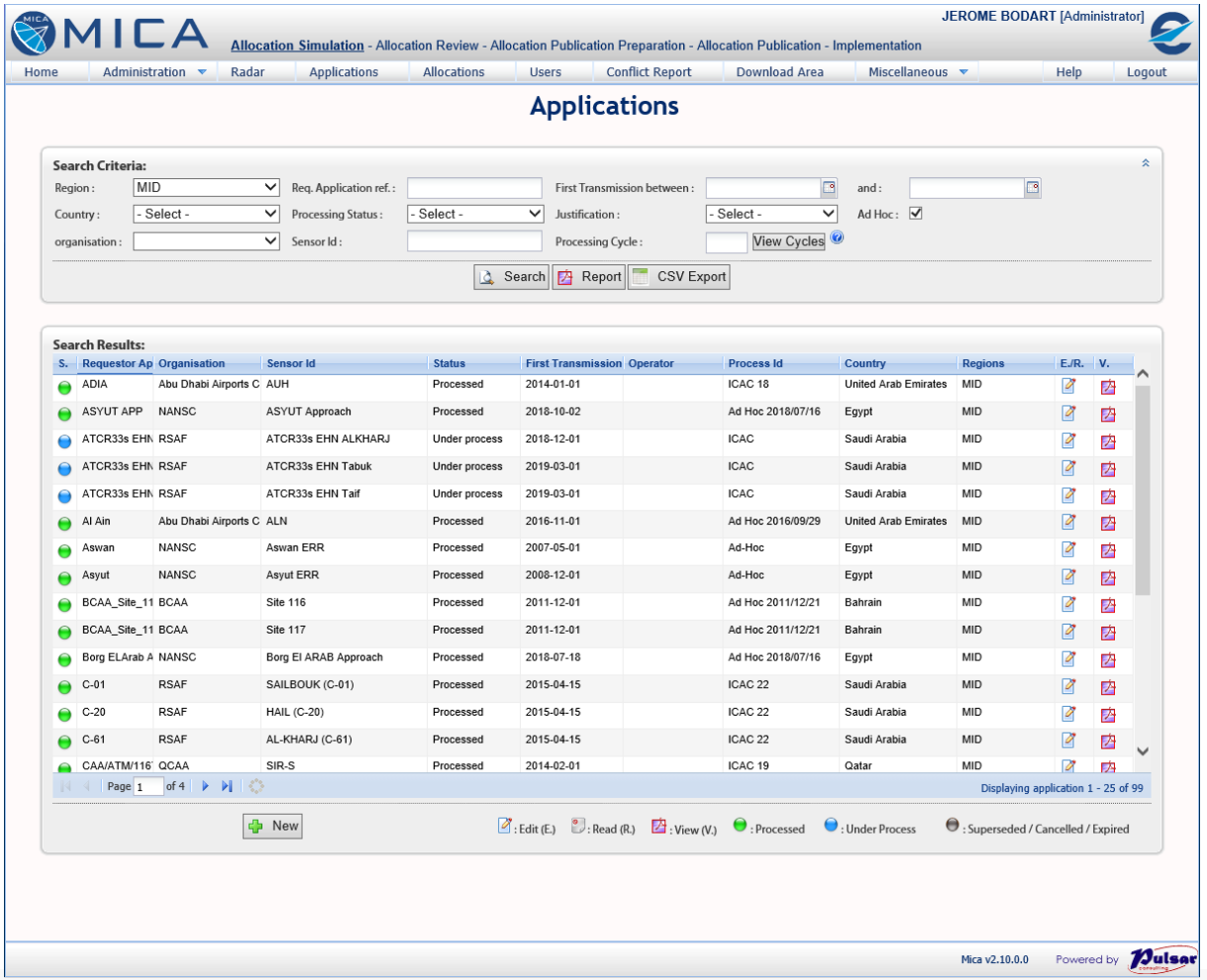
IC Applications (‘Applications’ button)

- “Applications” button on the menu bar to access existing IC applications, or to create new IC application,
- Access rights to IC applications depends on the user profile.

- “Search Criteria” frame to refine the displayed list of IC applications
- Export in PDF or CSV the list of IC applications

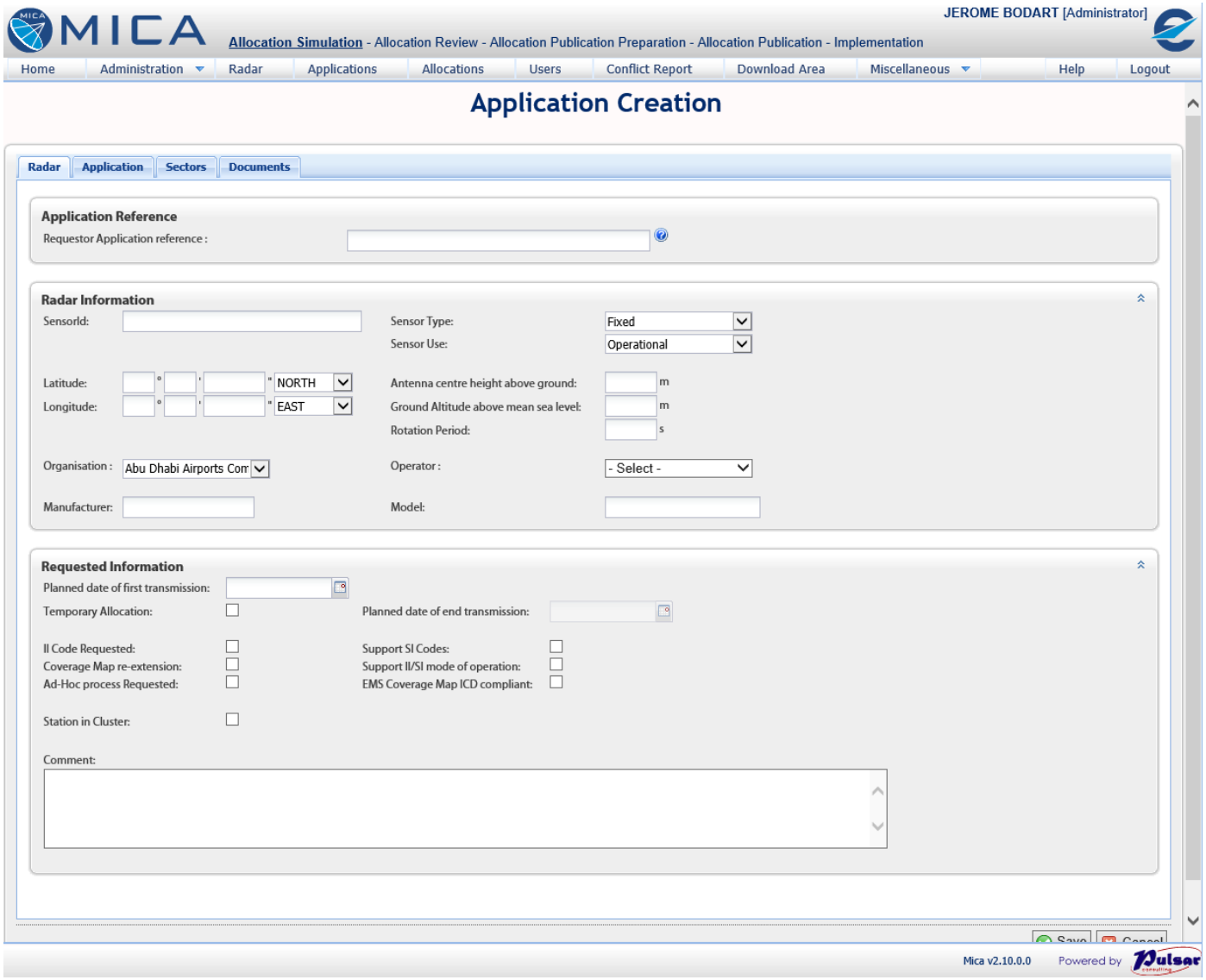
- Edit an IC application to display the details
- Export in PDF the details of an IC application (cf access rights)

- “New” button to create a new IC application



New IC Application Creation

- "Sectors" button to provide the requested range



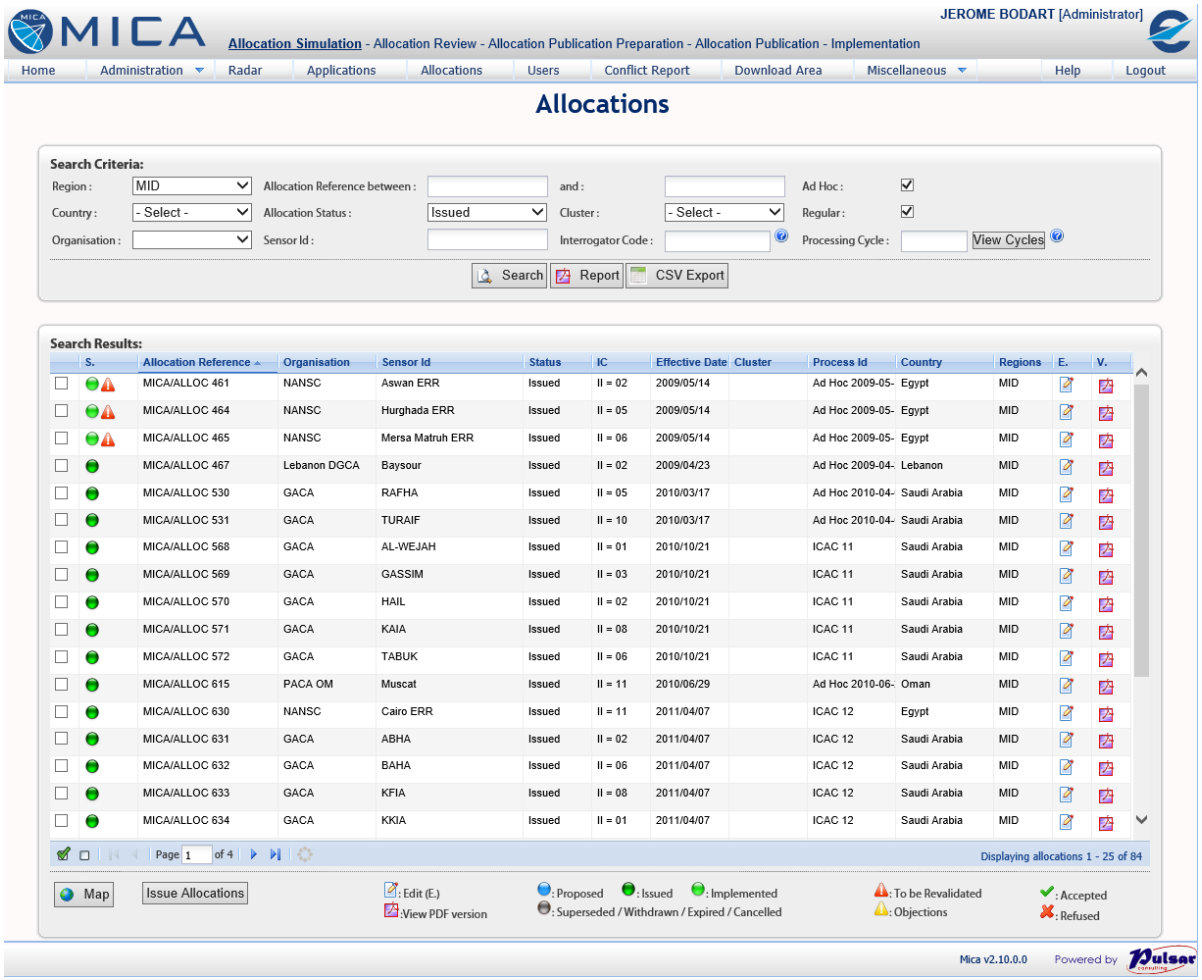
IC Allocations (‘Allocations’ button)

- “Allocations” button on the menu bar to access the list of IC allocations
- Access rights to IC allocations depends on the user profile.

- “Search Criteria” frame to refine the IC allocations to display
- Export in PDF or CSV the list of IC allocations

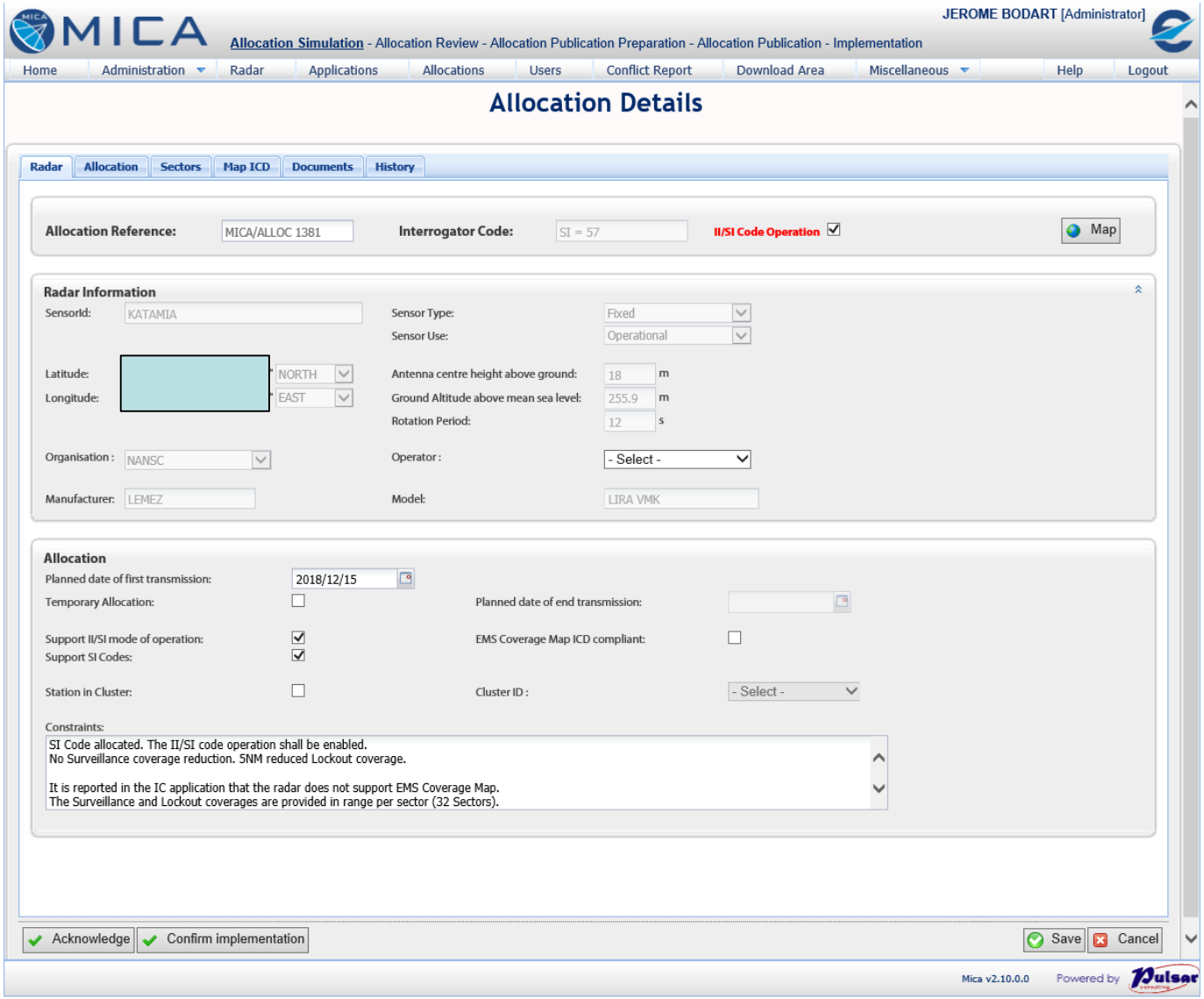
- Edit an IC allocation to display the details
- Export in PDF the details of an IC allocation (cf access rights)

- “Map” button to display coverage maps



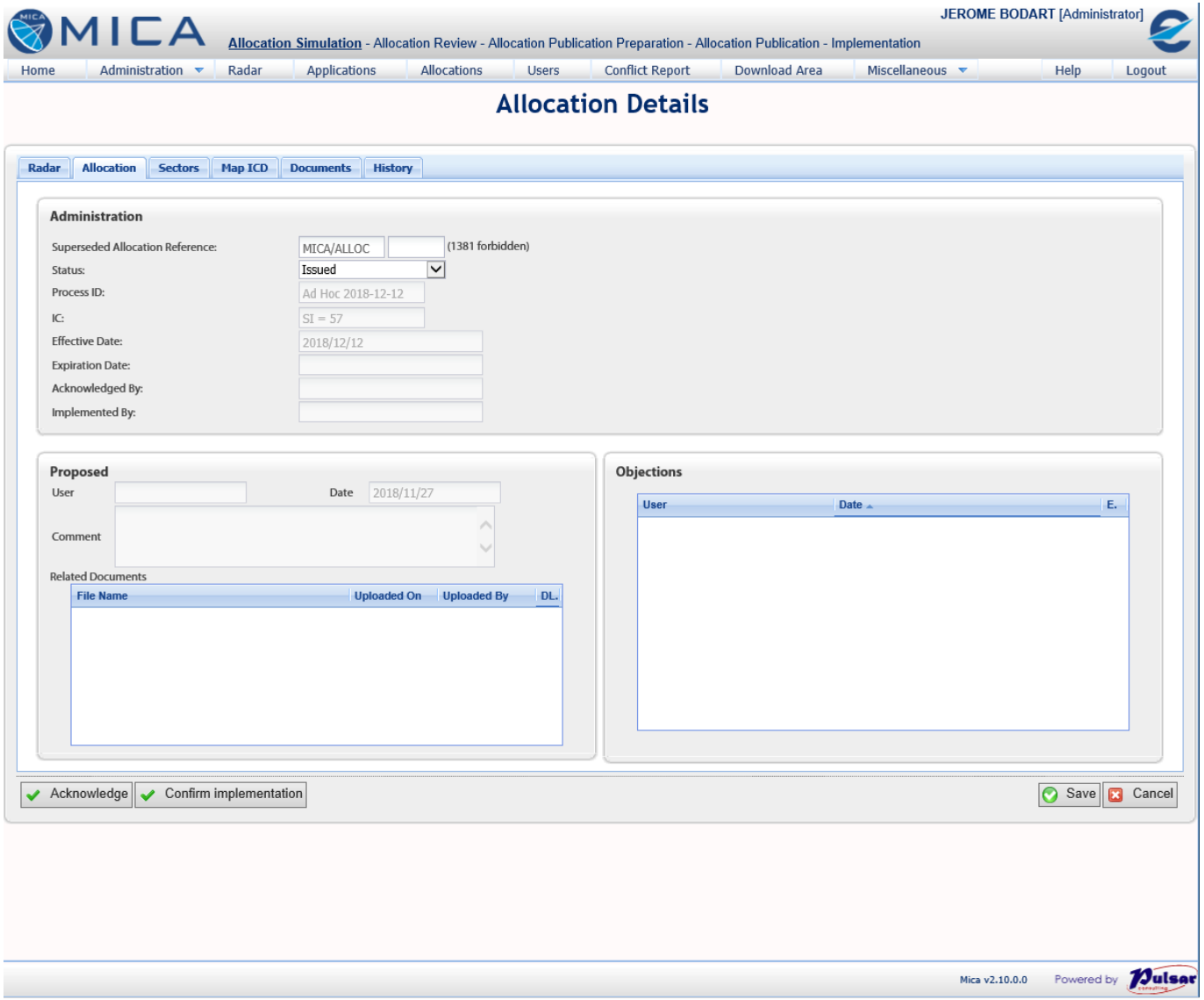
Detailed IC Allocation (1)

- Access rights to detailed IC allocation depends on the user profile.
- "Radar" Tab
- "Map ICD" tab to download the coverage map in EMS format if available
- The layout may depends on user profile



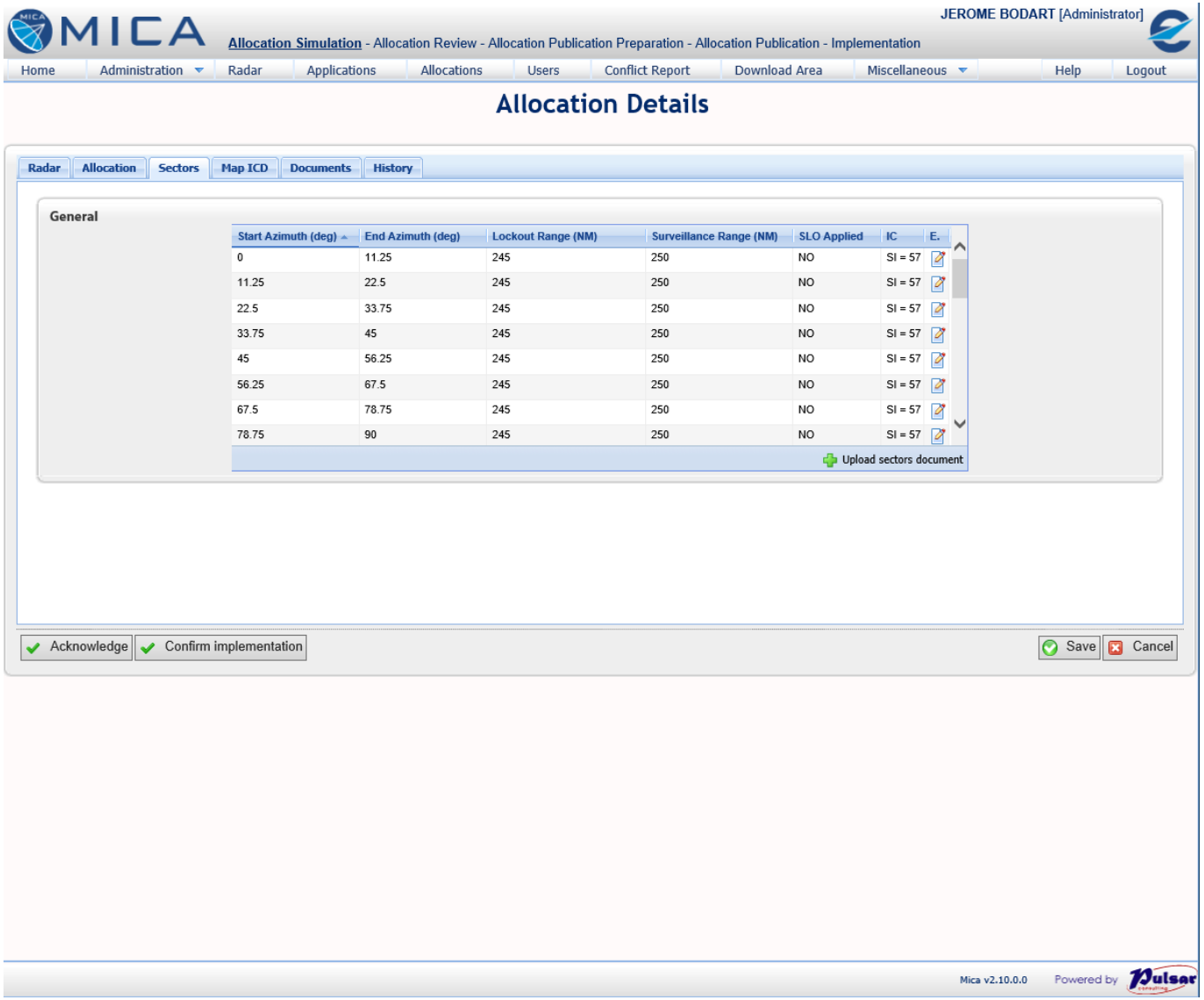
Detailed IC Allocation (2)

- “Allocation” tab



Detailed IC Allocation (3)

- "Sectors" tab provides the coverage in range per sector



Detailed IC allocation in PDF (1)

Mode S IC Allocation Cell

IC Allocation

EUROCONTROL

MICA/ALLOC 1381

Supersedes the following allocation(s)

NONE

II/SI Code Operation

YES

Interrogator Code

SI = 57

Radar Information

Your Application	KATAMIA		
Sensor Id	KATAMIA		
Operator	NANSC		
Latitude	N	Sensor Type	Fixed
Longitude	E	Sensor Use	Operational

Key dates

Date out for Review:	27 November 2018
Date issued:	12 December 2018
Effective Date:	***12 December 2018***

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Mode S IC Allocation Cell

IC Allocation

EUROCONTROL

MICA/ALLOC 1381

Allocation Details

Allocation Cycle : Ad Hoc 2018-12-12

EMS Coverage Map ICD compliant: No
Map ICD Identification

Station in Cluster: No **Cluster Id:**
Second IC requested: **Second IC:**

Allocation Constraints:
SI Code allocated. The II/SI code operation shall be enabled.
No Surveillance coverage reduction. 5NM reduced Lockout coverage.

It is reported in the IC application that the radar does not support EMS Coverage Map.
The Surveillance and Lockout coverages are provided in range per sector (32 Sectors).
The range per sector processed Ad-Hoc on the 27 November 2018 is provided in the "Sectors" tab.

Maps (ICD / Sector)

Lockout

Surveillance

2 /4

Detailed IC allocation in PDF (2)

Mode S IC Allocation Cell

IC Allocation

EUROCONTROL

MICA/ALLOC 1381

Additional Radar Information

Antenna centre heigth above ground :	18 m		
Ground altitude above mean sea level	255.9 m		
Rotation Period :	12 s		
Manufacturer :	LEMEZ	Model :	LIRA VMK

Mode S IC Allocation Cell

IC Allocation

EUROCONTROL

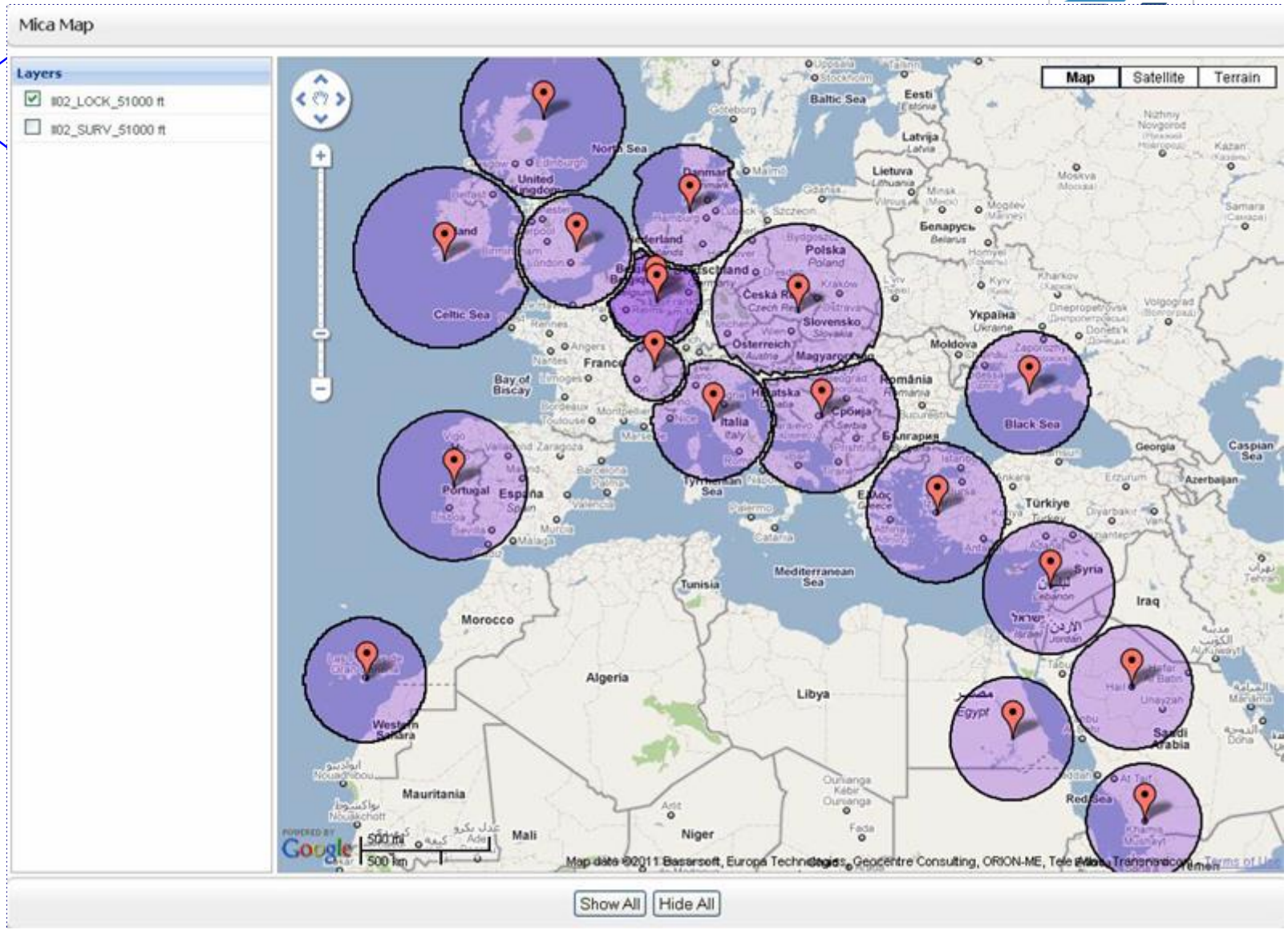
MICA/ALLOC 1381

Range per Sector

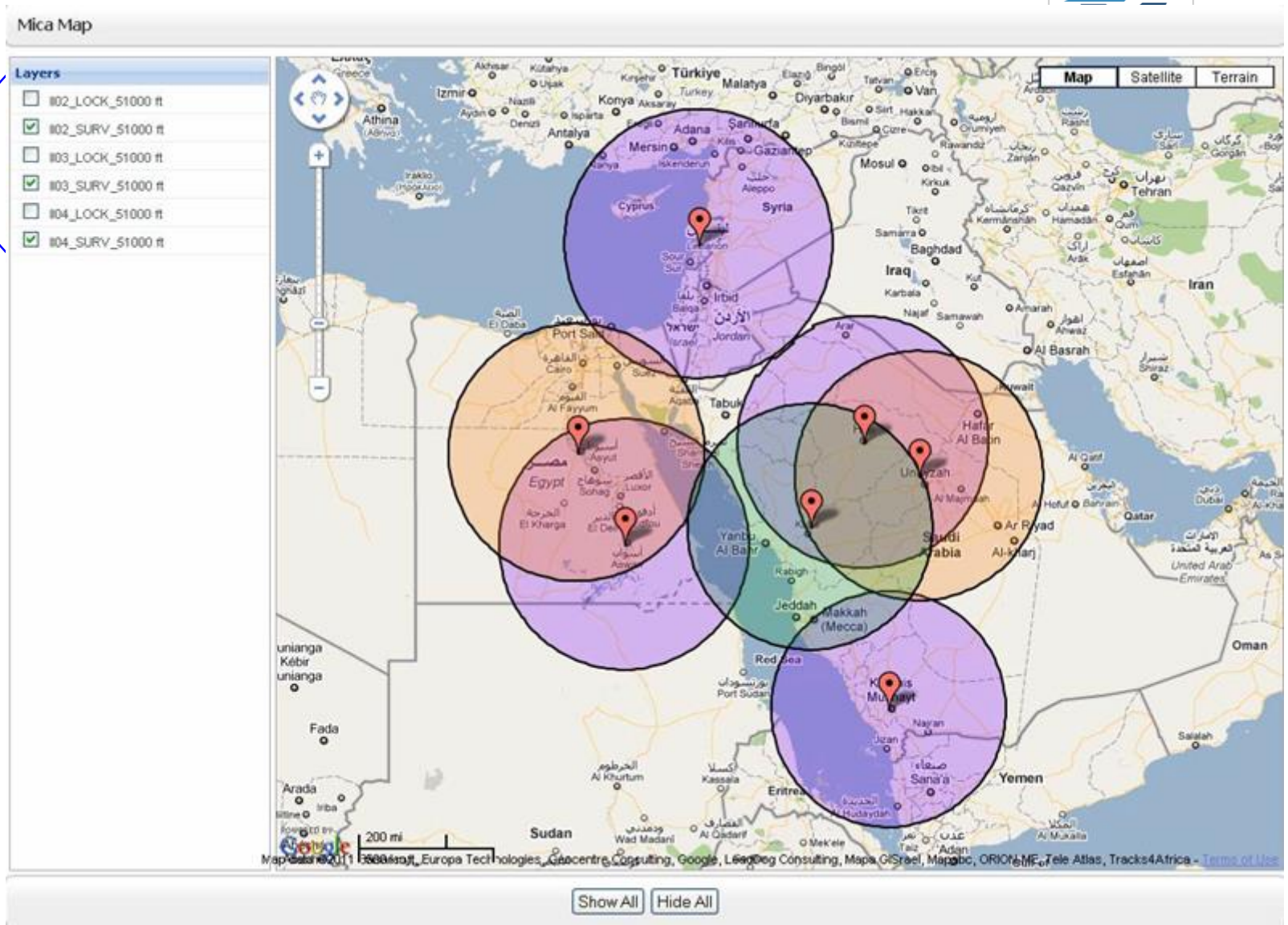
Sector	Start Azimuth (Degrees)	End Azimuth (Degrees)	Interrogator Code	Surveillance	LockoutRange (NM)	Stochastic Lockout
1	0.00	11.25	SI = 57	250	245	No
2	11.25	22.50	SI = 57	250	245	No
3	22.50	33.75	SI = 57	250	245	No
4	33.75	45.00	SI = 57	250	245	No
5	45.00	56.25	SI = 57	250	245	No
6	56.25	67.50	SI = 57	250	245	No
7	67.50	78.75	SI = 57	250	245	No
8	78.75	90.00	SI = 57	250	245	No
9	90.00	101.25	SI = 57	250	245	No
10	101.25	112.50	SI = 57	250	245	No
11	112.50	123.75	SI = 57	250	245	No
12	123.75	135.00	SI = 57	250	245	No
13	135.00	146.25	SI = 57	250	245	No
14	146.25	157.50	SI = 57	250	245	No
15	157.50	168.75	SI = 57	250	245	No
16	168.75	180.00	SI = 57	250	245	No
17	180.00	191.25	SI = 57	250	245	No
18	191.25	202.50	SI = 57	250	245	No
19	202.50	213.75	SI = 57	250	245	No
20	213.75	225.00	SI = 57	250	245	No
21	225.00	236.25	SI = 57	250	245	No
22	236.25	247.50	SI = 57	250	245	No
23	247.50	258.75	SI = 57	250	245	No
24	258.75	270.00	SI = 57	250	245	No
25	270.00	281.25	SI = 57	250	245	No
26	281.25	292.50	SI = 57	250	245	No
27	292.50	303.75	SI = 57	250	245	No
28	303.75	315.00	SI = 57	250	245	No
29	315.00	326.25	SI = 57	250	245	No
30	326.25	337.50	SI = 57	250	245	No
31	337.50	348.75	SI = 57	250	245	No
32	348.75	360.00	SI = 57	250	245	No

Coverage display in Google Map

- Display in Google Map the surveillance coverage and lockout coverage allocated to Mode S radars in ICAO EUR region and ICAO MID region.
  - In the list of IC allocations, checkbox in front of the IC allocations to select the coverages to display.
  - Depending on the user profile, the pin indicating the radar position may not be displayed in Google Map.
  - The display of radar coverage is provided IC by IC



Lockout Coverage of all Mode S radars having received an IC Allocation on II Code 02



Surveillance Coverage of all Mode S radars from ICAO MID Region having received an IC Allocation on II Code 02, II Code 03 or II Code 04

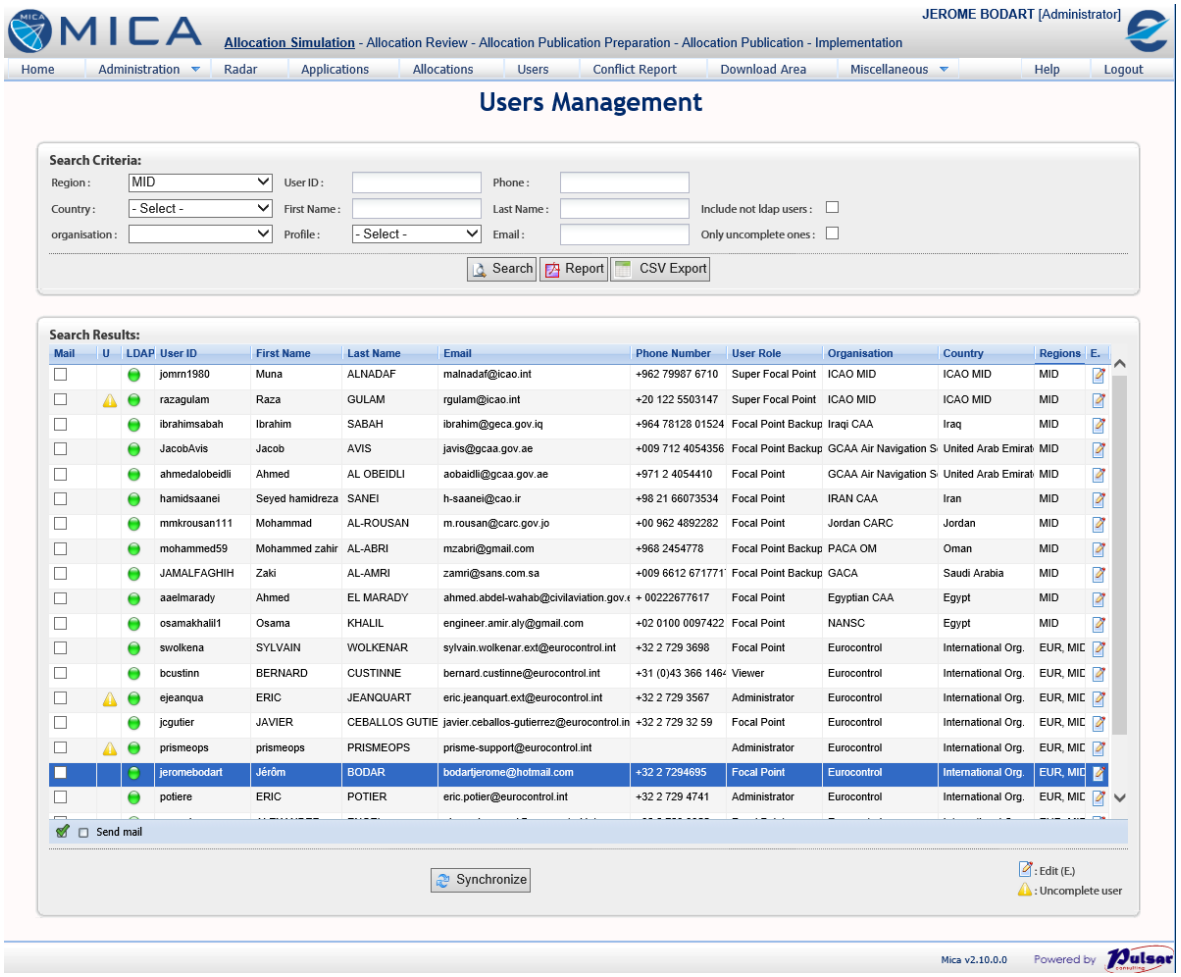
Export Coverage in Google Earth

- Users can export in Google Earth (KML file) the coverage maps of Mode S radar.
  - In the list of IC allocations, checkbox in front of the IC allocations to select the coverages to export in KML.
  - What can be exported depends on the access rights of the user profile

List of Registered Users (‘Users’ button)

- “User” button on the menu bar to display the list of users which are registered on the MICA website.

- “Search Criteria” frame to refine the displayed list of users
- Export in PDF or CSV the list of users



User Access Rights

- 6 different profiles are defined in the MICA website.
  - Administrator: members of MICA Cell in Eurocontrol
  - Super Focal Point: ICAO MID regional officer who is the Focal Point for all countries in ICAO MID Region.
  - Focal Point: representative of national regulatory authority
  - Operator: representative of Mode S operator
  - Inspector: access to IC applications and IC allocations for Mode S radars installed or planned to be in a country
  - Viewer: “public” access

- All users have access to the list of Mode S radars for which an IC allocation is issued (“Radars” button).

Super Focal Point Access Rights

- IC Applications:
  - Detailed access in Read/Write to IC applications from all countries in his ICAO Region (read/write “Edit” access + PDF)
  - No access to IC applications from countries in other ICAO regions.
- IC Allocations:
  - Detailed access to IC allocations for all countries in his ICAO region (read only “Edit” access with management + PDF).
  - Access to the list of IC allocations for countries in other ICAO regions.
- Visualization in Google Earth (KML export):
  - The radar position, the surveillance coverage and the lockout coverage allocated to Mode S radars from his own ICAO region only.
- Visualization in Google Map:
  - The surveillance coverage and lockout coverage allocated to Mode S radars both in his own ICAO region and in other ICAO regions.
  - Only the position of radars located in his own ICAO region is disclose.
  - The position of radars located in other ICAO regions is not disclose.

Focal Point Access Rights

- IC Applications:
  - Detailed access in Read/Write to IC applications from his own country (read/write “Edit” access + PDF)
  - Detailed access in Read Only to IC applications from other countries in the same ICAO region (PDF only). The radar position is not disclosed.
  - No access to applications from countries in other ICAO regions.
- IC Allocations:
  - Detailed access to IC allocations from his own country (read only “Edit” access with management + PDF).
  - Detailed access to IC allocations for countries in the same ICAO region (read only “Edit” access + PDF). The radar position is not disclosed.
  - Access to the list of IC allocations for countries in other ICAO regions.
- Visualization in Google Earth (KML export):
  - The radar position, the surveillance coverage and the lockout coverage allocated to Mode S radars from his own country only.
- Visualization in Google Map:
  - The surveillance coverage and lockout coverage allocated to Mode S radars both in his own ICAO region and in other ICAO regions.
  - Only the position of radars located in his own country is disclose.

Operator Access Rights

- IC Applications:
  - Detailed access to IC applications from his own organisation (read/write “Edit” access + PDF).
  - No access to IC applications from other organisations.
- IC Allocations:
  - Detailed access to IC allocations for his own organisation (read only “Edit” access + PDF).
  - Access to the list of IC allocations for other organisations.
- Visualization in Google Earth (KML export)
  - The radar position, the surveillance coverage and the lockout coverage allocated to Mode S radars from his own organisation only.
- Visualization in Google Map:
  - The surveillance coverage and lockout coverage allocated to Mode S radars in all ICAO regions.
  - The position of radars from his own organisation only is disclose.
  - The position of radars from other organisations is not disclose.

Inspector Access Rights

- IC Applications:
  - Detailed access in Read Only to IC applications from his own country (read only “Edit” access + PDF).
  - No access to IC applications from other countries.
- IC Allocations:
  - Detailed access to IC allocations for his own country (read only “Edit” access + PDF).
  - Access to the list of IC allocations for other countries.
- Visualization in Google Earth (KML export):
  - The radar position, the surveillance coverage and the lockout coverage allocated to Mode S radars from his own country.
- Visualization in Google Map:
  - The surveillance coverage and lockout coverage allocated to Mode S radars in all ICAO regions.
  - The position of radars from his own country only is disclose.
  - The position of radars located in other countries is not disclose.

Viewer Access Rights

- The Viewer has only access to the list of Mode S radars for which an IC allocation is issued (“Radar” button).

IC Conflict Report (‘Conflict Report’ button)

- There is a mechanism on the MICA web application to report a (potential) IC Conflict to all registered users.
- The purpose is to try to resolve as fast as possible the (potential) IC Conflict.

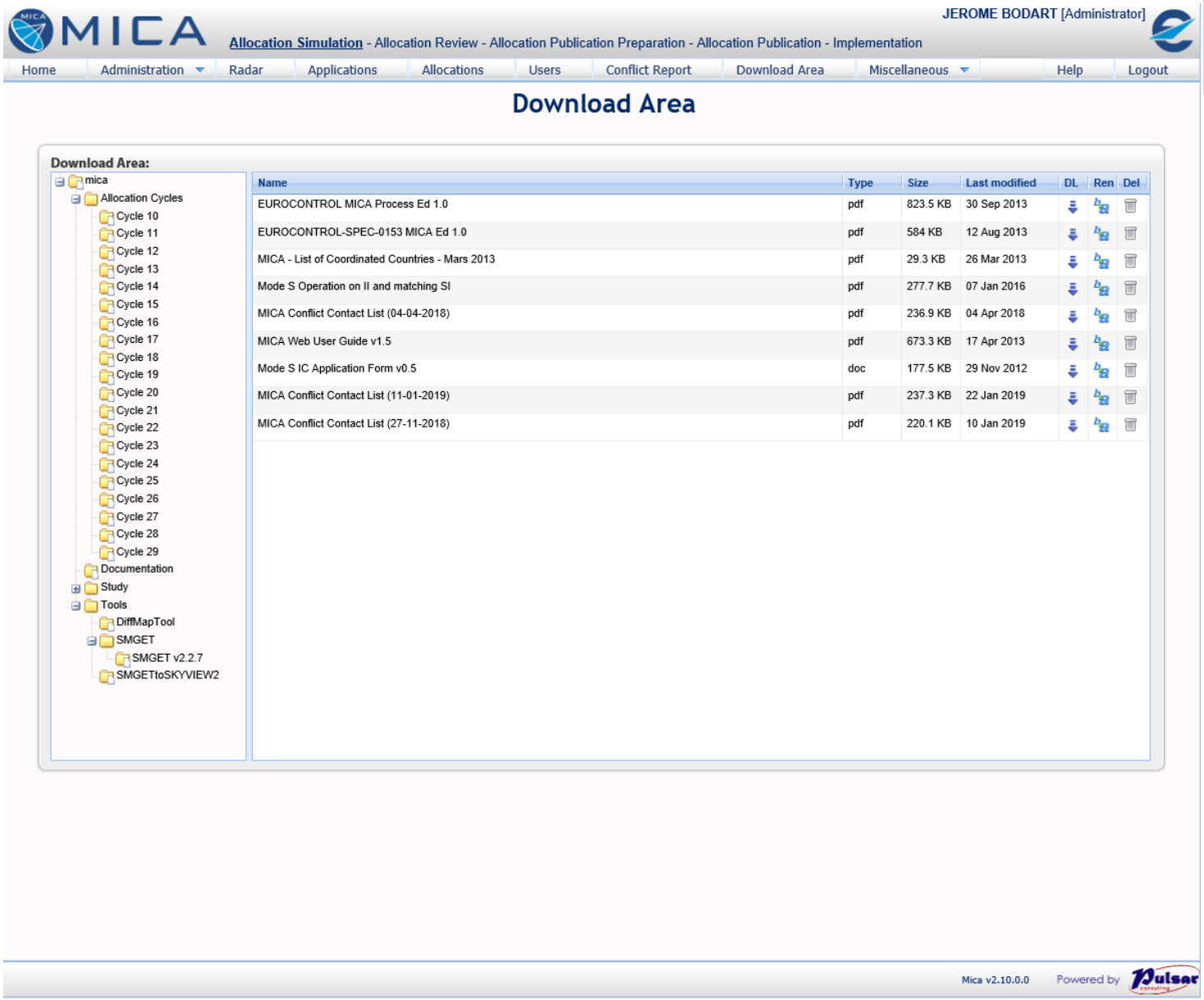
- To access to the conflict report page, a user has to click on the Conflict Report tab. Then he accesses to the list of reported conflicts.
- All users except Viewer have access to this page.

- The user can report a new conflict by clicking on “New” button.
- Any user can add information to an existing conflict report by clicking on “New Reply”

MICA
JEROME BODART [Administrator]
Allocation Simulation - Allocation Review - Allocation Publication Preparation - Allocation Publication - Implementation
Home
Administration
Radar
Applications
Allocations
Users
Conflict Report
Download Area
Miscellaneous
Help
Logout
Conflict Report
Conflict Reports:
User
Subject
Date
S.
Jan BURSIK
Repeated IC conflict impacting LPS SR / Velky Javornik on SI 28
2019-02-05
Jan BURSIK
Repeated IC conflict impacting LPS SR / Velky Javornik on SI 28
2019-01-23
Jan BURSIK
IC conflict impacting LPS SR / Velky Javornik on SI 28
2019-01-21
Tamas PORCSIN
IC conflict impacting TAR-1 at Ferihegy (LHBP) on SI25
2018-11-20
Manuela MARZOCCHI
Monte Stella - SPK Speikkogel Surveillance/Lock out Map conflict
2015-12-23
New
: Close
: Open
Conflict Details:
Messages
Docume...
Subject: Repeated IC conflict impacting LPS SR / Velky Javornik on SI 28
by Jan BURSIK
Focal Point
On 05 FEB 2019 from 0925 UTC repeated SI 28 conflict was identified on outbound traffic from the Polish territory again.
New Reply
Mica v2.10.0.0
Powered by
Pulsar

Download Area (‘Download Area’ button)

- The download area is a place where documents and tools related to Mode S IC Allocation are stored to be downloaded by users.
- To access to this storage, the user has to click on the “Download Area” button on the menu bar.
- As an example, the Download Area contains:
  - the current presentation,
  - the MICA Conflict Contact List,
  - the SMGET tool and related documentation,
  - …


MICA
JEROME BODART [Administrator]
Allocation Simulation - Allocation Review - Allocation Publication Preparation - Allocation Publication - Implementation
Home
Administration
Radar
Applications
Allocations
Users
Conflict Report
Download Area
Miscellaneous
Help
Logout
Download Area
Download Area:
mica
Allocation Cycles
Cycle 10
Cycle 11
Cycle 12
Cycle 13
Cycle 14
Cycle 15
Cycle 16
Cycle 17
Cycle 18
Cycle 19
Cycle 20
Cycle 21
Cycle 22
Cycle 23
Cycle 24
Cycle 25
Cycle 26
Cycle 27
Cycle 28
Cycle 29
Documentation
Study
Tools
DiffMapTool
SMGET
SMGET v2.2.7
SMGETtoSKYVIEW2
Name
Type
Size
Last modified
DL
Ren
Del
EUROCONTROL MICA Process Ed 1.0 pdf 823.5 KB 30 Sep 2013
EUROCONTROL-SPEC-0153 MICA Ed 1.0 pdf 584 KB 12 Aug 2013
MICA - List of Coordinated Countries - Mars 2013 pdf 29.3 KB 26 Mar 2013
Mode S Operation on II and matching SI pdf 277.7 KB 07 Jan 2016
MICA Conflict Contact List (04-04-2018) pdf 236.9 KB 04 Apr 2018
MICA Web User Guide v1.5 pdf 673.3 KB 17 Apr 2013
Mode S IC Application Form v0.5 doc 177.5 KB 29 Nov 2012
MICA Conflict Contact List (11-01-2019) pdf 237.3 KB 22 Jan 2019
MICA Conflict Contact List (27-11-2018) pdf 220.1 KB 10 Jan 2019
Mica v2.10.0.0
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