

MICE HMI Overview

Partner Nation Orientation Workshop

Objective

The purpose of this lesson is to:

| Inform the student about the main functionalities of the MICE graphic interface. The students must be familiar with the concepts of:

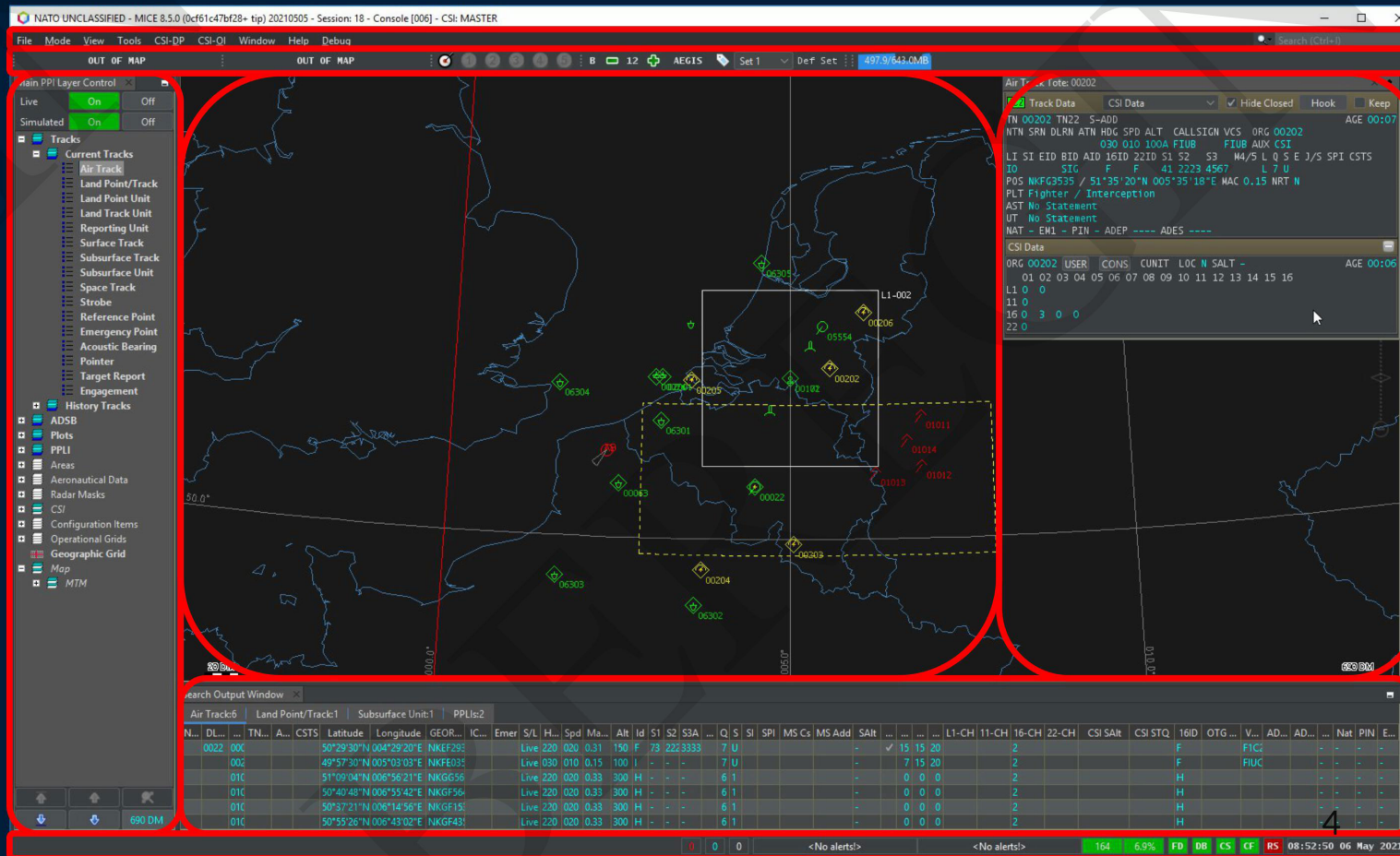
- | General
- | Window Layout / Management
- | Layer Control
- | Map Display and Navigation
- | Menus and Toolbar
- | Label Management
- | Status Bar, Alerts
- | Context Actions
- | Totes
- | CSI Mode, Displays and Operator Inputs
- | User Profiles



General

- | Can be used with both MASE and CSI
- | Runs with Java 8 on Windows, Solaris and Linux
- | Supports Touchscreens under Windows

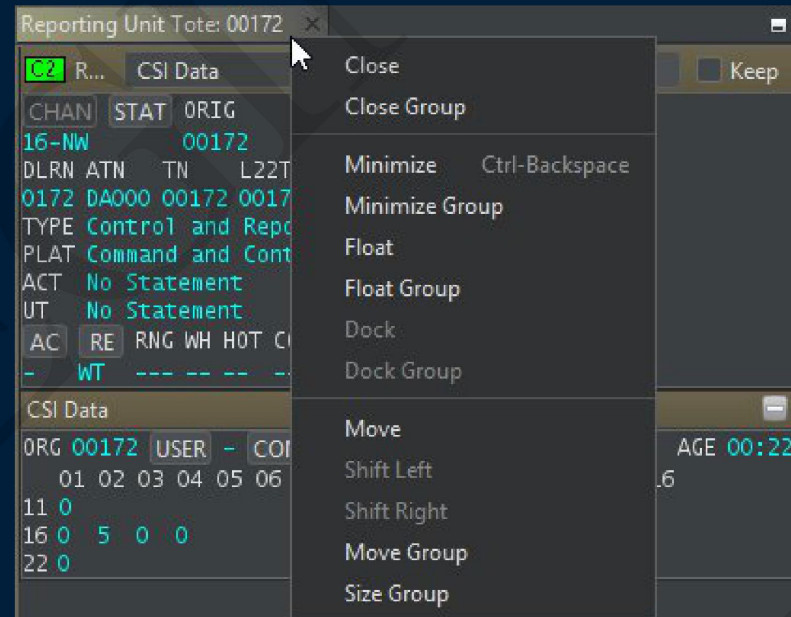
Window Layout



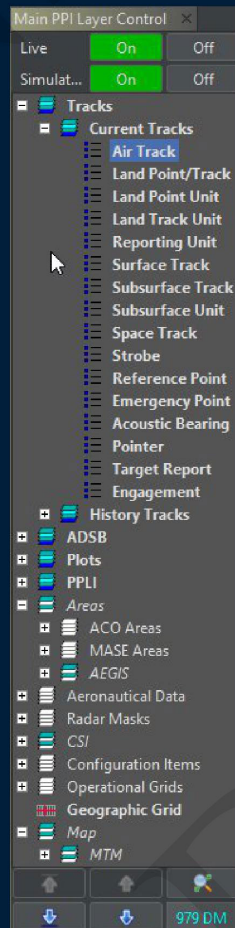
1. Layer Control
2. Map Area
3. Main Menu
4. Toolbar
5. Status Bar
6. Tote/Properties
7. Information

Window Management

- | Compact (docked)
 - | Tabbed
 - | Tiled
 - | Auto hide
- | Windowing (undocked/floating)
 - | Drag/drop window titles
 - | Context menu
 - | Window -> Reset Windows



Layer Control – Layer Visibility

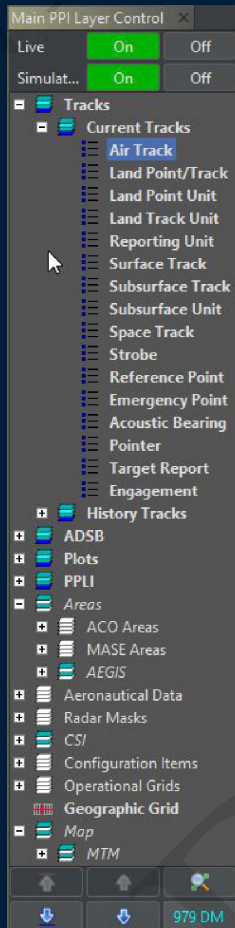


Bold means layer is visible

Plain means layer is invisible

Italic means a filter has been applied (e.g. cutoff scale)

Layer Control – Actions on Layers



Icon	Action
Live ☒ On ☐ Off	Display Live Objects on All Layers On or Off
Simulated ☒ On ☐ Off	Display Sim Objects on All Layers

Short cut	Action
V	Toggle Layer Visibility
F	Fit View to Layer
L	Toggle Layer Labels Visibility
S/R	Set/Remove Cutoff scale:...
D	Detailed Layer Control
C	Configure Labels
X	Reset Filters

Map Actions

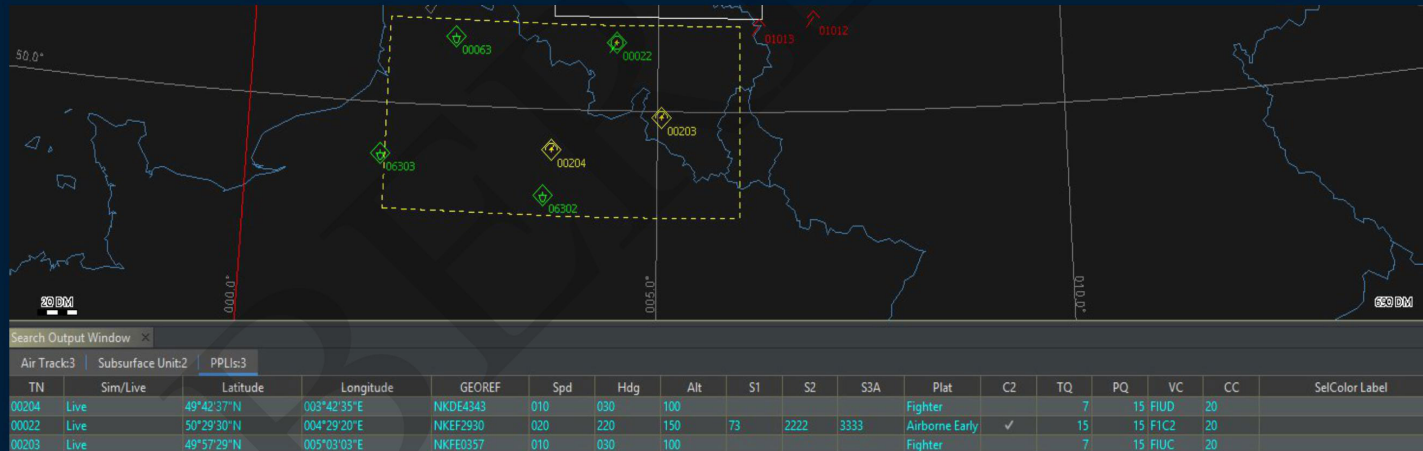
MICE

Map Action	How
Zoom In/Out	“Page Up/Down” or Mouse wheel [+Ctrl]
Pan	- Arrow keys [+Ctrl] or or right click + “Centre Map” [Alt] + Left Mouse Press and Drag
Bearing (in degrees) & Range (in DMs)	- Activate: Middle mouse button or “R”/“r” - Magnetic Declination: Ctrl



Map Actions (continued)

Map Action	How
Geographical Search	Drag the mouse to draw a rectangular area  Object types are displayed in tabs  PPI and Search Output windows are synchronized
Cut-off scale	"S"/"R" on the selected layer or Right-click on the layer and "Set Cutoff Scale"/"Remove Cutoff Scale"
Selection of overlapping objects	Ctrl + click



Menus

MICE	Action
File Exit	Exits MICE
Mode MASE CSI	Enter MASE Mode Enter CSI Mode
View Console Log Toolbars Full Screen Show/Hide Toolbar Switch Look & Feel Switch Background Color	Show the Console Log output window Turn Individual Toolbars On/Off; Reset Toolbars Display Main Window Full Screen Show or Hide the complete Toolbar Switch between Light and Dark mode Switch between MASE and ACCS background

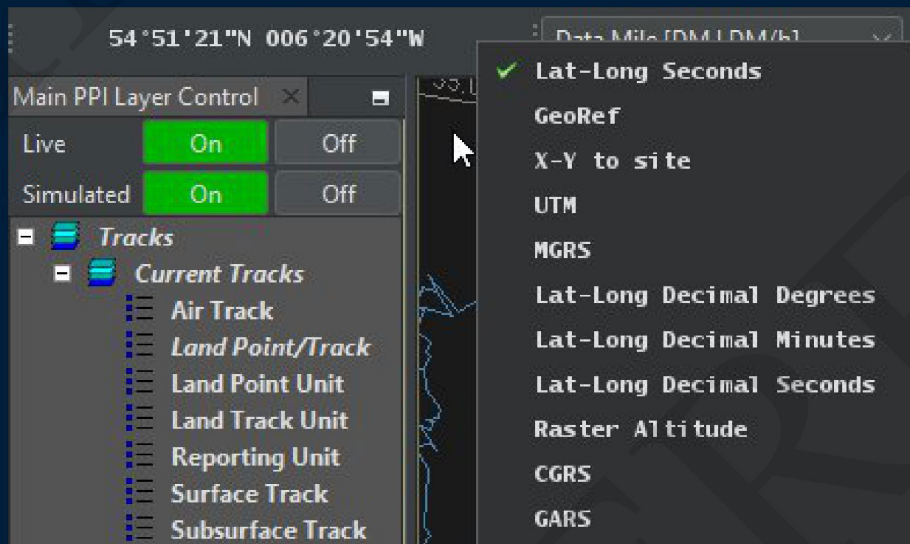
Menus (continued)

MICE	Action
Tools Options Load Profile Save Profile Enquire Clear Layers PPI Snapshot	Display the Options window Load a profile Save a profile Send out an Area or Global Enquire Clear all data from all Tracks layers Take a snapshot of the PPI in PNG format
CSI-DP	Access to the CSI Display windows
CSI-OI	Access to the CSI Operator Input windows
Window	Access to additional windows (e.g. Alerts, Sensors, Labels, Consoles, Grids, Flightdata)
Help MICE User Manual CSI Operator's Handbook About	Open and display the MICE User Manual Open and display the CSI Operator's Handbook Show the About window

Toolbars

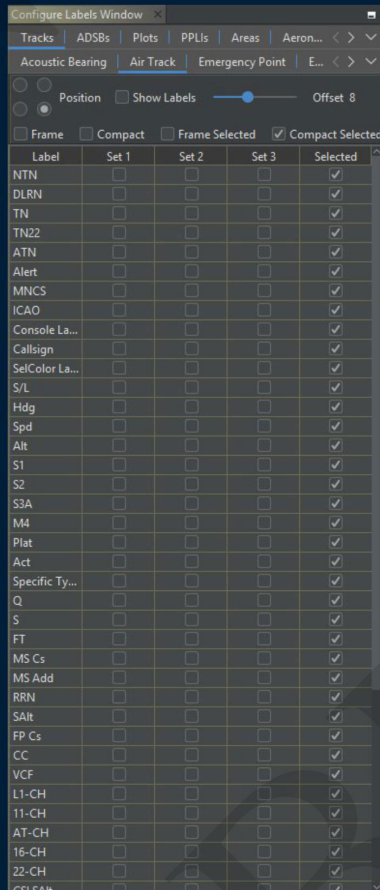
MICE	
Location	52°30'57"N 002°03'54"E
Position	     
Symbols and Labels	  12  AEGIS  Set 1  Def Set
Area Toolbox	☒ Activate        solid straight  
Units of Measure	Data Mile [DM DM/h] 
Quick Search	 Search (Ctrl+I)

Location Toolbar - Coordinate Systems



- | Lat-Long Seconds
- | GeoRef
- | X-Y to site
- | UTM
- | MGRS
- | Lat-Long Decimal Degrees
- | Lat-Long Decimal Minutes
- | Lat-Long Decimal Seconds
- | Raster Altitude
- | CGRS
- | GARS

Labels



Configure Labels

Tracks

ADSB / Plots / PPLI

Areas / Aeronautical Data / Configuration Data

Select Position and Offset

Frame / Compact / Selected

Select Properties for Display

Set 1

Set 2

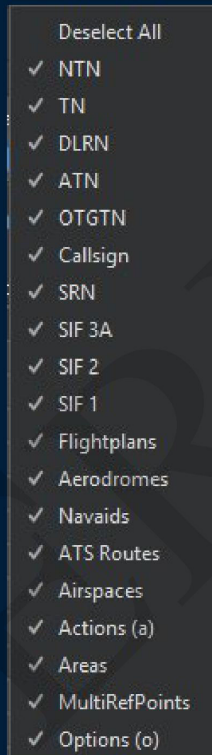
Set 3

Selected

Order (Drag and Drop)

Select Individual Label Set for a Track

Quick Search Toolbar



| Search Multiple Categories

| Track Numbers

| Callsigns

| SIF

| Aeronautical Data

| Areas

| Multi Reference Points

| Displays a matching list of items

| Selects the matching item on the map and re-centers the map to the item

Status Bar



- | Status external servers (MASE, Flightdata, DB Server, CSI, Recording)
- | Indication of Latency and Memory/CPU Usage
- | Time Display (Local or Zulu Timezone)

Alerts Window

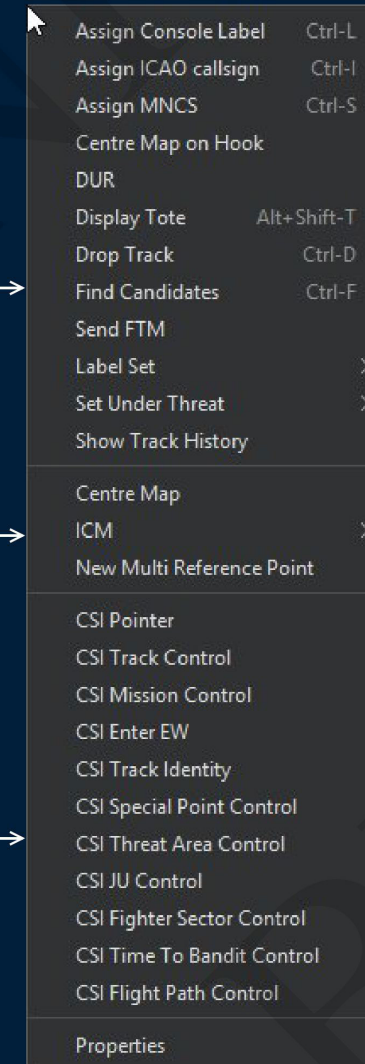
Source/Users	Category	Time	Message	Description
FD Server	Important Message		CHECK L16 ID WITHIN CIA	CHECK L16 ID WITHIN CIA
RAP	Critical: Safety	07 May 2021 10:24:42	EMERGENCY	Emergency on track

1 0 1 EMERGENCY CHECK L16 ID WITHIN CIA 248 3.6% FD DB CS CF RS 10:43:55 07 May 2021

- | Integrates all alerts (MASE & CSI)
- | Window | Alerts or double click on “Most Urgent Alert” or “Most Recent Alert” in Status Bar
- | Actions: “Ack”, “Ack All”, “Del”, “Del All”, “Filter”, “Hook Track”
- | Classification: **Critical**, **Warning**, Information
- | Non-acknowledged alerts in bold

Context Sensitive Map Actions

- Upper part contains common actions which are available in MASE and CSI modes and that depend on a hooked object
- Mid part contains console related actions that are available dependent on the mode but irrelevant with a hooked object
- Lower part contains CSI Mode Dependent actions



Totes

Air Track Tote: 00203

Trac... *multiple selected* ☒ Hide Closed Hook ☐ Keep

TN 00203 TN22 S-ADD AGE 00:03
 NTM SRN DLRN ATN HDG SPD ALT CALLSIGN VCS ORG 00203
 030 010 100A FIUC FIUC AUX CSI
 LI SI EID BID AID 16ID 22ID S1 S2 S3 M4/5 L Q S E J/S SPI CSTS
 IO SIG F F L 7 U
 POS NKHG2957 / 51°57'18"N 007°28'40"E MAC 0.15 NRT N
 PLT Fighter / Interception
 AST No Statement
 UT No Statement
 NAT - EM1 - PIN - ADEP ---- ADES ----

CSI Data

ORG 00203 USER CONS CUNIT LOC N SALT - AGE 00:02
 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16
 L1 0 0
 11 0
 16 0 3 0 0
 22 0

PPLI Data

PLT Fighter AGE 00:03
 ACT Interception
 VCS CC AB FL MC C2 B0 TQ HQ NST PST NET RTT REL
 FIUC 20 Y 7 15 ACT NOP INA

Different Totes for Tracks

Air Tracks/Units

Surface Tracks/Units

Subsurface Tracks/Units

Reporting Unit

Space Tracks

Land Tracks/Units

Special Points

Strobes

Target Reports

ADSB / PPLI

Multiple Totes can be opened at a time

Double-click an entity on the PPI or in the Search
Output window to open a Tote

Totes (Continued)

Air Track Tote: 00203

LC2 Trac... * multiple selected * ☒ Hide Closed Hook ☐ Keep

TN 00203 TN22 S-ADD AGE 00:03
 NTN SRN DLRN ATN HDG SPD ALT CALLSIGN VCS ORG 00203
 030 010 100A FIUC FIUC AUX CSI
 LI SI EID BID AID 16ID 22ID S1 S2 S3 M4/5 L Q S E J/S SPI CSTS
 IO SIG F F L 7 U
 POS NKHG2957 / 51°57'18"N 007°28'40"E MAC 0.15 NRT N
 PLT Fighter / Interception
 AST No Statement
 UT No Statement
 NAT - EM1 - PIN - ADEP ---- ADES ----

CSI Data

ORG 00203 USER CONS CUNIT LOC N SALT - AGE 00:02
 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16
 L1 0 0
 11 0
 16 0 3 0 0
 22 0

PPLI Data

PLT Fighter AGE 00:03
 ACT Interception
 VCS CC AB FL MC C2 B0 TQ HQ NST PST NET RTT REL
 FIUC 20 Y 7 15 ACT NOP INA

Multiple Tabs

C2, PPLI and Age Indicator

Common Data

MASE Specific Data (Air Tracks)

CSI Tell State Data

Intel Data (Air Tracks)

CSI Correlation Data

PPLI Data

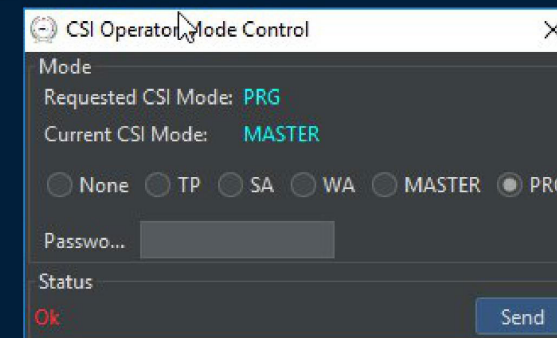
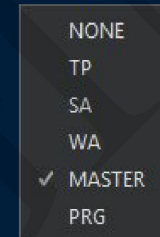
Status Data

Sensor Data (Air Tracks)

Subpanels can be collapsed/decollapsed/hidden

CSI Modes

- | CSI Supports different Operator Modes
 - | NONE (display only)
 - | TP (Track Production)
 - | SA (SAM)
 - | WA (Weapons)
 - | MASTER (Combined TP/SA/WA)
 - | PRG (Admin)
- | Any console can operate in any mode
- | CSI supports multiple consoles to have the same mode
- | Access through Mode -> CSI menu
- | PRG mode is password protected



CSI Displays

- | CSI Information Displays (DP) show the status of the CSI system
- | DPs are not directly linked to a individual entity on the PPI
- | DPs update periodically or on change of data
- | Only one instance of an DP can be opened at a time (except the ODX window)
- | Can be accessed from the CSI-DP pull-down menu of the PPI
- | DPs are represented in two types:
 - | Fixed format displays
 - | Tables

CSI Displays – Fixed Format

OIs can be called from the display by pressing the „framed“ headers in display

System Status Summary Window

System Info

SYS LOG

OPS TRACE

Air		Sur		Sub		Land		Space		System Wide	
EST	AVL	EST	AVL	EST	AVL	EST	AVL	EST	AVL	HST	ENG
0	8192	0	8192	0	6656	0	4608	0	512	0	0
0	0	0	0	0	0	0	0	0	0	0	0

Link Info

DLRP SCC

513136N - 0045538E 513000N - 0050000E

CSI

513000N - 0050000E - 000 - MANUAL

SIMPLE Network Classification Unclassified

L1 ADS MG

AT ADS DA TETH

11 ADS 172/72 11 BLK 3000 - 3777

FWD JU 0100 - 0120 11/16 A/00

16 ADS 00172 16 BLK 0M420 - 0Q017

16 CC 20 - 1234 16 VFC 225.000

22 ADS 00172 00172 22 BLK BC000 - BC777

IFF/SIF

00/0000/0000 ☐ Use Codes

Target Processing Mode

AIR SUR LND ☒ Process When CU

D D D

Procedural Identification Evaluation

ACT	APPLICABILITY	ALTITUDE	POSITION	COURSE	SPEED
-	30.0 DM	0 ft	0.0 DM	30	0.0-1000.0 DM/h

Software Info

IIP 18.6 R24A v/4-186-gd47

HMI MICE 8.5.0.1060 (ce57ada85390+ tip) 20210510

CSI Displays - Tables

- Tables can be filtered using the buttons in the toolbar on the left of the table
- OIs can be called from the display by using the context menu
- OIs are called context sensitively when a table entry is marked
- The preferred option can be called context sensitively by double-clicking on an entry in the table

Com Status Summary Window

	Device	Port	1 Link	2 Channel	Name	Link Status	FA	Load	Address	Connection	Parameters
	LAN		LINK-1	1	-----	NOP				INTERN	SESSION 18
	MPS-1	04	LINK-1	2	-----	NONE				SERIAL	EXTERN 1200 NRZ MPS_1000 147.21.1.124
	LAN		OTG	1	-----	NOP				OTG_CLI	147.21.32.20:1024
	MPS-1	05	LINK-11B	1	-----	NOP			0144 (RU)	SERIAL	EXTERN 1200 NRZ MPS_1000 147.21.1.124
L1	LAN		LINK-16	1	-----	NOP				LEGS	147.21.1.224:8500
LB	LAN		LINK-16	2	LINK-16 SIMULATOR	OP				INTERN	SESSION 68
LA	LAN		LINK-16	3	-----	NOP				INTERN	SESSION 5
	LAN		LINK-16	4	-----	NOP				JRE_SVR	172.31.154.106:2222 1
AT	MPS-1	01	RADAR	1	-----	NOP				SML_SER	INTERN 1200 NRZ MPS_1000 147.21.1.124
16	LAN		LINK-22	1	-----	NOP				SMP_UDP	172.31.154.119:1234 22
22											
RD											

OP Shift-O

NOP Shift-N

NOP (Drop Tracks)

Link Setup

Link Status Control

list filter buttons

OI menus and actions

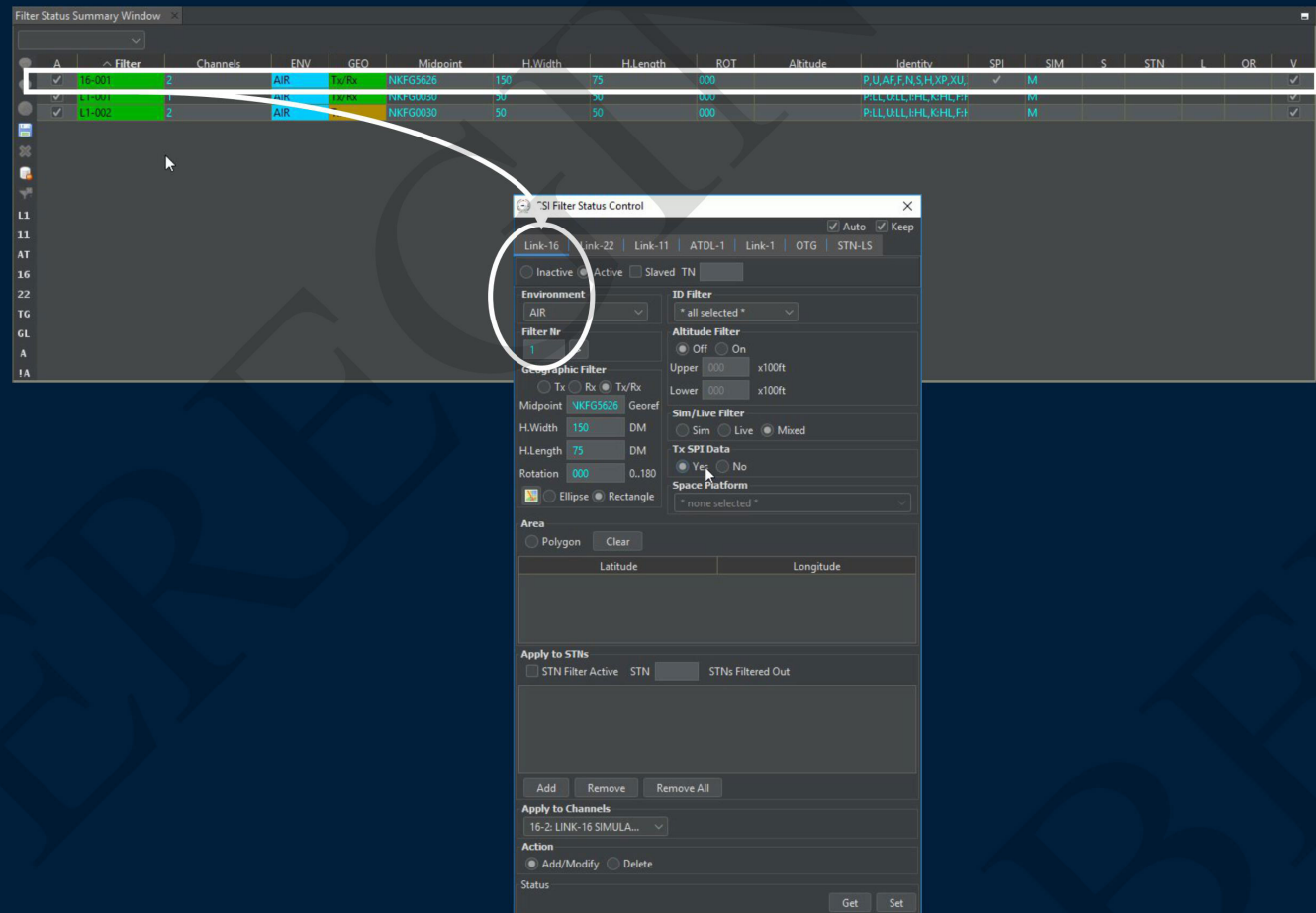
CSI Displays - Inputs

CSI Filter Status Control OI can be called from the CSI Filter Status Summary DP

Double-click a line in the table

Select a line in the table and select Filter Status Control from the context menu

This will produce the OI with the data already filled in



CSI Operator Inputs

- | Used to enter data into the CSI system
- | Can be called from
 - | CSI-OI pulldown menu of the PPI
 - | From Information Displays
 - | From the mode sensitive menu on the PPI
 - | By double-clicking items on the PPI (e.g. Filters, DLRP/SCC, Threat Areas, Weapon Zones, Defended Points, Airfields)

CSI Operator Inputs - Buttons

Standard buttons

Esc

quits the operator input without executing

Auto

the operator input will be filled with data from the hooked symbol

Keep

the operator input will not close after execution

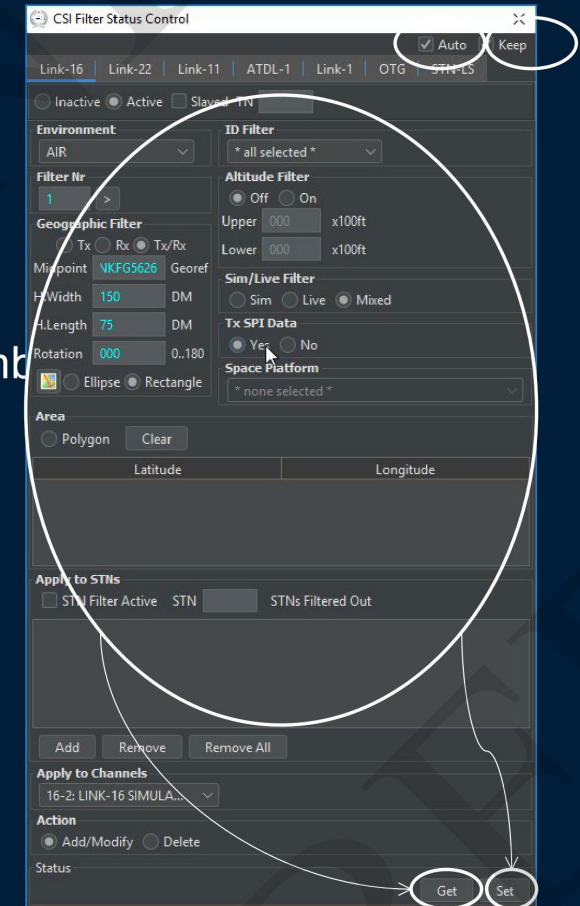
Get

get the current settings and

Set/Send

executes the operator input

only allowed when in correct CSI mode



CSI Operator Inputs - Error Messages

| Syntax Error

| If the operator enters a value out of range or in the wrong format.

| DLRN > 7776

| Rotation > 360 degrees

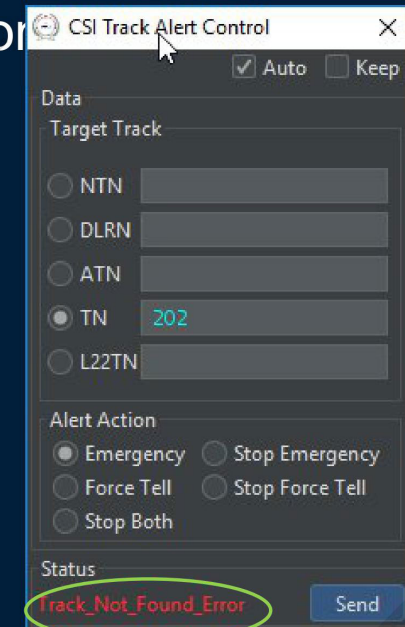
| Semantic Error

| If the system does not allow the action.

| Close a link when engagements active

| Test a link when it is OP

| Track not in system



User Profiles

- | Save Profile
 - | Position, Size and State of Windows
 - | Label Definitions
 - | Option Settings
 - | Layer Control Settings
 - | Sensors Settings
- | Saved in a single file
- | Load Profile
 - | Restores all settings

