



REPUBLIC OF CROATIA

Ministry of the Sea, Transport and Infrastructure

Maritime Safety Directorate



# *Use of IVEF in Croatia*

*17th IMS Group UCM*

*On-line, 21 October 2021*



## INTRODUCTION on IVEF service implemented in Croatia

The open Inter VTS Exchange Format (IVEF) service is implemented in Croatian maritime NSW from 2020

AIS and Radar raw data as collected from ships by Croatian AIS/Radar base stations is stored at national central server. Regarding the Radar data, only data with MMSI (at least once paired with the AIS) is processed.

From the national central server, data is exchanged with the NSW via IVEF, and used in number of functionalities including:

- Ships in port area
- IVEF vs Declarants Notifications (e-mail functionality)
- IVEF vs Declarants Notifications (NSW GUI reports)
- AIS trigger
- ADRIREP transit IVEF

Open IVEF





## IVEF admin settings of the NSW GUI

### IVEF Parametri



Pretraga: Sve kolone

Filtriraj

Opcije ▾

Uredi

Snimi

	Naziv ↑⇅	Num.vrijednost	Tekst.vrijednost	Značenje
	ADRIREP	1	-	Broj sati koliko čuvamo pozicije bez poligona (ADRIREP)
	ARHIVA	60	-	Broj dana neaktivnosti AIS uređaja nakon kojih se IVEF posjete neuparene sa najavama arhiviraju
	ARHIVA VOY	1	-	Broj sati nakon upisa ATD na najavu nakon kojih se IVEF posjete uparene sa najavama arhiviraju
	BROD_DUZINA	15	-	Maksimalna duljina broda koji ne mora imati najavu (AIS poruke)
	ETA_VS_ATA	60	-	Broj minuta dozvoljene razlika ETA (CIMIS najave) i ATA (IVEF poruke).
	JAHTA_DUZINA	45	-	Maksimalna duljina jahte koja ne mora imati najavu (AIS poruke)
	KASNI_LINIJA	60	-	Dozvoljeno kašnjenje linije u minutana (AIS poruke)
	KASNI_OT	60	-	Dozvoljeno kašnjenje plovila sa opasnim teretom u minutana (AIS poruke)
	MAIL_FROM	-	cimis-help@pomorstvo.hr	E-maili adresa sa koje se šalju AIS IVEF poruke
	MAIL_VTS	-	vts3@pomorstvo.hr	E-maili adresa sa koje se šalju AIS IVEF poruke
	MIROVANJE	1	-	Brzina u čvorovima ispod koje se smatra da brod miruje
	MS_TO_KNOT	1.94384449	-	1m/s to 1knots
	PLI_DELAY	30	-	Dozvoljeno kašnjenje uparivanja sa najavom (AIS poruke)
	POSJETA	0	-	Broj sati koliko pokazujemo posjete nakon ATD kao aktivne
	PROLAZ	10	-	Broj minuta ispod kojeg trajanja se ne računa kao posjeta
	TRANZIT	15	-	Preciznost u minutama ADRIREP Tranzit „AIS dohvat“ funkcije od trenutka kreiranja CW pozicije



## **Main IVEF admin settings (description)**

No. of hours storing the IVEF data with NSW notification assigned (1)

No. of days of the ship AIS inactive, after unassigned IVEF data is archived (60)

No. of hours from ATA provided, after IVEF data assigned to Notification is archived (1)

Maximum ship length under which Notification is not mandatory (15 m)

No. of minutes tolerating difference between Notification ETA and IVEF ATA (60)

Maximum Yacht length under which Notification is not mandatory (45 m)

Late port arrival tolerance (60)

Speed in knots below which it is assumed that ship is at anchor (1)

Grace period waiting before IVEF paired with the Notification (30)



## Ships in Port (NSW GUI)

- number of ships with AIS within a particular port area, in real-time
- prerequisite: all maritime port areas in Croatia (< 500) are defined (WGS 84) in NSW
- benefits: berth occupancy monitoring; traffic congestion prevention; logistics improvement

▼  Search for 'split - ' x

Naziv ↑	Broj Objekata
<input checked="" type="radio"/> Podstrana	0
<input type="radio"/> Split - bazen Gradska luka	32
<input type="radio"/> Split - Kaštelanski bazen A	0
<input type="radio"/> Split - Kaštelanski bazen B	2
<input type="radio"/> Split - Kaštelanski bazen C	15





REPUBLIC OF CROATIA

Ministry of the Sea, Transport and Infrastructure



## „IVEF vs Declarants Notifications” - e-mail functionality

IVEF functionality has the ability to compare the AIS data as received from the ships via IVEF, with the data from the declarants notifications reported in NSW

The system has predefined logic, as defined by NSW admins, in order to monitor discrepancies between data received by IVEF and data provided by declarants (agents)

Examples of predefined scenarios: ETA unavailable, ATA late more than 30 min., ETA late more than 60 min. for ships with HAZMAT, HAZMAT not selected on AIS while notified via NSW...

### Example of „IVEF vs Notifications” e-mail:

including: data and time, ship's name, IMO, flag, MMSI, position, port of destination, port call ID (NSW) and short description (in this case: ETA unavailable in AIS while declared by the ship agent in NSW. HAZMAT onboard as per NSW notification)



čet 28.1.2021 19:59

cimis-help@pomorstvo.hr

CIMIS automatska obavijest

Prima Toni Maričević

Uklonili smo dodatne prijelome redaka u ovoj poruci.

28.01.2021. 19:59:25

Plovilo: SVJETLICA , NIB: 11080, HRVATSKA, MMSI: 238407140, Pozicija: 43st 10min 34.71sek N, 16st 41min 44.78sek E , Luka: Bol, HR372 , Posjeta: 3528307

ETA nije upisana u brodski AIS uređaj. Brod prevozi HAZMAT.



## „IVEF vs Declarants Notifications” - NSW reports

This functionality creates automatic NSW reports available via NSW GUI in order for the administration (HMO’s officers) to monitor specific maritime safety issues

Reports currently available in Croatian NSW (*and there could be more depending on specific needs*) are:

Ships late at arrival, no notification provided, wrong „AIS vs Notification” data, AIS system turned off and wrong port of call notified

Example of the „Wrong data” IVEF report:

IVEF poruke u luci

Luka	Org.jed.	LK	Ime pom.obj.	AIS Name	Zastava	AIS Flag	IMO	AIS IMO	MMSI	AIS MMSI	Pozivni znak	AIS Call Sign	Nosivost	AIS Deadweight
Split - bazen Gradska luka	LK SPLIT	LK SPLIT	HELIOTROPE	HELIOS	KY	KY	-	-	319029400	319029400	ZGBQ4	ZGBQ4	-	-
Split - Kaštelanski bazen B	LK SPLIT	LK SPLIT	FORCA	FORCA	HR	HR	-	-	238760340	238760340	9A6644	9A5371	153	153

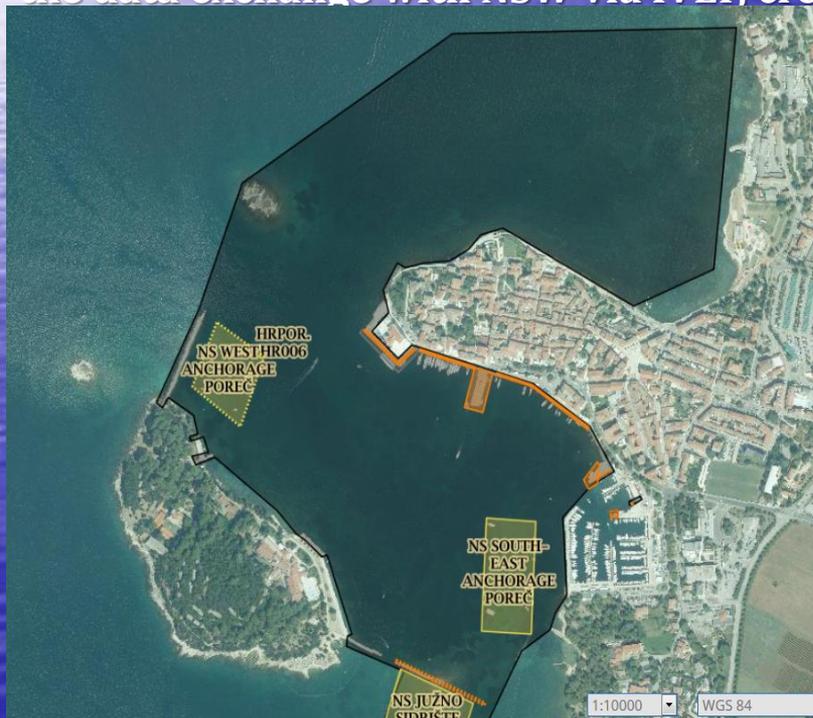


## „AIS trigger” functionality

This functionality is used for automated ship arrival/departure reporting in NSW (including persons on board)

- prescribed in HR legislation; mandatory test phase with participating ships
- based on ship AIS information as received via IVEF

**How it works?** - ship's crossing the outer limits of an predefined (WGS 84) port area triggers the data exchange with NSW via IVEF, creating new notification or updating ATA/ATD



**Luke**

Search for 'poreč'

Naziv	NBL	UNICODE	Administrativna
<input type="radio"/> Marina Vrsar	HR039	-	Poreč - putnička luka
<input type="radio"/> Otok sv. Nikola (Poreč)	HR746	-	Poreč - putnička luka
<input checked="" type="radio"/> Poreč - putnička luka	HR006	HRPOR	-
<input type="radio"/> Santa Marina (Tar-Vabriga)	HR874	-	Poreč - putnička luka
<input type="radio"/> Vrh Lima	HR622	-	Poreč - putnička luka

1 odabrani redak

**Posjete**

Lučko područje	Pomorski objekt	Zastava	IMO	MMSI	Call Sign	CIMS evidencija	Navstatus	ATA
LUKA POREČ	AMBISONTIA	AT	-	203011200	OEK6612		15 (not defined)	17.08.2019 14:16
LUKA POREČ	-	-	-	376453464	-		5 (moored)	16.06.2019 09:34
LUKA POREČ	SY BRZDO	DE	-	211582790	-		15 (not defined)	19.08.2019 17:48



## „ADRIREP transit IVEF” functionality

- Croatia is one of the countries participating in Mandatory Ship Reporting System ADRIREP
- Croatian NSW – module Notifications – is used by the VTS / MRCC operators to exchange ADRIREP information with ships and between the neighboring MSs administrations
- ADRIREP notifications are prefilled with data provided by the ship declarants within the NSW (for ship arriving / departing from HR ports)

**But, for ships not calling HR ports** (ships in transit through the Adriatic Sea), data in NSW is not available and VTS/MRCC operators use „ADRIREP transit IVEF” functionality to retrieve ships data as available on ship’s AIS.

ADRIREP prvi izvještaj (VoyageID - 2933734) [Povratak na detalje posjete](#) [Uredi report](#)

Vrsta dokumenta **ADRIREP prvi izvještaj** Zaključen  Poslan

▼ Osnovni atributi

Ship	[REDACTED]	Cargo information (IMO class, UN no., cargo, quantity [MT])	[REDACTED]
Reporting date/time (UTC)	<b>2019-08-25 11:04:51 +02:00</b>	Cargo information contact	<b>HRBAK; ; INA DD Terminal Bakar; 988207169; ;</b>
Present position	<b>45°14'45.2361"N 14°23'14.3903"E</b>	Size and type (type, DWT, GT, LOA)	<b>Tanker, 39574.85, 23217, 182.55</b>
Course	<b>251</b>	Total number of persons on board	<b>25</b>
Speed [knots]	<b>128</b>	Bunker fuel (fuel, quantity [MT], ships> 1,000 GT)	<b>HFO 158 mt/ MGO 251 mt/ LO 23740 l</b>
Port of departure	<b>"INA" - naftni terminal Bakar</b>	Navigational status	<b>00</b>
Destination and ETA	<b>Perama</b>		
ETA at the next checkpoint (UTC)	<b>2019-08-25; 12:00</b>		
Draught of the vessel (cm)	<b>1000</b>		



REPUBLIC OF CROATIA

Ministry of the Sea, Transport and Infrastructure



*Thank you for your attention*

*[Toni.Maricevic@pomorstvo.hr](mailto:Toni.Maricevic@pomorstvo.hr)*