

6th Region F ICC WG meeting

ICCWG6-2

ENC Coverage status – ENC overlaps risk assessment

VTC, 25th May 2021

Region F ICC Coordinator
Lt. Cdr. Marta PRATELLESI (Italy)



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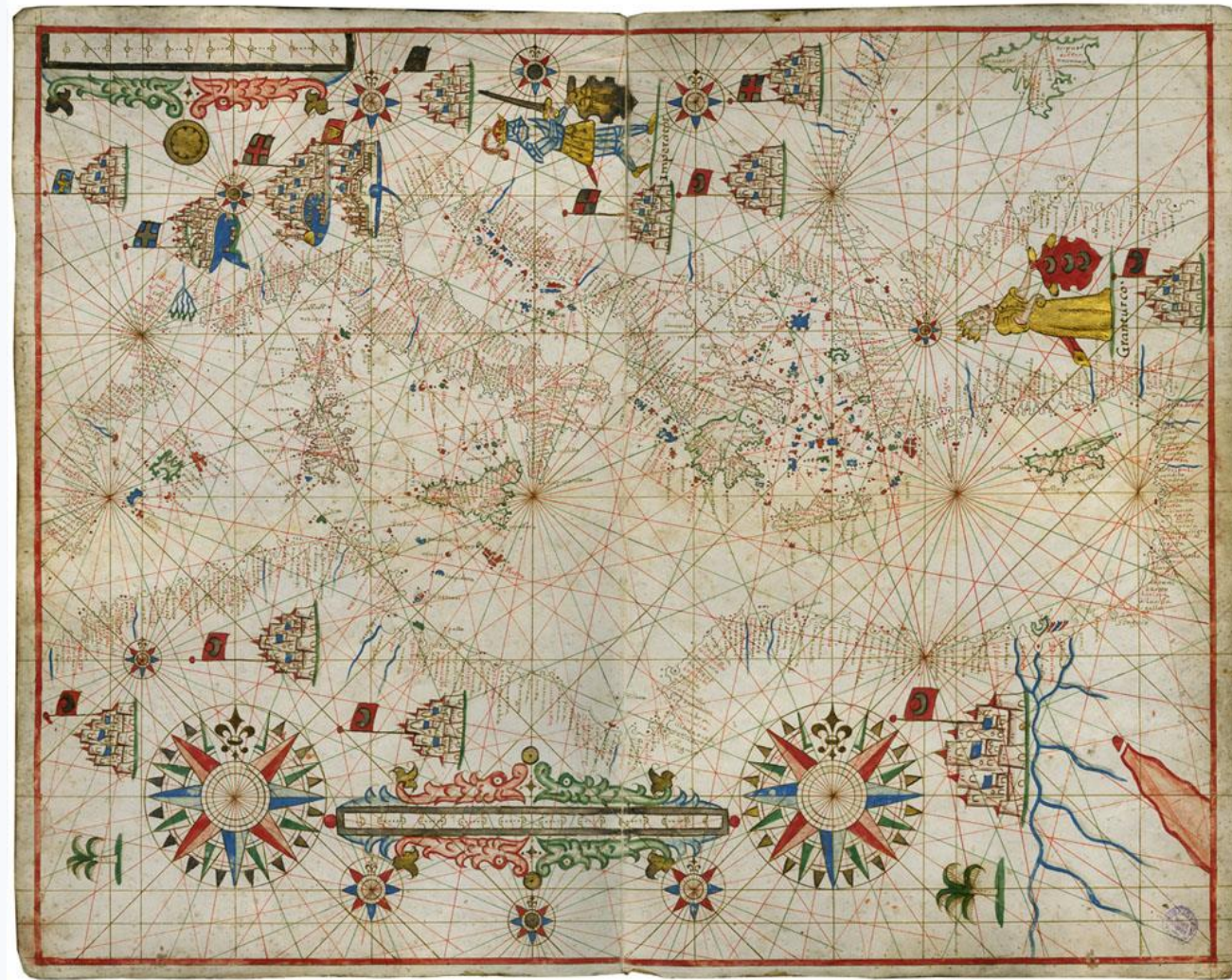
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ICC6-2

Preliminary considerations

- Analysis of the status of the ENC coverage at different UBs
- Overlaps analysis and risk assessment
- INTToGIS catalogue ver. 4.0.27
May 2021
- For each topic: proposed actions and recommendations



Placido Caloiro et Oliva, «Atlante Nautico» in six charts, 1646

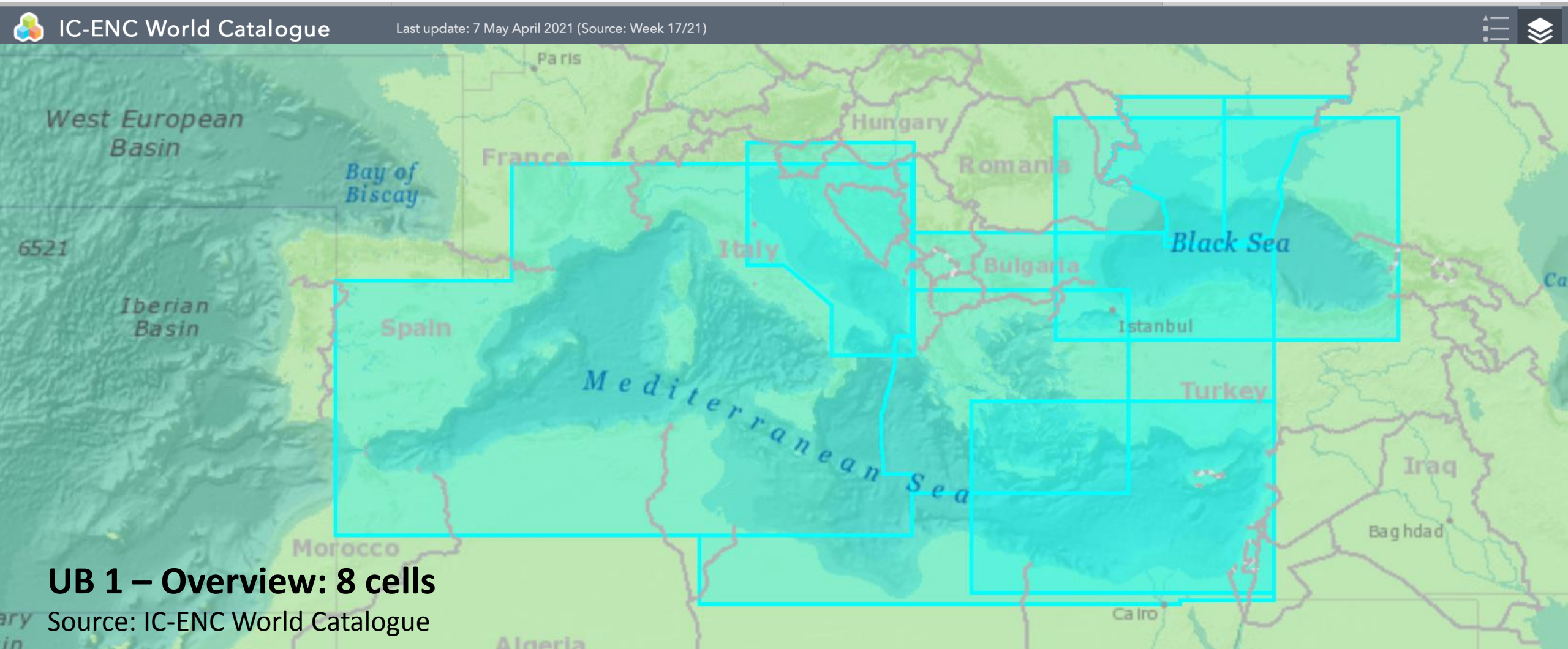


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Status of ENC's coverage – UB 1 - Overview

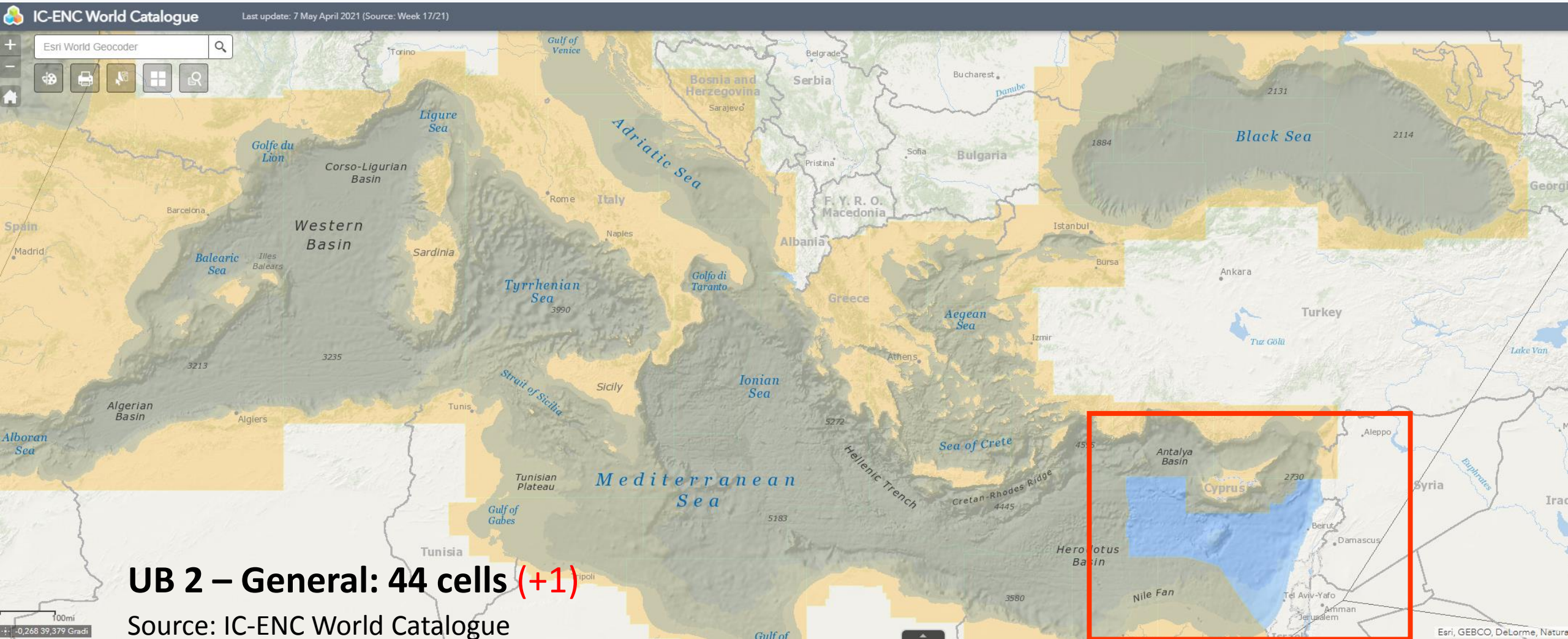


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Status of ENC's coverage – UB 2 - General

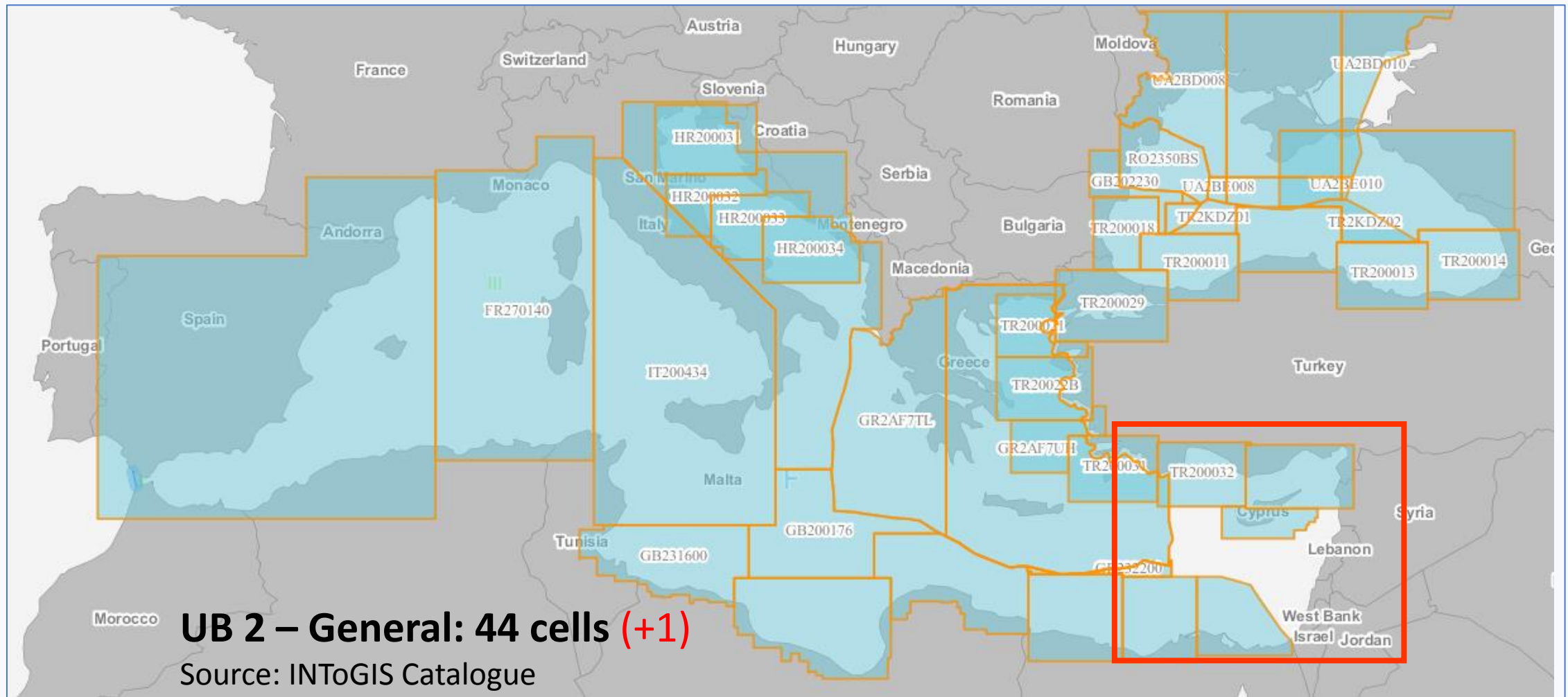


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Status of ENC coverage – UB 2 - General

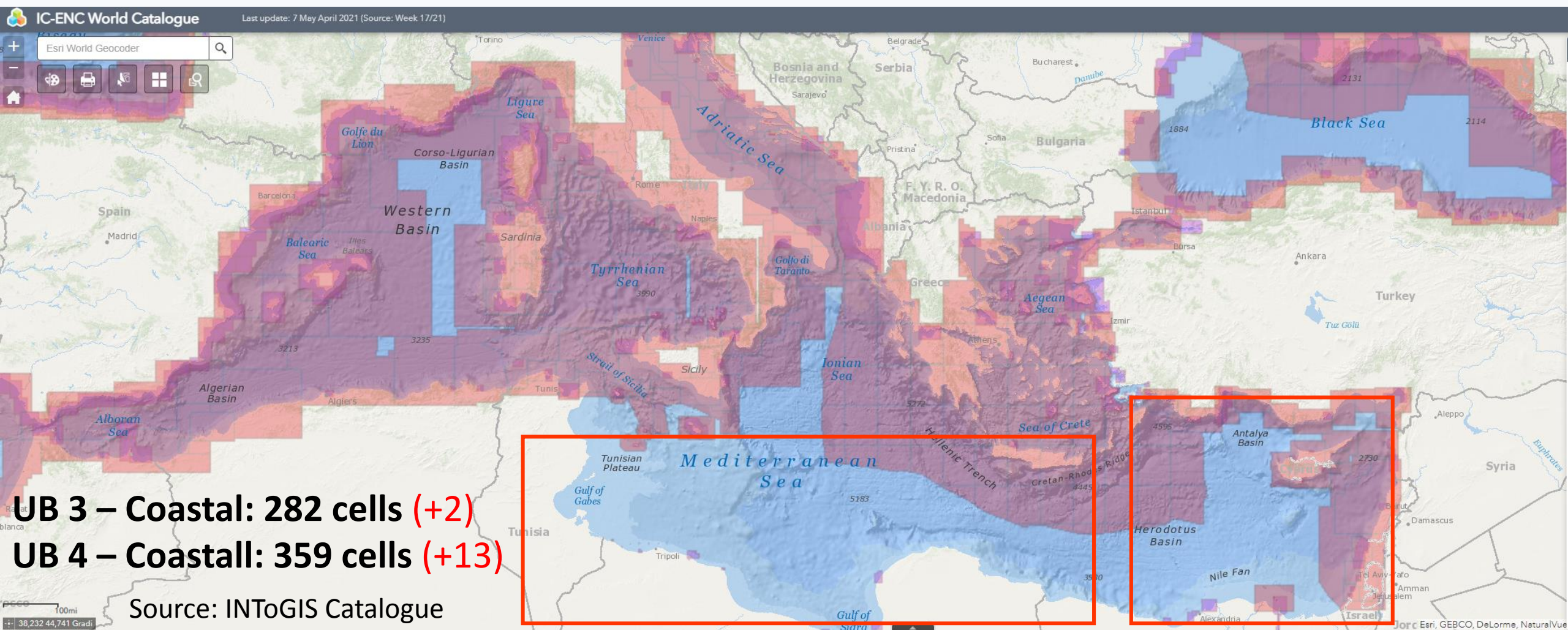


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Status of ENC's coverage – UB 3/4 Coastal/Approach



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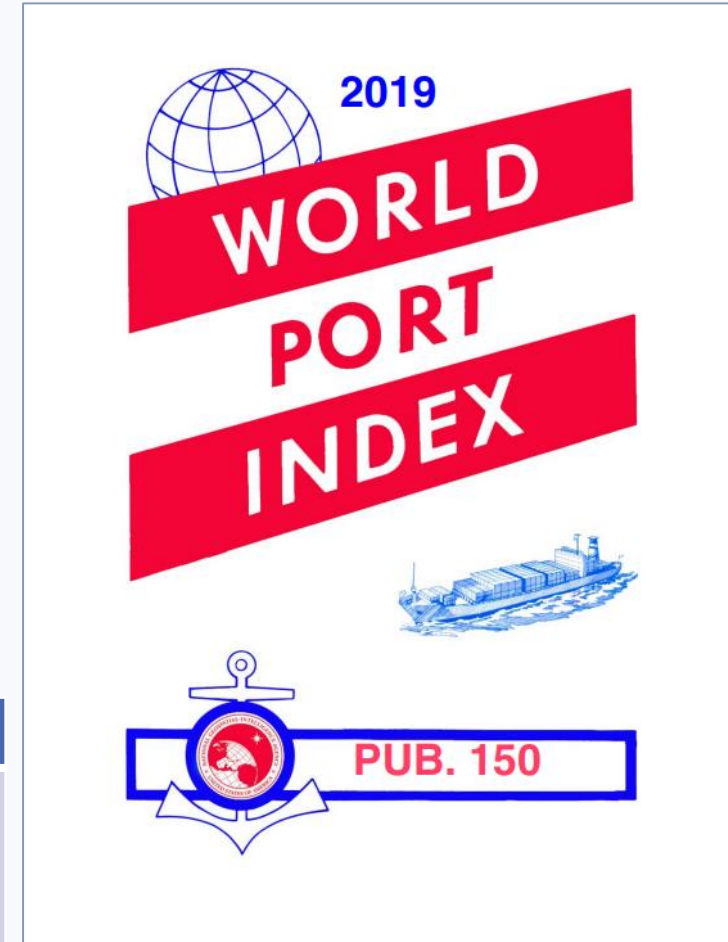
Status of ENCs coverage – UB 5/6 Harbor/Berthing

- NGA is working to update the Port List together with the IHO
- MBSHC21 inputs about port list not applied yet



Proposed action: To be ready to update the port list once NGA will complete the updates in the INTGIS

Action N°	Action	Responsible
MBSHC21/28	MS to use the IHO online port database to update their port priority list and report to the Regional Charting Coordinator (RCC).	All

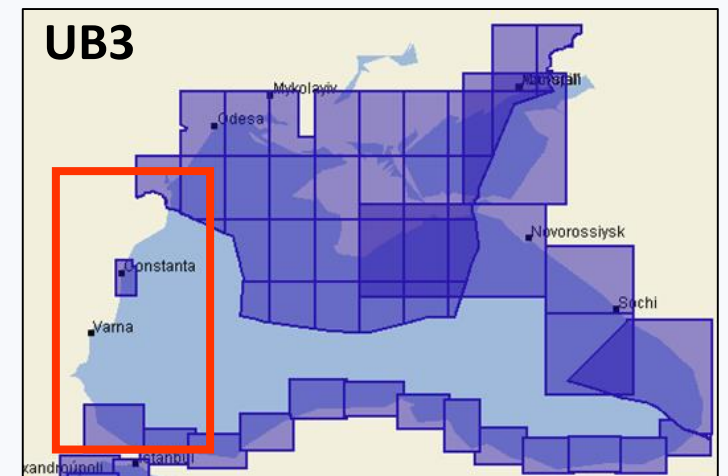
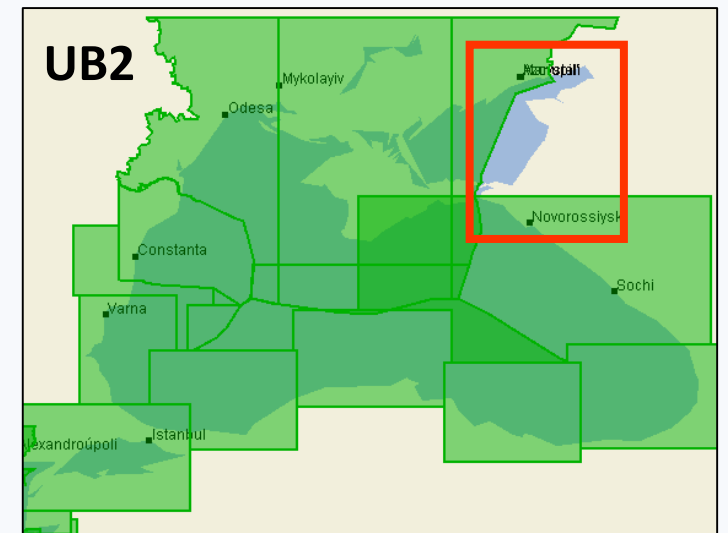
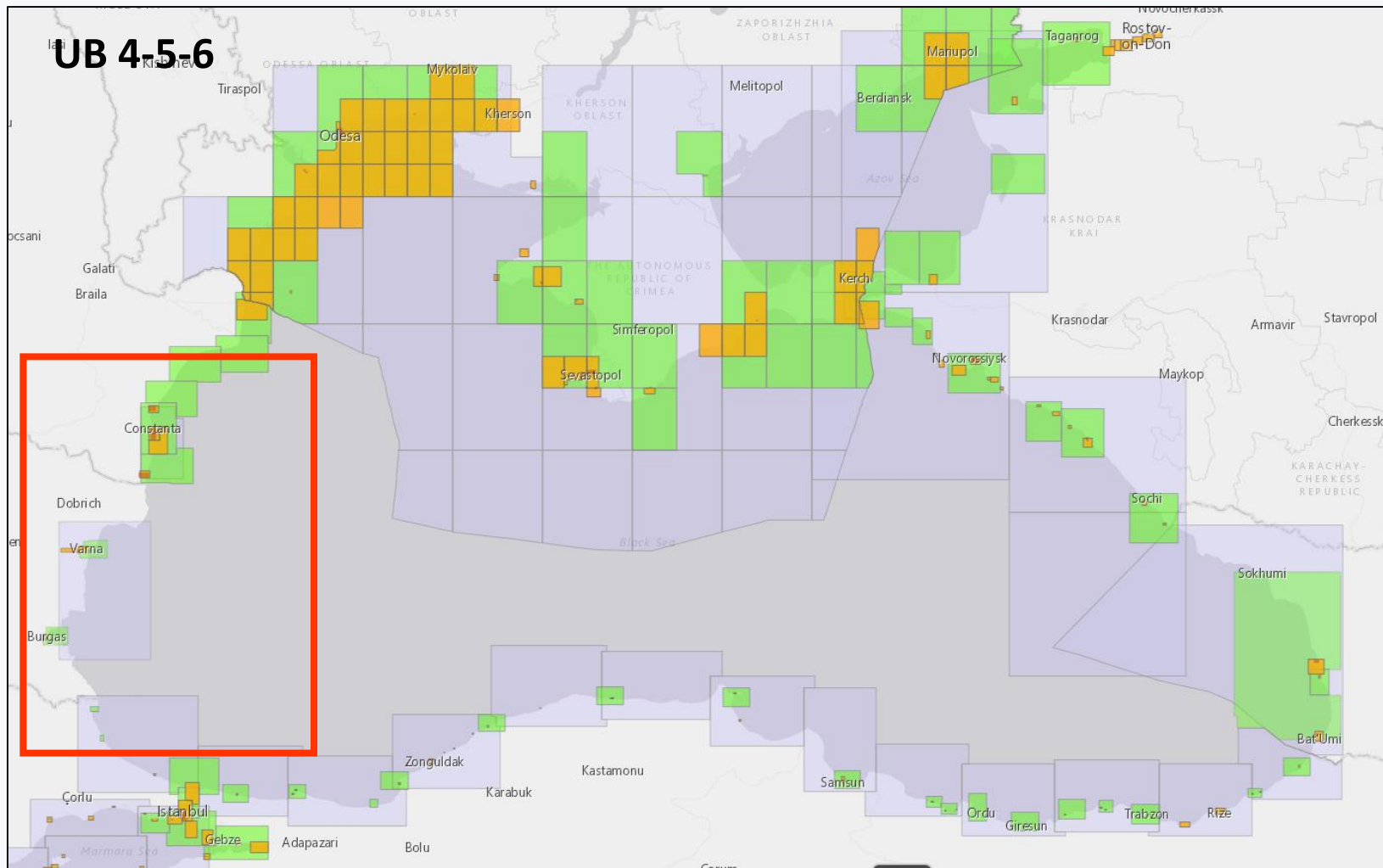


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Status of ENCs coverage - Black and Azov Sea



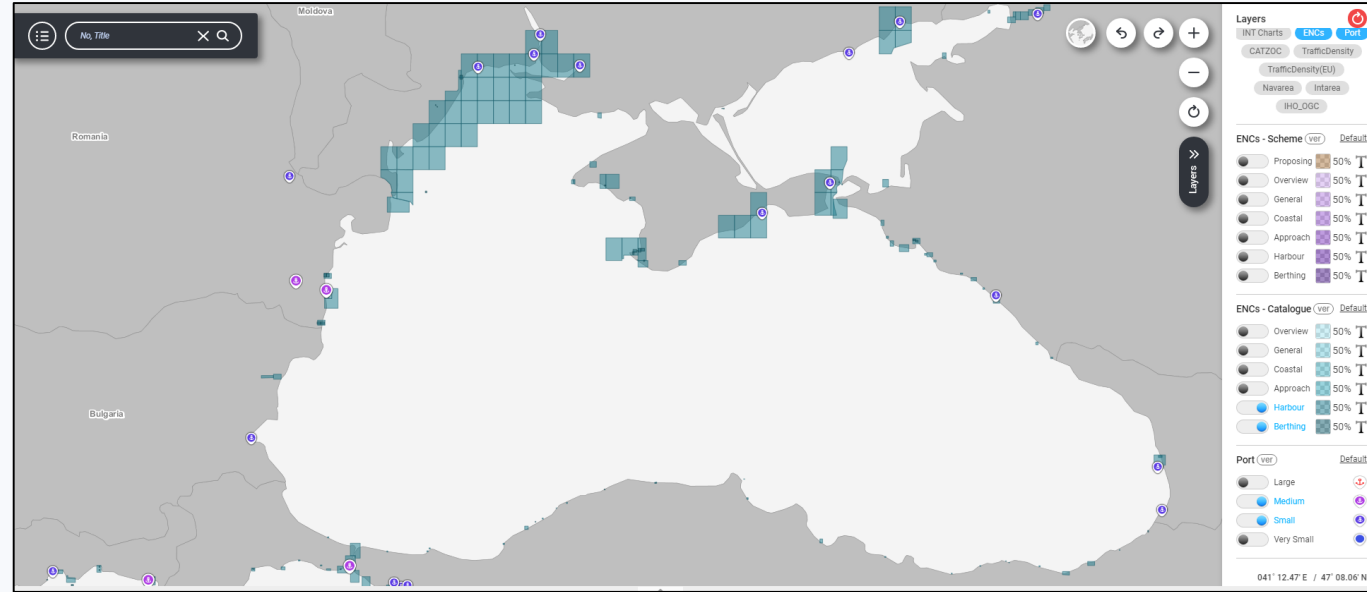
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Status of ENC's - Coverage

- **UB1 and UB2 coverage** considered as **completed**
- **UB3 coverage with gaps** on the Western part of the Black Sea
- **UB4/5/6** : NGA World Port Index (Pub150) covered – additional ports to add through MSs analysis



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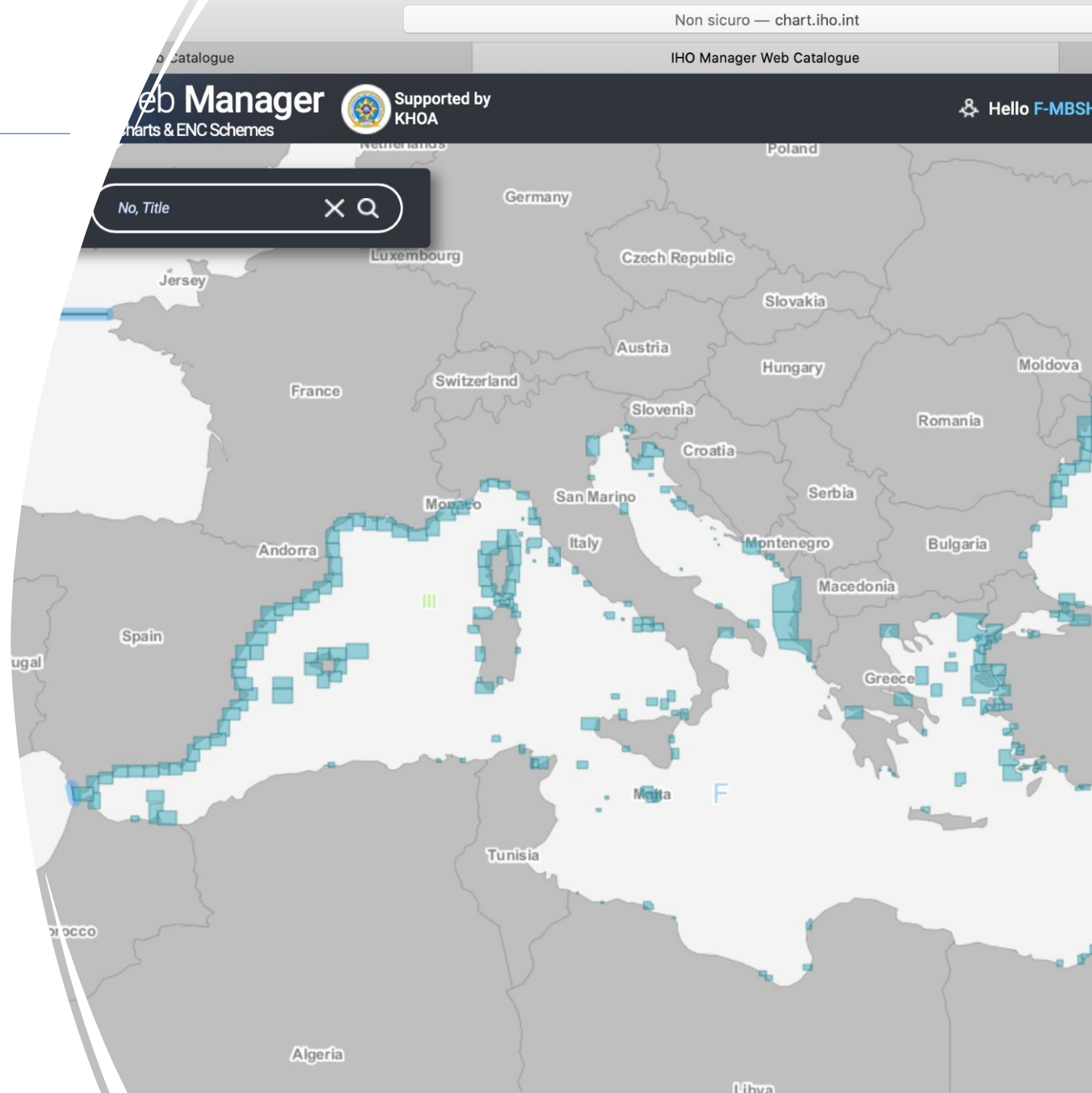
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General assessment

- **UB2 – UB 3 coverage not complete** (East Med)
- **UB 3-4 coverage not complete** (South Med – West Black Sea)
- General **increase** of the number of cells
- MBSHC21 inputs about port list not applied yet (on going by NGA)

Proposed Action: MSs to complete the ENC scheme and provide RCC with their ENC production plan for UB 4-5-6

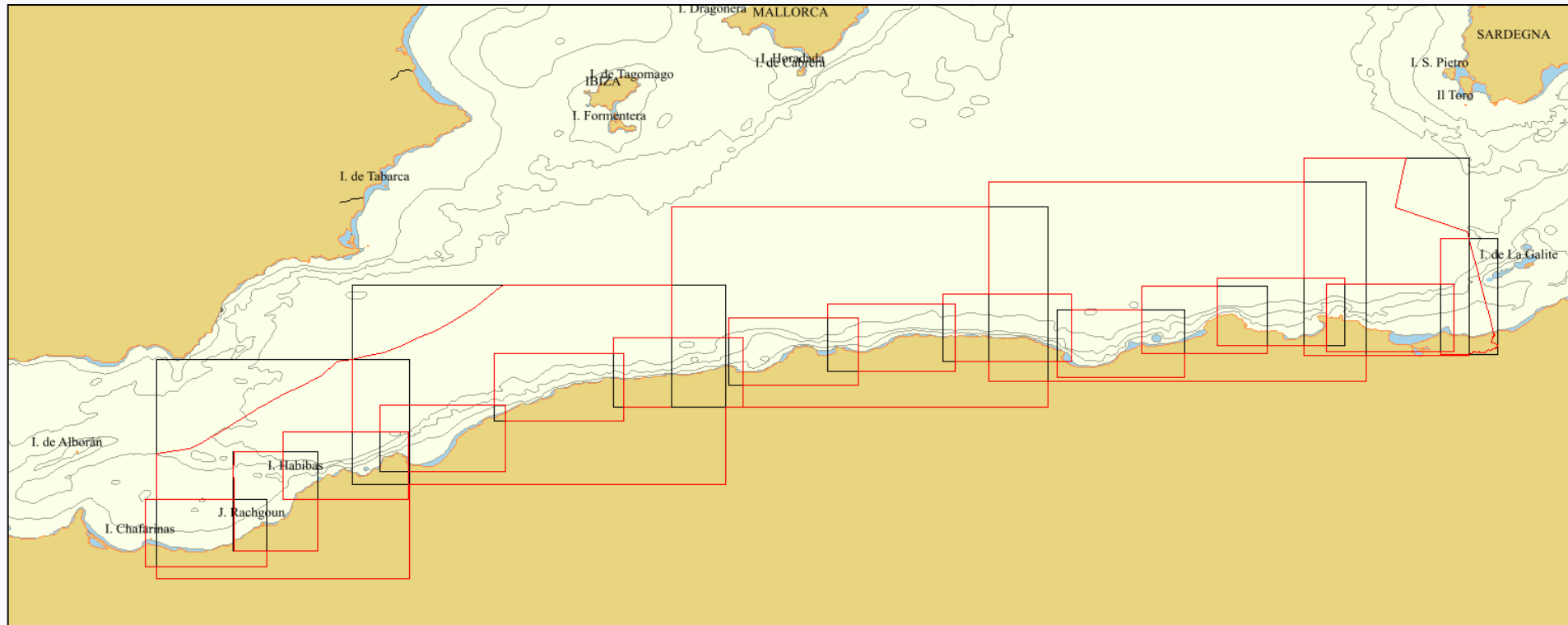


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Algerian New ENC Scheme

- UB3 complete scheme of the Algerian Coast
- RCC informed in April 2021
- Coordination needed for transition and implementation (DZ, UK and RENCs)



Proposed Action: DZ to update the RCC about the new ENC scheme implementation



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“Status of ENC’s” proposed action/ recommendations

Action/Recommendation N°	Action	Responsible	Update/Comment
ICC6/01	MSs are encouraged to liaise with the RCC to coordinate the development and maintenance of ENC scheme	All	ICC7/MBSHC23
ICC6/02	MSs to complete the ENC scheme and provide RCC with their ENC production plan especially for UB 4-5-6	All	ICC7/MBSHC23
ICC6/03	RCC to disseminate an updated version of the Port Priority List once NGA is ready to process new data	RCC	ICC7/MBSHC23
ICC6/04	MS <u>to be ready</u> to use the IHO online port database to update their port priority list and report to the Regional Charting Coordinator (RCC)	All	ICC7/MBSHC23
ICC6/05	DZ to update the RCC about the new ENC scheme implementation and RCC to provide support	DZ,UK,RCC	ICC7/MBSHC23



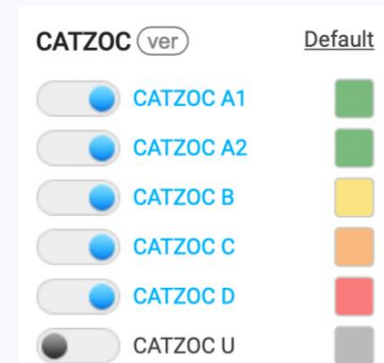
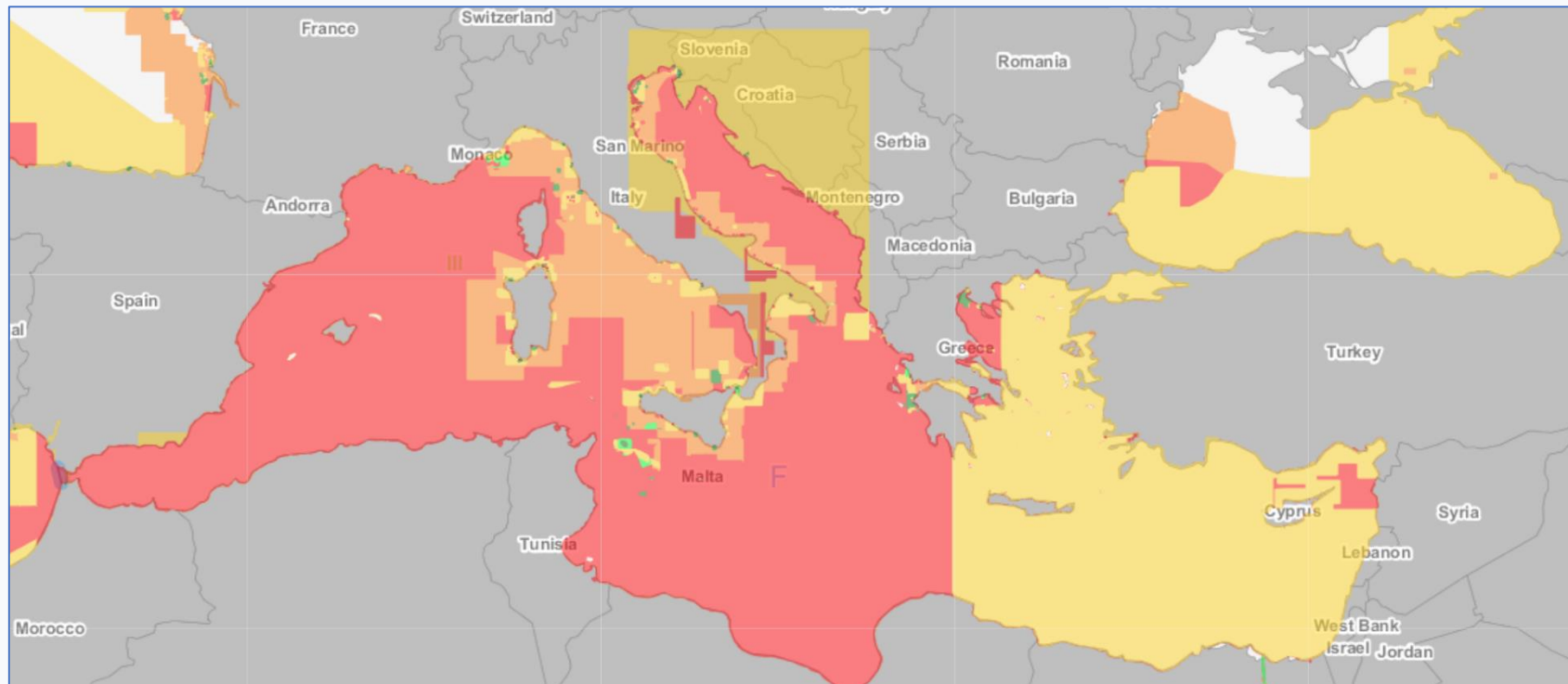
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Status of ENC's "Quality" - CATZOC

Action N°	Action	Responsible	Update/Comment
MBSHC21/22	MS are encouraged to populate the CATZOC values (1 to 5) of their ENC cells	All	<i>No significant updates, decreased n° of areas of UNASSESSED Quality of Bathymetric Data</i>



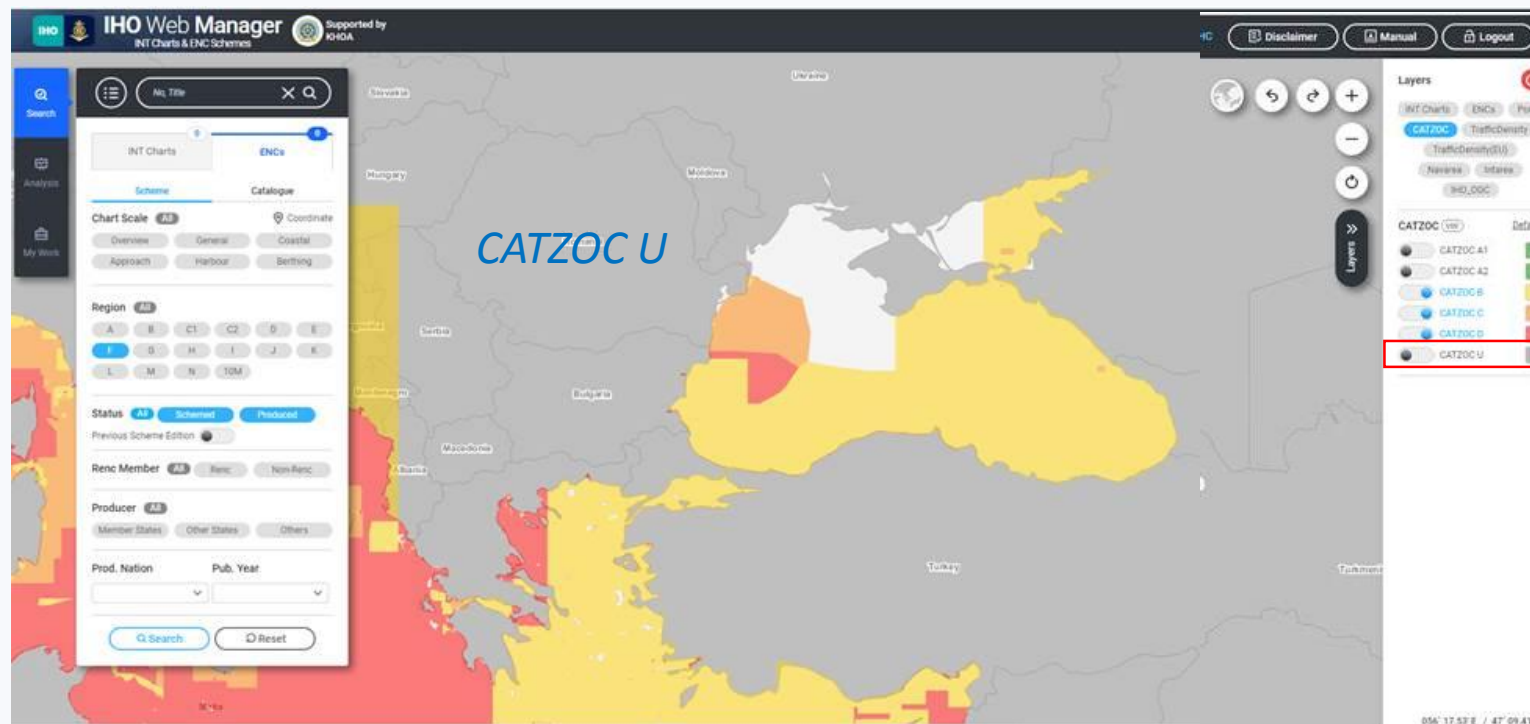
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Status of ENCs “Quality” - CATZOC

- Result of the INTToGIS query about «CATZOC U» showed at BASWG (Unassessed)
- UA informed the RCC that the M_QUAL value is attributed
- Investigation on going by the IHO with the INTToGIS Project Manager and RENCs



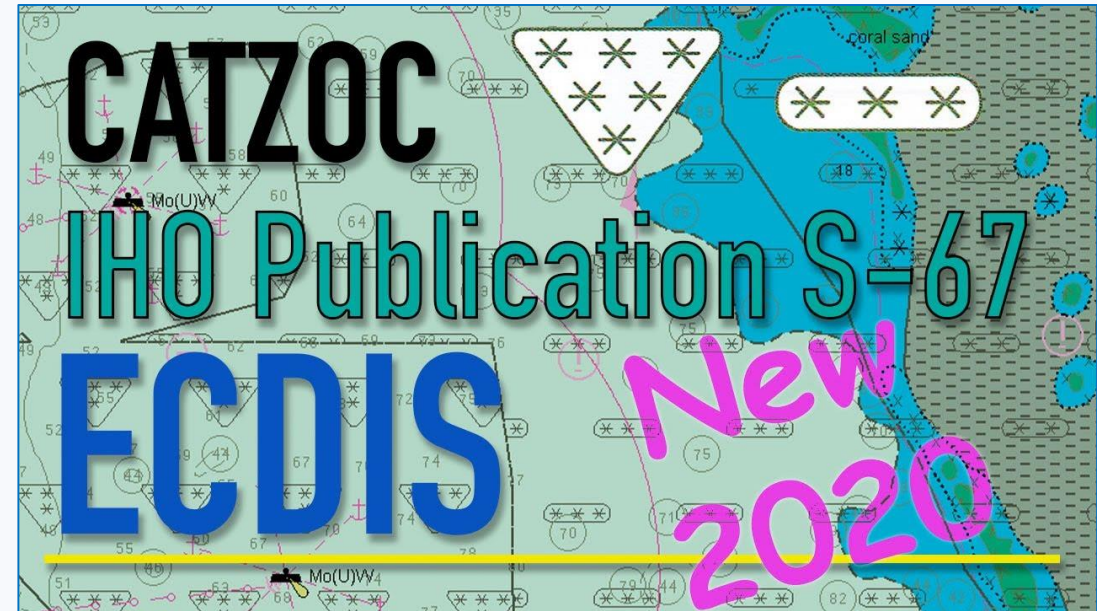
Action/Recommendation N°	Action	Responsible	Update/Comment
ICC6/06	RCC to inform UA about the result of the IHO investigation about INTToGIS CATZOC attribution	RCC	September 2021

“Quality of ENCs” proposed action/recommendation

Action/Recommendation N°	Action	Responsible	Update/Comment
ICC6/07	MS are encouraged to populate the CATZOC values (1 to 5) of their ENC cells	All	ICC7/MBSHC23

“Good data quality does not mean that the quality of data has to be good. It means that the end user is well informed in how the quality of data is”

This statement is about a **SPECIFIC RESPONSABILITY** of HOs and it was endorsed by HSSC and IRCC



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ENCs overlap - actions

Action N°	Action	Responsible	Update
MBSHC21/27	Concerned MSs to liaise bilaterally to resolve ENC overlaps, keeping the MBSHC Chair informed.	All	Very good progresses noted
MBSHC21/30	RENCs to provide a template report in order to collect the evaluation of risk level on ENC overlaps from the MS in the frame of the WENDWG risk assessment.	RENCs	Latest version sent to all ICCWG Members – e-mail Region F coordinator dated 23rd February 2021
MBSHC21/31	MS to use the RENCs' template report to provide the RCC with: <ul style="list-style-type: none"> - evaluation of risk level on the most critical ENC overlaps based on the IC-ENC risk assessment regional database (level: MEDIUM); - their views and comments on the IC-ENC risk assessment methodology. 	All	Feedback received from UA, GR, IT, SI, HR, UK, EG, ES



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ENCs Overlap – Resolution 1/2018

IHO Resolution 1/2018 – *Elimination of overlapping ENC data in areas of demonstrable risk to the safety of navigation*

Elimination of overlapping ENC data in areas of demonstrable risk to the safety of navigation	1/2018	IHO CL 19/2018	
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1. It has been reported that overlapping ENC data, when used in ECDIS equipment, may lead to unpredictable behaviour in at least the following cases:
 - overlapping data occurring in the same usage band (Navigational Purpose);
 - overlapping data occurring in ENC cells in different usage bands (Navigational Purposes) but using the same compilation scale.



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ENCs Overlap – Resolution 1/2018

- Region F Charting Coordinator reports to ENC producers the “**highest**” risk **overlapping** cases in accordance with IHO resolution 1/2018 (RENCs assessment dated Feb 21 – ICCWG-02B)
- **MSs responsibility** → IDENTIFY – PREVENT – RESOLVE (*demonstrable risk*)
- ENC producers are reminded, in accordance with WEND principles, that all overlaps must be resolved (*at least within one year*)
- Dialogue between parties involved must be strengthened



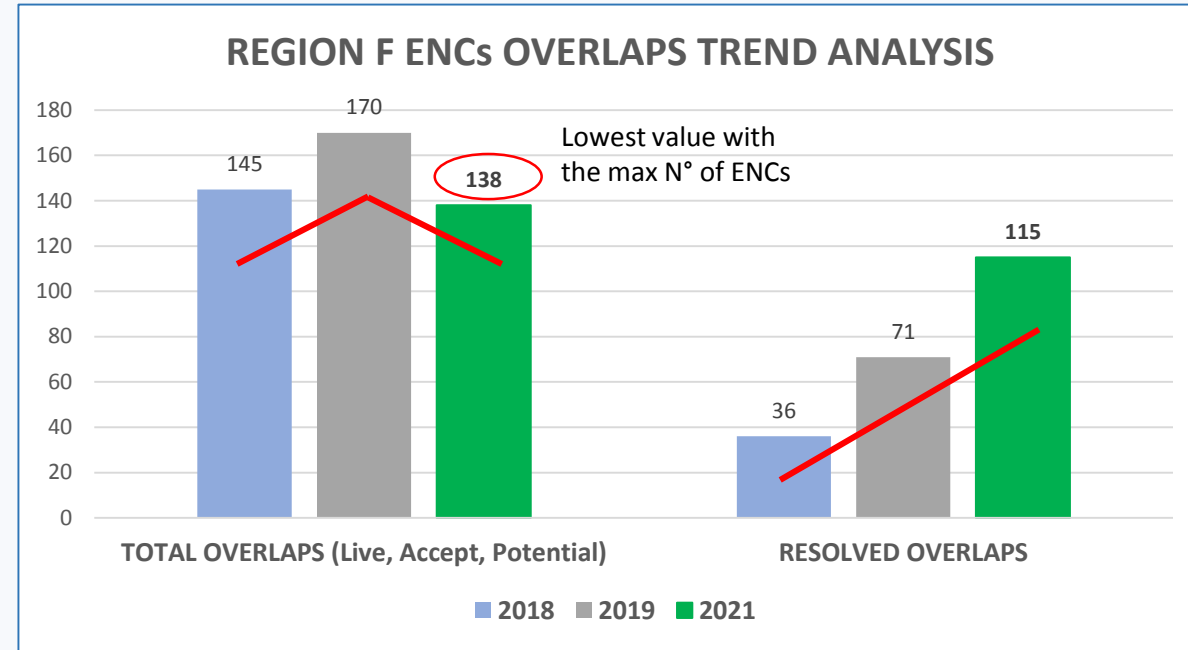
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Status of ENC's – Region F overlap assessment

Region F	March 2018	June 2019	June 2021
Resolved	36	71	115
Accept	3	15	12
Potential	37	50	39
LOW	81	81	70
MEDIUM	24	24	17
HIGH	0	0	0
Total overlaps (L,P,T)	145	170	138



- Results of the ENC's RENCs Report (see ICCWG6-02B)
- Values provided take account that some overlaps (Potential, Accept, Live) have already been solved by MSs since Feb. 2021
- Coordination between MSs significantly increased as shown by the overall trend

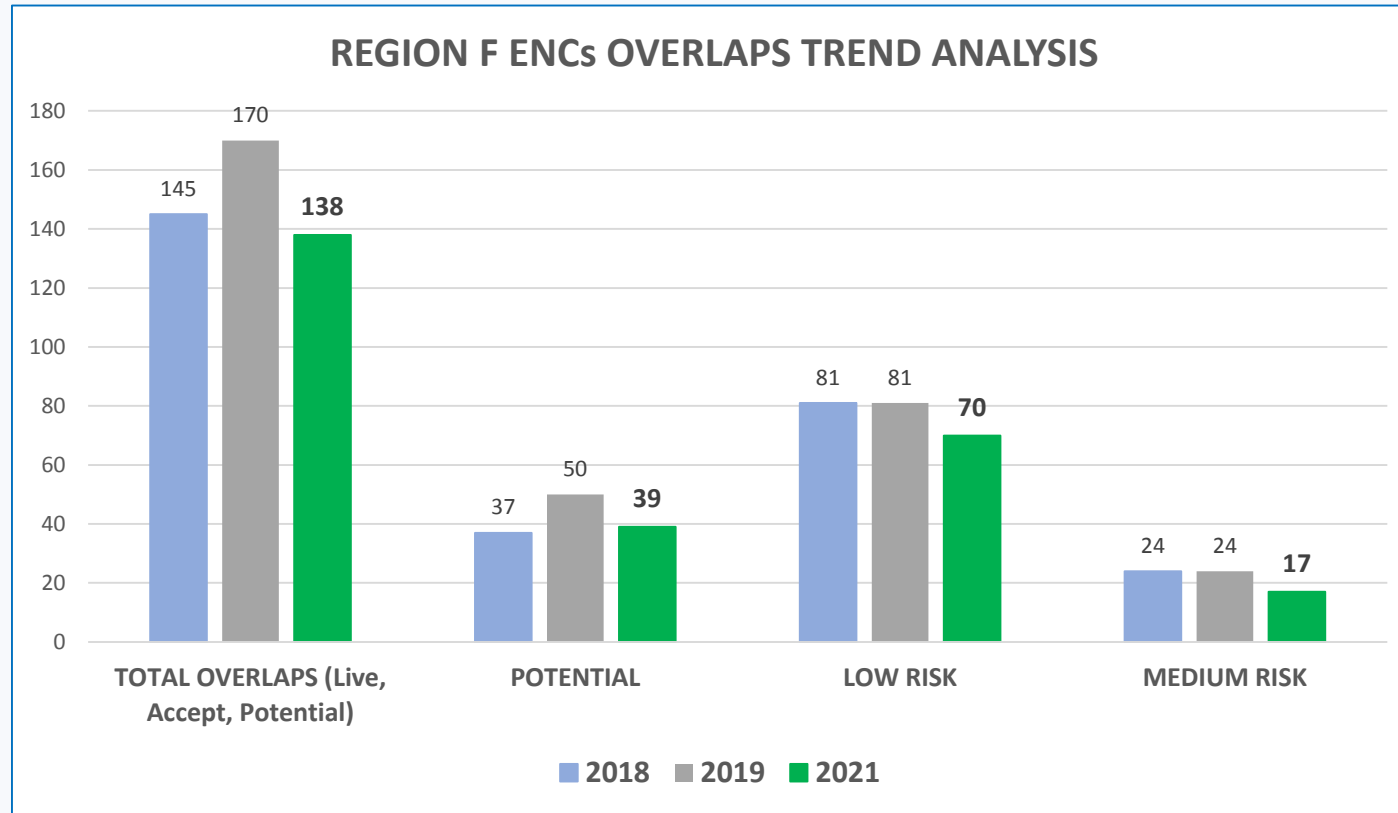


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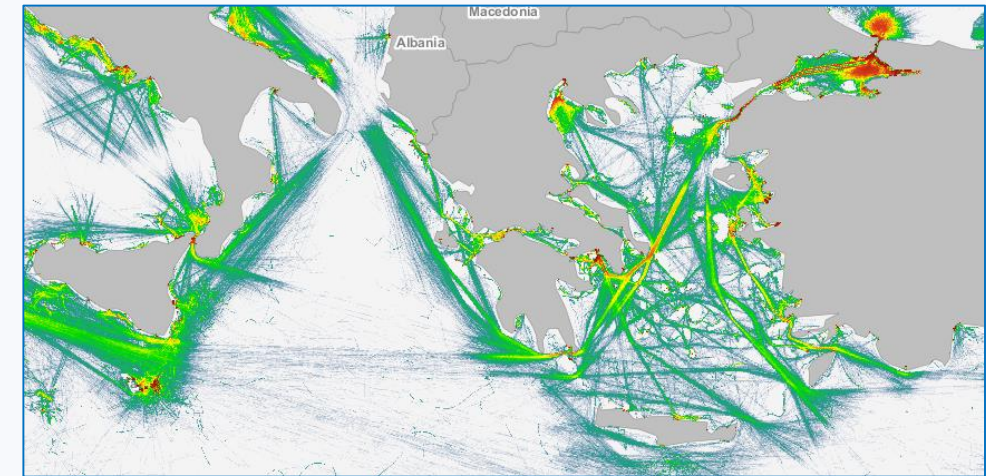
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Status of ENC's – Region F overlap assessment



- Resolved and Acceptable overlaps ↗
- Live Low and Medium overlaps ↘
- Potential overlaps ↘
- Risk assessment by MSs take into account Marine Traffic in the area



Monitoring mechanism at the RENCs level is working



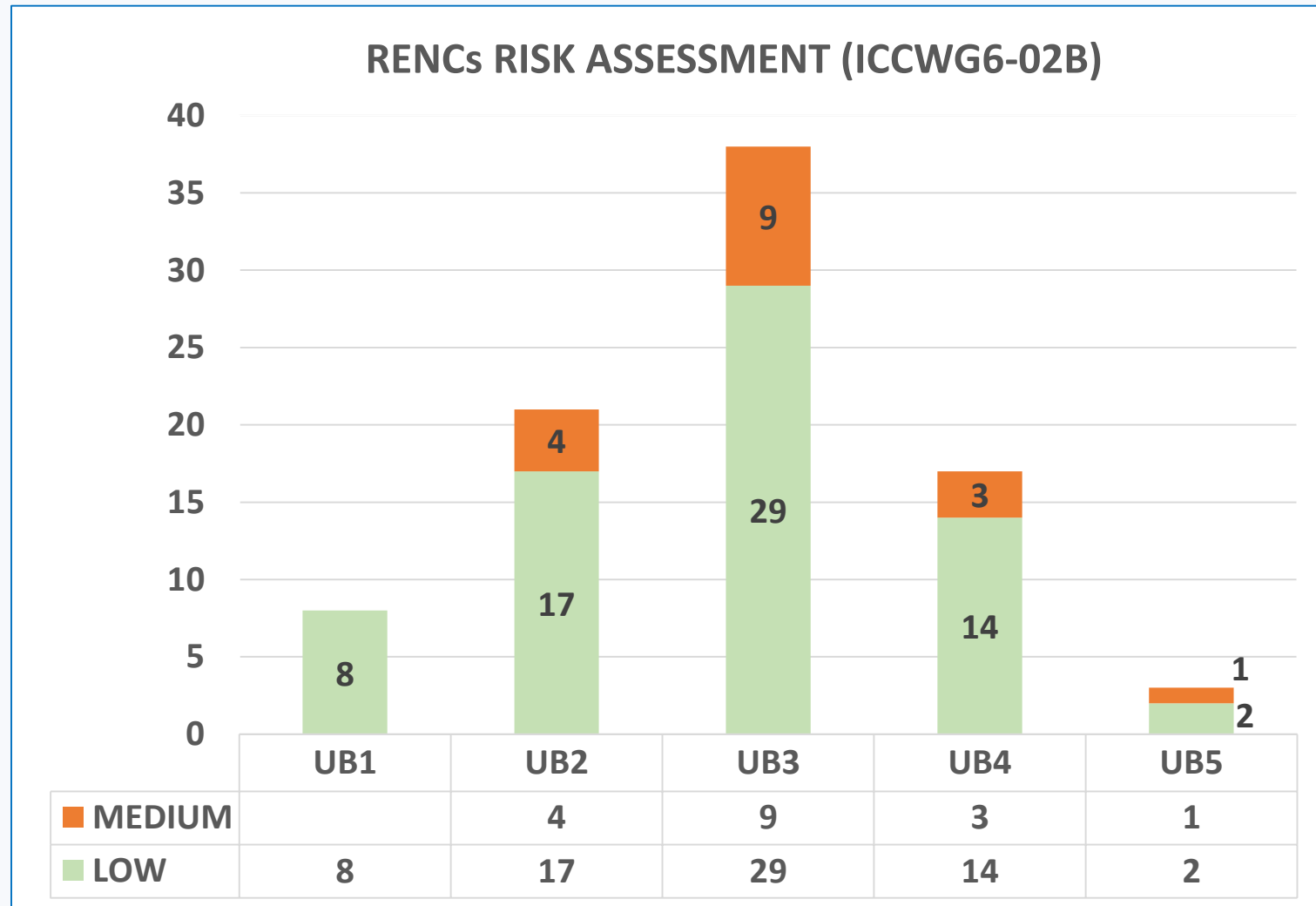
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Status of ENC's – overlaps risk assessment

- MSs that provided a feedback to the RCC generally confirmed RENCs risk assessment
- Higher number in UB3
- Only “LIVE” Medium risk overlaps will be analyzed
- MSs already resolved some “potential” overlaps



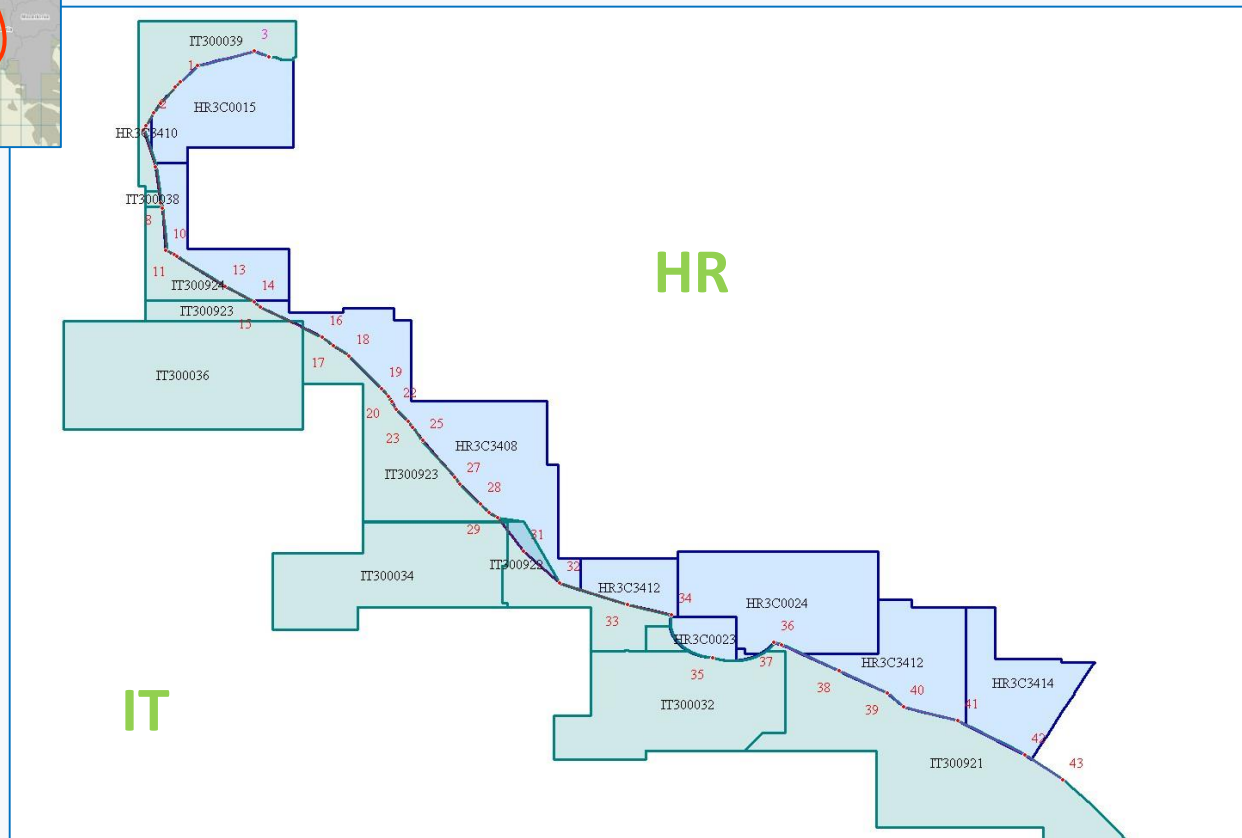
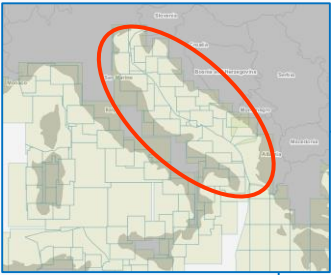
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Status of ENCs – Solved overlaps and gaps

Effort of GB, EG, HR, TR, IT, SI, TN, GR, ES to be acknowledged



- UB3 overlaps in the Adriatic Sea are solved
- Delimitation agreed by Ms
- There is not a “right” scheme but the “BEST AGREED” Scheme
- Dialogue is the key!



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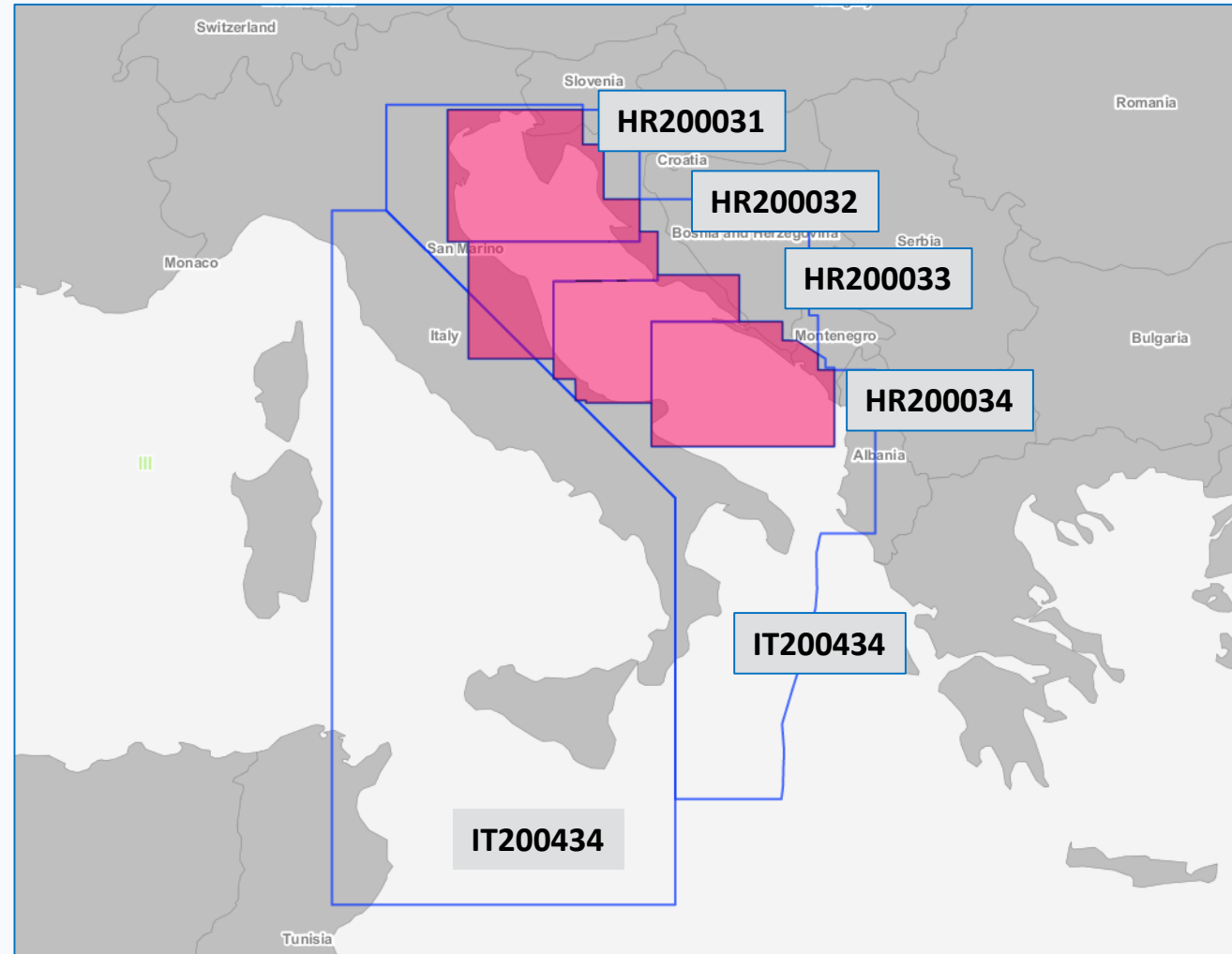
Status of ENCs – overlaps risk assessment UB 2

Highest risk case: General charts of the Adriatic Sea overlaps (IT-HR)

- Overlap exists due to the difference in the compilation scale
- Inconsistencies resolved through updates by HR
- Coordination between IT-HR

IC-ENC Risk analysis → **Medium**

MSs Risk analysis → **Low**



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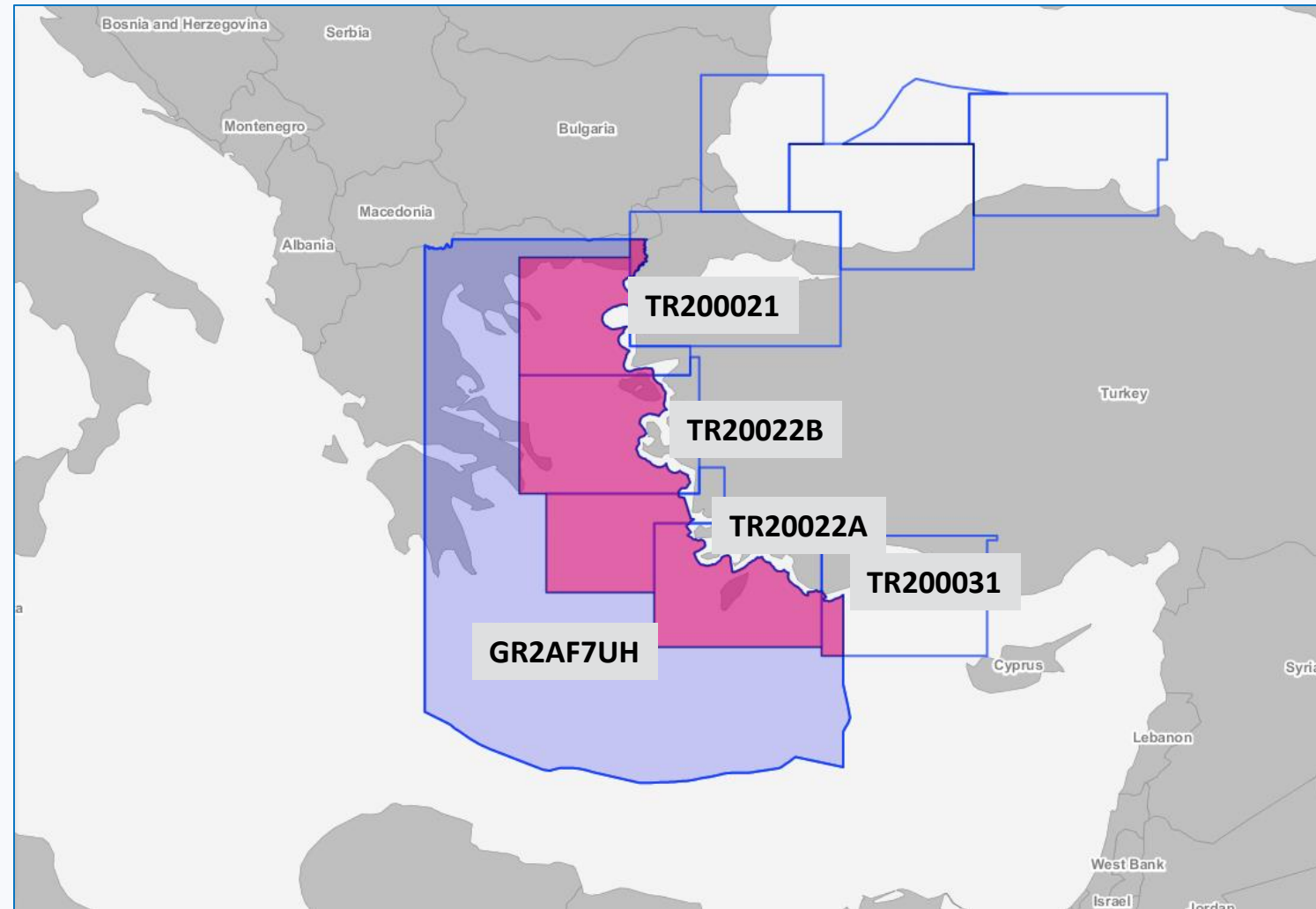
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Status of ENC's – overlaps risk assessment UB 2

Highest risk case: General charts of the Aegean Sea overlaps (GR-TR)

GR2AF7UH & TR20022A, TR20022B
IC-ENC Risk analysis → **Medium**

GR2AF7UH & TR200021, TR200031
IC-ENC Risk analysis → **Low**



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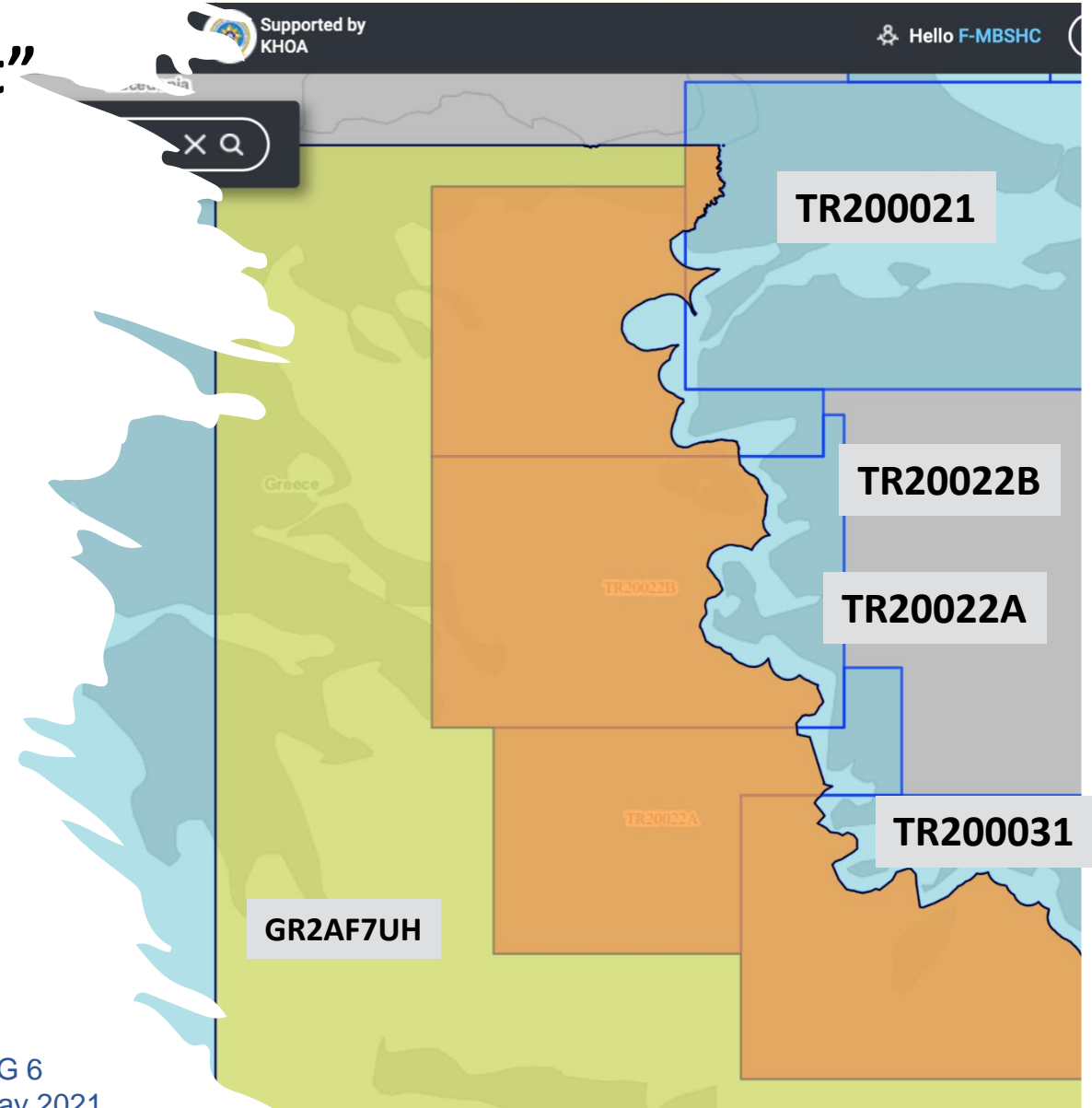
Status of ENCs – overlaps risk assessment UB 3

- **GR provided a “risk assessment report”** (posted on the ICC6 web page) with technical comments and also other considerations

GR Risk analysis → **High**

- Consistency issues
- Different compilation policies
- Quality of Data
- Updating capability and maintenance
- Overlapping extent

TR Risk analysis → **Low (2017)**



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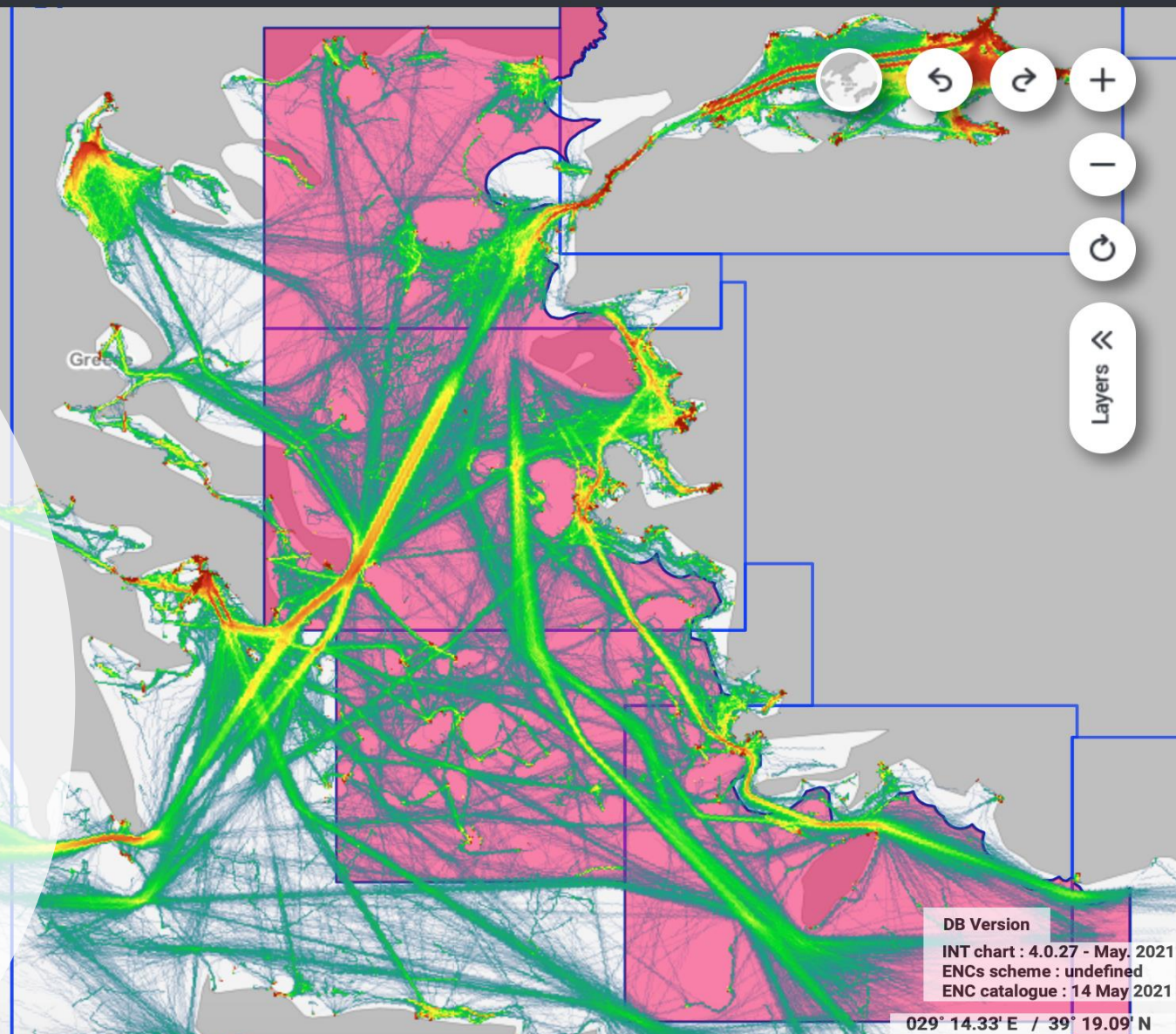
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RCC**Same scale (1:350.000)****Up to 90% overlaps****Risk of inconsistency between cells due to lack of coordination****High-traffic density area****Difference in compilation policies****Larger scale charts in the area**

Proposed Action: TR to confirm/update the risk assessment, RCC to inform the MBSHC Chair about the GR RISK ASSESSMENT REPORT on UB2 cells, MBSHC Chair to evaluate to apply res. 1/2018

Recommendation: TR and GR to liaise and solve the overlaps



Status of ENC's – overlaps risk assessment UB 3

Highest risk case: Coastal charts of the Aegean Sea overlaps (GR-TR)

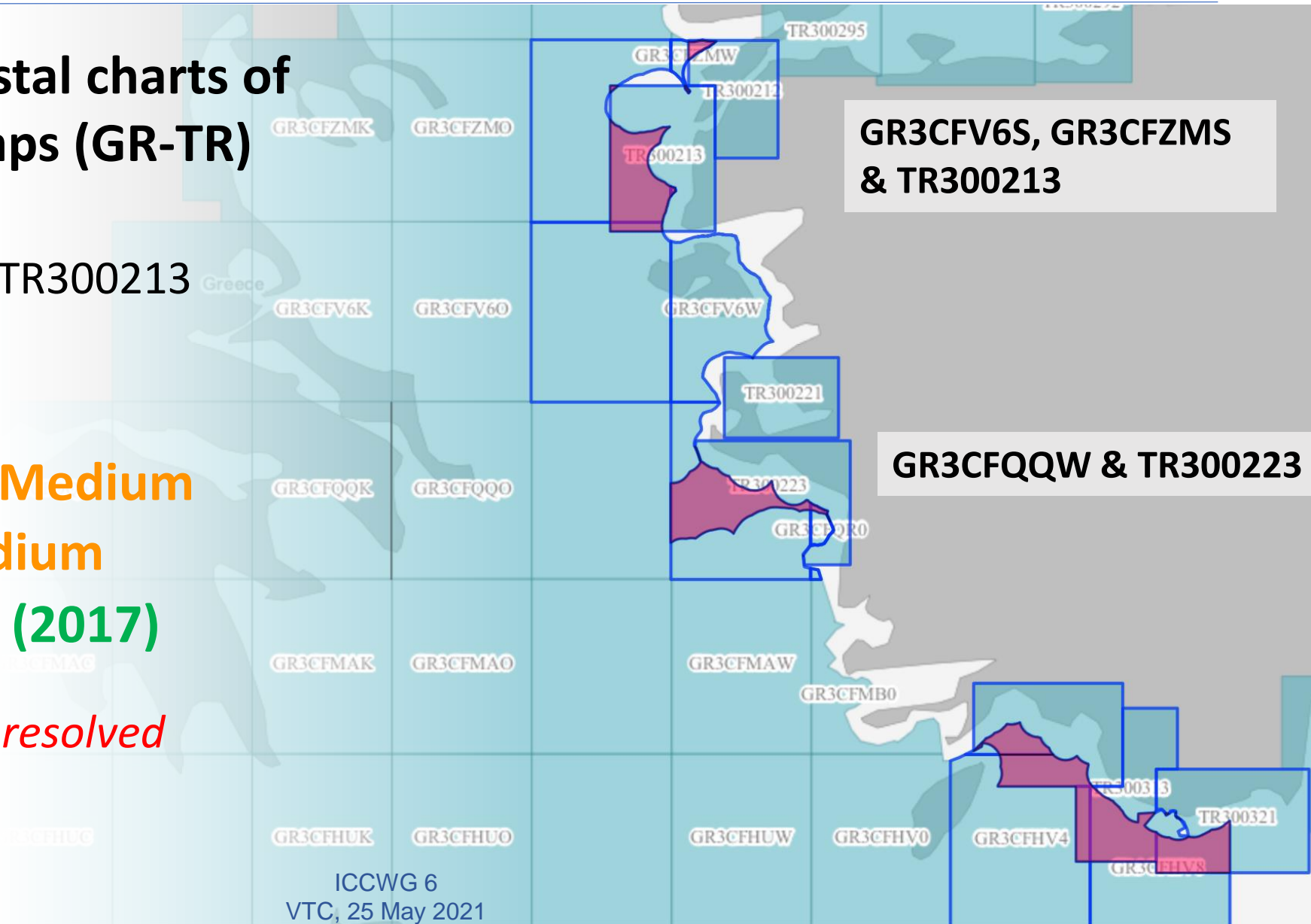
GR3CFV6S, GR3CFZMS & TR300213
GR3CFQQW & TR300223

IC-ENC Risk analysis → **Medium**

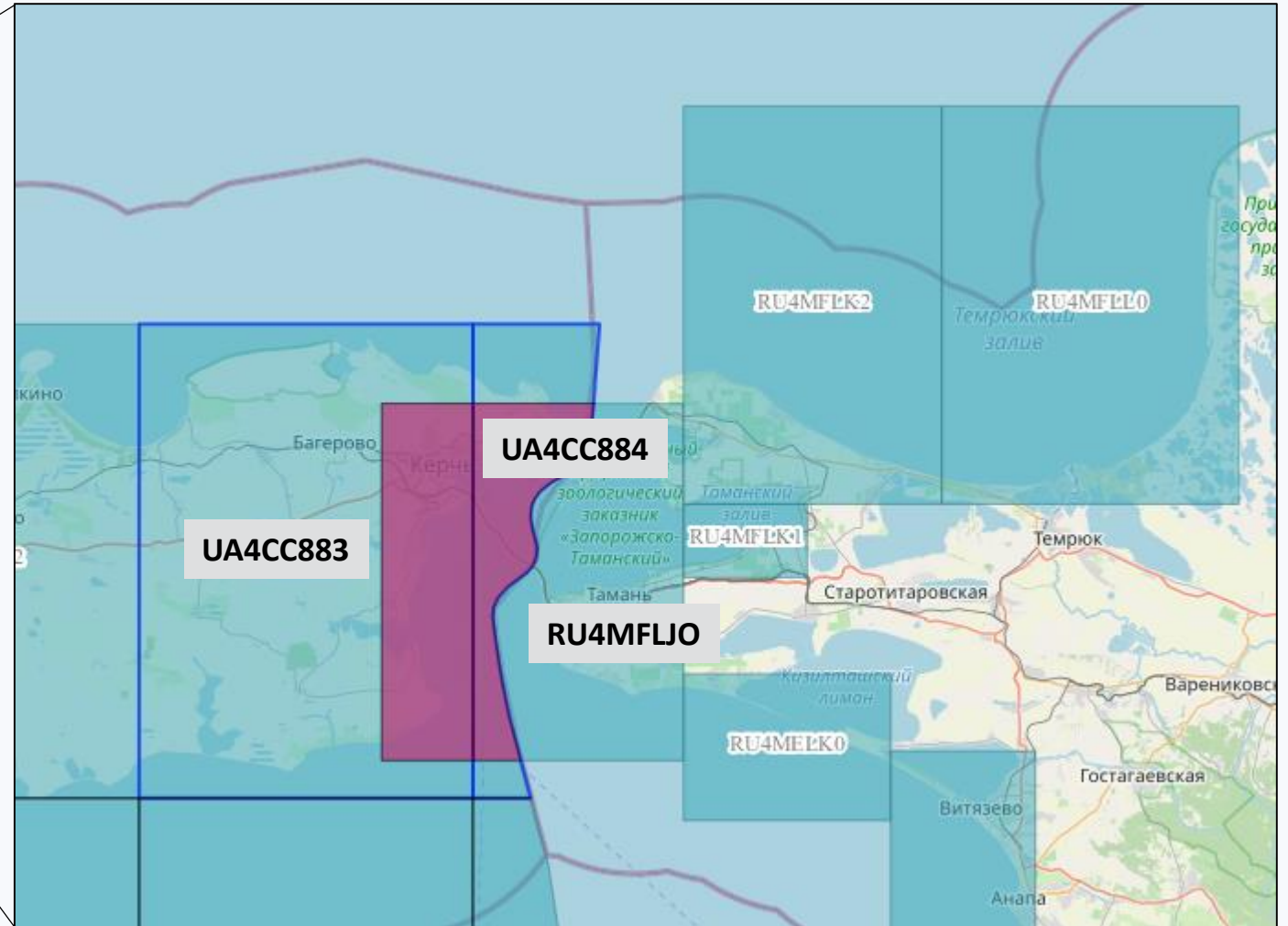
GR Risk analysis → **Medium**

TR Risk analysis → **Low (2017)**

Proposed action: to be resolved



Status of ENCs – overlap risk assessment UB 4



Highest risk case :

RU4MFLJO & UA4CC883

RU4MFLJO & UA4CC884

IC-ENC Risk analysis → **Medium**



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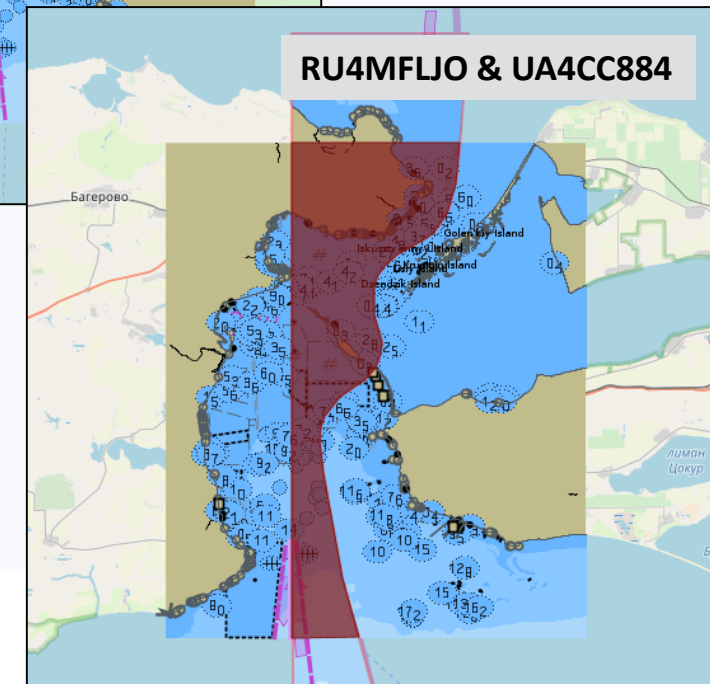
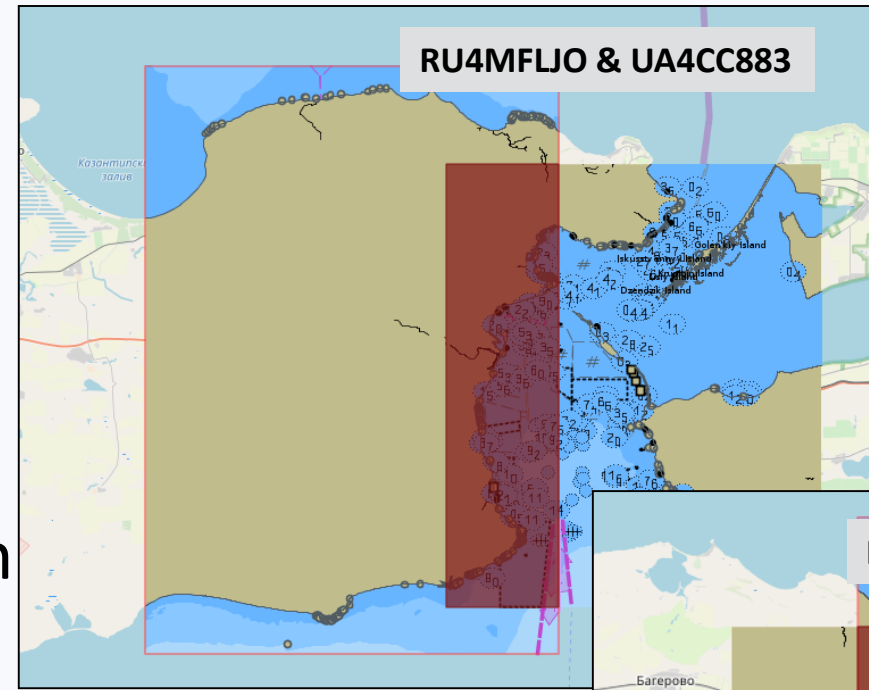
Status of ENCs – overlaps risk assessment UB 4

Highest risk case :

RU4MFLJO & UA4CC883

RU4MFLJO & UA4CC884

- IC-ENC Risk analysis → **Medium**
- Critical location of the overlap (main route through Kerch Straits & anchorage areas)
- Up to 100% overlap
- *Proposed action: to be resolved*



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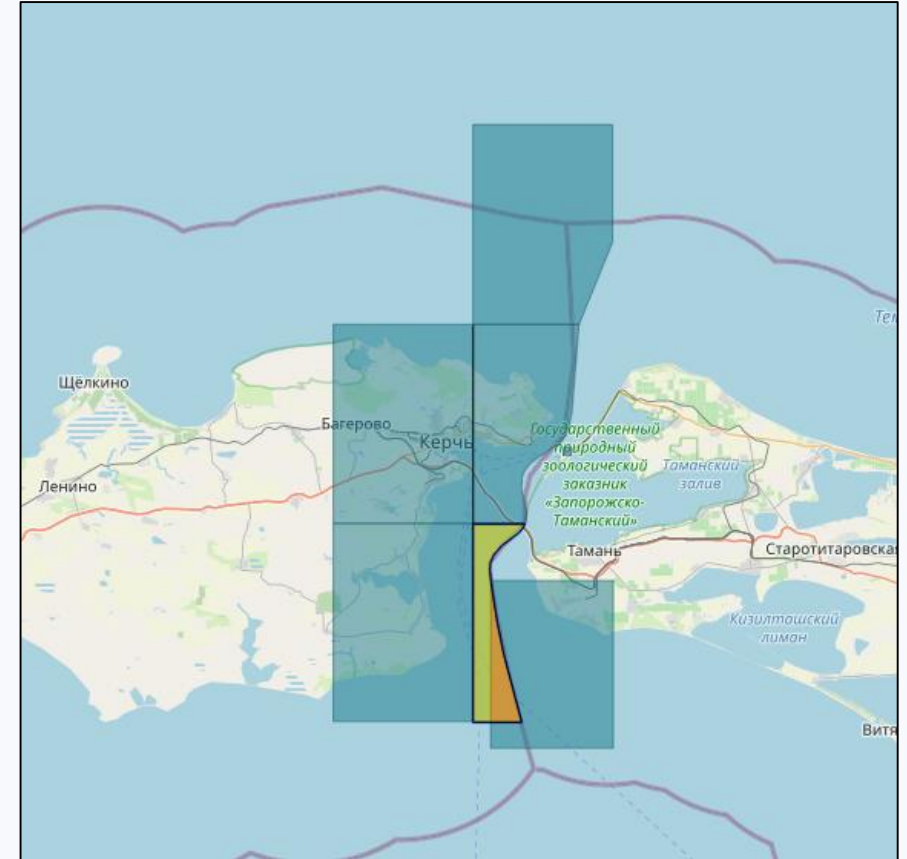
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Status of ENCs – overlaps risk assessment UB 5

Highest risk case :

RU5MELJ0 & UA5ECM39

- IC-ENC Risk analysis → **Medium**
- Critical location of the overlap (main route through Kerch Straits & anchorage areas)
- Inconsistencies between overlapping cells
- Up to 100% overlap
- *Proposed action: to be resolved*



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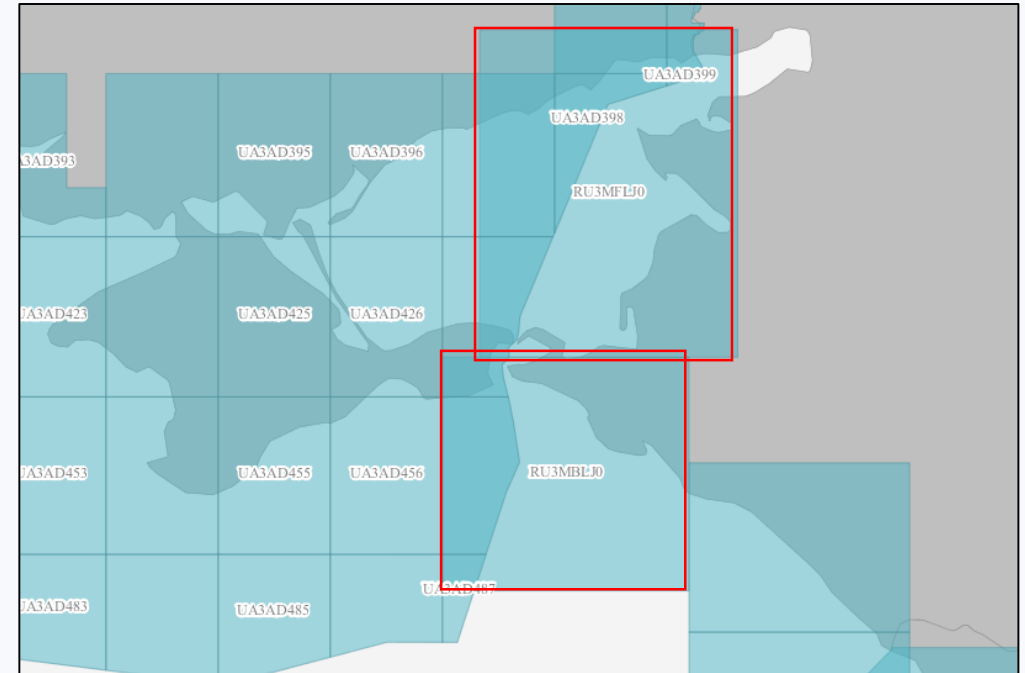
Status of ENCs – overlaps risk assessment UB 3

Highest risk case

- IC-ENC Risk analysis → **Medium**
- Critical location of the overlap (main route through Kerch Straits & anchorage areas)
- Up to 100% overlap

RU3MBLB0	UA3AD455
RU3MBLB0	UA3AD456
RU3MBLJ0	UA3AD427
RU3MFLJ0	UA3AD397
RU3MFLJ0	UA3AD398
RU3MFLJ0	UA3AD427

Proposed action: to be resolved

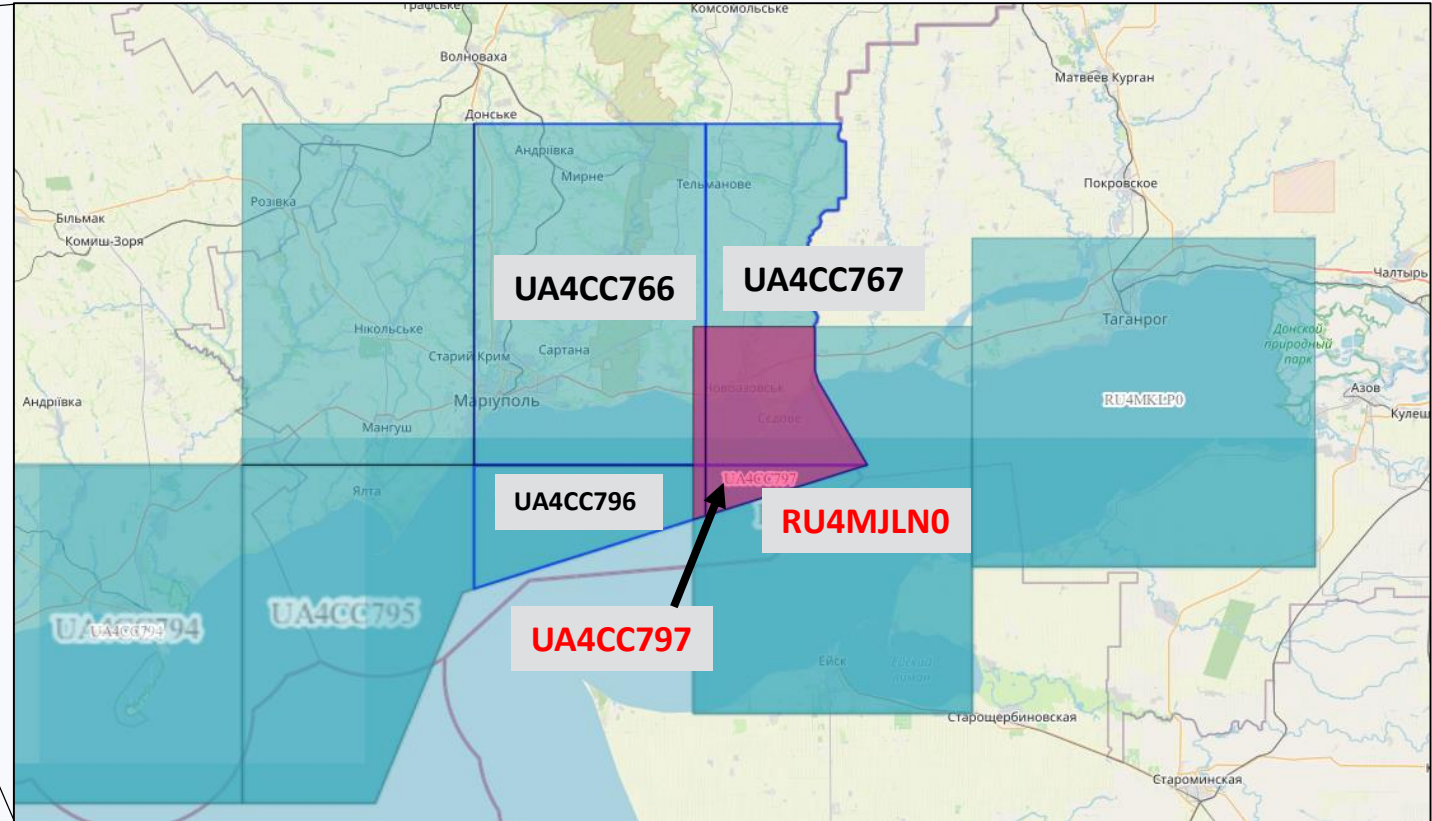
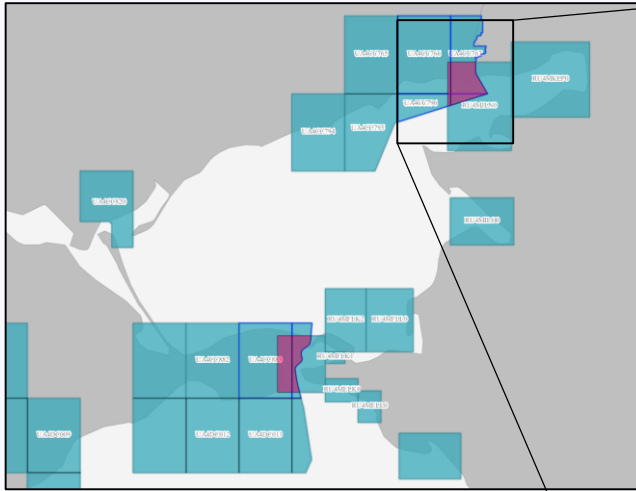


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Status of ENCs – overlap risk assessment UB 4



**RU4MJLNO & UA4CC796 & UA4CC797
& UA4CC767**

- Up to 100% overlap
- *Proposed action: to be resolved*
- IC-ENC Risk analysis ➔ **Low** (includes a busy traffic area, Content is consistent)



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“ENCs overlap” proposed action/recommendations

Action/Recommendation N°	Action	Responsible	Update/Comment
ICC6/08	Concerned MSs to liaise bilaterally to resolve ENC overlaps , keeping the RCC informed	All	ICC7/MBSHC23
ICC6/09	MSs to used RENCs’ template report to provide the RCC with the evaluation of the risk level on the most critical ENC overlaps based on the IC-ENC risk assessment regional database	All	ICC7/MBSHC23
ICC6/10	Inform the MBSHC22 about the GR RISK ASSESSMENT REPORT about UB2 cells and that there is no consensus with regards to the ENC overlaps risk evaluation in the area (apply res 1/2018)	RCC	MBSHC22
ICC6/11	TR to confirm/update the risk assessment provided (2017) about ENC overlaps	TR	MBSHC22



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ECDIS backup arrangements

Action N°	Action	Responsible	Update
MBSHC21/25	Member States and Associate members to ensure that the information on any requirements for ECDIS back-up arrangements using paper charts have been posted on the IHO website, and to update or give confirmation of no change at least once a year.	All	No updates received

- Still ECDIS back-up arrangements not provided by some MSs or not updated

Proposed action: to provide the list or update it (<https://iho.int/en/backup-paper-charts-0>)

Action/Recommendation N°	Action	Responsible	Update/Comment
ICC6/12	Member States and Associate members to ensure that the information on any requirements for ECDIS back-up arrangements using paper charts have been posted on the IHO website, and to update or give confirmation of no change at least once a year.	All	15 December 2021



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Final considerations

- **ICCWG priorities:**
 - Full implementation of the ENC scheme
 - CATZOC attributions
 - Resolve ENC overlaps
- **Increase bilateral cooperation** to solve ENC overlaps
- **Increase quality** of bathymetric data (CATZOC) through joint efforts and capacity building activities



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Action requested

- Take note of the RCC report about ICC6-2 agenda item
- Approve the actions/recommendations list to be presented to the MBSHC22
- Encourages ICCWG MS to provide their national chart catalogue (online access preferably) to the RCC and the IHO Secretariat
- Encourage ICCWG MS to provide RCC with their ENC production plan for UB4-5-6
- Encourage ICCWG MS producers concerned to liaise bilaterally to resolve ENC overlaps



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Action requested

- Request ICCWG to register that “highest” risks have been reported to ENC producers (in accordance with IHO resolution 1/2018) and to MBSHC
- Encourage ICCWG ENC producers to populate the CATZOC values of their ENCs
- Encourage ICCWG MS to use the IC-ENC template report to provide the RCC with their evaluation of risk level on ENC overlaps
- Request ICCWG ENC producers to provide information on ECDIS back-up arrangements
- Encourage ICCWG MSs to be prepared to update their port priority list and report to the RCC



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