# **Tunisian Navy Hydrographic and Oceanographic Center**



## NATIONAL REPORT

22<sup>th</sup> Meeting of the Mediterranean and Black Seas Hydrographic Commission (MBSHC-22)

27 - 28 May 2021

1. Hydrographic Office / Service:	The Tunisian Navy Hydrographic and Oceanographic Center (TNHOC) is the national authority with regards to nautical chart production.  The TNHOC collects, processes and distributes information related to safety of navigation. In the same time, the center analyses, archives, and implements databases in this field.  The TNHOC also provides hydrographic and oceanographic services to third parties.				
2. Surveys:					
Coverage of new surveys (See annex 1)	During the period between 2019 and 2021, the TNHOC has conducted many hydrographic surveys mainly concentrated in the east coast of Tunisia. These hydrographic surveys were used to update the INT3210 and TN7520 charts and to produce new chart INT3212 (in progress).				
New technologies and /or equipment:	Between 2019 and 2021, the TNHOC had purchased the following hydrographic equipment:  Four tides stations with meteorological sensors;  Two sound velocity profilers (Valeport miniSVP);  Two meteorological sensors;  Two miniSVS sound velocity sensors (Valeport);  The TNHOC has recently purchased a new multibeam system KONGSBERG M3 PHS sonar for shallow water and coastal surveys.				
New ships:	N.A.				
Problems encountered:	N.T.R				
3. New charts & updates:					
ENCs: (See ENCs coverage in annex 2)	The status of Tuni Name TN313208 TN313210 TN317500 TN317505 TN317510 TN317515 TN317520 TN412500 TN412510 TN412520 TN412500 TN415000 TN511500 TN511505 TN511510 TN511515	Edition 2 2 2 1 1 1 1 3 3 3 2 1 4 4 4 3	Issue date  08.01.2021  08.01.2021  15.09.2020  13.03.2019  15.02.2020  15.05.2020  15.09.2020  15.09.2020  15.12.2018  15.06.2020  31.01.2019  31.07.2020  30.09.2018  23.05.2017  15.06.2020	Scale 1/180000 1/180000 1/90000 1/90000 1/90000 1/90000 1/90000 1/22000 1/22000 1/22000 1/22000 1/12000 1/12000 1/12000 1/12000 1/12000	Nav. purpose Coastal Coastal Approach Harbour Harbour Harbour
ENC Distribution method:	All Tunisian ENC				Turour
RNCs:	N.A.				
INT Charts: (See annex 3)					
☐ Published:	The coproduced of hydrographic services				

☐ In progress:	INT 3212 with the Italian Hydrographic Institute.			
	"Da Ras El-Mir à Cap Africa – Pantelleria e Isole Pelagie"			
	Scale: 1/250 000			
☐ Planned:	N.A			
	The TNHOC has produced 15 nautical paper charts covering the northern part			
	of Tunisia. The online catalogue of national paper charts is available of the catalogue of national paper charts is available of the catalogue of national paper charts is available of the catalogue of national paper charts is available of the catalogue of national paper charts is available of the catalogue of national paper charts is available of the catalogue of national paper charts is available of the catalogue of national paper charts is available of the catalogue of national paper charts is available of the catalogue of national paper charts is available of the catalogue of national paper charts is available of the catalogue of national paper charts is available of the catalogue of national paper charts is available of the catalogue of national paper charts is available of the catalogue of	lable through		
	the following link:			
	http://www.cnct.defense.tn/index.php/fr/produits-et services/produits/item/183-cartes			
	Services, products, items 100 carees			
	The status of nautical paper charts produced by the TNHOC is	mentioned in		
	the table here below:			
	Title	Scale		
	• 150 : De Ras Engela à Ras Mostfa.	1/150000		
	• 7500 : De cap Roux à cap Serrat			
	•7505 : De cap Serrat à cap Zebib			
	•7510 : De cap blanc à Jaziret El Monbasta (De Cap Blanc à			
	l'ile Plane)	1/75000		
	• 7515 : De Jaziret Pilau à Jaziret Zembra (De l'ile Pilau à l'ile			
	de Zembra)			
	• 7520: De Jaziret Zembra à K'libia			
	• 5000 : De cap Gamarth à Ras Fartass	1/50000		
National paper charts:	• 2500 : Jaziret Jalta (Ile de la Galite)	1/25000		
(Published)	• 2510 : Rade et Bouhayret Benzart (Rade et lac de Bizerte)			
	• 2520 : Rade de Halk El Oued (Rade de la Goulette)			
	• 1500 : Tbarka et abords			
	• 1505 : Bouhayret Benzart (Lac de Bizerte)			
	• 1510 : Port de Benzart et goulet du lac.	1/15000		
	• 1515 : Port de Halk El Oued, Rades et Tounes (Port de la			
	Goulette, Rades et Tunis)			
	• 505: Port de plaisance de Benzart	1/5000		
	•515: Port de plaisance de Halk el Oued	1/3000		
National paper charts: (In	•516 : Port de pêche de Klibia	1/5000		
progress)	• 1520: Port de Klibia	1/15000		
	• 2525: Rade de Klibia	1/25000		
Other charts, e.g. for	N.A.			
pleasure craft:				
Problems encountered:	N.T.R			
4. New publications & up	dates:			
New Publications:	Tide table 2021 – Tunisian coast list of lights.			
Updated publications:	Nautical charts and nautical publications are updated via notices			
	A paper version of notices to mariners is sent periodically to Spai A digital version of notices to mariners is sent periodically (every			
	email to NGA (USA), SHOM (France), UKHO (UK), SHFN			
	IHM (Italy).			
Means of delivery, e.g.	All publications are available on paper.			
paper, digital:	7 m paoneurons are available on paper.			
paper, digital.				

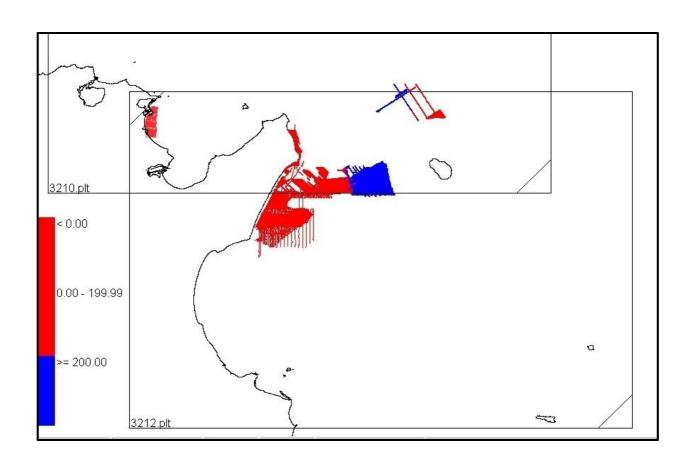
Problems encountered:	N.T.R
5. MSI	
Existing	Kelibia Navtex station.
infrastructure for	
transmission	
New infrastructure in	N.A
accordance with GMDSS:	
Problems encountered:	Kelibia Navtex station is not operational for the moment due to technical problems.  As a provisional solution, the Tunisian navigational warnings are broadcasted by the Maltese Navtex station until the Tunisian station will be ready and operational.  The TNHOC is in process of acquiring a new Navtex station and hope to get the new Navtex station operational by the end of this year.
6. C-55	
Latest update	See annex 4
7. Capacity Building	
Offer of and/or demand for	$\epsilon$
Capacity Building:	Multibeam data assessment
	• Marine cartography (S-101, S-102 and S-104)
	• Tides and currents analysis and prediction
Training received:	<ul> <li>Multibeam echo sounder and side scan sonar systems workshop - Istanbul (Turkey), from 24 to 28 October 2016.</li> </ul>
	<ul> <li>Workshop on ENC production distribution in Istanbul (Turkey), from</li> </ul>
	02 to 06 October 2017.
	<ul> <li>Workshop on technical aspects of maritime boundaries in Istanbul</li> </ul>
	(Turkey), from 27 November to 01 December 2017.
	<ul> <li>Port and shallow water survey course in Genoa (Italy), from 17 to 21</li> </ul>
	September 2018.
Training offered:	N.A.
Status of bilateral developm	nent projects with hydrographic component.
☐ In progress:	Cooperation with Algerian Hydrographic Service
	A bilateral agreement with the Algerian Hydrographic Service regarding the publication and the distribution of the chart INT3208 is in progress.
	Cooperation with the Italian Hydrographic Institute
	The coproduction of the INT3212 with the Italian hydrographic institute is in progress.  The last meeting of hydrographic expert was held via videoconference in December 2020, the scope of this meeting is to assess the progress of the
	INT3212 chart production.
	The TNHOC and the Italian hydrographic institute have concluded a bilateral
	agreement regarding the cooperation in the field of hydrography and
	oceanography.
☐ Planned:	N.A.
☐ Under study:	N.A.
Definition of bids to IHO	N.A.
CBC:	

8. Oceanographic			
activities			
General:	The TNHOC ensure the annual production and distribution of tide tables.		
GEBCO/IBC's activities:	N.A.		
Tide gauge network:	The TNHOC implemented since 1987 a tide gauge network (six tide gauges) to monitor the tide along the Tunisian coast. The tide network is there to:  • Tide data collection,  • Monitoring variations of the mean sea level,  • The determination of harmonic constants necessary for the prediction of tides and the development of tide tables.  The TNHOC has renewed the existing mechanical tide gauge network with seven digital tide gauge with real time data transmission.		
New equipment:	<ul> <li>Pressure tide gauge OTT.</li> <li>ADCP current Meter System: RDI Workhorse 300-600 m</li> </ul>		
Problems encountered:	N.T.R.		
9. Other activities	Participation in IHO Working Groups:  Meteorological data collection: Geospatial studies: Disaster prevention: Environmental protection: Astronomical observations: Magnetic/Gravity surveys:		
10. Conclusions	The TNHOC confirms that cooperation in the Mediterranean area still remains the priority for all the countries involved.  To ensure the safety of navigation in the Tunisian waters, the TNHOC intends to purchase new hydrographic assets and new hydrographic equipment in order to continue performing hydrographic and oceanographic survey and producing nautical charts with higher standards in all areas not yet surveyed.		

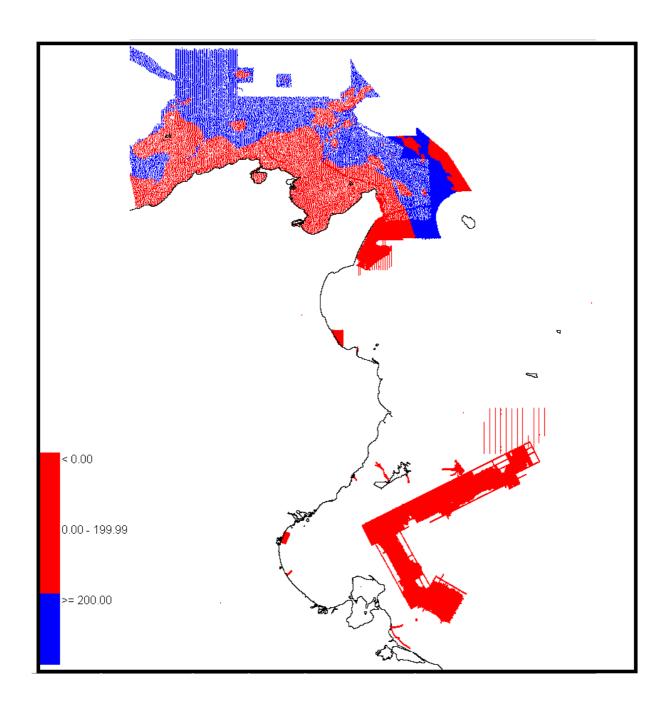
#### ANNEX 1

## **COVERAGE OF NEW SURVEYS**

(2019 - Mai 2021)



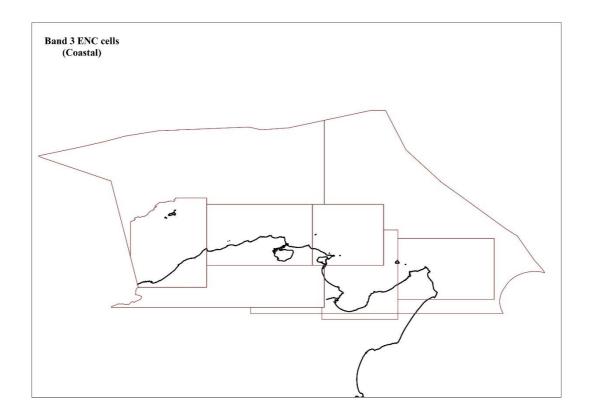
#### STATUS OF HYDROGRAPHIC SURVEYING



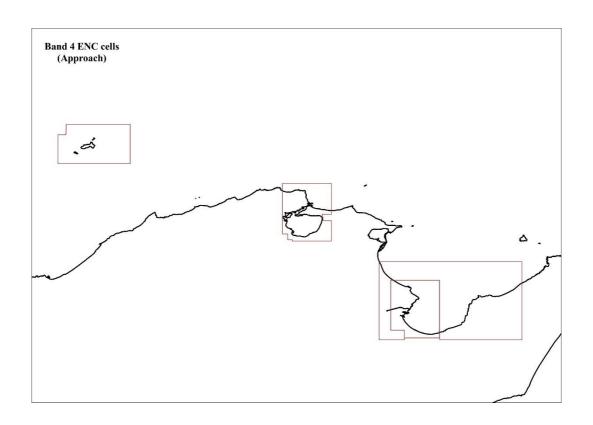
#### ANNEX 2

#### TUNISIAN ENCs COVERAGE

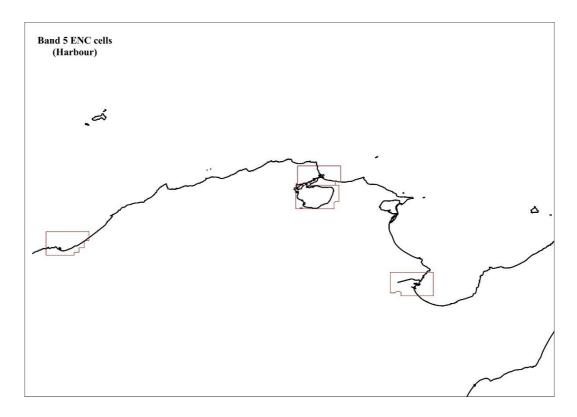
#### 1. Band 3 ENCs



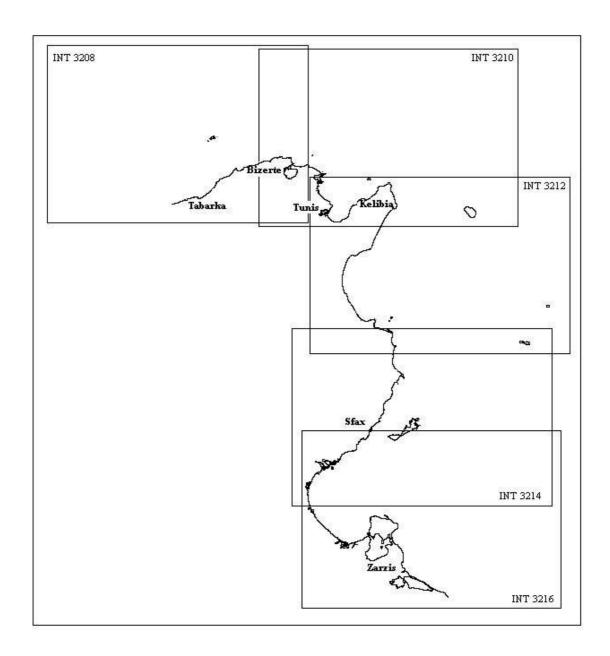
#### 2. Band 4 ENCs



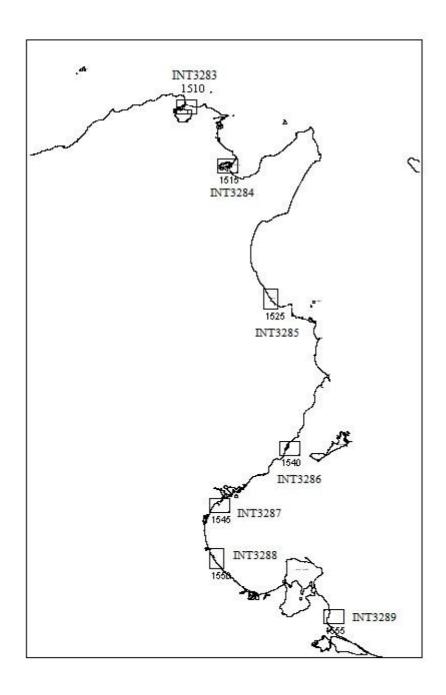
#### 3. Band 5 ENCs



ANNEX 3
SCHEME OF INTERNATIONAL CHARTS



INT No.	National No.	Title	Scale	Status
3208	250	De Ras El Hadid à Cap Zebib	1/250000	Achieved and will be
				published very soon
3210	255	De Banzart à K'libia – Trapani et	1/250000	published
3210	233	Pantelleria	1/230000	
3212	260	Da Ras El-Mir à Cap Africa – Pantelleria e Isole Pelagie	1/250000	In progress



INT No.	National No.	Title	Scale	Status
3283	1510	Port de Benzart et goulet du Lac	1/15000	Achieved
3284	1515	Ports de Halk El Oued, Rades et	1/15000	Achieved
		Tounes		
3285	1525	Port de Susah (Sousse)	1/15000	In progress
3286	1540	Port de Safaquis (Sfax)	1/15000	In progress
3287	1545	Port de Skhirra	1/15000	In progress
3288	1550	Port de Gannouche (Gabès) 1/15000 In pr		In progress
3289	1555	Port de Zarzis 1/150		In progress

#### **ANNEX 4**

## C55-Tunisia-20210506.pdf

C-55 Summary for:			Comments on Charts:	
Country: Country	Tunisia			According to the IHO (MBSHC), it was agreed
Iso Code:				that TNHOC will produce international charts as
Country	TUN			follows:
SubCode:	TUN-F			• INT Chart 3208 in cooperation with the
INT Region:				Algerian HO (achieved).
Country/Depend:	F C			• INT Chart 3210 in cooperation with the
Last updated:	C			Italian HO (achieved).  • INT Chart 3212 in cooperation with the
Provided by:	Tunisia			Italian HO (surveyed at 25%).
Chart coverage	Passage (%)	Coastal (%)	Port (%)	<ul> <li>INT Chart 3214 to be produced by the TNHOC (surveyed at 25%).</li> <li>INT Chart 3216 in cooperation with the Libyan HO (surveyed at 20%).</li> </ul>
INT	0	40	30	Comments on Surveys:
RNC	0	0	0	The hydrographic surveys for the northern
ENC	0	25	30	maritime area are achieved.
Status of Paper C h	Status of Paper C harts			The eastern maritime area is being surveyed
Paper charts with o	depths in meters	(%)	100	since 2010.
Paper charts referenced to a satellite datum (%)		100		
Status of surveys	Adequate (%)	Resurvey (%)	No survey (%)	
0-200m	55	45	0	
> 200m	46	54	0	

MSI	Y/N	Comments on MSI:	
Local warning	Υ		
Coastal warning	Υ		
Nav warning	Υ	Through NAVAREA III	
Port warning	Υ		
GMDSS	Y/N	Comments on GMDSS:	
Master Plan	N	The GMDSS implementation responsibility lies on the merchant marine	
Area A1	N	administration.	
Area A2	N	All Tunisian merchant marine vessels comply with the IMO recommendations	
Area A3	N	regarding the GMDSS implementation.	
NAVTEX	Υ	Kelibia Navtex station is not operational for the moment due to technical problems. The TNHOC broadcast its related MSI via Malta station.	
SafetyNet	N	The GMDSS Implementation responsibility lies on the merchant man administration.  All Tunisian merchant marine vessels comply with the IMO recommendati regarding the GMDSS implementation.	