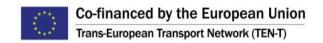


NAPADRAG

ACTIVITY 3 PORT OF VENICE West Canal Dredging project

Liguria Dock - ME10 Dock stretch (-11,80 m depth)









Dredging to the depth of -11,80 m



West Industrial Canal Liguria dock-ME10 dock (1/3)

- The project consists in a navigational and remedial dredging (up to -11,80 m depht) of a West canal stretch
- The project is a first step of futher dredging activities to improve the nautical accessibility, to accomodate bigger ships and optimize the capacity infrastructure

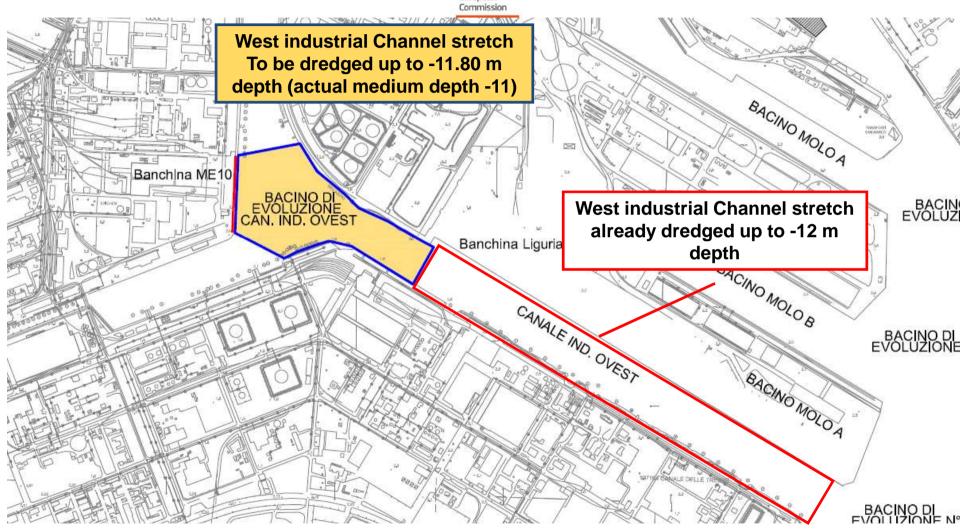
Port strategic plan foresees -12 m depth along all the West Canal whereas several operators are located.



Dredging to the depth of -11,80 m



West Industrial Canal Liguria dock-ME10 dock (2/3)





Dredging to the depth of -11,80 m



West Industrial Canal Liguria dock-ME10 dock (3/3)

IMPACTS:

Operators located along the West Canal (from the Liguria Dock to the West Basin), that will benefit from the intervention:

Transped - general cargo, iron and steel product (85%), project cargo.

ENEL

CIA – Bulk, multipurpose

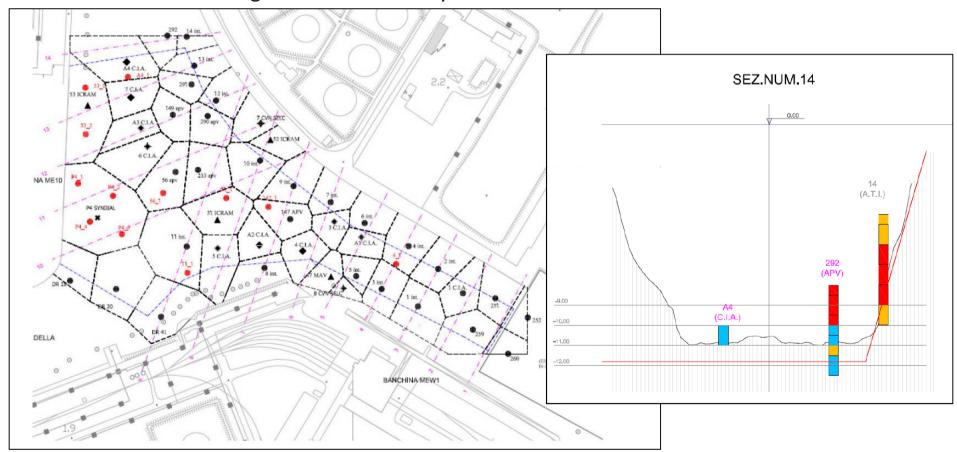
Grandi Molini Italiani - Cereals



Sediments quality characteristics



• Sediment core samples data have been loaded in a GIS program, in order to define characteristics of dredged material area by area





Sediments quality characteristics

Sediments are classified according to Venice Protocollo 1993 in: C class, C plus class.In definitive design, some sediments were considered «uncertain» and need to be further

characterized.

zea.				 	
	VOLUME	VOLUME	VOLUME	VOLUME	
1	0	0	657,43	1785,16	
2	0	0	99,61	365,632	
3	0	0	41,11	70,952	
4	0	0	2762,57	4413,576	
5	0	0	300,56	582,68	
6	0	0	842,15	2047,08	
7	0	0	573,59	1246,664	

8-9		9-10		10-11		11-12			
	МС	2841,74	MC	13570,89	MG	32625,048	мс	49037,678	entro C
277,11	мс	804,4	MC	6900,3	MG	18996,64	MC	26978,45	dubbi
	MG	1143,12	MG	10518,08	МС	14189,912	MC	25851,112	oltre C

Uncertain quality sediments have been already characterized in may 2013.

Sediments quality data are going to be loaded in the GIS program to define the dredging activity plan (executive design).

Excavation activity



- Sediments will be excavated by selective dredging, taking in account different quality characteristics.
- C plus sediments will be firstly removed, as priority intervention.

 Navigational dredging includes also clean up activities (C plus sediments are polluted material).

Analiti	Protocollo di Venezia						
Andini	tab. 1 col. A	tab. 1 col. B	tab. 1 col. C	Oltre col. C			
Arsenico	15	25	50	>50			
Cadmio	1	5	20	>20			
Cromo totale	20	100	500	>500			
Mercurio	0,5	2	10	>10			
Nichel	45	50	150	>150			
Piombo	45	100	500	>500			
Rame	40	50	400	>400			
Zinco	200	400	3000	>3000			
Sommatoria policiclici aromatici	1	10	20	>20			
Pesticidi organoclorurati totali	0,001	0,02	0,5	>0,5			
РСВ	0,01	0,2	2	>2			
Idrocarburi Totali	30	500	4000	>4000			





Sediments will be disposed, according to their quality class to different plants:

- C class sediments will be disposed to Tresse Island (confined disposal facility -CDF, located in Venice Lagoon, in front of Porto Marghera Industrial Site)
- C plus class material will be send to Molo Sali confined disposal facility, where they will be characterized in order to define if they are dangerous or not.



Non dangerous material will be disposed to Molo Sali CDF, without any treatment

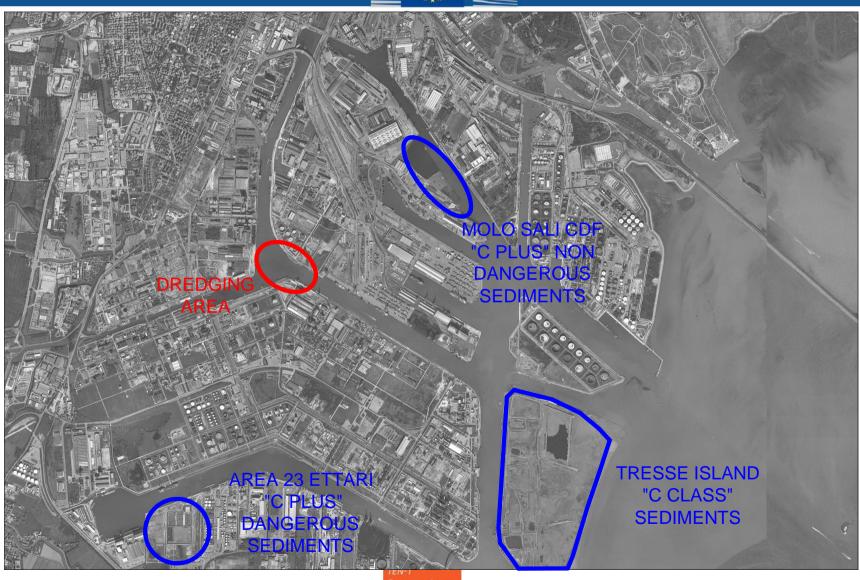


Dangerous material will be send to Area 23 plant to be treated (inertization) and finally disposed to Vallone Moranzani Landfill plant

Disposal plants



(2/3)



Disposal plants

(3/3)









MILESTONE 11 "Letter of award for the dredging work"

Sub.activity 3.1 EIA screening

- Executive design is beeing drafted internally in VPA
- Environmental Impact Assessment screening procedure from January 2014 to April 2014





Sub.activity 3.2 tender procedure

- Tender procedure for the works will start in January 2014
- The works will be awarded in April 2014 (milestone 11)





Milestone 12 Works Director Certificate

Sub.activity 3.3 Dredgings in the Port of Venice

 Dredgings will start in April 2014 and finish within December 2014 (milestone 12)



TIME PLAN AND BUDGET



BUDGET

Estimated overall budget € 5.320.000

Management € 20.000

Dredgings € 5.300.000

EU contribution € 532.000





The relation between VPA and the TEN-T Unit of the Italian Ministry for Transport and Infrastrutctures (MIT):

- VPA will send to MIT SAP and ASR
- MIT will send comments to SAP and to ASR
- VPA will revise accordingly
- MIT will approve ASR (e-submission)





VALIDATION PROCEDURE OF FINAL REPORT

- > VPA will fill technical report in and send it to LK
- ➤ VPA will fill financial report in and send it to MIT along with all the supporting documents and technical report
- ➤ MIT will examine all supporting documents and validate the final report (MIT will sign the report)
- > VPA will send nationally validated report to LK





Thanks for attention!

Venice Port Authority: Technical Dpt

Eu Projects Unit



