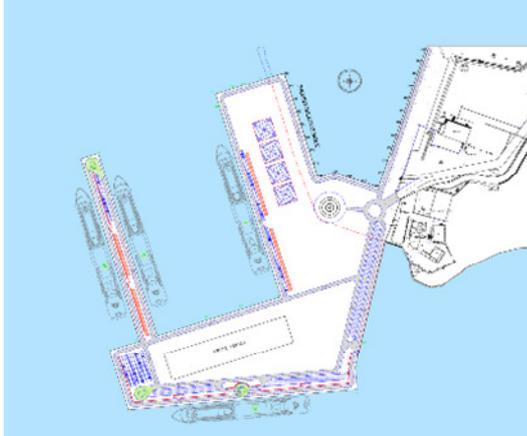
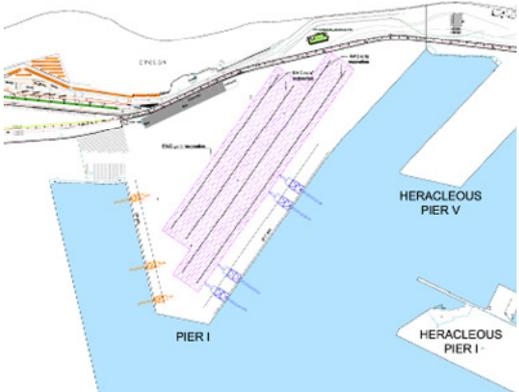
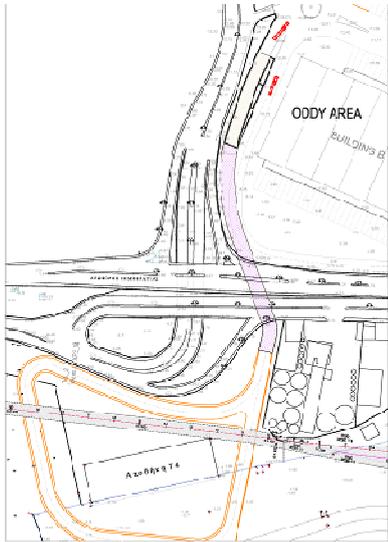
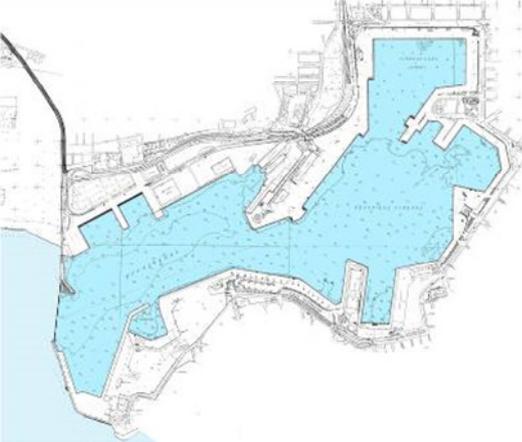


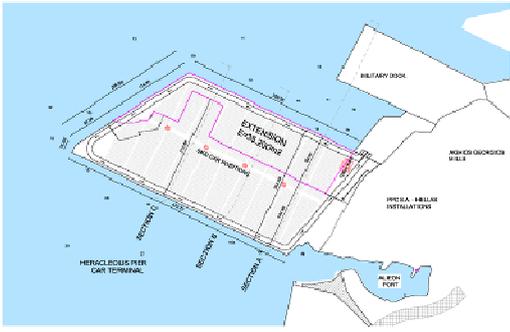
MANDATORY ENHANCEMENTS

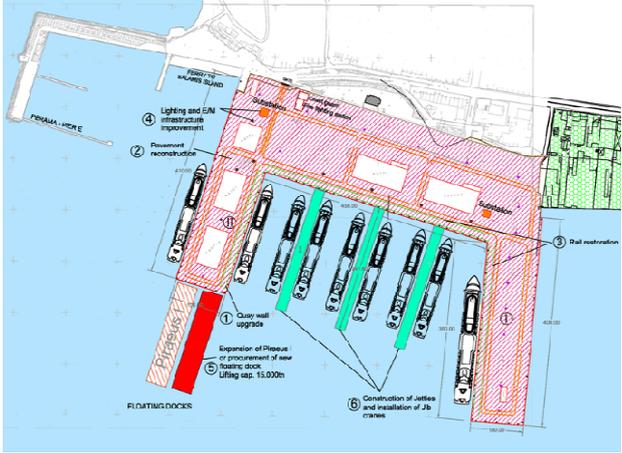
No.	Mandatory Enhancement	Reference Cost (in EUR)	Indicative Drawing
1	Passenger Port Expansion (Southern Zone Phase A)	136.283.800	
	Short Description	<p>The scope of the project is to expand the existing cruise terminal towards the south, in order to create four (4) additional berthing positions for cruise vessels. The total quay wall will be approximately of 1.510m length with variable depth from -19.00 to -29.50m.</p> <p>More specifically, there are two berthing positions on the inner side of the new cruise terminal (no.1 & no.2) and two seasonal on the outer side (no.3 & no.4). The quay walls will be constructed with reinforced concrete caissons and piles. On the quay walls all necessary equipment will be installed (bollards, fenders, stairs, quay wall steel protection) and network infrastructure will be constructed (water supply, power supply, firefighting network). The yard area, where all passenger facilities will be located, is designed to be 134.300m². This area will be comprised of parking areas, covered areas for protecting the passengers from the weather conditions while embarking and disembarking from the vessels, bus stations, moving walkways and the cruise center.</p> <p>The “Home Port” cruise center will be designed to serve the on-coming and off-going passengers along with the transit passengers. The total area will be approximately 10.000m², extending in two (2) levels. The lower level will accommodate all passenger services (baggage handling system, customs office and document control), and the upper level will include all recreational facilities, ie restaurants, duty-free shops, etc.</p>	

2	Repair of Pier I RMG yard area and cranes	8.000.000	
	Short Description		<p>The Container Terminal Pier I, which is located on the eastern part of the Commercial Port and has total area 220.000m². The quay walls are approximately of 1.636m length with variable operational depth from -12,50m to -18,00m.</p> <p>The terminal has been constructed in two (2) phases, the first phase during 1970-1975 and the second one in 2007-2009. The stacking cranes are RMGs and Straddle Carriers, while the handling equipment comprises of Empty Container Handlers, Reach Stackers, Terminal tractors, Top Lifts and Container Movers. Along the quay wall a harbor mobile crane is operating. At the yard area, the stacking capacity is six (5+1) containers per height.</p> <p>The terminal is operating since 2010, however there have been significant damages in the pavement and the rails of RMGs. Major settlements have been also recorded in the land area of the terminal, exceeding by far the expected and affecting severely the operation of the terminal.</p>
3	Conversion of Pentagonal Warehouse into Cruise Passenger Terminal	1.500.000	

	Short Description	Conversion of pentagonal warehouse into a cruise passenger terminal of PPA with area approx. 2.700m ² . The building needs exterior and interior renovation for serving the new purpose of use.	
4	Underground Linkage of Car Terminal with Former ODDY Area	5.000.000	
	Short Description	<p>This project aims at the underground connection of ex-ODDY area, which is located at the north of G2 car terminal, with the commercial terminal and unification of customs' area. PPA intends to develop the ex-ODDY area, by constructing new logistics center and formatting the surroundings. The connection of this area to G2 existing car terminal, is of great importance for the operation of the logistics business, as it will extend the customs area to the new logistics center. The connection will be underground (tunnel) made of reinforced concrete. The construction method that will be applied is the "Cut and Cover" methodology, which is the most efficient method for the partial construction of the road. The net height will be according to the EU transportation regulations and best practices, of 5,00m. Additionally, all necessary facilities, network infrastructure and safety measures will be constructed.</p>	
5	Port Infrastructure Improvement and Maintenance	15.000.000	

	Short Description	Throughout the coastal zone of PPA area, there are damages seeking restoration. A monitoring, assessment and evaluation of the total area is needed. For securing the service level, there are also some upgrades that should be executed partially, including but not limited to: <ul style="list-style-type: none"> 1) Maintenance of port infrastructure (coastal line and land area) 2) Renovation of substations 3) Increase of the port power capacity 4) - Renovation of buildings 	
6	Supply of Equipment	25.000.000	
	Short Description	Supply of equipment required for the upgrade of PPA areas. Such equipment may refer to: <ul style="list-style-type: none"> 1) Quay cranes 2) Stacking cranes 3) E/M equipment (transformers etc.) 4) Terminal Trucks The project budget also may include: <ul style="list-style-type: none"> a) Restoration of existing cranes (quay and stacking) b) Maintenance of existing cranes (quay and stacking) 	
7	Dredging of Central Port	8.000.000	

	Short Description	The scope of this project, operation wise, is the removal of excess material that has been transferred to the central port seabed, resulting in the reduction of the quay walls' operational depth and locally creation of ditches on the seabed. The dredging material will be disposed at a sea area, indicated and approved by the Central Port Authority. The quantity of the material that has to be dredged is estimated at 250.000 - 300.000m ³ , but the exact number will be evoked by the execution of new bathymetric measurements. Moreover, chemical tests will be executed to determine the substance of the material.
8	Construction of New Oil Pier	15.000.000 
	Short Description	<p>The New Oil Terminal is located in the southern side of Pier III, SEMPO N.Ikonio Perama. The total land area is approx. 12.800m² with quay wall of 350,00m length. The pipping passage of the three oil companies will be underground through a rectangular shape culvert, made of reinforced concrete with an approximate length of 825,00m, connecting the south and north sides of Pier III. In the northern part of Pier III, the tie-ins of pipes are located. The designed infrastructure follows the international and EU specifications such as the ASME, API, IEC, NFPA. On the quay walls there shall be construction of upper structures incorporating all necessary components (bollards, rings, fenders, stairs, quay wall steel protection).</p> <p>For the New Oil Terminal to work properly some supporting facilities & buildings should be constructed, according to the technical study. These facilities include:</p> <ol style="list-style-type: none"> 1) Steel racks for the pipes 2) Weather shelters for the pipes 3) Pump station for the firefighting network 4) Metering station 5) Control room 6) Drainage network 7) Other supporting structures
9	Car Terminal Expansion (Herakleous)	20.000.000 

	<p>Short Description</p>	<p>This project refers to the extension of the existing Herakleous Pier I, which is currently used for ship repair activities. The existing pier expands in a surface of 69.231m² and is located in the southern part of the commercial port. The dimensions of the extension area are approx. 360m length and 99.55m width. The construction process should take into account the need to diminish the disturbance caused by the conversion of the Herakleous Pier I, currently used for ship repair activities, into a car terminal. The new general layout corresponds to a surface of 110.000m² with a quay wall length of 1.100m at an operational depth of the terminal is -12,50m (from mean sea level),. The Pier new capacity will amount up to 5.400 car positions. The west quay wall of the new pier stretches along a 175m distance. The capping beam is enhanced with all required marine equipment, such as bollards, fenders, ladders, fire-fighting/ water supply shafts etc. At the same time the sub-base and base layers are formed in the yard area and heavy-duty concrete pavements are constructed on top. The construction phase also comprises the construction of all electromechanical networks, the installation of automation equipment, ICT infrastructure etc.</p>
<p>10</p>	<p>Improvement Infrastructure of Ship repair Zone (incl. floating docks)</p>	<p>55.000.000</p> 
	<p>Short Description</p>	<p>The existing ship repair zone of Perama consist of two (2) Piers (East and West) and a wharf between them., with total quay wall length 2.070m. The floating docks Pireas I (15.000dwt) and Pireas II (4.000dwt) have been installed at the North-West pier, for ship repairing activities. The total terminal i.e. infrastructure, (E/M networks etc.), the crane rails, the pavements and the buildings of the pier are in poor condition due to insufficient maintenance. The project includes but is not limited to:</p> <ol style="list-style-type: none"> 1) Quay walls upgrade 2) Pavement reconstruction 3) Crane Rails 4) E/M installations-network 5) Floating dock 6) Jetties and Jib cranes