PROGRAM
renewal and development of vessels of the port and technical fleet of the state enterprise 'Ukrainian Sea Ports Authority' for the period 2025 – 2035

I. MAIN PROVISIONS

The state enterprise 'Ukrainian Sea Ports Authority' (hereinafter – USPA) is a state unitary enterprise and operates as a state commercial enterprise, established in accordance with the order of the Cabinet of Ministers of Ukraine dated March 4, 2013, No. 133 'On approval of the proposal regarding the reorganization of state maritime transport enterprises.'

The USPA was established to manage and effectively utilize state property in the country's seaports, create mechanisms for attracting investment in port infrastructure for its development, and ensure the stable operation of businesses. Among other tasks of the Administration are maintaining the passport depths of port waters, ensuring maritime safety, and more.

The enterprise operates for the state and business, covering the entire spectrum of tasks in the port and at sea daily – from improving the legislative framework to ensuring cargo transportation and maritime safety.

The structure of the enterprise consists of the management apparatus, the 'Delta-Pilot' branch, the 'Dredging Fleet' branch, the 'ChornomorNIIProject' branch, and 13 branches in the sea ports of Ukraine.

II. COMPOSITION OF THE PORT AND TECHNICAL FLEET VESSELS

To carry out its statutory activities, the USPA has 159 units of port and technical fleet vessels on separate balances of its branches.

1. By the year of construction and commissioning, the vessels are divided as follows:

№ No.	Year of construction of vessels (years)	Quantity	In percentage terms
1	up to 1970	18 units	11,32 %
2	from 1970 to 1980	41 units	25,79 %
3	from 1980 to 1990	43 units	27,84 %
4	from 1990 to 2000	29 units	18,24 %
5	After 2000	28 units	17,61 %
TOTAL:		**159 units**	-

2. By type and purpose, the vessels are classified as follows:

Serial No.	Type of USPA vessels	Number of vessels
1	Dredging vessels and support vessels	36 units
2	Port specialized vessels and auxiliary vessels (oil garbage collector, bilge water collector, monofunctional port vessel, fire and rescue vessel, diving boat, floating cranes, oil tankers, water tankers, pontoons)	72 units
3	Tugboats and icebreakers	8 units
4	Harbor and passenger vessels (pilot boat, passenger and service boats, motorboats)	43 units
TOTAL:		**159 units**
		160

3. The countries constructing the vessels are divided as follows:

№ No.	Type, class of vessel	Country of construction	quantity	In percentage terms
1	PS, ZLV	Baku, Azerbaijan, USSR	12	**7,53 %**
2	Pilot boat, PRP-52, tugboats, service, harbor, water barge	USSR, Russia	69	**43,6 %**
3	NMS, MNMS, NSZ	SRZ USSR	15	**9.43 %**
4	Pilot boats, tugboats, Sea ANT, oil barges, floating pontoons, barges KS-1, KS-2	Ukraine	41	25,79 %
5	MZ-318	Georgia, USSR	1	0,63 %
6	NZS SKIF	Slovakia	1	0,63 %
7	Stakhanovets Petrash, Flipper, Silver	Finland	3	1,89 %
8	T-236, diesel scows Krymska 3, 9, Inhulskyi, Meotyda	Romania	5	3,14 %
9	Boat Halia	Poland	1	0,63 %
10	Dredger RION	Germany	1	0,63 %
11	Vessel Tiligulsky	Yugoslavia	1	0,63 %
12	Service boats	USA	3	1,89 %
13	Floating cranes type PK	Hungary	2	1,26 %
12	Pilot boats	Turkey	2	1,26 %
13	Pilot boat	France	1	0,63 %
14	Vessel DS-5	Czech Republic	1	0,63 %

The operation of the vessels of the port fleet of the enterprise is under the state supervision of the state enterprise KT 'Register of Shipping of Ukraine' (established by the Resolution of the Cabinet of Ministers of Ukraine dated 08.06.1996 No. 814 'On improving technical, classification, and shipping supervision on maritime and river transport').

According to the rules of the Register of Shipping of Ukraine, technical supervision of vessels during operation includes:

- conducting inspections (scheduled – once a year, unscheduled – as needed (replacement of mechanisms, equipment, emergency cases, etc.);
- supervision of vessel repairs (classification – once every 3-5 years depending on the year of construction of the vessel, dock – once every 1-3 years depending on the class of the vessel, passenger – once a year, current – as necessary).

The main factor negatively affecting the accident-free operation, maintenance, and repair of USPA vessels is the lack of spare parts and components due to the imposition of sanctions on the country of manufacture, regarding their acquisition, in connection with the state of war.

(Reference: On most USPA vessels (61.16%) of the MNMS, NMS, PS, ZLV, SLV types, pilot boats (LK), tugboats 'Dnestrovets', 'Dunay' built before 1993, ship equipment manufactured in the former USSR is installed (all main engines 3D6, 3D12, 6Ch, 4Ch from Barnaul and Caspian diesel plants, YMZ (Yaroslavl DP), 6Ch(N) 18/22 (Khabarovsk DP), diesel generators, windlasses, capstans, and other technical equipment).

III. TASKS AND OBJECTIVES

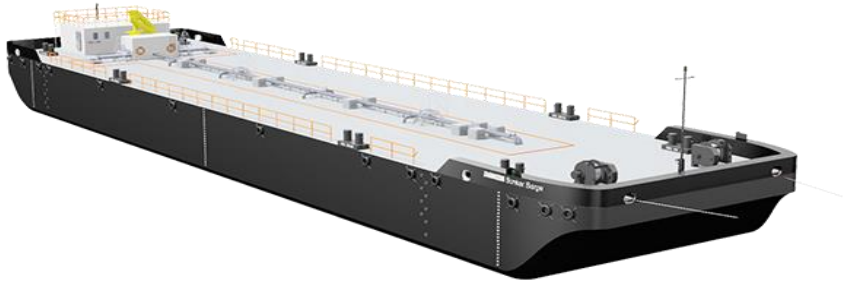
The gradual replacement of outdated vessel projects of the port and technical fleet will lead to a reduction in costs for repairs, the purchase of spare parts, and components for ship equipment and devices.

Due to the level of automation in servicing the main and auxiliary engines, modern vessel projects of the port and technical fleet require fewer servicing personnel, which will lead to a significant reduction in the minimum number of crews.

Based on the study of the global shipbuilding market, the main indicative projects of port and technical fleet vessels have been identified for planned renewal.

№ № No.	Type of vessel	Quantity	Feasibility study
1	Multifunctional vessel type NMS-PS-Boom laying vessel-Tugboat-Firefighting vessel with ice class allowing to operate in shallow on broken ice (analog '**Multi Cat 2309**'). Length – 23.36 m. Width – 9.0 m. Draft – 2.4 m. Bollard pull – 15.0 t. Oil product tank volume – 69 m³. Additional equipment: - Fire diesel pump Q=up to 200 m³/h, P= up to 10 kg/cm², up to two fire monitors with a nozzle diameter up to 25 mm. Foam tank.	**4**	The average age of the environmental protection vessels of the USPA is 38 years, and it is necessary to annually increase expenditures to maintain them in operational condition. It is also necessary to comply with regulations on reception of 'wash water' from merchant vessels. To relatively reduce the costs of maintaining the respective vessels, as well as to expand the capabilities for providing services in sea ports, there is a need to acquire a new multifunctional vessel. The Multifunctional vessel (analogous to the 'Multi Cat 2309') will assist in more economical and higher quality performance of not only the main environmental functions but also in a whole range of auxiliary ones, serving as: port collector, boom installer, firefighting vessel, tugboat, supplier etc. Additional installation on the vessel's deck: equipment for the elimination of emergency spills (skimmer, inflatable boom barriers with reel, emergency spill containment system, waste collection tank type 'Lamor', or equivalent). Provides fastenings for heavy boom barriers. 
2	Multifunctional vessel type NMS-PS-Boom Layer-Tugboat-Firefighting vessel with ice class allowing operation in shallow	**3**	The average age of the environmental protection vessels of the USPA is 38 years, and it is necessary to annually increase expenditures to maintain them in operational condition. It is also necessary to comply with regulations on reception of 'wash water' from merchant vessels. To relatively reduce the costs of maintaining the respective vessels, as well as to expand the capabilities for providing services in sea ports, there is a need to acquire a new multifunctional vessel. A multifunctional vessel (analogous to the 'Multi Cat 1908') will assist in more economical and higher quality performance of not only the main environmental functions but also in a whole range of auxiliary ones, serving as: port collector, boom installer, firefighting vessel, tugboat,

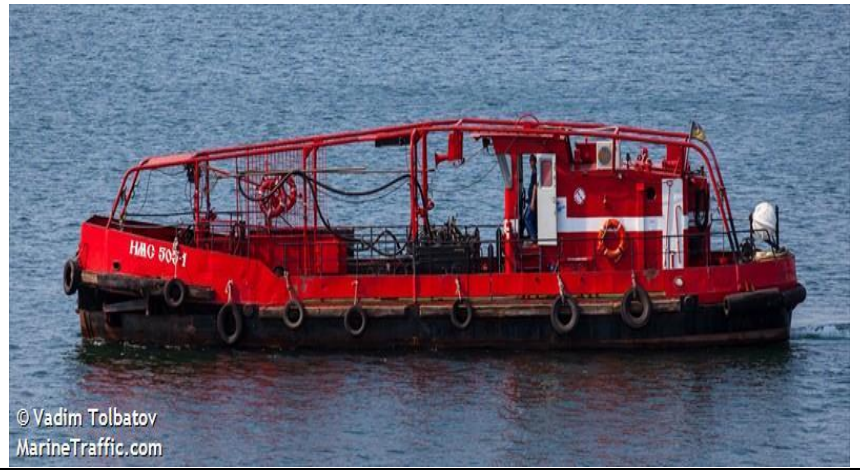
	on broken ice (analog **«Multi Cat 1908»**). Length – 18.9 m. Width – 8.1 m. Draft – 2.1 m. Bollard pull – 13.5 t. Oil product tank volume – 54 m^3. Additional equipment: - Tugboat hook with remote release; - Fire diesel pump Q=up to 200 m^3/h, P= up to 10 kg/cm^2, up to two fire monitors with a nozzle diameter up to 25 mm. - Tank for foam concentrate.		supplier etc. Additional installation on the vessel's deck: equipment for the elimination of emergency spills (skimmer, inflatable boom barriers with reel, emergency spill containment system, waste collection tank type 'Lamor', or equivalent). Provides fastenings for heavy boom barriers. 
3	Non-self-propelled oil barge (up to 650 tons). Length – 41.5 m. Width – 11.4 m. Cargo tank volume – up to 650 m^3. Adapted for the storage and handling of oil products and substances X, Y, Z, including sludge. Additionally, equipped with a module with heating for sheltering personnel from bad weather	**3**	Designed to increase the volume of reception from merchant vessels and temporary storage (before delivery to shore treatment facilities) of bilge, sewage, and wash water in the waters of Ukrainian sea ports. System for the reception and autonomous discharge of cargo (pollutants). Installation of specialized equipment on the deck of the barge, which helps to process wash and bilge waters for discharge into the shore collector.

	and for storing and maintaining documentation.		
4	Non-self-propelled oil barge (up to 400 tons). Length – 32.0 m. Width – 9.5 m. Cargo tank volume – up to 400 m³. Adapted for the storage and handling of oil products and substances X, Y, Z, including sludge. Additionally, equipped with a module with heating for sheltering personnel from bad weather and for storing and maintaining documentation.	**8**	Designed to increase the volume of reception from merchant vessels and temporary storage (before delivery to shore treatment facilities) of bilge, sewage, and wash water in the waters of Ukrainian sea ports. System for the reception and autonomous discharge of cargo (pollutants). Installation of specialized equipment on the deck of the barge, which helps to process wash and bilge waters for discharge into the shore collector. 

5	Pilot boat Length: 12-14 m.	**6**	Of the 14 pilot boats belonging to the branch, only 8 are modern that were built to the order of SE 'Delta-pilot'. The rest of the vessels have a long period of operation (close to critical) - from 20 to 28 years. As a result, and also due to their operation with very high intensity, they often fail due to the breakdown of major mechanisms. Very often this leads to critical situations and possible disruptions in the work of pilot services. At the same time, the main mechanisms for the boats, built during the USSR era, are manufactured by enterprises located on the territory of Russia. Thus, due to temporary occupation of Crimea and the russia supporting illegal military formations in the Eastern Ukraine, the procurement of spare parts for the mentioned mechanisms and units is becoming difficult, and in some cases even not possible. When merging the Mykolaiv branch of the SE "USPA" and the "Olvia" branch of the SE "USPA», the issue of acquiring an additional service boat or a pilot boat up to 14 meters in length arises to ensure the safe operation of the seaports of the Mykolaiv region. 
6	Pilot boat Length: 15-20 m.	**11**	Of the 14 pilot boats belonging to the branch, only 8 are modern that were built to the order of SE 'Delta-pilot'. The rest of the vessels have a long period of operation (close to critical) - from 20 to 28 years. As a result, and also due to their operation with very high intensity, they often fail due to the breakdown of major mechanisms. Very often this leads to critical situations and possible disruptions in the work of pilot services. At the same time, the main mechanisms for the boats, built during the USSR era, are manufactured by enterprises located on the territory of Russia. Thus, due to temporary occupation of Crimea and the russia supporting illegal military formations in the Eastern Ukraine, the procurement of spare parts for the mentioned mechanisms and units is becoming difficult, and in some cases even not possible.

			
7	Self-propelled dredger (1800-2200 м³).	**1**	To ensure depths in the water areas of seaports and navigable channels according to passport characteristics. 
8	Self-propelled hopper barge (500-600 m³)	**2**	Operation as part of the 'Rion' convoy, independent dredging operations along the port berths using a grab and suction pump.

	with a crane for the pump and grab.		
9	Non-self-propelled oil barge (1000 tons) with living quarters.	**1**	To ensure storage and bunkering of vessels in the Danube region (Reni, Izmail, 'Delta-pilot'). 
10	Tugboat with an ice class not lower than LP3 and a fire class not lower than FF3WS	**1**	To ensure icebreaking for vessels on the sections of the Danube River from the port of Reni to the mouth of the Danube River.

	(power from 3500 to 4000 hp, with shallow draft and azimuth thrusters).		
11	Vessel for collecting garbage and oil spills of the NMS type (MINI CAT).	**5**	To ensure safe operation of the seaports of Kherson and Odessa. When merging the Mykolaiv branch of the SE "USPA" and the "Olvia" branch of the SE "USPA», the issue of acquiring an additional oil-garbage collector arises to ensure the safe operation of the seaports of the Mykolaiv region. 
12	Service and patrol boat (analogous to UMS 865 HT). Length - 9 m. Outboard engine power – 2x183 kW.	**1**	To ensure the patrolling by the SMB service of the Branch's facilities and fulfill the duties assigned to the service within the framework of the ISPS Code, as well as to carry out booms works.

	Patrol, self-propelled, motorized. Passenger capacity – 10 persons.		
13	Service and patrol boat (analog of UMS 600 TUNA DC PL). Length - 6 m. Outboard engine power – 150 hp. Patrol, self-propelled, motorized. Passenger capacity – 6 persons.	**1**	To ensure the patrolling of the Branch's facilities by the SMB service and fulfill the duties assigned to the service within the framework of the ISPS Code. 
14	BACKHOE DREDGER (excavator-dredger). Maximum soil extraction depth up to 25.0 m. Presence of three driven piles. Number of hydraulic cranes with bucket - 1 unit. Number of additional working cranes - 1 unit.	**1**	A dredger with a hydraulic excavator crane with a backhoe is necessary for performing dredging operations in both sheltered and unsheltered areas of dredging and cleaning under the influence of lateral and longitudinal currents: • soil extraction and cleaning of the border strip near the berths and port waters; • dredging in conditions of limited space and low water levels.

			
15	Cutter Suction Dredger CSD 350 with a slurry pipeline L=1000m. Length: ≈ 26.0 m. Width: ≈ 6.0 m. Draft: up to 1.5 m. Diameter of the discharge pipeline 350 mm Productivity of the soil pump with clean water: ≈ 2,000 m³/h. Dredging depth: up to 9 m. Availability of mechanical and hydraulic ripper.	**2**	The cutter suction dredger is needed for performing dredging operations in areas protected from waves under the influence of lateral and longitudinal currents. 
16	Multifunctional vessel, tugboat, anchor handler (analog of 'Multi Cat 1205'). Length: ≈ 12.65 m. Width: ≈ 5.20 m. Draft: ≈ 1.45 m. Bollard pull: ≈ 3.4 t.	**2**	Multifunctional vessel, anchor handler, necessary for laying and relocating anchors, servicing dredgers.

	Deck winch. Crane-manipulator for lifting anchors, loading/unloading, and transporting ship equipment. Power of main engines ≈ 2x100 kW or more.		
17	Tugboat – pusher (tugboat type from the POSS-115 series) Maximum length - 31 m Maximum width - 12 m Maximum formation depth - 3 m Maximum draft - 1.80 m Maximum displacement - not more than 400 tons	1	The tugboat is designed for maneuvering non-self-propelled barges on the Danube River, performing the functions of a fire-fighting and rescue vessel, assisting ships during the winter period, and in other operations.