

# Shopfloor initiative

Plans of the Russian shipbuilders to go ahead with a serial production of modern energy-saving fishing long-liners require prompt decision-making by the government.

Leningrad shipyard "Pella" plans in the nearest future to outfit the first-in-class fishing research vessel commissioned as far back as in May 2014, which will be named after the famous scientist Konstantin Konstantinovich who had for many years been investigating the peculiarities of a ground fishery in the North Atlantic. She will be registered by the Russian Maritime Register of Shipping (RMRS). After hoist of the Russian flag the crew together with scientists of sectoral research institutes VNIRO and PINRO shall start harvesting tests and get to implementation of quantitative evaluation program of underexploited stocks of ground fish in different regions of the Barents Sea. For this purpose the new vessel has been equipped with both special facilities and modern fishing gear for long-line fishing (cod, haddock, halibut, catfish, seabass).

But until now the Russian Federal Fisheries Agency hasn't accepted any Cabinet-level decision on quotas backing (fish capture rights) of this vessel in required measure 3000 t of ground fish annually – the designated purpose of the integrated resource analysis.

## CATCH ON HOOK

The domestic fishing fleet (95% of it are trawlers) in the North Basin mostly catches baby ground fish aged 3 to 7 years weighing 0,5 to 3 kg. But cod and haddock live in the area up to 22 years and would gain in weight 45-50 kg. It is practically impossible to fish out large ground fish by a trawl net – they would expertly avoid it, as was also proved by Russian and some Scandinavian scientists.

Large samples of fish have been successfully caught by modern automated long-liners at which the primeval method of archangelic coast-dwellers is utilized – hook and long line on a rope. Squid is being planted to large hook at the moment of many kilometers long line streaming by means of special automated equipment. There are no more than 10-12 pcs of such vessels in the Barents Sea belonging to Russia.

Over the past twenty years Russian scientists had been assessing primary resources of ground fish dwelling in the Barents Sea using only facts of catch by trawlers.



Therefore the total usable stock of ground fish in this area of Russia is being underestimated.

The additional resources exploration with the use of modern long-liners is needed in order to receive reliable data concerning availability of large ground fish stock of senior age group in the Russian region of the Barents Sea and neighboring seas. Norway has, for example, been engaged in such activities. In this country the proportion of the long-line fishing is 50%, and in its coastal waters fish trawling is forbidden generally as being ecologically destructive and destroying the ground habitat of both fish and seafood. The same prohibition in accordance with accepted rules and regulations of fishery has been imposed in Canada, Iceland and in a series of other north countries.

Ecologists form the Wild Life Fund note that fish escaped though net trawl meshes is, as a rule, destined to die. Furthermore, trawl net would rumple and waste fish. With long-line fishing the probability of a negative impact on both seabed and incidental catch is being minimized. The marine bioresources caught on long-liners are of higher quality and, accordingly, more expensive.

According to preliminary scientific data, the additional supply of fish in the North Basin can maintain construction and year-round operation of 25-30 medium long-liners in Russia. In such case the land-based fish-canning factories would receive additional supply of high quality fish, volume of whose sales can amount to 12 bln rubles annually.

Besides the long-line is a passive fishing gear whose fuel consumption is significantly lower because much lesser effort is needed than at streaming and especially at haul of a bottom trawl. The average specific fuel consumption per 1 ton of caught fish is on trawlers 0,60–1,5 t and on long-liners no more than 0,23–0,4 t, namely, one-third of it.

It is true that with long-line fishing it's necessary to use as bait on hooks additional bioresources – squid, fish, shellfishes. But according to specialists' statement, the costs associated with buying of bait are much lower than additional expenditures for fuel.

It is important to bear in mind that the domestic fishing fleet used to catch in the Barents Sea 60% of fish in the Norwegian 200 miles economic zone and at fishing ground of the Spitsbergen archipelago, while only 40% - in the 200 miles economic zone of Russia. It is possible that Norway



can restrict the use of the ground fishing gear in regions under its jurisdiction in connection with damage inflicted by such fishing gear to ecosystem. The Norwegian coast guard has already tightened control over Russian vessels working in western regions of the Barents Sea. Essential penalties have been imposed upon Russian trawlers for drop-out undersized fish at sea.

In actions of Norwegian coast guard the determined line is traced aimed at forcing Russia out of the regions of cooperative fishing. It is likely that under the conditions of economical confrontation and imposing sanctions on Russia the situation may become sharp.

Other problem is connected with a condition of domestic fishing fleet. It urgently requires modernization. Thus among vessels operating in the North Basin more than two thirds have gone out of date not only physically but also morally. One would think that over recent years Russian leadership has been addressing this problem. Time and again the Government entrusted relevant authorities and ministries by its regulations and orders with developing and implementing measures for economic motivation of building within the territory of Russian Federation of high-technology marine fishing vessels.

But concrete mechanism for the implementation of those orders hasn't still been developed. They would either be built under one-of-a-kind orders or to be bought in foreign countries. So far no concrete reciprocal obligations of the country, Russian fishery organizations and

shipbuilders on the matter have been assumed.

The ice broke up **when the leaders of the shipyard "Pella" and the Murmansk fishery company "Persey" Gerbert Tsaturov and Alexander Chumakov** have discussed different variants of cooperation and have agreed on a long-term cooperation in the field of building of the line of long-liner vessels. It should be noted that "Persey" acts as an ordering party and "Pella" – as an investor and builder of modern commercially viable vessels.

The Norwegian long-liner ship "Gear-II" which confirmed on practice high efficiency of its operation in the Barents Sea has been chosen as a new vessel's prototype. The construction design documentation based on the foreign technical project was developed by the design bureau of the shipyard "Pella". The technical project of the vessel with the Ice class 2 is developed with the following characteristics: length – 47,5 m, beam – 12 m, volume of refrigerated hold – 500 m<sup>3</sup>, propulsive output – 1200 kW. Comfortable conditions have been provided for accommodation and work of members of the crew up to 20 persons in number (including 2 accommodations for members of industry research centers). The aim of the offshore fishery is bottom species of fish.

The vessel is built on shipyard's own and borrowed extrabudgetary funds with a profit no more than 2-3%. Subsequently she is to be delivered to the ordering party on a five year's installment plan. Payback period of the vessel shall be at least 6 years.



As the deputy general director of the shipyard "Pella" Ilya Vaisman and the general director of company "Persey" Alexander Chumakov note, the investment commercial project has undergone operational and qualification expert evaluation by the independent noncommercial organization "Agency for Strategic Initiatives". Supervisory board of the Agency under the chairmanship of the President of the Russian Federation Vladimir Putin as far back as in November 2013 authorized the Ministry of Industry and Trade of the Russian Federation as well as Russian Federal Fisheries Agency to draw up specific production incentives in Russia concerning resources-saving fishing vessels and to move forward with implementation of measures of State support for fishery organizations placing orders with domestic shipbuilders. Also provision was made for enforcement of underexploited bioresources discovery in the Barents Sea, which would include the use of modern long-liner ships built in Russia. But until now all these plans are only on paper.

At the end of 2014 "Pella" and "Persey" wrote to the President. By doing this they pointed out the necessity of acceleration of arrangement of serial production of modern fishing vessels on by now established new production site of shipyard "Pella". The letter contains the list of specific actions developed with the participation of scientists and specialists of sectoral research institutes VNIRO and PINRO, representatives of the Agency of Strategic Initiatives, leading northwest fishery organizations and the Saint-Petersburg and Leningrad region Shipbuilders' Association. Implementation of those actions would offer to Russian companies the same economic opportunities as competitors in the world market have.

It has been offered to make provision for subsidization from the budget of rates of interest for credits and lease payments at building in Russia of new fishery vessels as well as their registration by RMRS, to exempt shipbuilders from VAT and custom duties at building of fishery vessels on Russian shipyards, at their registration by RMRS as well as at the importation into the Russian customs area of marine accessory equipment whose analogies haven't been produced in Russia.

It has been also offered to create the Fund of disposition of obsolete fishing vessels and provide for a possibility of making payments out of it up to 10% of a new vessel's cost to fishery organizations placing orders up to 2020 in Russia, upon condition of delivery of out-of-date ships for disposition in the order established by the Russian Government. As part of preparation of a new version of the law on fishery, it is offered to provide for the allocation, starting from 2019, to Russian companies, engaged in building of new vessels, of the quotas on bioresources recovery rights by those vessels for a term of 20-25 years.

Customers would believe that economic fishing and transport vessels building stimulation activities will be brought into real action only on condition that under the contract there would be placed signatures not only of shipyard and ordering party, but also the one of a representative of the Russian Government, personally in charge of the application from 2015 of series of the above mentioned measures of State support.

"And this should be done as soon as possible under control of the Agency for Strategic Initiatives if we really want to renovate the Russian fishing fleet by our own forces", - was emphasized at "Pella" and "Persey" companies.

## GROUND-UP INITIATIVE

*The plans of the Russian shipbuilders to start mass production of modern energy-efficient longline fishing vessels require expedient and prompt decision-making by the government.*

*The domestic fishing fleet that operates in the Northern Basin (with 95% of the vessels being trawlers) mostly catches young groundfish, aged 3-7 years, weighing 0.5 to 3 kg. It's impossible to catch large groundfish reaching 45-50 kg by a trawler which the adult fish knows how to avoid.*

*The longline fishing, in turn, is perfect for catching big fish. Longline fishermen uphold to the old fishing technique used by the Russian Pomors (White Sea coast settlers) - the hooks and line gears with baits attached to long ropes. According to preliminary research data, the additional resources of groundfish for the longline fishing in the North Basin can provide for the construction and year-round operation of 25-30 medium longliners. The seafood processing enterprises operating along the coast will receive additional high quality raw material that could bring an income of about 12 billion rubles a year.*

*Leningrad factory "Pella" is currently constructing a head scientific and commercial longline fishing vessel, the work was commissioned by the Murmansk fishing company "Perseus". Norwegian long liner "Hyeres-II" which proved its high efficiency while operating in the Barents Sea was chosen as the prototype for construction.*

*Pella has scheduled the delivery of the vessel for April 2015, after which the crew together with the scientists from the All-Russia Research Institute of Marine Fisheries and Oceanography (VNIRO) and the Knipovich Polar Research Institute of Marine Fisheries and Oceanography (PINRO) will proceed to field testing and quantitative ratings of the underutilized resources - the groundfish in different regions of the Barents Sea. Still, the Federal Agency for Fisheries has not made any government level decision to secure the new vessel with fishing quotas of 3000 tons of groundfish per year, purpose-designed for integrated research of resources.*