

The 16th International Exhibition and Conference for Commercial Shipping, Shipbuilding, Ports and Offshore Development NEVA-2021 has taken place in St. Petersburg.

The exhibition was held in Expoforum CEC on September 21-24, 2021, with support of allied structures – the RF Ministry of Industry and Trade, RF Ministry of Transport, RF Ministry of Foreign Affairs, the Government of St. Petersburg, the Marine Board under the RF Government, the St. Petersburg Maritime Council, the Russian Union of Industrialists and Entrepreneurs, the Russian Chamber of Shipping, Russia’s largest publicly-owned shipbuilding holding – USC and State Atomic Energy Corporation Rosatom, as well as state institutions and public organisations that promote entrepreneurship while helping to boost exports and strengthen international cooperation.

Strategic partner of NEVA-2021 was Bank ROSSIYA. Partner of the business programme was State Transport Leasing Company (GTLK). Ak Bars SC was the exhibition’s innovative partner. The exhibition’s official partner was Turkish Ship Yacht&Marine Services Exporters Association. The official linguistic partner was EGO Translating. Vody Zdorovya was the partner for potable water. Overall, more than 40 different organisations became NEVA-2021 partners.

The formal opening ceremony of the largest industry exhibition in the Eastern Europe and the entire post-Soviet space was attended by Deputy Minister of Transport of the Russian Federation Alexander Poshivay, Deputy Minister of Industry and Trade Oleg Ryazantsev, Vice Governor of St. Petersburg Eduard Batanov, General Director of United Shipbuilding Corporation JSC Alexey Rakhmanov. President of the All-Russian Industrial Association of Employers Russian Chamber of Shipping Aleksei Klyavin, Deputy General Director – Director of Northern Sea Route Directorate in Rosatom SC Vyacheslav Ruksha, General Director of GTLK JSC Yevgeny Ditrikh, General Director of the Russian Maritime Shipping Register FAI Konstantin Palnikov and General Director of Expoforum-International Sergei Voronkov also took part in the ceremony.

Alexander Poshivay reminded that the exhibition was biannual and emphasised that the instruction of the Russian Government to accelerate the development of water transport can only be fulfilled through close interaction between shipbuilding and shipping companies. “We need to not only increase the number and improve the quality of ships,” he said, “but we also have to bring Russian shipbuilding onto a larger scale”.

The exhibition was spread out across 3 pavilions – F, G, H and the inter-pavilion space, which was used to house the exhibition of small vessels – motorboats, yachts, and high-speed hovercraft. Compared to 2019, the total area of the exhibition has increased by 1,000 sq. m and amounted to 31,000 sq. m. It was occupied by stands of 544 exhibitors, out of which 436 were Russian and 108 foreign.

Group stands were organised by export centres of the regions supporting their enterprises: Astrakhan, Nizhny Novgorod, Rostov, Saratov, Arkhangelsk and Leningrad Regions, as well as the Republic of Karelia.

Seven countries have been presented in the national pavilion format: Germany, Holland, Spain, Norway, Turkey, Finland and South Korea. Other exhibitors and delegates were companies from Belarus, Austria, Bulgaria, Great Britain, Hungary, Denmark, Iceland, Italy, Canada, Lithuania, the Netherlands, Poland, Turkey, France, the Czech Republic and Estonia.

The largest national pavilion with an area of 240 square meters housed German companies supported by the German Ministry for Economic Affairs and Energy (BMWi), the German Mechanical Engineering Industry Association (VDMA) and the Association of the German Trade Fair Industry AUMA. The German delegation was headed by representatives of the State Chancellery of the federal state of Mecklenburg-Western Pomerania.

A large delegation represented the Autonomous Region of the Azores (Portugal): Regional Minister of Transport, Tourism and Energy Mario Jorge Mota Borges, Deputy Minister of Finance Vasily Plesov, Regional Director for Fishing at the Regional Ministry of Maritime Affairs and Fishing Alexandra de Carvalho dos Santos Garcia Guerreiro and directors of state corporations. They participated in the exhibition to find new partners and negotiate on purchasing.

Spanish companies also took active part in the exhibition&conference. The region of Galicia organised a national pavilion and a visit of a large delegation. The Spain intends to develop localisation in a variety of areas. ACLUNAGA shipbuilding cluster updated and supplemented its agreement with CSRI KURS JSC. At a meeting of cluster leaders with the head of the centre for shipboard equipment import substitution of CSRI Kurs JSC Dmitry Stoyanov, the parties discussed the potential of the Russian shipbuilding market, interaction mechanisms and localisation prospects.

NEVA Exhibition

The exhibition has confirmed, yet again, that high technology and digitisation are not merely a fashion but a new reality. The participants have presented several dozens of innovative projects, from specific equipment designs to entire shipbuilding technologies.

Onego Shipyard JSC presented the project of the first Russian digital shipyard; *Atomenergomash* in partnership with Atomenergo and Finnish company Aker Arctic Technology Inc. – conceptual designs of semi-submersible vessels of Arc5 and Arc7 ice classes for transportation of extra-heavy and oversized cargo in Arctic conditions. *Armalit* demonstrated new electric drives, *Krylov State Research Centre* - models of their already manufactured vessels. *Ship Systems LLC* showcased its KMM-E pump unit, start-up and breathing air compressors and equipment for compressed gas systems; *JSC LGM* - a new generation of centrifugal vertical pumps and shipboard electric pumps. *NPC AQUAMARIN* introduced visitors to the basic load-bearing structures, specialised block frames and a protected Aquamarine laptop based on the *ELBRUS* processor. *LENTRANS* production commercial company showcased an automatic towing winch with a traction force of 40 kN (type TWA-E).

For the first time, *Kingisepp Machine-Building Plant* introduced a line of emergency rescue equipment and workwear. Other projects popular with visitors were *NavCom Voyager* electronic mapping system based on the domestic software by *NavMarin*; a range of unmanned underwater remotely operated vehicles and diving complexes by *TETIS PRO*; crew boat with diesel engine 900 and boat 500 by *Vineta* machine-building enterprise; rudder propellers, thrusters and deck propulsion complexes developed by *SDK LLC*. *Vega Group*, combining Akhtubinsky, Balakovsky and Volzhsky shipbuilding and ship repair plants, introduced tankers, dredgers, towing motor boats and other vessels. *Oka Shipyard* presented the designs of its ships (under construction and finished) and a model of NE020.2 project passenger&cargo ship set afloat on August 30, 2021, designed to transport passengers and standard twenty-foot containers, including refrigerated ones, between the Kuril Islands and Kamchatka. *Belomorskaya splavnaya kompaniya* presented a model of their Yaroslav project tugboat; *Furuno Eurys* – a new concept combining all navigation data (the system can display an image from any navigation instrument to any of the monitor's at the bridge deck). *Sitronics Group* presented innovative developments

of autonomous ship navigation, Russian navigation system Bering and a maritime communication platform. The exhibition also included an online ceremony for the launch of construction of ASD 3010 Ice tugboats by *DAMEN Shipyards* group.

NEVA business programme included 33 sessions with participation of about 3,500 delegates and 300 speakers.

The plenary session was devoted to Russia's national strategy for developing the shipbuilding industry and fostering international cooperation. Deputy Minister of Transport Alexander Poshivay presented the bullet points of the strategy for development of Russia's inland waterways. He mentioned the deficit of vessels as one of the existing bottlenecks. Specifically, seamless operation is lacking engineering ships; presently more than 40% of these vessels are obsolete. At the same time, the inland waterways are an important component of the development of transportation infrastructure, and require utmost attention at the highest level, said the Deputy Minister.

Deputy Minister of Industry and Trade of the Russian Federation Oleg Ryazantsev shared the plans to use alternative fuels for shipping and consider construction and subsequent refuelling of innovative ships with hydrogen and liquefied natural gas. The Deputy Minister spoke about success in the field of autonomous navigation and announced that the Ministry of Industry and Trade will invest 108 billion rubles in construction of 300 vessels.

General Director of United Shipbuilding Corporation Alexey Rakhmanov stressed the need for state support for innovative technologies in shipbuilding. In his opinion, Russia has all the possibilities, both scientific and technological, to apply new solutions necessitated by new environmental requirements in practice. He urged to prepare to the new "technological leap" as "the era of piston engines will expire in 20-25 years".

Evgeny Ditrikh, General Director of GTLK PJSC, said that the company, together with the Ministry of Industry and Trade and relevant departments, is working to raise funds from the National Welfare Fund for the development of a leasing program in shipbuilding. Besides, he told that Russia will use the method of operational leasing for water transport.

Deputy General Director of Rosatom State Atomic Energy Corporation – Director of Northern Sea Route Directorate Vyacheslav Ruksha spoke in favour of building ice class freight vessels in Russia. According to him, liquefied natural gas powered icebreakers are just as necessary as nuclear-powered icebreakers.

The professional audience was mostly interested in sessions devoted to the development of marine robotics and digitisation.

The session "Marine Robotics" organised in conjunction with the Academician Krylov Scientific-Technical Society of Russian Shipbuilders and St. Petersburg State Marine Technical University took place within the framework of the international conference PAAMES AMEC 2021 at the NEVA exhibition. Projects were presented by engineers and researchers from Russian and foreign bureaus, production companies and allied universities: Rubin Central Design Bureau for Marine Engineering, Malachite St. Petersburg Marine Machine-Building Bureau, SPO Aurora, Centre for the Advancement of Autonomous Navigation Technologies MARINET RUT, Southern Federal University, SMTU, Evologics GmbH (Germany), Hong Kong and Harbin Engineering University (China), and others. Presentation of the unique complex Vityaz-D, created in the Rubin Central Design Bureau for Marine Engineering, took place with support of the Advanced Research Foundation. The complex is intended for the

performance of survey-search and research tasks at the near-bottom and bottom of the World Ocean across the entire range of depths and for the development of engineering technologies and materials that could be used in the creation of prospective autonomous underwater vehicles (AUV) capable of operating at maximum depths.

Representatives of SeaSoft, Aveva, Sea Project, Promtech and other companies took part in the conference “Shipbuilding 4.0. Digital Shipyards of the Future”. Foreign companies RINA (Italy) and Sener Ingenieria y Sistemas S.A. (Spain) shared their experience. St. Petersburg State Marine Technical University representatives spoke about nurturing new talents. The experts have come to the conclusion that digitisation is an inevitable process, not only in the field of shipbuilding, but also in other industries. Therefore, enterprises need to raise new talent with consideration of new requirements and implement the idea of digital twins not only in design and construction of facilities, but also in conceptual design of operations. This, in turn, requires implementation and in-depth study of additive technologies, development and continuous improvement of domestic software.

Arctic Theme at NEVA-2021

Arctic shipbuilding and shipping has become one of the priorities of the exhibition and business programme at NEVA-2021. The relevance of the topic is explained by growing interest in the resources and opportunities offered by the Arctic, as well as by the need to further strengthen Russia’s positions as the leading regional power and Russia’s chairmanship of the Arctic Council in 2021-2023.

The strategic session “International, technical and scientific cooperation to ensure stable shipping and transit development in the Arctic” involved expert discussion of the latest global and Russian shipbuilding and ship design trends for the Arctic, shipping safety technologies in Arctic conditions, ship maintenance, modernisation and repair, development of the Northern Sea Route infrastructure, the impact of the changing climate on the development of sustainable shipping, new fuels for the Arctic and much more.

Boris Kabakov, Director of the Department of Shipbuilding Industry and Marine Engineering of the Ministry of Industry and Trade of Russia, reminded of state support measures aimed at strengthening NSR, and also urged colleagues to feel free to share their ideas with the department.

Deputy Director of the Northern Sea Route Directorate Maxim Kulinko focused his speech on large energy projects. In his opinion, the need for floating nuclear power plants is high, as foreign companies in England, Korea, and China have embarked on this type of projects. The total demand for such energy sources in the global market is estimated at the level of 10 GW.

Today, Atomflot is engaged in large contracts to supply nuclear power for Arctic projects with North Star, Vostok Oil, Baimsky Processing Plant and Mine (preliminary agreements have already been concluded for supply of 4 floating nuclear units. Power is scheduled for launch in 2027). The theme of nuclear-powered icebreakers has also been reviewed. Atomflot General Director Mustafa Kashka noted that the icebreaker role has been gradually shifting as new emerging ships can independently reach the desired destinations (he was referring to the successful trial of the gas carrier Christophe de Margerie). However, the need for advanced nuclear icebreakers is still urgent, because old ships need to be replaced and NSR needs to be launched into commercial operation.

Vice President of United Shipbuilding Corporation Vasily Boytsov shared that one of the enterprises designed an ice-resistant self-propelled platform that can drift in ice without an icebreaker. In the year to come, it will be handed over to the Northern Fleet. In addition, he said that cables for communication are laid along the NSR, which means that data centres can be installed along the entire Route. This will be much cheaper than similar stations on land.

Konstantin Globenko, Deputy General Director of Zvezda Shipbuilding Complex, showed the vessels already in production with the enterprise that has not yet been completed. Their overall number is 66, including 40 ice class vessels. They comprise multifunctional support vessels, Arctic shuttle tankers, gas tankers of the highest ice class, an atomic icebreaker etc.

The Arctic session also included signing of a cooperation agreement between the “Arctic Development Project Office” (PORA) centre of expertise and NEVA-International company.

In the context of the Arctic theme of the business program, **an excursion to the Krylov State Research Centre** was organised for participants of the NEVA exhibition. The guests viewed a landscaped wind tunnel - a dedicated experimental installation for determining wind loads on high-rise buildings, stadiums, large-span bridges, river and seaports, drilling platforms and other unique structures. The participants of the excursion were also shown a maneuver&navigation open reservoir designed to determine the hydrodynamic characteristics of ship models up to 3 m long, as well as to physically simulate the movement and dynamic positioning of vessels on quiet water and in conditions of wave disturbance using autonomous self-propelled radio-controlled models.

Negotiations and Agreement Signing

More than 15 agreements have been signed and a series of negotiations took place at the NEVA venue. In particular, agreements were signed between the State Transport Leasing Company and Neva Travel; Marine Instrument Engineering Corporation and the Far Eastern Shipbuilding and Ship Repair Centre; United Shipbuilding Corporation and Bank ROSSIYA; Ak Bars SC and the Russian Export Centre and others.

Deputy Minister of Transport of Perm Krai Alexander Polygalov, General Director of Perm Krai Development Corporation Alexei Burakov and General Director of Perm Shipyard LLC held a series of productive meetings. As a result, the United Shipbuilding Corporation confirmed its interest in organising the franchise assembly process of Sotalia and other vessels on the basis of Perm Shipyard. The meeting with Ak Bars SC included discussion of the possibility to place orders for the construction of ships and manufacture of components at Perm enterprises, including Perm Shipyard. A meeting was also held with members of the Board of Bank ROSSIYA.

The Chairman of City Council of the city of Nizhny Novgorod, the Chairman of the Board of Directors of JSC Joint Stock Company Arzamas Instrument Making Plant named after P.I. Plandin Oleg Lavrichev together with the Minister of Industry and Trade of Nizhny Novgorod Region Maxim Cherkasov held a working meeting at the stand of Morsvyazyavtomatika concerning localisation of production of electric propulsion vessels which are potentially in demand for transportations of tourists and passengers along the Nizhny Novgorod river routes.

Youth Day at NEVA

In cooperation with the Maritime Youth Council of St. Petersburg, a **Youth Day has been organised for the first time** on September 24. The opening ceremony was attended by Director

General of Neva International LLC Alexander Ulyanov, Chairman of the Board of the regional youth public organisation Maritime Youth Council of St. Petersburg Tatyana Pustynnikova, Advisor to the Chairman of the Committee on Youth Policy and Interaction with Public Organisations of St. Petersburg Oleg Polishchuk and President of the Scientific and Technical Society of Shipbuilders named after academician A.N. Krylov, Advisor to the President of United Shipbuilding Corporation Vladimir Nikitin.

Scientific and Technical Society of Shipbuilders named after academician A.N. Krylov, in cooperation with St. Petersburg State Marine Technical University, held an inter-industry event “Innovations by young shipbuilders”. Winners and laureates of the All-Russian Scientific-Technical Industry Competition “Young Shipbuilder – Shipbuilder of the Year” and winners of RosNIO “Hope of Russia” youth award in science and engineering have presented their projects.

That same day, an award ceremony was held for the winners of the 10th jubilee creative contest “21st Century Maritime Lawyer” for students, postgraduates and young scientists. There was also an award ceremony for winners of the Marine Professions quiz for senior students of St. Petersburg schools. The unique project provided everyone with an opportunity to plunge into shipbuilding topics and learn something new and interesting for themselves. Besides, the Youth Day participants were introduced to the NEVA exposition through a series of tours across the exhibition pavilions.

Additional Options for Comfortable Work and Business Communication.

Special formats of business communication were proposed to increase the efficiency of participation and working comfort at the exhibition. An official zone was arranged for signing agreements; meeting rooms, lounge zones and VIP zones were available in the Arctic business hall for meetings. Specific categories of participants were offered informal networking activities. **A business lunch was organised for diplomats**, with participation of consuls of Germany, Norway, Turkey, Finland, Spain, Portugal, and Poland, as well as the representative of the British Embassy Trade Department. The NEVA organisers shared the updates of ongoing projects for promoting international trade with their foreign colleagues. For VIP delegates, a **gala dinner** “On the same wavelength with the best ones!” was held with the original programme featuring performances of soloists of the Mariinsky Theatre and the show of illusionists, as well as a **cocktail-cruise along the Neva River**.

A series of significant events took place at the stands of participants and partners.

At DAMEN company stand, there was a formal ceremony for laying down of a series of five ASD tugs 3010 Ice by DAMEN Shipyards Group for FSUE Atomflot. The ceremony took place online: ice class Arc4 tugs laying-down process was broadcast from DAMEN site to DAMEN stand at the exhibition.

On September 22, the Korabel.ru stand hosted the awards ceremony for the winners of the “My Shipyard!” contest for the most talented and creative welders at shipbuilding and ship repair enterprises from all across Russia. The winner, Vympel Shipyard, has been granted a new welding machine.

Awards

Following the results of the exhibition, the organisers of NEVA presented a number of awards. Bank ROSSIYA obtained the Honorary diploma for the best stand. The bank’s stand was designed in the style of the Scarlet Sails - a symbol of St. Petersburg - and was admired by many exhibitors and guests. Dmitry Stoyanov, Deputy General Director – Head of Centre for Marine Equipment Import-Substitution in CSRI Kurs JSC, was awarded for his contribution in the

development of NEVA-2021 Conference. The award for “Best Country Representation” was presented to the head of the department of the Turkish Ship, Yacht & Marine Services Exporters Association Anyl Janer Topaloglu. The “Innovative Product of NEVA 2021” award went to Ak Bars SC and was received by the Deputy General Director of Ak Bars Shipbuilding Corporation JSC Alexander Emelyushin.

The events of the exhibition were covered by **200 journalists** representing 58 media outlets, including 7 television companies, 6 news agencies, 11 print and 32 industry publications, 30 of them being official media partners of the event. The general media partner was Korabel.ru, the general industry media partner – IAA PortNews.