<u>Kick-off of the New Horizon Europe Rresearch Project HORSE with the</u> Participation of the Department of Ports Management and Shipping, NKUA



Holistic, omnipresent, resilient services for future 6G wireless and computing ecosystems

The EU-funded HORSE (Holistic, Omnipresent, Resilient Services for future 6G Wireless and Computing Ecosystems) research project with a total budget of **6.5 million euros** and a three-year duration, got started on 1/1/2023.

The National and Kapodistrian University of Athens is participating in the consortium through the **Department of Ports Management and Shipping**, with the research team led **by Associate Professor Panagiotis Trakadas**.

The research team is complemented with the participation of Faculty Members from the Department of Digital Industry Technologies as well as the General Department.

The main goal of HORSE research project is based on 6G technologies and targets to develop the technological solutions that will allow the achievement of the milestones set for the sixth generation mobile networks (6G), as well as the evolution of the corresponding systems, for an intelligent and secure provision of network services. Creating a common and standardized architectural frame for the aforementioned technologies is a critical research challenge.

In this context, the successful implementation of the HORSE project, integrating the cooperation of fourteen (14) European partners (research institutions, universities, companies), is led on an opening of new opportunities for the development of innovative network management and security strategies, based on new technologies and architectures, such as artificial intelligence, encryption methods but also new signaling methods.

The research team of the Ports Management and Shipping Department, in particular, has undertaken the responsibility to investigate and evaluate the benefits that will arise from the integration of 6G mobile networks in ports and maritime business.

The NKUA research team is to actively contribute to the implementation of the solutions proposed by the project, offering, at the same time, opportunities to support doctoral positions to interested young researchers.

At the final stage of the project, HORSE will offer a new human-centric, open-source, green, sustainable provisioning and secure 6G network, which can inclusively but seamlessly combine developments in several fields to meet qualifications that cannot be met by the current fifth generation networks (5G).