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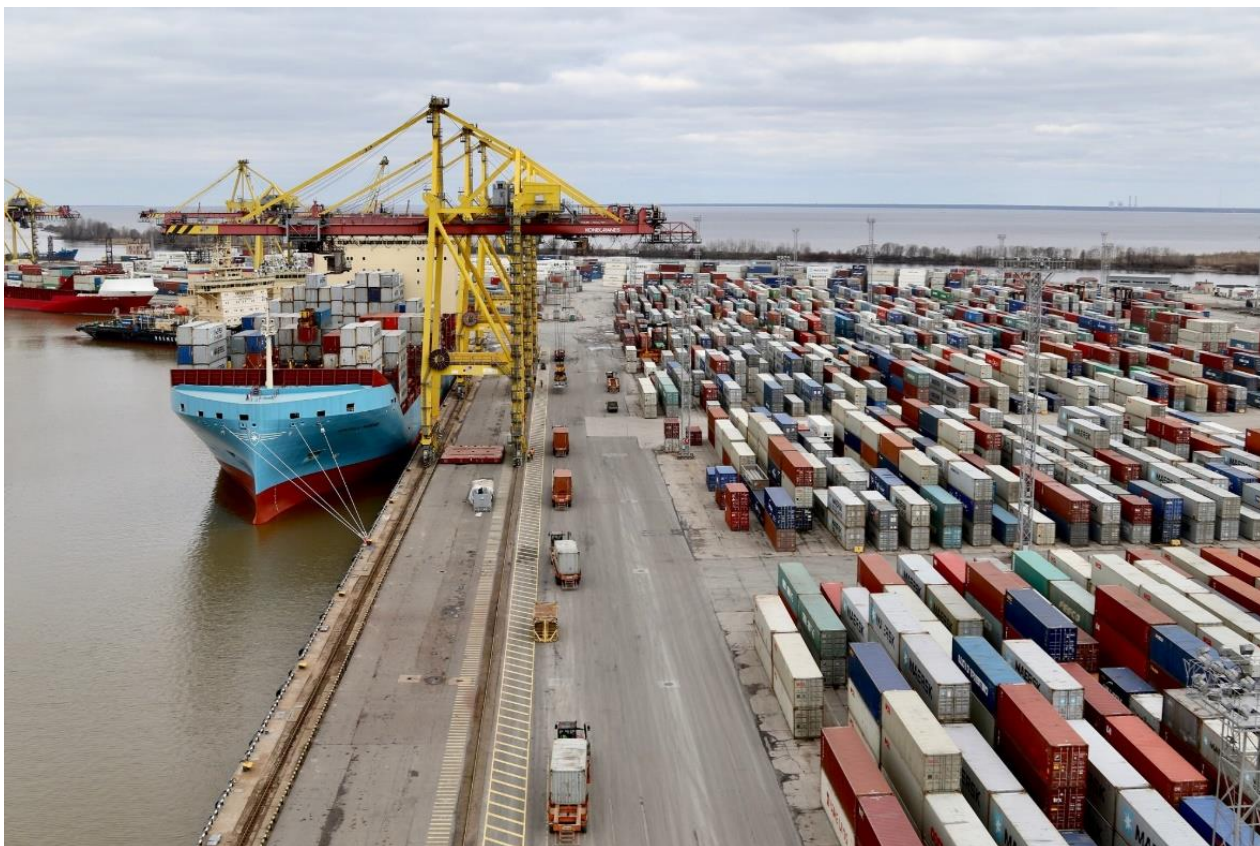
ICMSIT

Metrological Support
of Innovative Technologies

II International Conference on Metrological Support of Innovative Technologies (ICMSIT-II-2021)

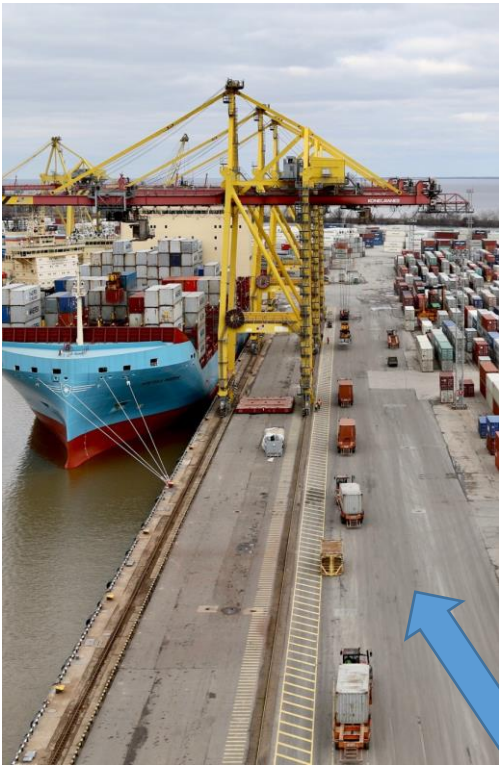
2.1 Cybernetics, Economics and Organization of Metrological Support

RESEARCH OF THE QUALITY OF PORT SERVICES AS A FACTOR OF THE COMPETITIVENESS OF SEA PORTS



N N Maiorov , N V Starceva

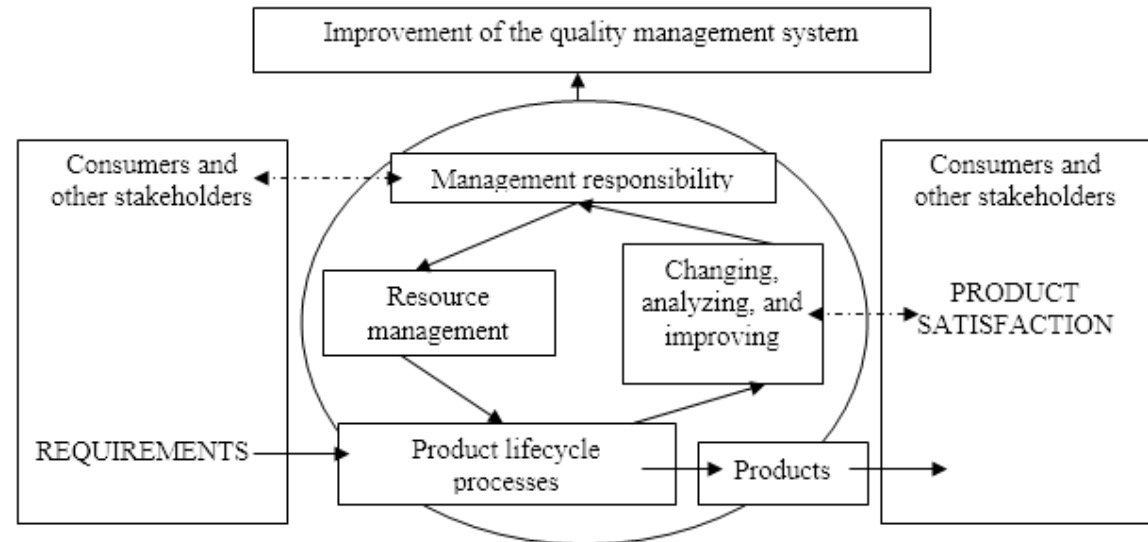
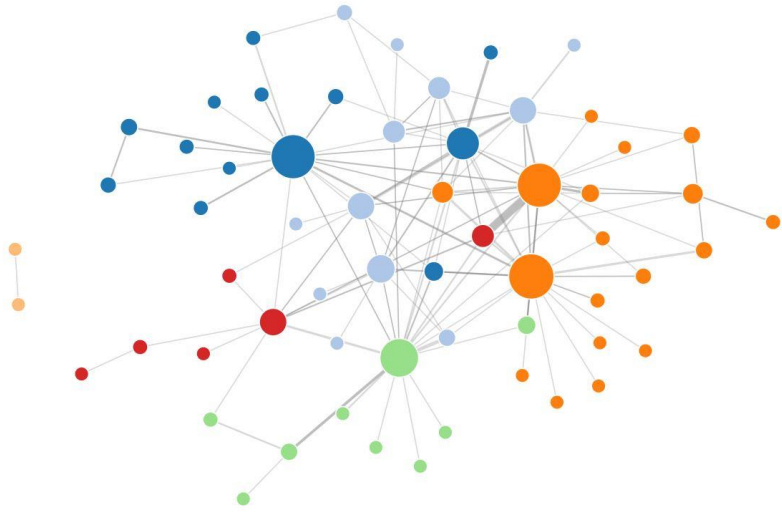
Saint-Petersburg State University of Aerospace
Instrumentation, Bolshaya Morskaia str. 67, Saint-
Petersburg, 190000, RUSSIA

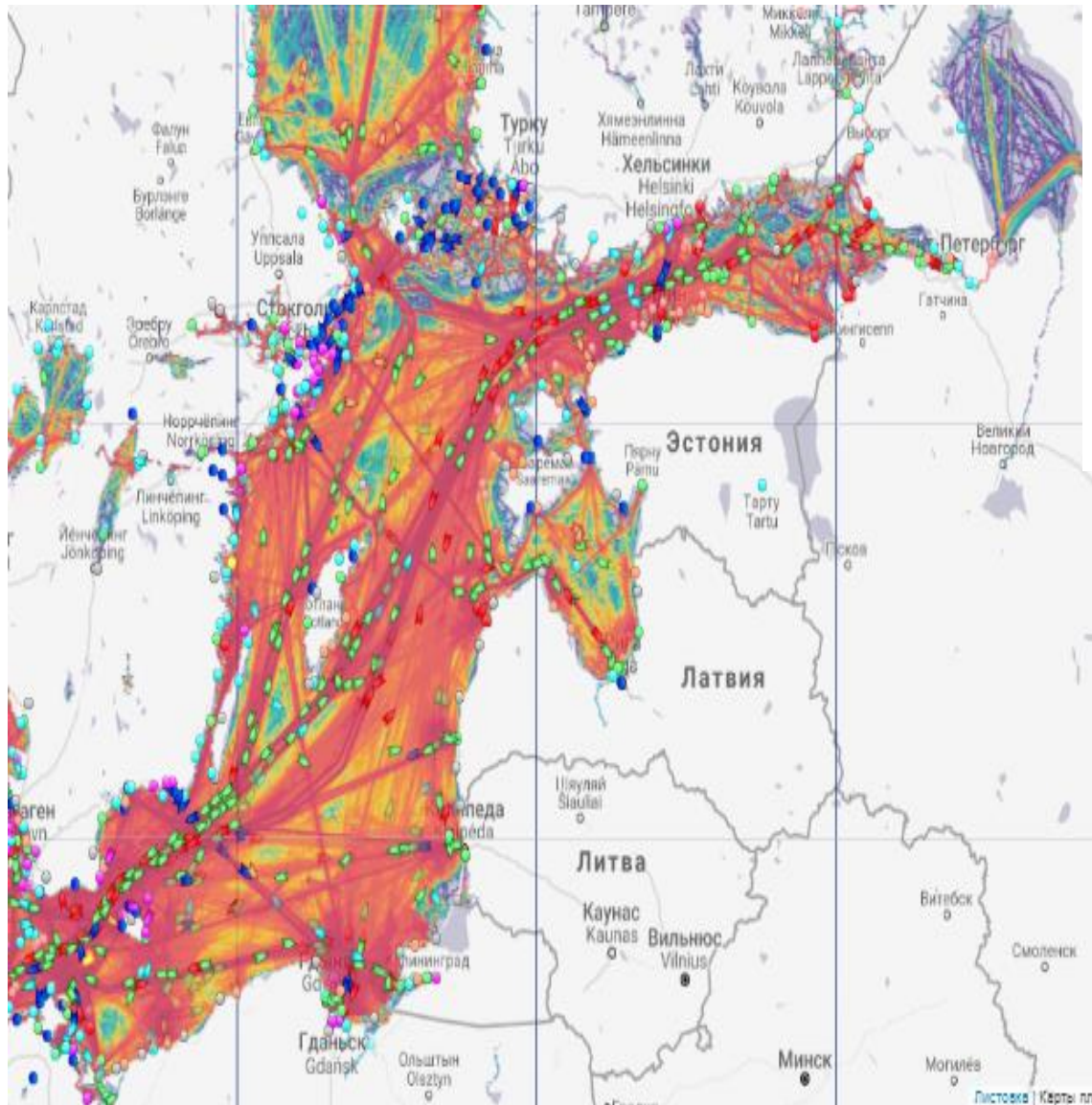


Currently, the general concept of quality according to the national standard ISO 9000 is defined as the degree of compliance of the set of inherent characteristics of the object to the requirements.

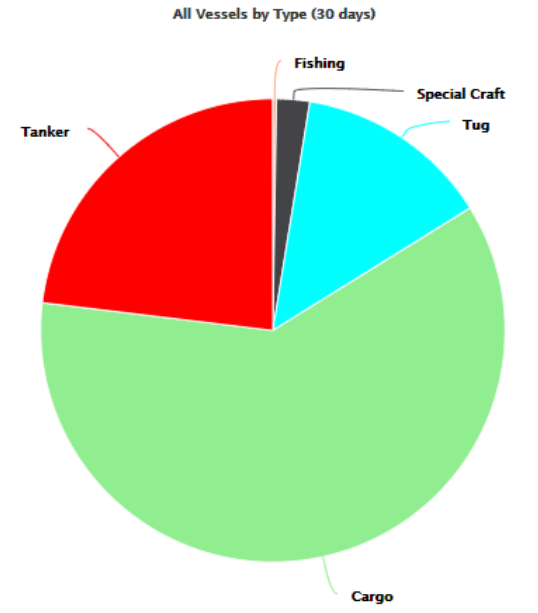
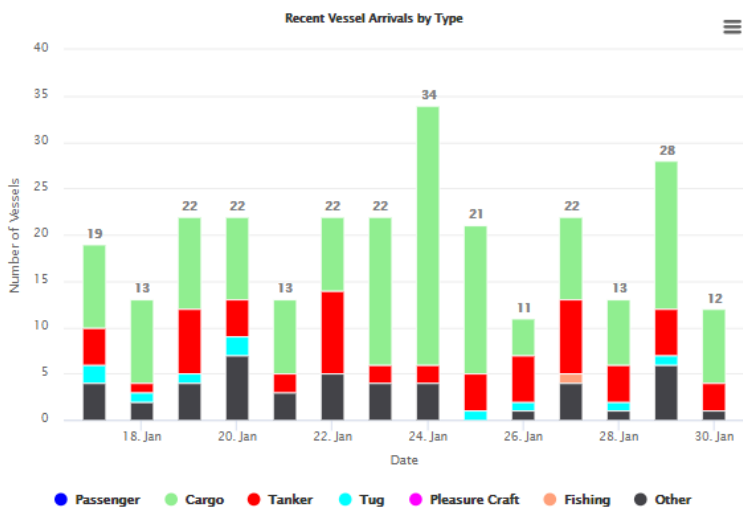
The quality of products is evaluated on the basis of quantitative measurement of its defining indicators, which are currently classified into such main groups:

- indicators of purpose (useful effect from the use of products for their intended purpose, the definition of the scope of application);
- indicators of reliability (reliability, maintainability, repairability, durability);
- technological effectiveness (production efficiency);
- ergonomic parameters (complex of hygienic, anthropometric, physiological parameters of a person);
- aesthetic indicators;
- safety performance (for the buyer and operating personnel during installation, service, repair, storage, transportation, consumption of products);
- indicators of standardization and unification (the saturation of products with standard, standardized and original components);
- environmental performance (for the environment);
- transportability indicators (suitability of products for transportation);
- patent-legal indicators (patent purity of products).

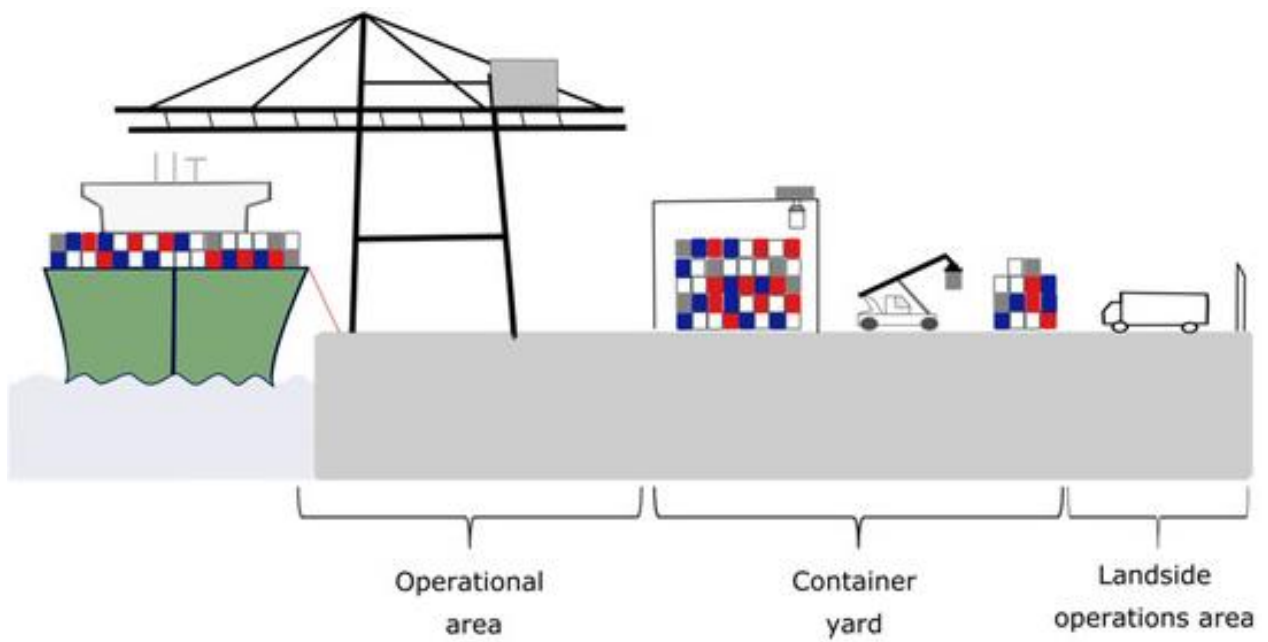




Intensity of cargo ships, ferries in the Baltic Sea

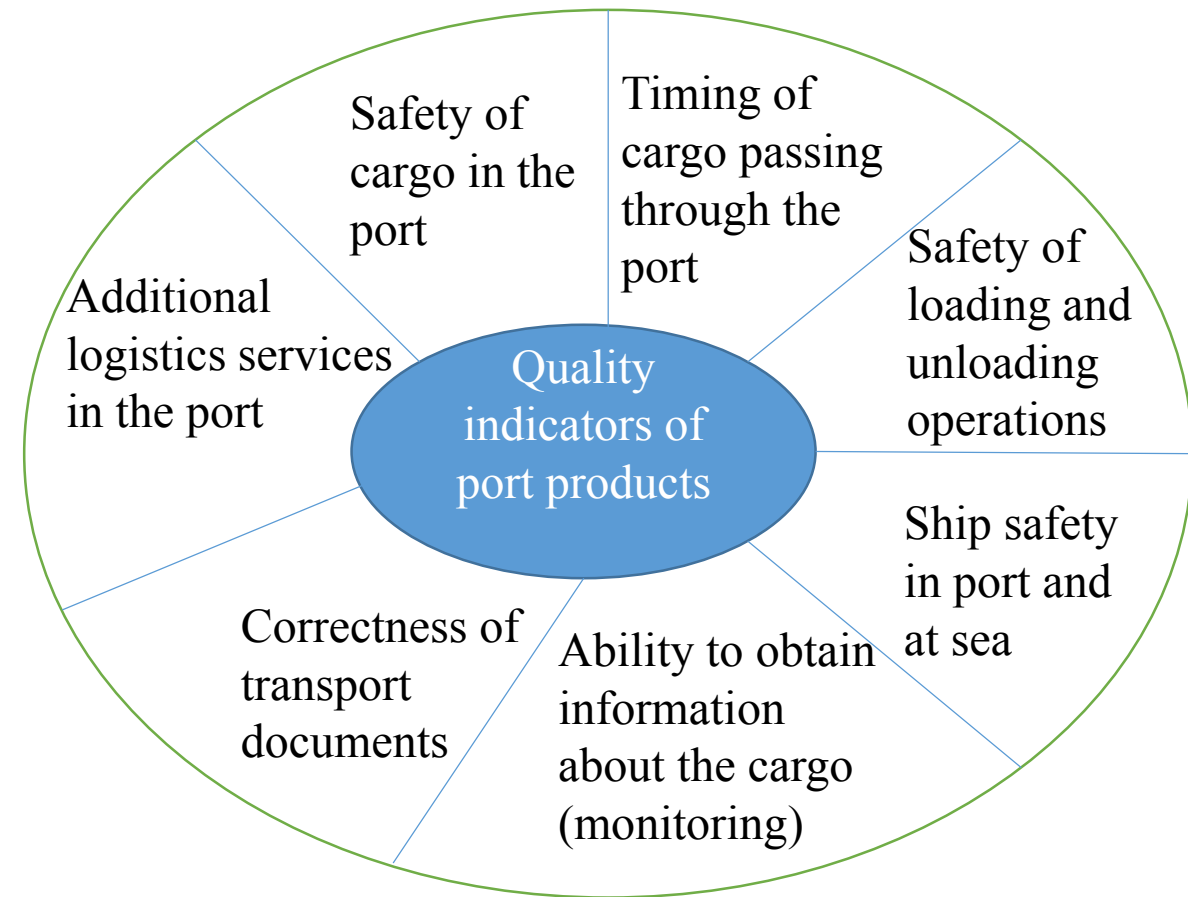


Analytical data on St. Petersburg port cargo turnover for January 2021



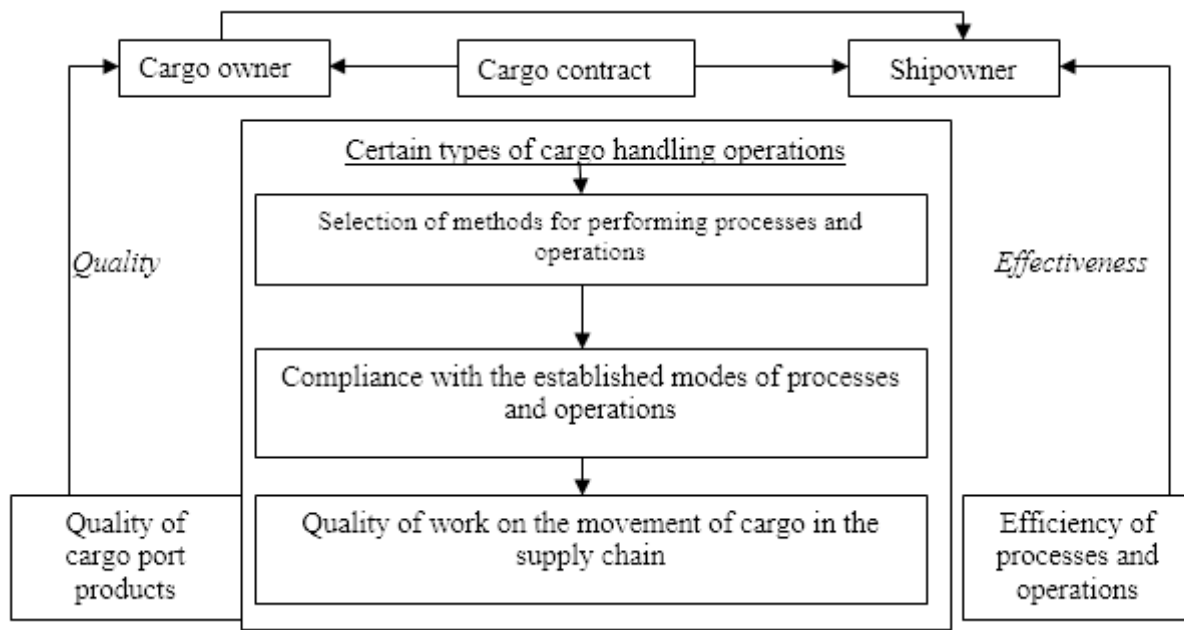
The seaport is a fairly large transport hub, linking different types of transport, such as sea, river, road, rail and others. As a result of historical development, the purpose of seaports has changed from simply providing the interaction of these modes of transport to creating a full-fledged logistics service. Such transition from transport functions to logistic ones also determines the change in the general direction of its functional purpose. This predetermines the change of its main objectives to the objectives of logistics:

- optimal use of throughput capacity;
- high flexibility in production activities;
- rapid response to customer requirements;
- readiness to provide services;
- reliability in the provision of services;
- reduction of time for performance of services;
- minimization of costs;
- timely and continuous information service to consumers,
- consideration of consumers' needs and requests.

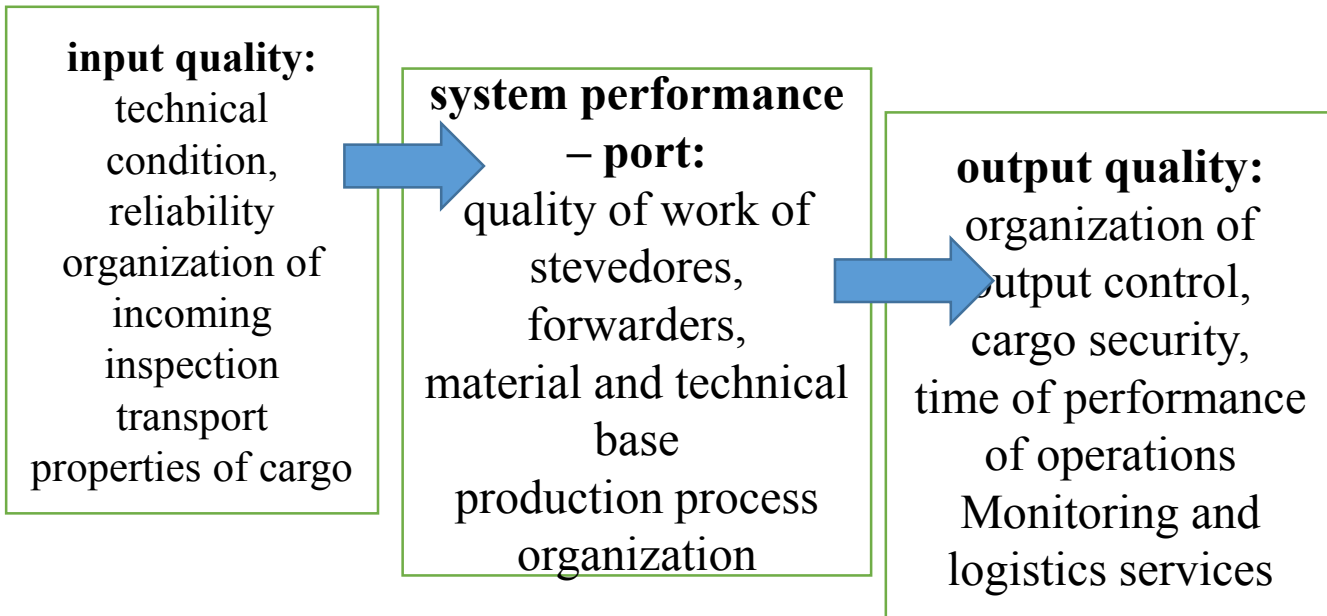


Quality indicators of port products

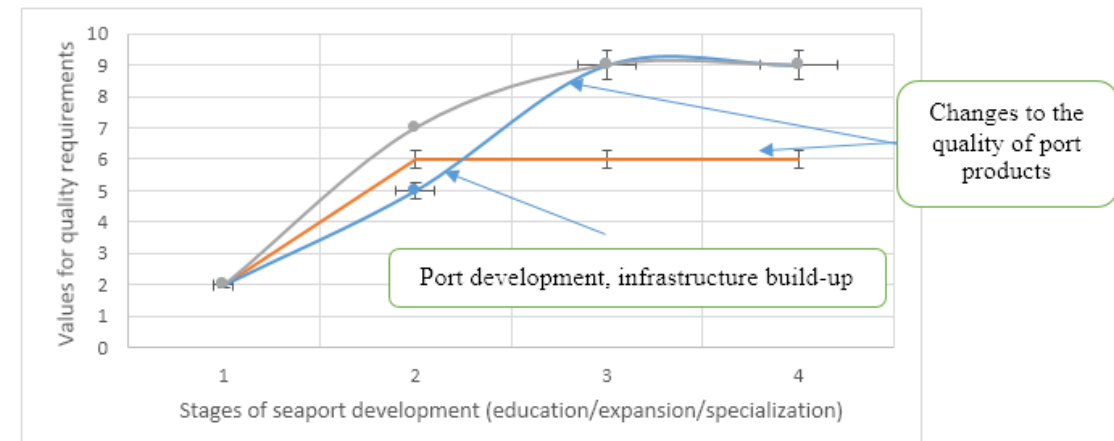
The quality of port products as a whole should be considered as a system consisting of input quality, port system performance quality and output quality.

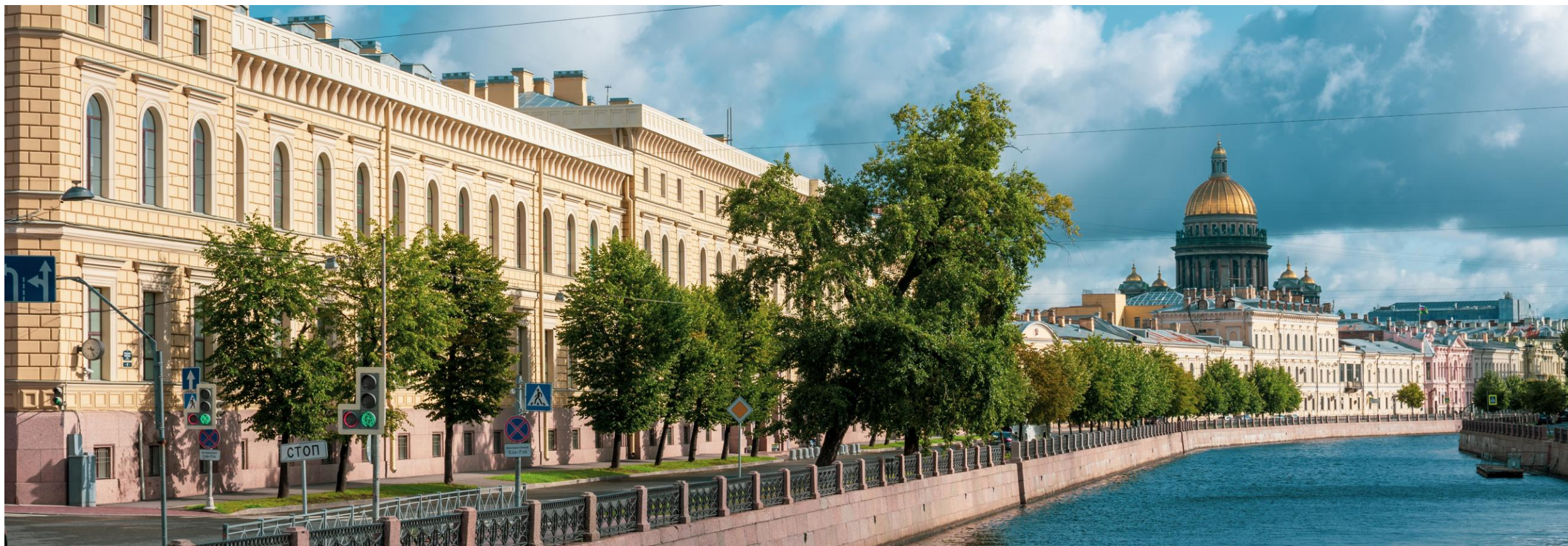


Scheme of the formation of product quality and efficiency of the seaport



- any seaport in the process of its evolution passes separate stages of development, at which there are different requirements to product quality with reference to cargo types;
- the quality of the seaport products is directly influenced by the state of the port equipment and machinery involved in cargo traffic handling;
- the influence of the external environment changes the requirements for the ports and terminals, while cargo-specific quality assurance remains little changed. With the exception of the short-term phases of commissioning new port areas, when the quality requirements for port products increase;
- the seaport as a complex system has tools and resources that affect cargo handling processes, thus can influence quality and customer satisfaction;
- seaport quality assurance is not understood as a technical function that is implemented by a single unit of an enterprise or organization, but as a systematic, uninterrupted process that penetrates through their entire organizational structure and touches all their functions;





Saint-Petersburg State University of Aerospace Instrumentation

Department of Systems Analysis and Logistics

N N Maierov , N V Starceva

Thank you for your attention!

SUAI, 67, Bolshaya Morskaia str., Saint-Petersburg, 190000, RUSSIA