





**PEST** Analysis is used in strategic management; and is a tool for understanding market growth or decline, business position, potential and direction for operations

# Political Factors

- Russian legislation governing shipping on the NSR and the Russian government future maritime policies in the Arctic
- Future international legislation on ecological/environmental protection and fulfillment of Polar Code requirements
- Russian government's determination for improving NSR's maritime infrastructure
- Political support from other Arctic nations, EU and countries in NE Asia for improved maritime infrastructure along the NSR and on transport regularity and safety
- Political controversy about the interpretation of Article 234 of UNCLOS
- Arctic shelf delimitation – resolution of overlapping claims
- Political impacts of continued sanctions against Russia and response sanctions from Russia effecting shipping and regional development in the Arctic
- Concerns about regional security and stability and means of enhancing national security

# Economic Factors

- Continued development of Arctic resources (oil, gas, minerals, fisheries); Arctic energy and ore mining projects as a prerequisite for future investments in needed maritime transport and logistics infrastructure on the NSR; economic bust to the Arctic communities
- Long-term economic feasibility of NSR transit shipping compared to the SCR; Russian government's tariff policy and tariff fees on the NSR; development of the Eurasian transport network; demand and prices for energy and other communities in NE Asia; cost of bunker fuel
- International cooperation (including public-private partnerships) in financing a new NSR transportation and logistics system; financial support from the Russian government
- Industrialization of Eurasian Arctic (Siberia and Far East)
- Conditions on the international freight market (market cycles/trade trends) and global economic trends; interests from commercial shipping companies to use the NSR; local and regional trade instead of global trade

# Social Factors

- A new NSR shipping and logistics system has the potential of benefitting Arctic communities through increased local and regional development and community infrastructure projects (e.g. housing, schools, hospitals); industrialization
- Population growth and revitalizing Arctic communities and cities; migration to the North instead of from the North
- Promote increased cooperation and ties between NW Europe, Russia and NE Asian countries (China, Japan and South-Korea)
- Life-style changes, human and social development issues in the Arctic; opinions of Arctic residence about Arctic development; concerns and demand of Arctic's indigenous societies
- Environmental and social impacts of climate change in the Arctic (e.g., sea ice reduction; thawing of permafrost)
- Environmental and social impacts due to increased exploitation of natural resources and increased maritime activity in the Arctic
- The role of environmental organizations and the media in shaping the public opinion about natural resource development and commercial shipping in the Arctic

# Technological Factors

- New Arctic transportation and logistics system for reliable and safe cargo transportation; advanced and innovative logistical solutions; deep-water transshipment hubs providing needed port services and storage facilities
- Powerful icebreakers providing navigational support for transiting vessels; multi-purpose oblique icebreaking vessels for SAR, emergency services and oil spill response; innovative icebreaking technologies
- Fleet of new energy efficient high ice-class cargo ships for year-round navigation; advanced and innovative shipbuilding technologies
- Skilled ice pilots/navigators providing navigational support services
- Accurate and real time sea-ice forecasts for ice distribution and thickness; sophisticated and unified Arctic telecommunication networks; satellite coverage
- High-standard navigational charts; development of innovative navigational aids
- Safer and more cost-effective technologies for offshore exploitation of Arctic oil and gas
- Competing technologies – deepening and widening of the Suez and Panama Canals; railways and China's Silk Road Initiative



# Thank You!

