«Comparative analysis of conditions for operating Ro-Pax ferry service in the Black sea and the Baltic Sea»

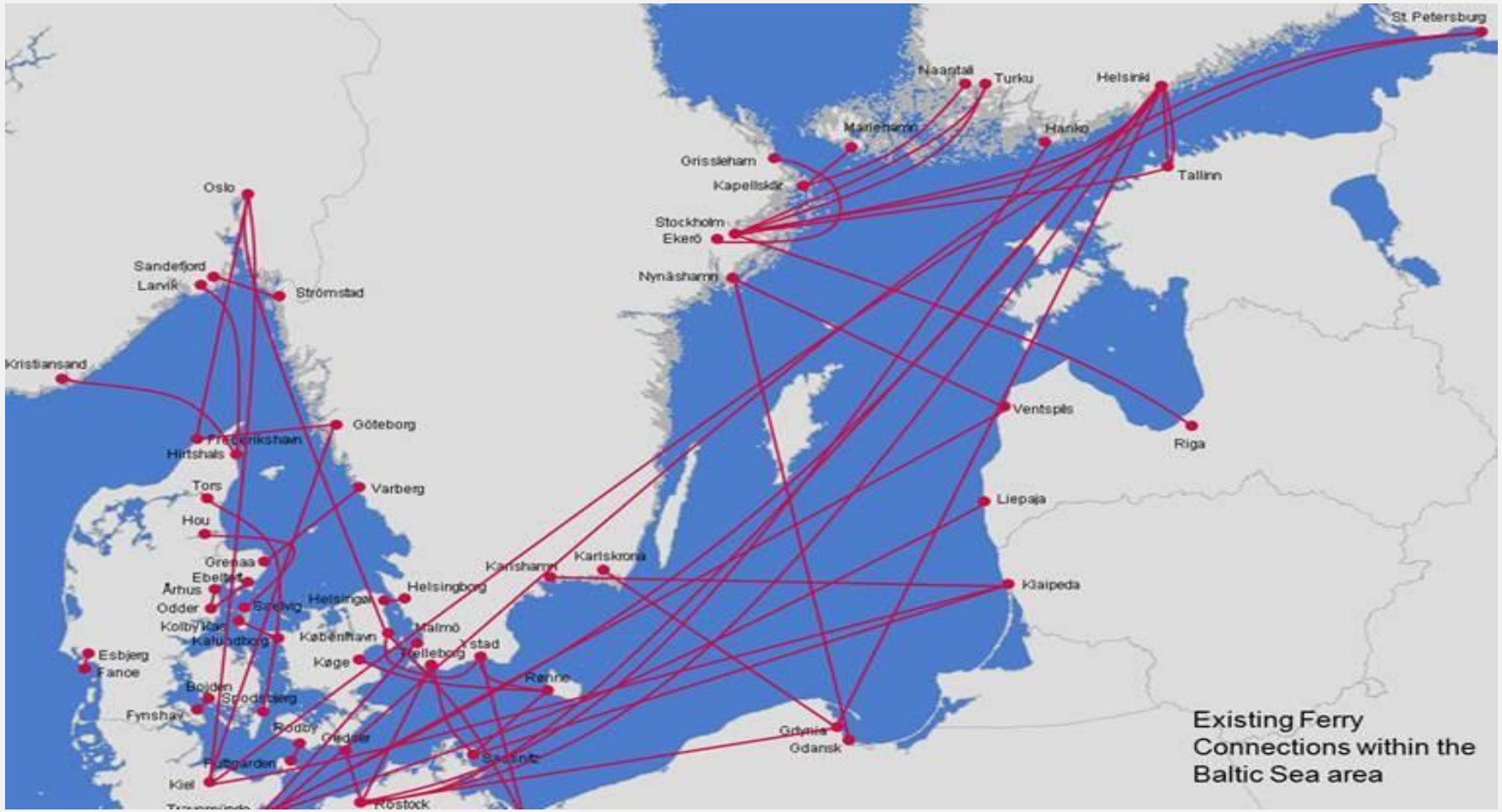
Introduction

Ukrferry shipping company has been developing international ferry services including passenger ferry services in the Black Sea area for nearly 20 years. Attempts were made by the Company to develop Cruise Ferry shipping in the Black Sea.

You might be interested to learn that only 1 out every 4 cruise vessels that used to call to Istanbul in 2013 would continue with their cruise program into the Black Sea despite all the promising sites the region would offer.

To understand the principal economic grounds underlying the development of regular shipping including passenger and cruise ferry shipping in the Black Sea we’d like to present a short comparative analysis of operating a passenger ferry service in the Black and in one of the most developed areas in terms of cruise and ferry shipping, the Baltic Sea.

It’s known that the Black Sea and the Baltic Sea are the areas with well-developed ferry services which are an important part of regional transport systems.
The Baltic Sea along with North Sea area is considered to be the founder and the world leader in ferry shipping, sort of standard setter in this area.



Ferry services in the Baltic Sea

Ferry services operating in the Baltic Sea

Direction	Operator	Frequency of port calls	Remarks
Finland – Sweden			
1. Turku – Stockholm	Tallink group	2 sailings daily	
2. Turku – Stockholm	Viking Line	2 sailings daily	
3. Helsinki – Stockholm	Tallink group	Daily	
4. Helsinki – Stockholm	Viking Line	Daily	
5. Naantali- Kapellskar	Finnlines	Daily	
6. Vaasa – Umea	RG-Line	6 sailings a week	
Finland – Germany			
7. Helsinki - Rostock	Tallink group	4 sailings a week	
8. Helsinki - Rostock	Superfast Ferries	Daily	
9. Helsinki –Travemunde	Finnlines	Daily	

Ferry services operating in the Baltic Sea

Direction	Operator	Frequency of port calls	Remarks
Finland – Poland – Germany			
10. Helsinki – Gdyna– Rostock	Finnlines	3 sailings a week	
Finland – Estonia			
11. Helsinki – Tallinn	Tallink group	6 sailings daily	
12. Helsinki – Tallinn	Viking Line	2 sailings daily	
Estonia – Sweden			
13. Kapellskar – Paldiski	DFDS	7 sailings a week	trucks, trailers, containers, passengers
14. Tallinn– Stockholm	Tallink group	daily	
Latvia – Sweden			
15. Riga – Stockholm	Tallink group	daily	
16. Nynashamn – Ventspils	Scandlines	6 times a week	
Lithuania – Sweden			
17. Karlshamn – Klaipeda	DFDS	daily	

Ferry services operating in the Baltic Sea

Direction	Operator	Frequency of port calls	Remarks
Sweden – Denmark			
18. Helsingborg – Helsingor	Scandlines	64 sailings a day	
19. Frederikshavn – Gotheburg	Stenaline	8 sailing a day	
20. Grenaa – Varberg	Stenaline	8 sailing a day	
Sweden – Germany			
21. Rodby- Puttgarden	Scandlines	36 sailings a day	
22. Trelleborg –Rostock	TT-line	3 sailings a day	
23. Trelleborg –Sassnitz	Stenaline	1 sailing daily	
24. Malmo - Travemunde	Finnlines	2 sailings daily	
25. Kiel – Gotheborg	Stenaline	3 sailings weekly	
26. Travemunde – Trelleborg	TT-line	3-4 sailings daily	
27. Trelleborg –Rostock	TT-line	3 sailings a day	

Ferry services operating in the Baltic Sea

Direction	Operator	Frequency of port calls	Remarks
Sweden – Poland			
28. Karlskrona– Gdynia	Stenaline	daily	
Sweden – Norway			
29. Sandefjord - Stromstad	Colorline	daily	
Denmark – Norway			
30. Frederikshafen – Oslo	Stenaline	6 sailings weekly	
31. Kristiansand – Hirtshals	Colorline	3 sailings a day	
32. Larvik – Hirtshals	Colorline	14 sailings weekly	
33. Copenhagen – Oslo	DFDS Seaways	daily	cars only
34. Hirtshals– Bergen	Fjord Line	7 sailings weekly	
35. Hirtshals– Kristiansand	Fjord Line	2 sailings daily	

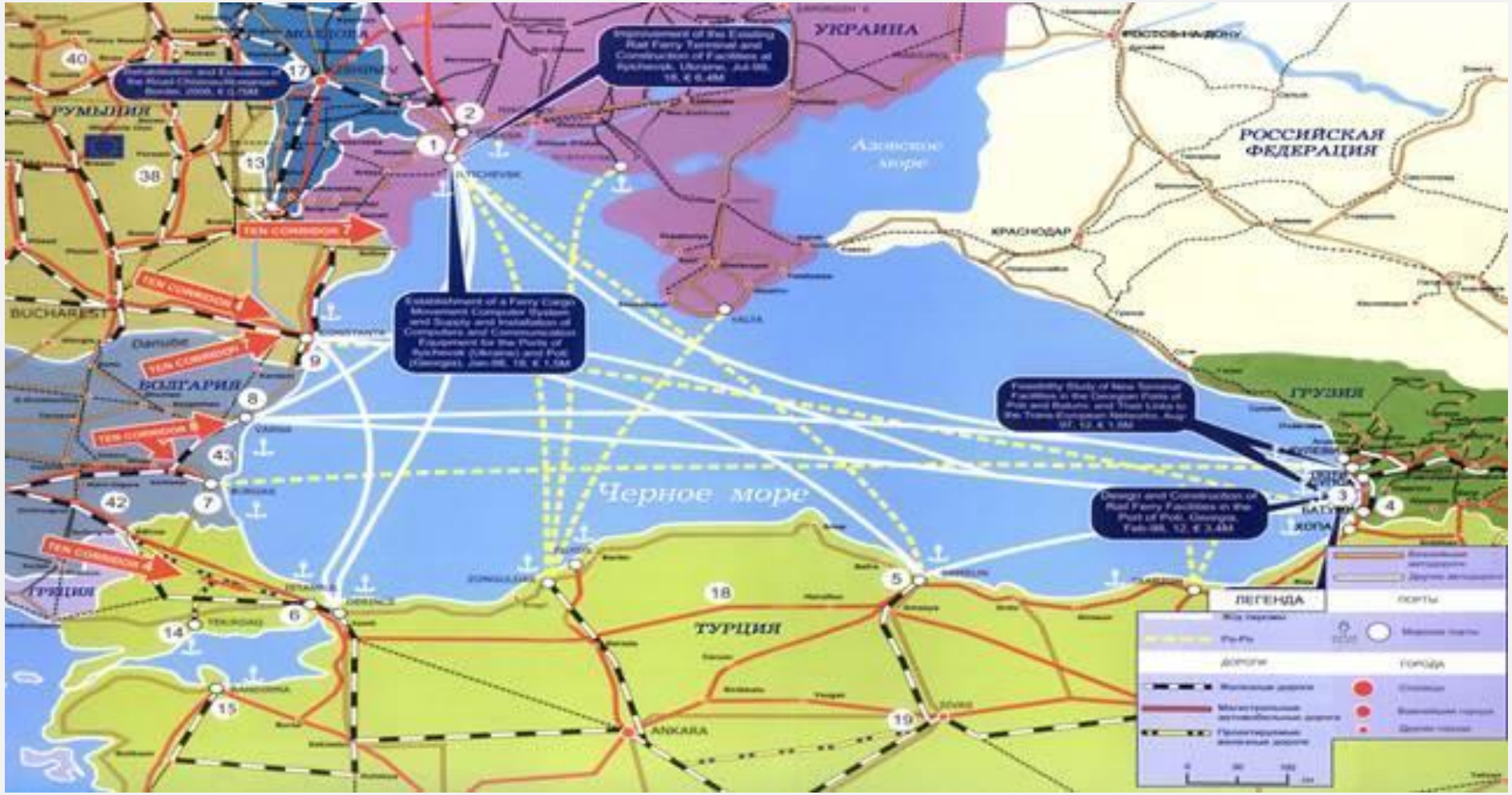
Ferry services operating in the Baltic Sea

Direction	Operator	Frequency of port calls	Remarks
Denmark – Germany			
36. Gedser – Rostock	Scandlines	Up to 11 sailing a day	
Germany – Lithuania			
37. Travemunde- Klaipeda	DFDS	3 sailing per week	
38. Kiel – Klaipeda	DFDS	6 sailings per week	
Germany – Latvia			
39. Travemunde – Ventspils	Stenaline	2 sailings weekly	
40. Travemunde –Liepaja	Stenaline	2 sailings weekly	
Germany – Russia			
41. Lubeck – St. Petersburg	Finnlines	1 sailing weekly	
Germany – Norway			
42. Kiel – Oslo	Colorline	daily	

Ferry services operating in the Baltic Sea

Direction	Operator	Frequency of port calls	Remarks
Russia – Finland			
43. St. Petersburg– Helsinki	St. Peter Line	3-4 sailings weekly	cars only
Russia – Sweden			
44. St. Petersburg – Stockholm	St. Peter Line	1 sailing weekly	cars only
Russia – Estonia			
45. St. Petersburg – Tallinn	St. Peter Line	1-2 sailings weekly	cars only
Lithuania – Denmark			
46. Klaipeda – Kopenhagen– Fredericia	DFDS	3 sailings weekly	trucks, trailers, containers, passengers

At the same time, the Black Sea is considered by many as a prospective region where growing regional cooperation, projected long term economical growth and geographic particulars contribute to beneficial conditions for developing ferry shipping.



Ferry services in the Black Sea

Ferry services operating in the Black Sea

as at 20 March, 2015

Shipping Companyv	Country of registration	Fervry services	Vessels	Cargo carried
1. Ukrferry Shipping Company	Ukraine	•Ilyichevsk (Ukraine) – Varna (Bulgaria) •Ilyichevsk (Uvkraine) – Poti/Batumi (Georgia) •Constanta (Romania) – Batumi (Georgia) •Ilyichevsk (Ukraine) – Haydarpasa (Turkey)	“Geroi Shipki”, “Geroi Plevny”, “Greifswald”, “Vilnius Seaways”	•cars •buses •trucks •rail cars; •containers •ro-ro units; •rassengers
2. Cenk Shipping	Turkey	•Zonguldak (Turkey) – Ilyichevsk (Ukraine) •Zonguldak – Sevastopol/Evpatoria	“Cenk A” “Cenk Y” “Rainbow”	•Trailers; •Ro-Ro cargo; •cars
3. Black Sea Ferry Investment	Turkey/Russia	•Kavkaz (Russia) – Poti (Georgia);	“Ulfat”	•Railway cars;
4. Anship Ltd	Russia	•Kavkaz (Russia) – Krim •Kavkaz (Russia) – Varna (Bulgaria)v	“Annenkov”, “Petrovsk”, “Avangard” “Slavyanin”	•railway cargo •trucks •cars; •passengers
5. Kerch Ferry Crossing	Russia	•Port Krim – Port Kavkaz (Russia)	Kerchenskiy1, Kerchenskiy2, “Yeysk”, “Ionas”, “Olympiada”, “Glukofilous III”, “Krim”	•railcars; •trucks; •cars; •passengers

Ferry services operating in the Black Sea

as at 20 March, 2015

6 Navibulgarv	Bulgaria	•Varna (Bulgaria) – Ilyichevsk (Ukraine) – Poti/Batumi (Georgia) • Varna (Bulgaria) – Poti/Batumi (Ukraine)	“Geroite na Odessa”, “Geroite na Sevastopol”,	•railcars; •trucks; •cars;
7.Stena – Sea Lines	Finland-Sweden	Ilyichevsk (Ukraine) – Haydarpasa (Turkey)	“Sea Partner”	•trucks
8 PBM Ship management	Bulgaria	Burgas (Bulgaria) – Poti (Georgia)	“Drujba”	•trucks
9 *Russian interests*	Russia	Novorossiysk (Russia) – Kerch, Novorossiysk–Sevastopol Novorossiysk – Feodosia	“Novorossiysk” “Sevastopol”	•trucks

Comparative information on the development of ferry services in the Black Sea and the Baltic Sea

	Baltic Sea	Black Sea
Total number of international ferry services (excluding coastal shipping)	46	9
including: -Rail ferry services : -Passenger ferry services: -cruise services:	4 43 30	5 8 0
Number of ports with regular international ferry connections	42	17
Number of ferries with the largest ferry operator	19	4
Booking availability via Internet	All operators	Only 4 out of 9
Published fares	All operators	Only 4 out of 9
Published ferry service timetables	All operators	Only 4 out of 9

Classification of ferry lines

This presentation aims to compare **similar ferry services in the Baltic and the Black Sea** area operating in the sector of rail/car ferry services.
In order to be correct, it must be understood that the widely used terms “ferry services”, “ferry lines”, “ferry routes” should be clarified and broken down into particular classes.

Roughly, all ferry services and ferry vessels employed thereunder can be classified as follows:

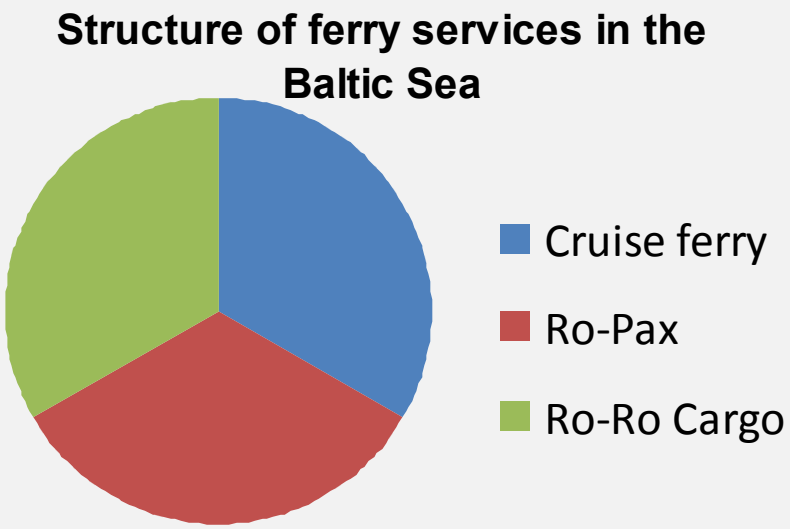
Marine ferry services for shipping Ro-Ro cargo / the number of accompanying drivers and passengers on board not exceeding 12 persons. (**RO-RO Cargo Ferry services**)
Marine ferry services for shipping Ro-Ro cargo together with typically up to 200-400 accompanying drivers and passengers (**RO-PAX Ferry services**)
Marine ferry services for shipping Ro-Ro cargo together with more than 200 accompanying drivers and passengers, using ferry vessels offering well-developed entertainment and shopping facilities and infrastructure similar to that of Cruise vessels (**Cruise Ferry services**)

Classification of ferry lines

Besides, ferry services can be classified depending on distance between ports of call as follows:

Short routes - up to 70 nautical miles, usually serviced by ferries without cabins with sleeping facilities (Day Ferry)
Medium routes- between 70 and 150 nautical miles (Day/Night ferry)
Long distance routes – more than 150 nautical miles (Overnight crossing)

Structure of ferry services in the Baltic Sea and the Black Sea



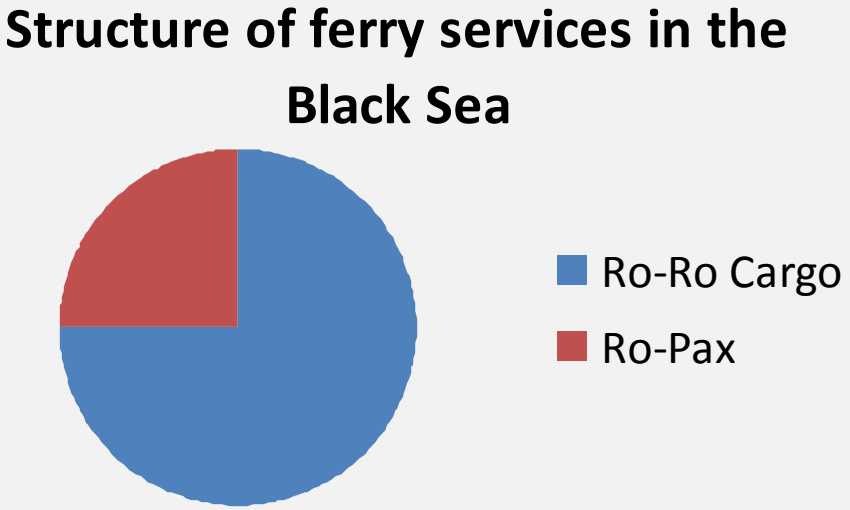
Structure of ferry services in the Baltic area shows that all of the above classes are present there with no prevalence of any particular class of ferry service.

All classes of ferry services develop evenly across the Baltic region.

At the same time, only RO-RO Cargo and RO-PAX Ferry services survived to this day in the Black Sea.

All the attempts in the past to develop **Cruise Ferry Concept** in the Black Sea failed.

Another peculiarity of Black Sea ferry services is the prevalence of medium range and particularly long range routes due to geographic peculiarities of the region.



How to compare ferry services correctly?
Is it correct to compare Tallinn – Helsinki and Ilyichevsk – Poti ferry services?

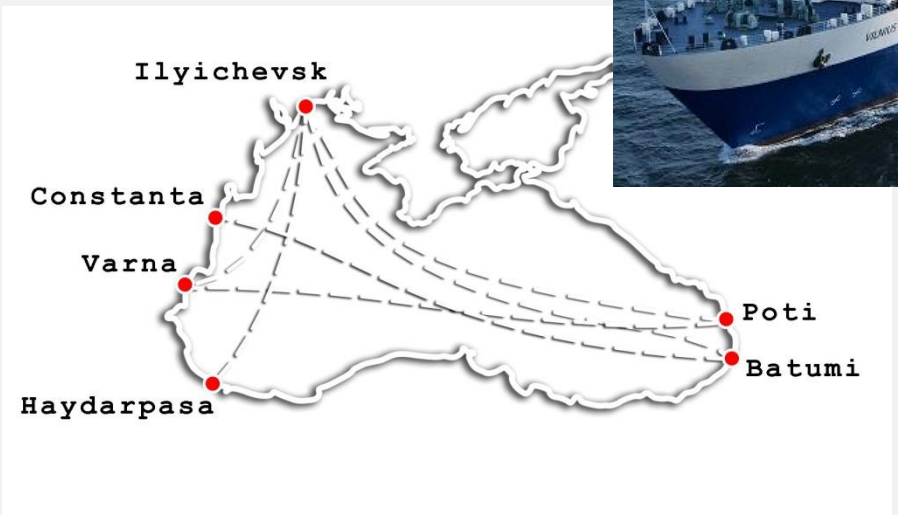
The issue of proper classification is very important and it's a frequent mistake to compare ferry services of quite different classes leading to erroneous conclusions. For example, we have been asked why a ferry ticket to a brand new luxury ferry belonging to TALLINK operator and operating on Tallinn – Helsinki route costs less than a ticket to a moderate Ro-Pax ferry running between Ukraine and Georgia.

At that, the journalist representing one of the transport media resources had no idea of the absolutely different distances of these ferry services, types and dimensions of the ferries employed on these routes and the principal difference in the conditions of functioning of these ferry routes.

Ilyichevsk – Poti/Batumi (annual passenger traffic – 13 000) Length between ports - 563 miles Long distance Ro-Pax Ferry service (overnight crossing)
Tallinn – Helsinki (annual passenger traffic – 7 500 000) Length between ports – 50 miles Short cruise ferry service (Cruise Ferry – Day Route)

Comparing operation of m/v “Vilnuis Seaways” on similar ferry routes in the Black Sea and the Baltic Sea.

In order the prevent the above mentioned mistake, only comparable values shall be considered in this presentation. **Ilyichevsk (Ukraine) – Poti/Batumi (Georgia)** rail/car ferry service in the Black Sea and **Sassnitz (Germany) – Ust Luga (Russia)** ferry service, both classified as **long distance Ro-Pax ferry routes**, shall be considered for the purposes of this short analysis. To make the analysis even more correct, we’ll use the same rail/car ferry “Vilnius Seaways” that used to be operating in the Baltic and now running in the Black Sea.



Comparing port charges for m/v “Vilnius Seaways” in the Black Sea and the Baltic Sea

As you might be aware, one of the main factors affecting operating expenses of any vessel including ferries is port charges.

Port charges per port levied from m/v Vilnius Seaways carrying railcars and passengers on a basis of 40 port calls per annum

Baltic Sea	Black Sea
Sassnitz (Germany) - **USD 1 235**	Ilyichevsk (Ukraine) - **USD 15 000**
Klaipeda (Lithuania) - **USD 3 250**	Poti (Georgia) - **USD 27 000**
Kiel (Germany) - **USD 3 800**	Batumi (Georgia) - **USD 20 000**
Ust-Luga (Russia) - **USD 6500**	Derince (Turkey) - **USD 16 000**
Average port charges for a single port call in the Baltic Sea **USD 3 697**	Average port charges for a single port call in the Black Sea **USD 19500**

Varying policy for charging ferry shipping with port dues in the Baltic and the Black Sea

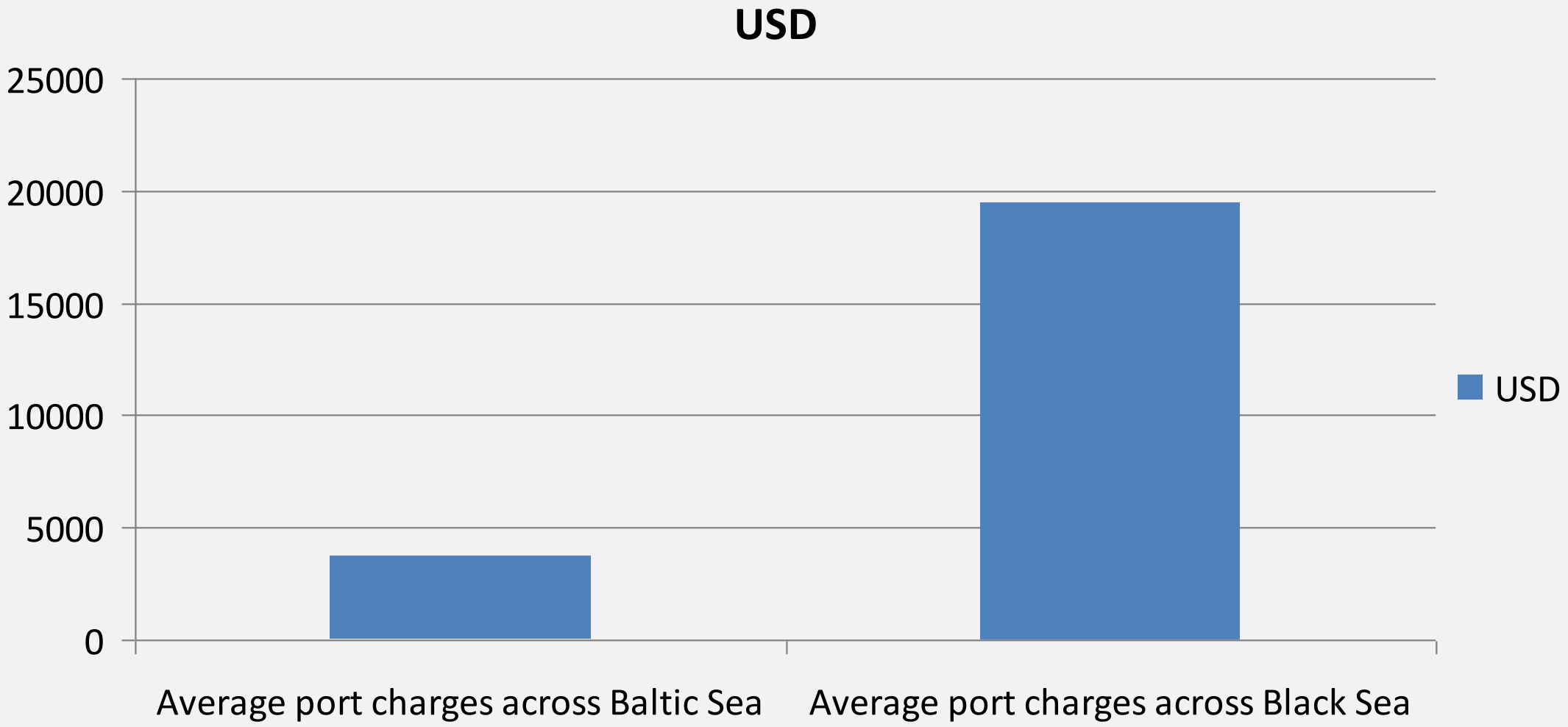
There is a very important difference between the state tariff policy of collecting port dues from line shipping including ferry shipping in the Baltic and the Black Seas. **While the level of port dues in the majority of Black Sea ports is not dependant or little dependant on the number of calls, nearly all ports in the Baltic area,** perhaps with the only exception of Russian ports, **will apply progressive discounting system for port dues charged depending on the number of port calls.**

This system allows ferry operators for a long term to make port calls with little cargo on board building up the new service. As you know, ferry is normally a vessel with large dimensions and tonnage, so the level of port charges plays a very significant role in her economics.

This however doesn't mean that the Baltic ports would gain less proceeds, rather the contrary is true as in addition to port dues, **a cargo due is levied from cargo units actually carried**. This approach is pretty logical and flexible- you can use a large vessel to call frequently at a port paying low port charges but getting an opportunity to develop the cargoflow and paying cargo charges from the cargo on board, that is from the cargoflow.

To sum up, Baltic EC-member states adhere to cooperation with ferry services to mutually develop cargoflow aiming to gain main proceeds from the cargoflow rather than the number of port calls with no consideration of cargo on board.

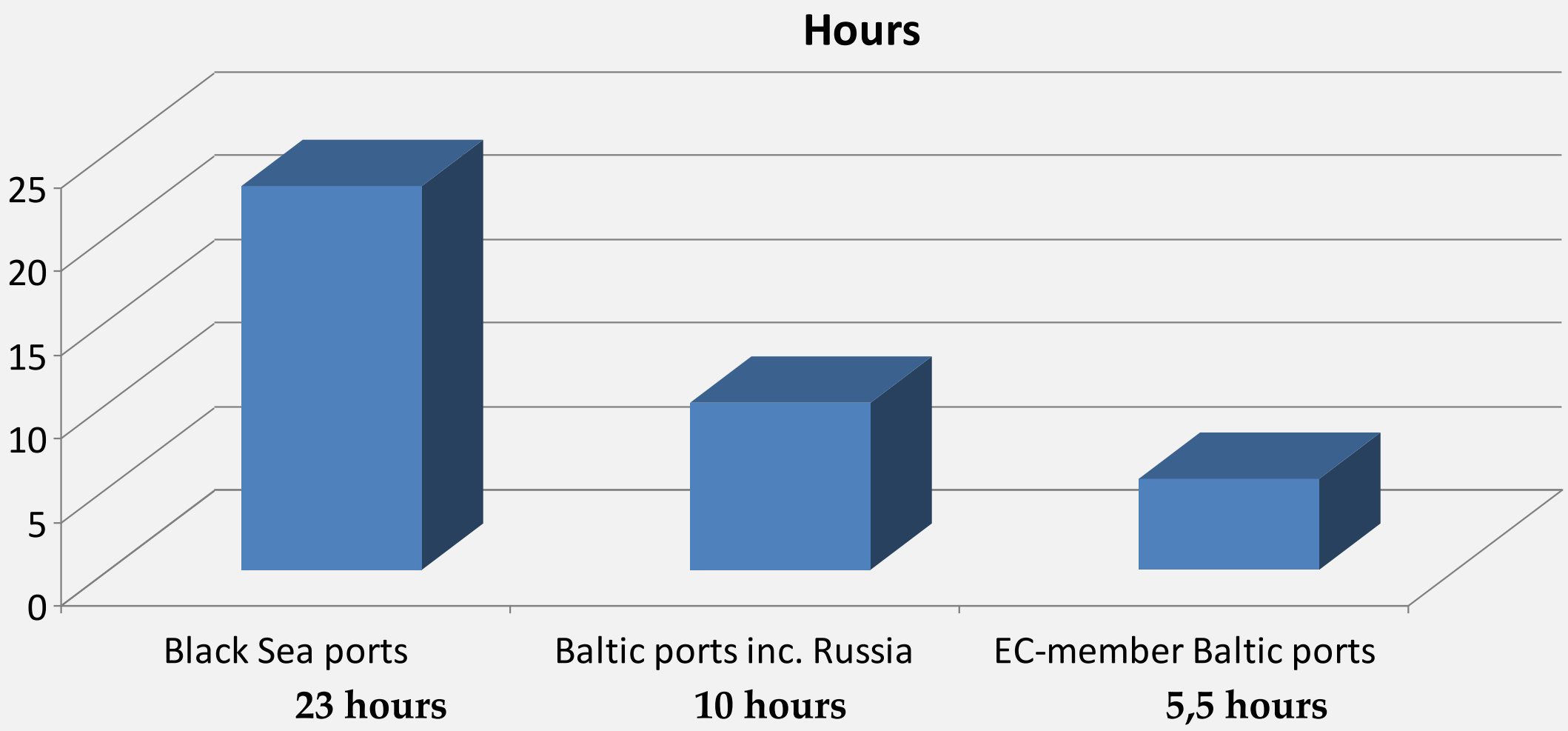
Average port charges for m/v “Vilnius Seaways” in the Black Sea ports are 5,3 times higher than those in the Baltic ports.



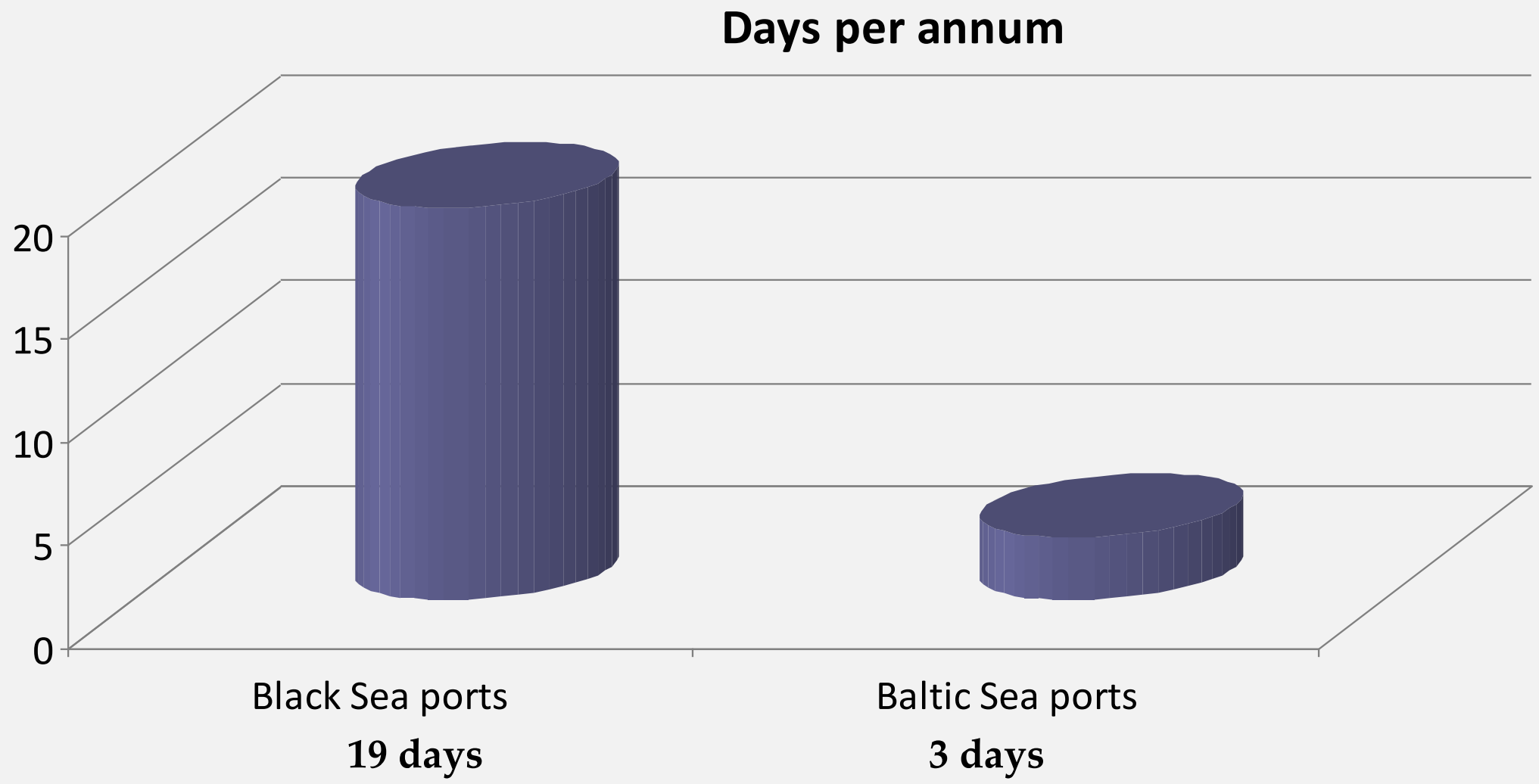
3 697 USD

19 500 USD

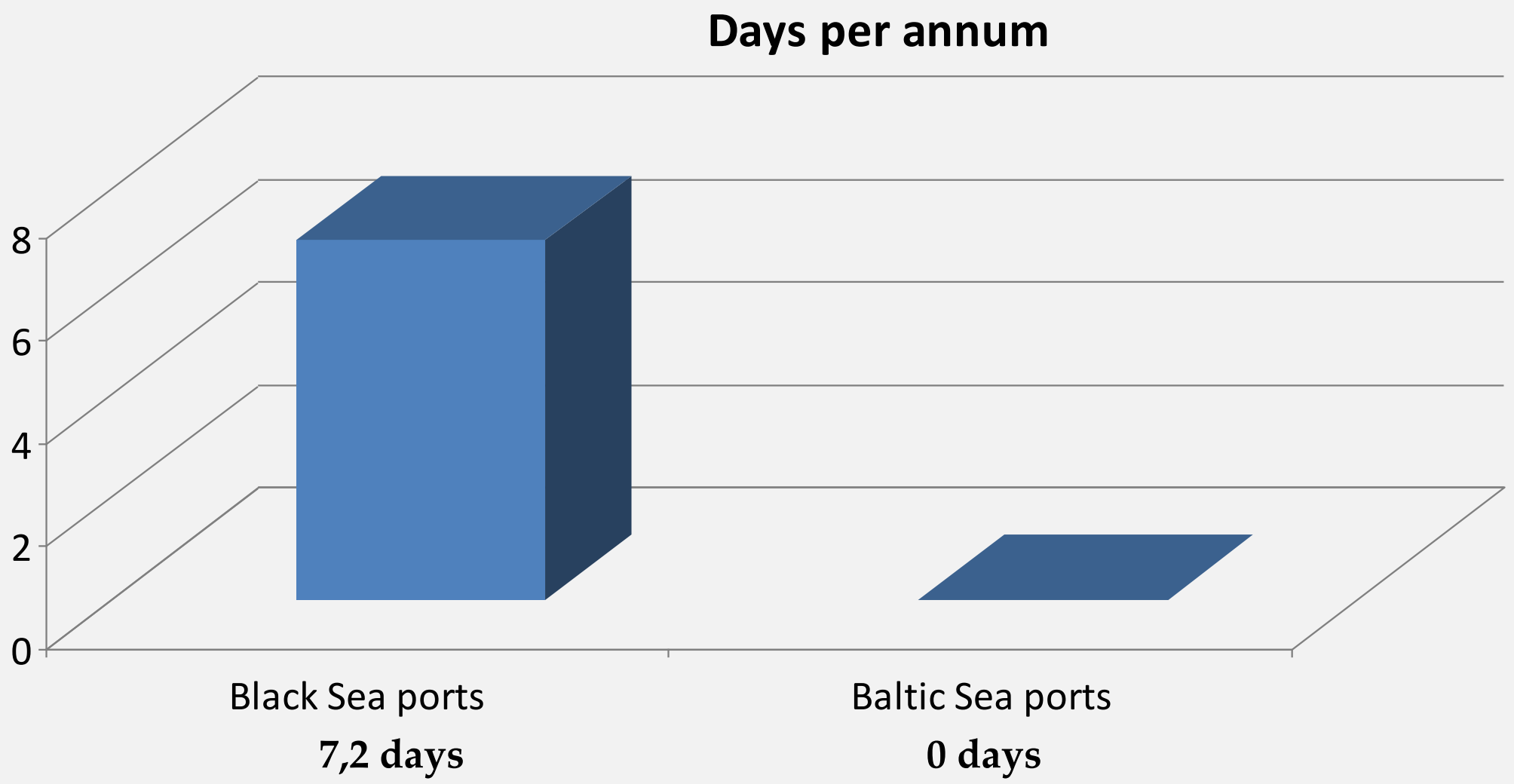
Average port turnaround times (discharge + loading operations + formalities)



Average time lost by ferry waiting at outer anchorage due to weather and other conditions (berth occupancy etc)



Average time lost waiting or deviating to other ports for bunkering



Difference in operating expenses of a vessel in the Baltic and the Black Sea.

If we are to compare identical characteristics then the annual difference in the operating expenses of a vessel engaged in trading on the above routes (considering 45 voyages / 1 voyage weekly) would be:

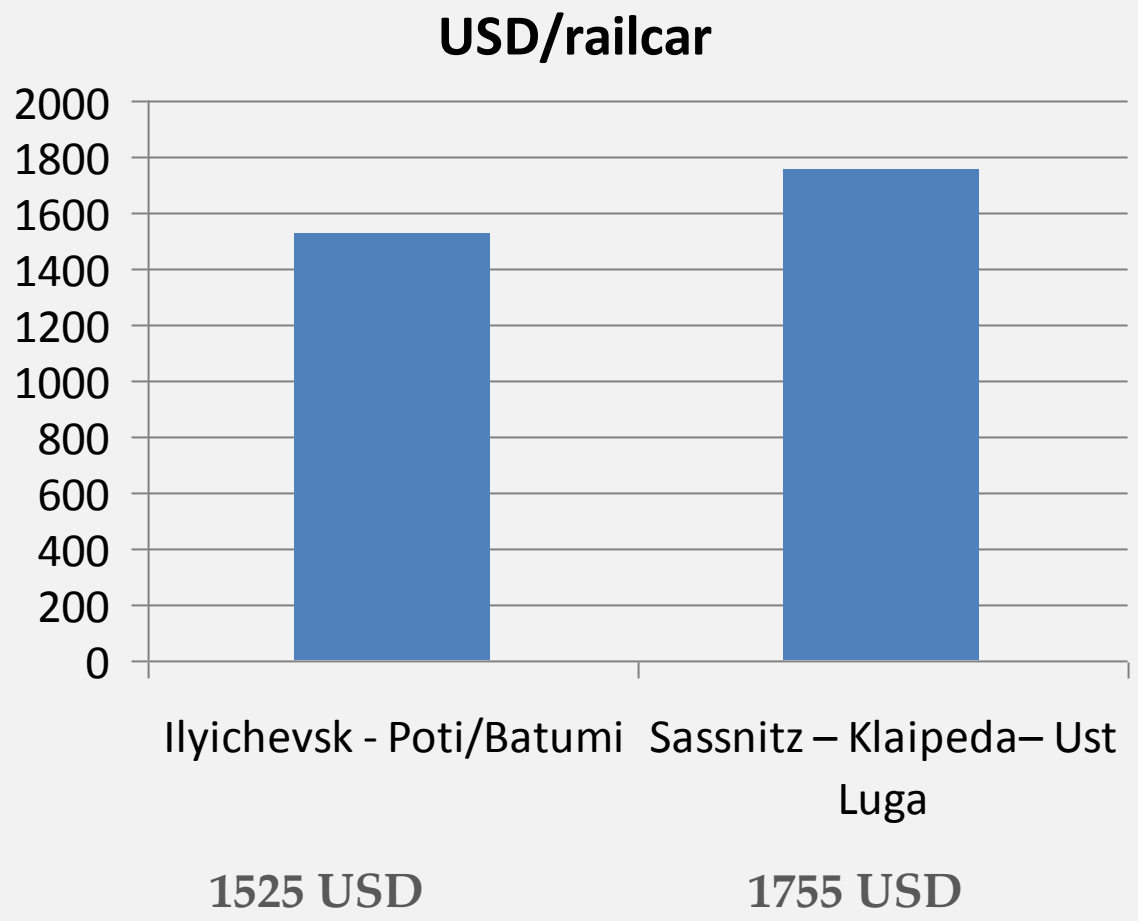
Port charges: USD 27 265 weekly for a round voyage with 2 ports of call or USD 1 226 930 annually.

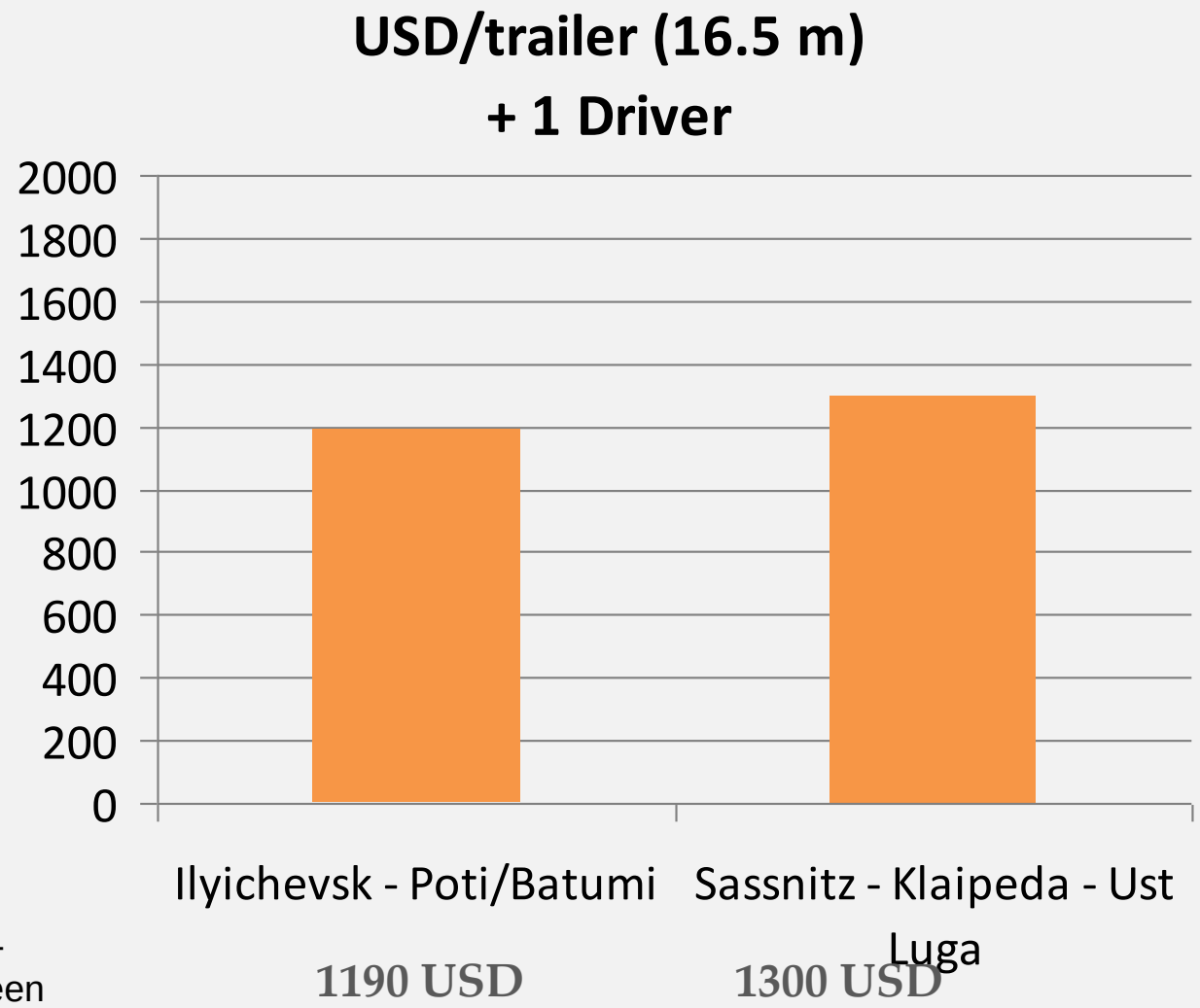
Laying idle at outer anchorage or deviating for bunkering in the Black Sea the vessel will waste USD 10 000 per day x (19 + 7.2 – 3) = 23,.2 days = USD 232 0000

This means that **additional operating expenses for a ferry operating in the Black Sea area** (considering ports charges and idle waiting/deviation expenses only) account to an average of USD 1 458 930

Coupled with extra USD 50 000 per annum for **customs clearance** expenses for provision and spare parts supplied on board a vessel in the Black Sea,
we will get a figure of mo than **USD 1 500 000 annually or USD 4 134 daily.**

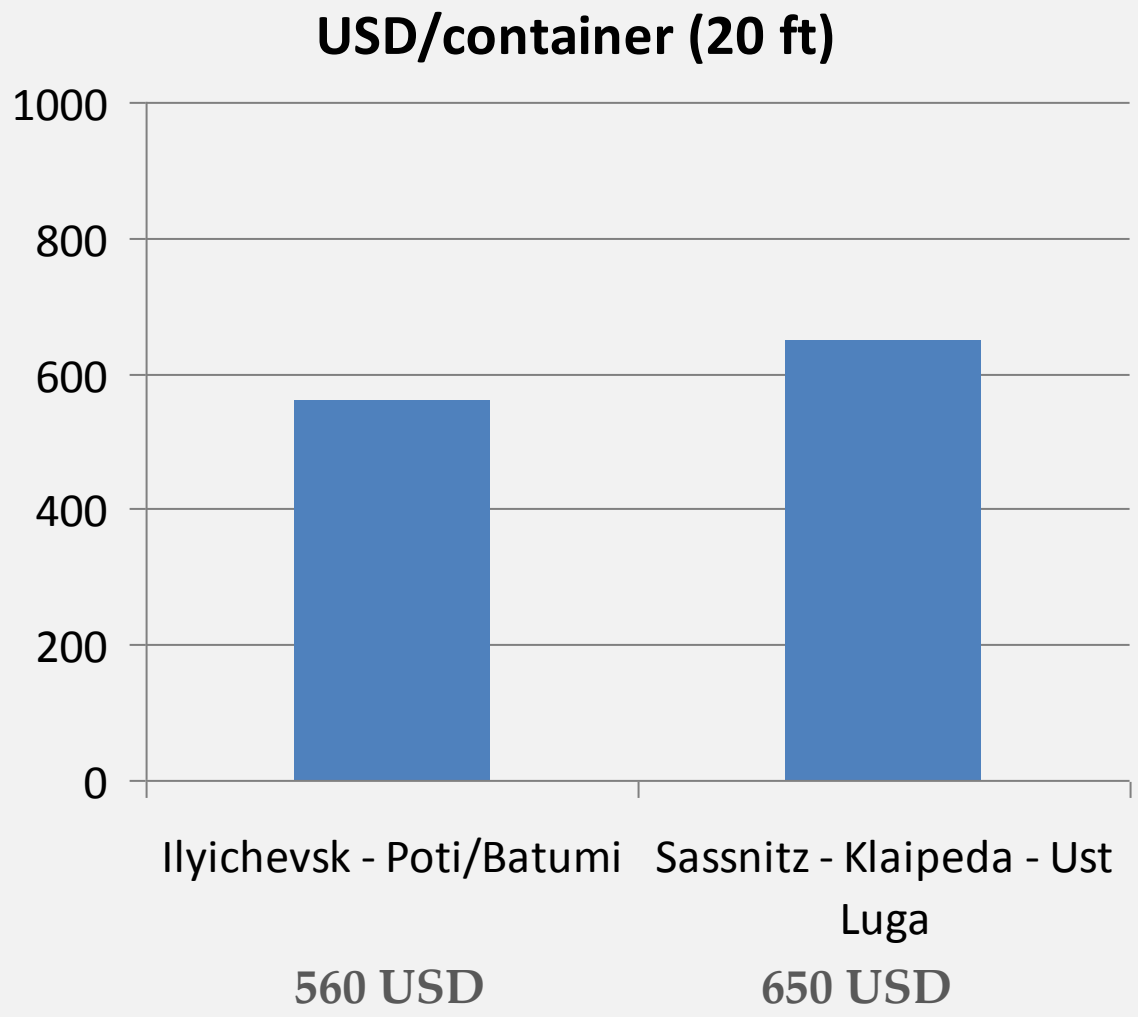
Average basic ferry freight rates in the Black Sea and the Baltic Sea (one way marine freight including BAF)

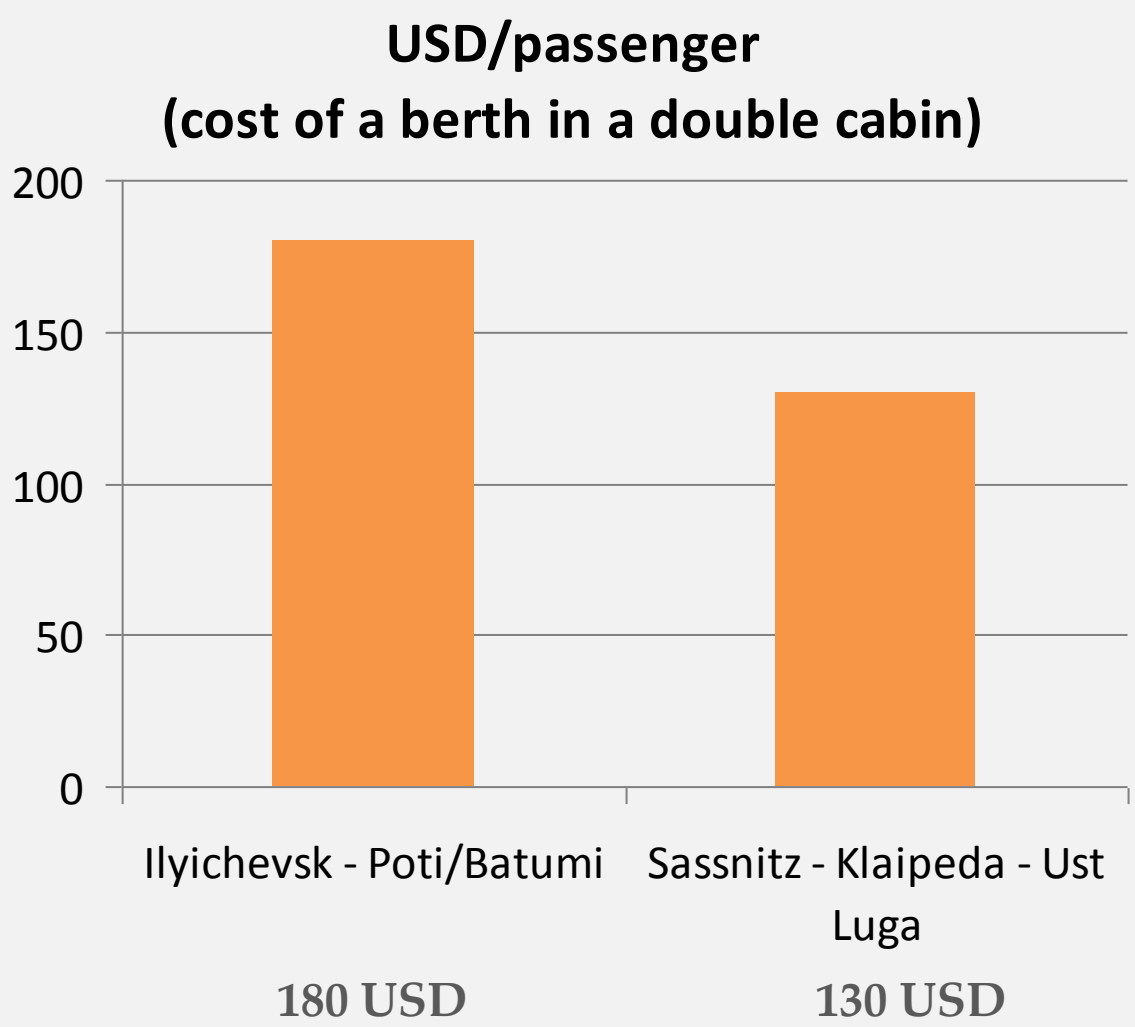




It should be noted that nearly 70% of cargo carried in railcars with Ilyichevsk-Poti/Batumi ferry service is subject to discounted special rates ranging between USD 1000 and USD 1200 per a railcar one way

Average basic ferry freight rates in the Black Sea and the Baltic Sea (one way marine freight including BAF)





Conclusions:

Freight rates for similar types of cargo with Ilyichevsk - Poti/Batumi and **Sassnitz – Klaipeda – Ust Luga ferry services are nearly the same level** (freight rates in the Baltic sea being an average of 10% higher).

At the same time, operating “Vilnius Seaways” at Ilyichevsk - Poti/Batumi service costs an additional USD 1,5 mln per annum compared to operating a ferry with a commensurable ferry service **Sassnitz – Klaipeda – Ust Luga** and performing the same number of voyages.

Conclusions

Consequently, the **facts show that the opinion assumed by some experts that the Black Sea freight rates** for rail/car ferry services **are too high compared to freight rates in the Baltic area is not true**.

There is also an assumption that ferry shipping in the Black Sea fetches excess profits. Considering the information of this presentation, you can see for yourself how true are such conclusions. As a matter of fact, **operating ferry services in the Black Sea is more expensive for an operator compared to Baltic area. This is one of the reasons obstructing the development of ferry services in the Black Sea**.

Conclusions

From a professional point of view, to increase the efficiency of ferry services in the Black Sea and to bring them up to one level of service, regularity and frequency with those of the Baltic Sea it is necessary to:

- change state tariff policy towards line shipping in general and ferry shipping in particular.
- improve infrastructure of ferry terminals and insure round the year navigation regardless of weather conditions.
- improve turnaround time for loading/discharging and customs clearance at ferry terminals
- secure high quality fuel bunkering at all of the Black Sea ports

Ferry operators are ready to do all within their power to improve the quality of service but their attempts shall be insufficient without changes to the state policy in respect of line shipping and the adoption of European standards by the adjacent authorities and organizations.

Economics are at core of any process. The presented report shows what fundamental economical reasons hamper the development of ferry shipping, and in particular the increase of passenger and tourist transportation by black sea ferry services. Since proceeds from passenger transportation form only a small part compared to proceeds from cargo transportation we must be honest to recognize that, first of all, favorable conditions for ferry shipping of cargo must be created.
These include favorable policy in respect of port charges, quick and effective passport and customs procedures at the ports.
In the end, if the operators gain sufficient profit they will be able to acquire modern and comfortable passenger vessels. Surely, this is conditional on economical and political stability in the region.

Thank you for attention!