



## Maritime Register In Landlocked Countries - Appropriate Setting Of Tonnage Tax And Determing Of Break-Even Point

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**ABSTRACT**

The article deals with a reflection on the effective functioning of the Maritime Register in landlocked countries. Realistically compares the setting of registration fees and tonnage tax of selected successful coastal flag states and flag states in selected landlocked countries. Based on the model example, which is considered the most registered tonnage in the world, is given an optimum design for calculating fees, including their classification according to tonnage, so that the maritime register be competitive. Based on the model example is to calculate the Break-Even Point, from where the flag State Register of Shipping effective.

**KEYWORDS**

Tonnage tax, Maritime Register, Seagoing Vessel

**1. INTRODUCTION**

Efficient allocation of seagoing ships is into four categories, according to the Gross Tonnage GT (Table 1). Small vessels that are within the tonnage of 100-499 GT, are mostly not engaged on international sea voyages and they are usually on the edge of the scope of certain international maritime conventions that apply to seagoing ships of 300 GT, respectively 500 GT. Medium sized are seagoing vessels *Handysize* type to transport cargo in bulk (Figure 1).

Categorization of Ships by size	Gross TonnageGRT
Small	100 - 499
Medium	500 - 24 900
Large	25 000 - 59 999
Very large	60 000 and more

**Table 1 -Categorization of ships by size, Source [1]**

Large sized seagoing vessels are mostly *Handymax* type, *Panamax* type for transporting cargo in bulk, tankers and container ships. Very large sized seagoing vessels are mostly *Capesize* type, container ships and tankers.



Figure 1 - *Handysize* type, Source [2]

**2. MOST OFTEN REGISTERED TYPES OF SEAGOING VESSELS**

To build a model situation for calculating fees for tonnage tax is desirable to determine the frequency of seagoing vessels ac-

ording to their size and their usual tonnage (Table 2).

A strong group of seagoing vessels with the highest frequency will be the basis for comparison of registration fees and tonnage tax.

To find the optimal interface of tonnage for proposals of calculation of the registration fee and tonnage tax to optimize maritime registry in landlocked countries, a comparison of the fee rates in selected coastal and inland states represents the Table 3

	Medium 500 - 24 999 GT	Large 25 000 - 59 999 GT	Very Large Over 60 000 GT
HANDYSIZE General Cargo Ships	11 650	---	---
HANDYMAX Dry Cargo in bulk	3 700	212	---
PANAMAX Dry Cargo in bulk	---	5 374	---
Container Ships	2 255	1 619	5 084
Tankers	6 597	2 414	1 537
CAPESIZE Dry cargo in bulk	---	---	1 602
Ro-Ro Cargo Ships	653	619	180

**Table 2 - Selected number of seagoing vessels in the world by size, Source [3]**

The basis for comparison is a simplification and determining of most registered tonnage (20,000 GT) and setting of a four-year age limit of seagoing vessels, which are interesting for international maritime registers (Table 3).

Flag State	Registration Fees (USD)	Tonnage Tax (USD)
Panama	4 700	4 700
Liberia	2 500	6 714
Luxembourg	7 886	7 886
Czech Republic	4 143	13 674
Slovakia	4 480	4 144

**Table 3 - Model calculation of charges, Source [4]**

**3. SETTING OF TONNAGE TAX**

The newly created or optimized international maritime register should be competitive in comparison with successful maritime registers of the world. One of the basic conditions is clear adjustment tonnage interface for calculation of tonnage tax and its amounts. Specific design may be a proposed tonnage tax referred to in Table 4, which reflects the efficient allocation of seagoing vessels according to gross tonnage and level of fees that are set in comparison with successful Flag States/Maritime Registries. From the perspective of landlocked countries, especially, in comparison with the successful flag state Luxembourg, which has a maritime register currently a total of 184 seagoing vessels, with a total GT 1.077.428 tons<sup>1</sup>.

GT	Registration Fees (USD)	Tonnage tax (USD)
Up to 14 999	5 000	6 000
15 000 - 24 999	5 000	7 000
25 000 - 59 999	5 000	8 000
Over 60 000	5 000	9 000

**Table 4 - Competitive fees and Tonnage Tax proposal [5]**

The amount of fees for tonnage should include an annual amount for the implementation of state supervision by the flag state. Fixed amount for the conduct of inspections by the flag state has separately from charges flag state Panama, Liberia and other advanced international maritime registers.

Furthermore, it should be taken into account increased rate charges for seagoing vessels older than 5 and 10 years. Age restrictions of ships for the first registration should be 15 years or more. The reason is a higher probability of technical condition worsened.

**4. BREAK-EVEN POINT**

To determine the break-even point and determine what the number of registered seagoing vessels will landlocked country maritime register effective, there is a simplified modeling.

The data source for the break-even point (Figure 2) is a model-setting ship *Handysize type* (Figure 1) with a tonnage of 20,000 GRT and determine the costs per employee in the Czech Republic, which is 8.125 USD / month (salary<sup>2</sup>, office, phone, car, equipment).



**Figure 2 - Graph of Break-Even Point of registered vessels [6]**

Landlocked countries have for their operational activities in the field of maritime navigation (registration of seagoing vessels and maritime yachts, authorization of classification societies, the issue of qualifications, training and certification of seafarers/crews of vessels, maritime recreational yachting) a small number of employees (usually 4-5) and the whole issue of maritime navigation / maritime Office is solved in the structure of the Ministry of Transport.

**5. CONCLUSION**

System solutions for the Registration of Ships in the International Register in landlocked countries and for to maintain a standard of registering flag quality is desirable that the maritime register has been solved at least two employees and while options in the form of outsourcing to solve some necessary and time-consuming activities (e.g. conducting independent inspections by the flag state or legal services.

Economically interesting may be the international maritime register for

a landlocked country, providing an optimized amount of the fees referred to in Table 4, from 10,

respectively 15 (possibility of outsourcing) registered seagoing vessels (Figure 2). At the same time, however, must be applied system solutions for the opening of the international maritime register in the landlocked country with regard to best practice in successful coastal flag state, which has long been placed on the White List of Memorandum of Understanding within the registered seagoing vessels.

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