



**PRIORITY 6  
SUSTAINABLE SURFACE TRANSPORT**

**MTCP**

Maritime Transport Coordination Platform  
Contract: 506328  
Start: 13<sup>th</sup> April 2004  
End: 12<sup>th</sup> April 2007

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**WORK PACKAGE 2.1  
QUALITY & EFFICIENCY**

**TERMS OF REFERENCES TONNAGE MEASUREMENT**

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*Contributing to WP/ Task:* **2.1**

*Circulation:* **Public**

# 1 INTRODUCTION

The Tonnage Measurement methodology (GT/NT) within the London Convention has been identified as a possible bottleneck for the development of Short Sea Shipping. DG TREN has requested to conduct a study to review this issue and to identify a possible policy direction.

The MTCP Consortium has asked its partners in January 2006 to express an interest in this study. After preliminary discussions about a possible cooperation of several partners the ISL herewith presents a proposal for the Tonnage Measurement Study. The study will be carried out in cooperation among the three partners ISL, AMRIE and WMU.

This study falls within MTCP work package 2.1, Quality and Efficiency, group of studies which is supervised by BMT.

## 2 TERMS OF REFERENCE

The study requested to comprise 5 components:

### London Convention

- Background and brief description of the London Convention.
- Has the London Convention been amended since it was established? Have there been unsuccessful attempts to amend the Convention, by which countries, and for which purposes? Can one draw conclusions?

### Impact on the market

- Do the methods of calculating port charges and dues have a structural impact on the market (e.g. in terms of choosing vessel types, shipbuilding, port income, cargo costs)?

### Calculation and use of GT

- Is it the case that port charges and dues are frequently based on GT in accordance with the London Convention. How wide-spread is this practice in the EU, and which are the individual port charges and dues normally based on this method? Is the method extended beyond ports (e.g. to fairway dues)? What could be the reason for ports to use this method? Are there relevant obligations under international or national law?
- Does the calculation method of GT adversely affect some types of ships both in terms of GT and port charges and dues? Which types of ships and in what proportion? A couple of concrete examples should be provided of the differences in GT and, consequently, port charges and dues for corresponding ship sizes (e.g. roro vs. closed-top lolo).

### Alternative calculation methods

- What other calculation methods are used in the EU ports for determining port charges and dues? Details of all calculation methods are not required. A general description of methods is sufficient (e.g. correction co-efficient for “volume” vessels, tariffs based on vessel length, use of net tonnage). How commonly are these alternative methods used in the EU? What could be the reasons for ports to use alternative methods?
- How do the alternative methods relate to the port charges and dues of “volume” vessels in relation to other vessels having theoretically a lower GT? Which of these alternative methods would be most opportune to balance the charges and dues of different vessel types (details are needed of the method(s) chosen)?

### Policy direction

Policy recommendation, such as:

- Is this a matter where the EU should consider acting? If yes, what kind of an approach could be taken (on what basis and grounds)?

- One approach could be for the Member States to approach the IMO in order to amend the London Convention and create a balance of calculating GT between vessel types? Would this approach contain added value?
- If approaching the IMO seems justified by the findings, the study should contain a draft submission to the IMO by the EU Member States for the purpose of amending the Convention to better accommodate the above types of “volume” vessels for the purpose of GT calculation.

### 3 WORK PACKAGES

#### London Convention (WP 1)

The London Convention (LC) was prepared before the era of container transport at a time when only small ro-ro vessels and the very first container vessels had been in service. One of the aims of the LC was to finish with the many exemptions from the GRT measurement but to get similar results for the new GT measurement. However, the GT was nothing real new in its application compared to the GRT. After a lengthy ratification and a twelve year transition period it has been only a few years ago that the last ships have been re-measured - but, in fact, the LC dates from the 1960ies when the conventional general cargo ship had dominated the merchant fleet.

#### Tasks in WP 1: London Convention

| Task | Description   | Euro | Partner |
|------|---|------|---------|
| 1.1  | Background and brief description of the London Convention   |      |         |
| 1.2  | Has the London Convention been amended since it established? Have there been unsuccessful attempts to amend the Convention, by which countries, and for which purposes? One draw conclusions? |      |         |
|      |   | 3,00 | ISL     |

There seem to be no amendments up to now. Before going into details of supposed deficiencies of the LC, the IMO and a classification society should be asked to discuss advantages of the LC and reasons why they would not change it.

#### Impact on the market (WP 2)

The method for calculating the GT is the same for all ship types, but the earning capacity of ship types is very different. A container vessel has a much higher capacity of load units than a ro-ro vessel. If both types pay harbours dues per GT, a trailer has to bear much higher port dues than a container. This could have consequences on the choice of ship types.

Shipbuilders have to regard several GT limits regarding manning, pilotage etc. leading to a lower GT than desirable for technical or safety reasons. The OECD uses the GT to compare the workload of yards and yard countries, but they need a compensation factor to make different ship types comparable. The port authorities calculate the tonnage due on the basis of the ship's GT. Increasing ship sizes lead to higher revenues of the ports. However, because ports are facing heavy competition they might adjust the dues per GT to a similar level than competing ports.

In this respect the question occurs why ports do not use any other basis for port dues since they are obviously not legally committed to use the GT as base for calculation.

The calculation of harbour dues levied by the port administration for entering the port is based on gross tonnage, therefore also called tonnage dues. For the ship operator these are costs which he incorporates into his freight rates. As already mentioned before, roro cargo has to bear much more harbour dues than containers because of the smaller number of load units on a roro vessel of the same size.

### Tasks in WP 2: Impact on the market

| Task | Description   | Euro  | Partner |
|------|---|-------|---------|
| 2.1  | Do the methods of calculating port charges and dues have structural impact on the market in terms of choosing vessel? |       |         |
| 2.2  | Do the methods of calculating port charges and dues have structural impact on the market in terms of shipbuilding?    |       |         |
| 2.3  | Do the methods of calculating port charges and dues have structural impact on the market in terms of port income?     |       |         |
| 2.4  | Do the methods of calculating port charges and dues have structural impact on the market in terms of cargo costs?     |       |         |
|      |   | 3,000 | .....   |

This work package deals with port dues and fees in four different views, the view of the ship operator, the shipbuilder, the port operator and the shipper or its forwarder. The main aim of the WP is to find a sufficient number of cost examples to confirm or to invalidate any impact on the market in relative terms.

Nevertheless, this can be only a short collection of cost data. The reasons behind it etc. will be treated in detail in WP 3.

### Calculation and use of GT (WP 3)

The harbour dues levied by the port authority are often based on GT. They form a major part of all port dues and are charged just for entering the port without rendering any further services except providing safe access to the terminals independent of the amount of cargo on board. GT measurement is also the base for the calculation of some kind of fairways dues, tug fees etc. but this is not everywhere the case.

**Tasks in WP 3: Calculation and use of gross tonnage**

| <b>Task</b>  | <b>Description</b>   | <b>Euro</b> | <b>Partner</b> |
|--------------|--|-------------|----------------|
| <b>3.1.1</b> | Is it the case that port charges and dues are frequently based on GT in accordance with the London Convention? How wide-spread is this practice in the EU, and which are the individual port charges and dues normally based on this method? What could be the reason for ports to use this method? Are there relevant obligations under international or national law?            |             |                |
| <b>3.1.2</b> | Does the calculation method of GT adversely affect some types of ships both in terms of GT and port charges and dues? Which types of ships and in what proportion? A couple of concrete examples should be provided of the differences in GT and, consequently, port charges and dues for corresponding ship sizes (e.g. roro vs. closed-top lolo).                                |             |                |
| <b>3.2.1</b> | Is the method extended <b>beyond ports</b> e.g. to fairway dues? wide-spread is this practice in the EU, and which are individual charges and dues normally based on this method? What could be the reason for others to use this method? Are relevant obligations under international or national law?  |             |                |
| <b>3.2.2</b> | Does the calculation method of GT adversely affect some types of ships both in terms of GT and <b>other charges and dues</b> (as in 3.3)? Which types of ships and in what proportion? A couple of concrete examples should be provided of the differences in GT and, consequently, other than port charges and dues for corresponding ship sizes (e.g. roro vs. closed-top lolo). |             |                |
|              |  | 5,000       |                |

WP 3 studies in detail where the GT is used, to what financial impact the application leads and what are the background of the use of GT.

## Alternative calculation methods (WP 4)

Obviously, not every port uses the GT. A selection of other methods and an indication how commonly these are used are the aims of Task 4.1. The more important Task 4.2 is to select the better alternatives instead of GT and to describe their advantages.

**Tasks in WP 4: Alternative Calculation Methods**

| <b>Task</b> | <b>Description</b>  | <b>Euro</b> | <b>Partner</b> |
|-------------|---|-------------|----------------|
| <b>4.1</b>  | What other calculation methods are used in the EU ports for determining port charges and dues? Details of all calculation methods are not required. A general description of methods is sufficient (e.g. correction co-efficient for “volume” vessels, based on vessel length, use of net tonnage, number of calls). Which methods are commonly used in the EU? What could be the reasons for ports to use alternative methods? |             |                |
| <b>4.2</b>  | How do the alternative methods relate to the port charges and dues of “volume” vessels in relation to other vessels having theoretically a lower GT? Which of these alternative methods would be most opportune to balance the charges and dues for different vessel types (details are needed of the methods chosen)?  |             |                |
|             |   | 11,000      |                |

## Other reasons for amendments to the LC (WP 5)

Before making any proposals for amendments to the LC it is necessary to know who else needs the LC and what for. Are other users satisfied with the Convention or do they even have any ideas for amendments? Is it possible to find any common interests for amendments?

One particular aspect of the LC is the measurement of open-hatch container vessels. In spite of similar TEU intakes (compared to ships with hatch covers) they have a higher GT figure and pay more port dues etc. One flag state has already introduced a unilateral exception of the LC.

Furthermore, the consideration of the crew accommodation should be regarded. This is often very small because the deck house is included in the GT measurement.

For the study it is certainly essential to contact the groups dealing with these issues to learn about their experience with envisaged amendments to the LC.

**Tasks in WP 5: Other reasons for amendments of the LC**

| <b>Task</b> | <b>Description</b>  | <b>Euro</b> | <b>Partner</b> |
|-------------|---|-------------|----------------|
| <b>5.1</b>  | Who else uses the LC and what for (e.g. insurance companies, safety authorities)? Are they satisfied with the LC or what do they have for any amendments? |             |                |
| <b>5.2</b>  | Open-hatch container vessels  |             |                |
| <b>5.3</b>  | Safety aspects of the LC  |             |                |

|  |  |       |     |
|--|--|-------|-----|
|  |  | 11,00 | ISL |
|--|--|-------|-----|

### Policy direction (WP 6)

WP 6 contains the conclusion of the study regarding the impact of the LC on short sea shipping. The result will explain whether the EU should consider any acting and in which way.

Is it better to live with the LC and to adapt the GT of individual ships by certain factors respectively use other ship data for the calculation of port dues and fees (Task 6.1)? Or is it useful to amend the LC (Task 6.2)? There are voices warning that the IMO will probably not accept such a proposal with amendments based on pure economic reasons.

### Tasks in WP 6: Policy direction

| Task | Description  | Euro   | Partner |
|------|--|--------|---------|
| 6.1  | Is this a matter where the EU should consider acting? If yes, kind of an approach could be taken (on what basis and group)   |        |         |
| 6.2  | One approach could be for the Member States to approach IMO in order to amend the London Convention and create a balance of calculating GT between vessel types? Would such an approach contain added value? |        |         |
| 6.3  | If approaching the IMO seems justified by the findings, the draft should contain a draft submission to the IMO by the EU Member States.  |        |         |
|      |  | 13,000 | ISL+AM  |

A draft submission is to be prepared in Task 6.3 in case it seems useful to propose an amendment based on economic reasons. Before preparing such a draft, it is necessary to have checked the chances that other groups join a common approach to the IMO.

However, it has to be stressed that in such a case it is not sure that a draft submission can be finally presented. Assuming that such a situation will occur, the contractors will describe and explain the obstacles and proposals for further steps will be made.

## 4 QUALIFICATION OF THE GROUP

### ISL

The ISL has gained experience with the calculation of port dues and fees during the preparation of a German approach to “Quality Shipping”. For technical aspects there are good relations to Germanischer Lloyd. In case of leading resp. participating in the Tonnage Measurement Study the ISL will enjoy the assistance of the German Ministry of Transport and the Authority for Sea Transport (Bundesamt für Seeschifffahrt).

Staff proposed:

Arnulf Hader, Project Manager and Shipbuilding Expert

### AMRIE

### WMU

## 5 TECHNICAL ISSUES

### Work Sharing and Time Schedule

The ISL is prepared to take the lead in the project. The partners will be responsible for single Tasks as shown in the WP Tables in chapter 3.

| <b>Work Package</b> | <b>Partner</b> | <b>Budget</b> | <b>Delivery until</b> |
|---------------------|----------------|---------------|-----------------------|
| WP0                 | ISL            | 2000          |                       |
| WP1                 | ISL            | 3000          | March                 |
| WP2                 | WMU            | 3000          | Mid of March          |
| WP3                 | WMU            | 5000          | End of March          |
| WP4                 | AMRIE          | 11000         | April                 |
| WP5                 | ISL            | 11000         | May                   |
| WP6                 | ISL            | 7000          | End of June           |
|                     | AMRIE          | 7000          | End of June           |

The final report will be finished by End of June 2006.

### Costs of the Study

ISL understands that the budget for the study is 48,000 Euro. This will be fully exhausted and shared among the partners.