ECONOMIC BENEFITS OF TIR
UNESCAP FOCUS

Executive Summary
of a Scientific Study

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International Road Transport Union (IRU)

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## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBJECTIVE</td>
<td>3</td>
</tr>
<tr>
<td>STRUCTURE OF THE STUDY</td>
<td>4</td>
</tr>
<tr>
<td>TIR SYSTEM</td>
<td>5</td>
</tr>
<tr>
<td>METHODOLOGY</td>
<td>6</td>
</tr>
<tr>
<td>TRANSPORT SECTOR IN THE NINE COUNTRIES</td>
<td>8</td>
</tr>
<tr>
<td>FACILITATION ISSUES</td>
<td>9</td>
</tr>
<tr>
<td>RESULTS OF TIR BENEFIT CALCULATIONS</td>
<td>10</td>
</tr>
<tr>
<td>CONCLUSIONS</td>
<td>12</td>
</tr>
</tbody>
</table>
OBJECTIVE

The principal objective of the study has been to analyse, quantify and present economic benefits of the TIR System in selected UNESCAP member countries.
First, this study briefly presents the TIR System. Furthermore, it contains a chapter on the methodology challenges that were faced while developing the quantified monetary benefits of implementing the TIR System in the nine selected countries. To understand better the context of TIR benefit calculations, the transport industry of the countries concerned is also described and the general framework of trade and transport facilitation in the examined region of the World is equally expounded.

The second part of the study contains a detailed presentation of TIR economic benefit calculations starting from trade and transport volume data and ending at potential monetary savings as well as the exposure of their relative economic importance.

Eight Annexes complement the study. Of these, a general factsheet on TIR benefits accompanied by country factsheets on the same subject should specifically be mentioned.
The TIR Customs transit system is a valuable trade and transport facilitation instrument in place in an increasing number of countries since 1959, first version, preceded by a provisional agreement dating back to 1949 that proved extremely useful in the post WW2 reconstruction period in Europe. The first UN Convention (1959) was signed by 17 states, and it is recalled that the Convention’s present 1975 version currently has 69 Contracting Parties.

TIR is a tried and tested UN Convention that is applied and administered on a daily basis by a complex institutional network that comprises public and private agencies, including the IRU, working together for the benefit of traders, carriers and consumers.

Recognised virtues of the TIR System, and fruits of its continuous modernisation and computerisation ongoing over the last 15 years, reinforce the rationale and chances for its further geographic extension.

**TIR BENEFITS**

- Goods move across international borders with minimum interference from authorities thanks to TIR and related streamlined border crossing procedures
- Opening the TIR procedure and Customs clearance take place at internal Customs points and not at often congested borders or in likewise crowded ports
- Possibility to implement dedicated quick “Green Lanes” for all TIR trucks with all related facilities
- Reduced delays resulting in less costs for trade and international transport of goods
- Accrued security in the supply chain: only approved hauliers and vehicles; loaded vehicles doing transport operations sealed with seals mutually acknowledged by Customs
- Guaranteed payment of Customs duties and taxes in the case of irregularities thanks to a reliable international guarantee chain
- No restriction as to the mode of transport used, i.e. TIR intermodal operations possible
- High rate of return on investments, if needed, for the introduction of the system coupled with reasonable permanent costs of operation for all actors involved: trade and transport operators, Customs, etc.; most physical facilities and institutional arrangements as well as system maintenance required by TIR management serving various other purposes than just the operation of the TIR System (spin-off effect and cost dissemination)
- Extensive IT support
METHODOLOGY

The study is the result of a desk research combined with local and other “reality checks”. Other research methods, including local data surveys, are by all means possible and even very much desirable in the future.

The underlying idea of quantifying potential economic benefits of using TIR is to determine the annual number of possible TIR-related movements / Customs treatments in the 9 selected UN ESCAP countries (Cambodia, India, Indonesia, Japan, Lao PDR, Myanmar, Republic of Korea, Thailand and Viet Nam) on the basis of the volume (weight) of traded goods expressed in the number of 20-tonne load units. Multiplying the number of Customs treatments related to these load units with the specific time requirement of these treatments and subsequently with the specific monetary value of Customs time savings provides TIR’s possible direct gross economic benefits. Potential benefits have been computed for a time horizon of 5 years (2014-2018) at three + one levels: trade with the World of the nine selected countries, in Region 9 (among the nine countries), Region 4 (among the four specifically targeted countries: Lao PDR, Myanmar, Thailand and Viet Nam) + Corridor EWEC, a specific corridor in Region 4.
Much attention has been paid to objectivity of research; therefore a very prudent approach has been applied characterised by limitations, exclusions and various correction factors intensifying this cautious approach, e.g.

- Mineral products (HS 27) have been excluded from traded quantities as in principle not apt for TIR usage
- Relatively large 20-tonne load units have been applied resulting in lower numbers of potential load units and consequently less Customs treatments required
- Only 40% of World trade related traffic considered taking into account the present global number of TIR Contracting Parties
- Only 50% of the value of empirical waiting time information (hours) has been taken into account; extrapolated waiting times have also been mitigated; the possible option of “truck & container idling together” has not been taken into account
- Only 50% of time saved (hours) has been taken into account, duly reflecting additional time needed to perform Customs functions at in-country Customs checkpoints instead of at borders and in ports
- A progressive application of TIR in the five-year forecasted period has been introduced, starting with 10% of available cargo processed under TIR in the first year with a ceiling of 60% as from the 4th year of planned TIR use
- Modest specific monetary values ($/hour) set for calculating monetary losses caused to container usage or trucking operations due to waiting times, etc.

Further studies would be necessary to define net benefits of the introduction and continuous use of the TIR System as well as to understand better who the main beneficiaries are.
Main features of the nine countries’ transport sector have been presented based on a detailed description of the industry in each country concerned. These are:

- Heavy reliance on sea transport, including coastal shipping
- Road freight transport dominating the over-land freight transport market
- Multimodal transport in need of further domestic and international transport development
- Transport infrastructure highly developed in two advanced economies while in need of important qualitative and quantitative extension in the other seven countries; congestion, on roads and in ports, typical for all; road safety to be further improved everywhere
- Transport and other regulations as well as institutions in place and laws enforced in two developed economies while rent-seeking and regulatory disorder widespread in other countries
- Regarding mainland countries, international market access restrictions in place inhibiting foreign trucks’ free movement, among other things imposing on them transhipments at borders as a rule or “silent practice”; long waiting times due, among other things, to heavy administrative procedures in most ports and at most land borders
- Truck overloading, low annual rate of vehicle utilisation and high costs of operation being common phenomena in less developed economies
- Very fragmented road transport sector with an outstandingly high share of owner-operators
- Lack of appropriate industry institutions (e.g. of politically and financially strong associations) in less developed economies also in need of improved professional training facilities and practices
Problems hampering a dynamic development of international trade and transport should be solved in a coherent and integrated manner encompassing a number of interconnected facilitation issues.

A systematic and step-by-step improvement of the situation is an absolute necessity. For example one cannot enjoy benefits of the TIR System by its simple introduction if advance or simultaneous efforts are not undertaken in many other interrelated areas, like elimination of international transport permit/quota systems, mutual recognition of vehicle technical certificates, implementation of temporary importation rights in respect of transport vehicles, improvement and adjustment of Customs working methods to absorb TIR requirements and working patterns, general improvement of border crossing conditions, development of strong national transport industry associations, creation of efficient national financial and insurances schemes (not only supporting TIR but also e.g. third-party vehicle insurance), improvement of industry professional training and so on.

In this respect, the proper implementation of a multitude of existing multilateral transport conventions and agreements can substantially help. Of these instruments, priority accent should be put on the use of renown and proved multilateral arrangements, e.g. those concluded under the aegis of the UN.

Countries under investigation have reached varying degrees of development not only economically but also in the sense of trade and transport facilitation as presented in the study by a number of global country ranking exercises conducted by reputable international organisations and banks.
TIR benefit calculations embody the core of the present study.

The value ($) of the nine countries’ trade conducted in 2013 represents a spectacular share of 13% in total World export-import, as shown in the study.

This trade value stands for a large quantity of cargo carried by various modes of transport from origin to destination. At global level, the nine countries generated almost 100 million 20-tonne load units in 2013.

Implementing TIR in selected UNESCAP countries will save $35 billion in transit costs over a five-year period.
Taking into account the above trade volumes and related Customs treatments as well as their time need and savings potentials multiplied by the specific value of time, it is presented in the study that thanks to the proposed application of the TIR System, important potential savings to the nine economies would be achievable at all levels of investigation (lower level comprised in higher level): at World level more than 35 billion $ in the five-year forecasted period (2014-18).

Potential five-year savings have been compared to various annual macro-economic indicators of the countries concerned in order to better grasp the savings’ order of magnitude. This savings represent a share of national annual GDPs between 0.14% and 1.31%.

<table>
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<th>Country</th>
<th>Savings World (billion $)</th>
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<tbody>
<tr>
<td>Indonesia</td>
<td>3,740,675,695</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>425,291,664</td>
</tr>
<tr>
<td>Rep. of Korea</td>
<td>35,384,975,132</td>
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<tr>
<td>Total</td>
<td>35,384,975,132</td>
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The economic benefit of implementing TIR is between 0.14% and 1.31% of national GDP.
The results of the present TIR benefit quantification exercise, no similar efforts have yet been undertaken, are by all means promising. Even if just tendencies and not exact figures brought to light by the present study in relation to a dynamically growing region of the world in an economic sense, are recognised as possibly valid, decision-makers must not remain indifferent. The significance of potential monetary savings even in macro-economic comparison is of such relevance that the nine countries examined should either very seriously consider the practical implementation of the TIR Convention or undertake the necessary diplomatic steps for TIR accession.

In order to prepare the ground for such measures, urgent in the sense that every day important losses are suffered by all players in the absence of this facilitation instrument, a complex preparatory programme should be launched covering a vast area from expert training and institution building to physical investments, if necessary, all depending on and adjusted to the preparedness for TIR and practical needs of individual countries concerned. In order to prove the viability of TIR as a powerful facilitation instrument, pilot TIR operations could make part of a TIR introduction strategy depending on the needs and conditions of individual countries.

It is only hoped that revelations presented in this study on potential savings thanks to the proposed application of the TIR Convention convince responsible governments to take action for the Convention’s earliest implementation.