

9-1-1999

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Stapleton, Drew M. & Saulnier, Virginie. (1999). Defining dyadic cost and risk in international trade: a review of incoterms 2000 with strategic implications. *Journal of Transportation Management*, 11(2), 25-43. doi: 10.22237/jotm/936144240

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# Defining dyadic cost and risk in international trade: a review of incoterms 2000 with strategic implications

## **Cover Page Footnote**

We would like to acknowledge a grant from Penn State University and the Industrial Studies of British Markets (ISBM) for their aid in this research project.

# DEFINING DYADIC COST AND RISK IN INTERNATIONAL TRADE: A REVIEW OF INCOTERMS 2000 WITH STRATEGIC IMPLICATIONS

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## ABSTRACT

As trade markets continue to expand due to developments in transportation and logistics technologies, distribution networks extend well beyond national frontiers. With obstacles such as distance, language, and business customs, allocation of legal responsibility between a buyer and a seller of goods becomes even more crucial in international commerce. This document is presented in three general sections. Reviewing the basics, including definition, origin, use and classifications of INCOTERMS constitutes the first section. The second section describes and analyzes the differences between each of the 13 INCOTERMS 2000. Lastly, the changes introduced by the 2000 revision are studied in more detail in section three and implications are proffered.

## INTRODUCTION

INCOTERMS, an acronym for International Commercial Terms, are internationally standardized “trade terms” that describe the dyadic obligations of both buyers and sellers in international sales transactions. Moreover, INCOTERMS is a set of 13 terms that clearly allocate the costs, risks, customs, and insurance responsibilities when internationally transporting goods between the buyer and seller. Consequently, it is important to stress that

INCOTERMS deal only with the relation between sellers and buyers under a contract of sale. They do not relate directly to the contract of carriage.

INCOTERMS were first developed in 1936 by the Paris-based International Chamber of Commerce (ICC) as a set of international rules for the interpretation of trade terms (Barelier et al. 1995). These rules, known as “INCOTERMS 1936,” have been subsequently revised. Amendments and additions were later made in

1953, 1967, 1976, 1980, 1990 and presently in 2000 in order to bring the rules in line with current international trade practices. INCOTERMS serve much the same purpose for international trade as the Uniform Commercial Code does for domestic commerce in the U.S. (*Journal of Commerce*, 1999).

It should be stressed that, when the parties intend to incorporate INCOTERMS into their contract of sale, they should always make an expressed reference to the current version of INCOTERMS. Buyers and sellers willing to use INCOTERMS 2000 should therefore clearly specify that their contract is governed by "INCOTERMS 2000." Further, the correct use of INCOTERMS implies that a named port of destination or named place of destination has to be stipulated to be valid, followed by the INCOTERMS version governing their use (e.g., EXW La Crosse, WI – INCOTERMS 2000; FAS Norfolk, VA – INCOTERMS 2000).

The trade terms have been put together in four different groups: E, F, C, and D.

### **Group E**

Group 'E' (for "Ex" or from) represents the minimum responsibility for the seller, and maximum responsibility for the buyer. In this group, the seller is only responsible for making the goods available to the buyer at the agreed place, usually at the seller's premises.

### **Group F**

Group 'F' continues with the seller being "free" of responsibility during the main carriage. Thus, the seller is called upon to deliver the goods to a carrier appointed by the buyer. In other words, he/she is not responsible for the main carriage, only some pre-shipment charges.

### **Group C**

Group 'C' stands for "cost" or "carriage" and means that the seller is responsible for contracting and paying for the main carriage, but

without assuming the risk of loss of, or damage to the goods, or additional costs due to events occurring after shipment and dispatch.

### **Group D**

Finally, group 'D' means "delivery" and rallies five "arrival" INCOTERMS where the seller is responsible for the payment and delivery of the goods to the country of destination. The seller has to bear all the costs and risks needed to bring the goods to the country of destination.

Further, INCOTERMS can be classified into two categories from a delivery perspective: 1) departure contracts; and, 2) arrival contracts. "Departure contracts" involve the seller being responsible for delivering to a named place in the country of export or departure country. The seller assumes all costs and risks before crossing a border. Departure contracts involve groups 'E', 'F', and 'C.' Note that the 'C' terms are frequently misinterpreted as "arrival contracts." However, it must be stressed that under 'C' terms, as under the 'F' terms, the seller fulfills the contract in the country of shipment. Thus, the contracts of sale under the terms 'C' falls within the category of "departure contracts."

"Arrival contracts" require the seller to bear all costs and risks involved in bringing the goods to an overseas point of delivery. In other words, the seller is responsible for the arrival of the goods at the agreed place or point of destination at the border (DAF) or within the country of destination. Hence, the seller assumes most, if not all, of the transportation responsibilities. Arrival contracts only concern 'D' trade terms.

Moreover, carriers and freight forwarders may interpret INCOTERMS according to the following alternative: "Freight Prepaid" means the seller pays the main carriage charges before the departure. Therefore, the seller is responsible for the costs of the main carriage. It rallies groups 'C' and 'D.' "Freight Collect," on the other hand, means the main carriage charges are collected, or payable, at destination, thus the buyer is paying for them. Groups 'E' and 'F' are involved here.

## INCOTERMS 2000

In response to developing technology and increasing worldwide use of trade terms, INCOTERMS have been revised for the 21<sup>st</sup> century. The revisions were made by the Working Party on Trade Terms (WPTT), a group of 40 trade experts from around the world. The WPTT is a subgroup of the Committee on International Practice, which is part of the Paris-based International Chamber of Commerce (ICC).

After two years of revision of its sales terms for the new millennium, the ICC began publishing its new edition, *INCOTERMS 2000*, since September 1999. INCOTERMS 2000 are in effect with contracts beginning on the 1<sup>st</sup> of January, 2000, and should only be quoted on contracts effective from January 2000.

### Standard Obligations of Each Party

INCOTERMS rely on and apply to a contract of sale, and do not relate directly to a contract for carriage. While most of the issues salient to the use of INCOTERMS relate to maritime transportation, the negotiation of contractual obligations represented by INCOTERMS is critical to the buyer-seller dyad. Next, we cover the seller's standard obligations, followed by the buyer's standard obligations.

### Seller's Standard Obligations

**Packaging and marking.** The seller is obliged to pack the goods in such a manner as is required for the transport, but only to the extent that the circumstances relating to the transport are made known to the seller at the time the contract of sale is concluded. In addition,

marking is to be made appropriately, especially when dealing with dangerous goods.

**Checking.** The seller supports the costs of any required checking operations, such as checking quality, measuring, weighing, and counting, which are necessary for the purpose of placing the goods at the buyer's disposal.

**Goods in conformity with the contract.** The goods provided by the seller must be in conformity with the contract of sale. Moreover, the seller has to enclose the commercial invoice and any other evidence of conformity as required by the contract.

**Notice to the buyer.** The seller must inform the buyer when and where the goods will be placed at his/her disposal.

### Buyer's Standard Obligations

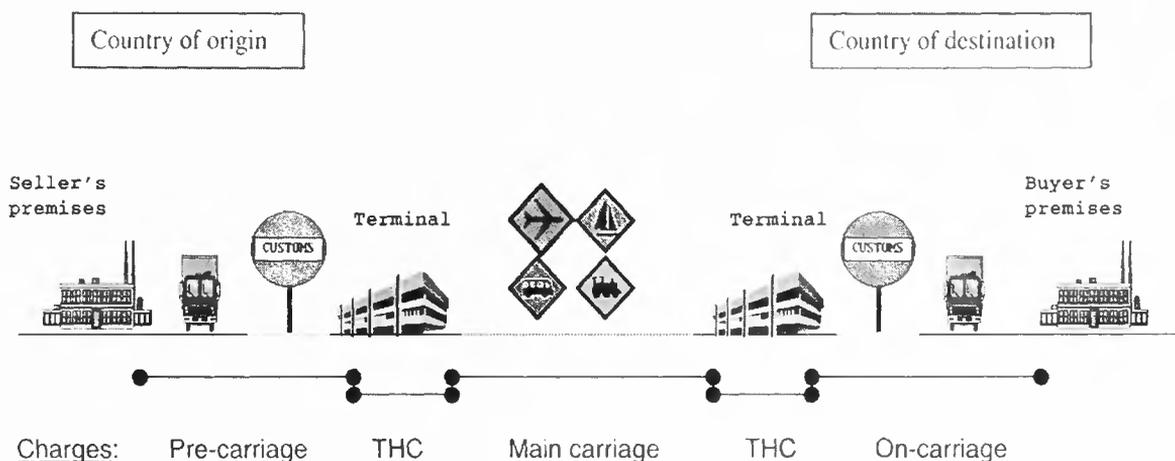
**Payment of the price.** The buyer must pay the exact price as provided in the contract of sale.

**Take delivery.** The buyer must take delivery of the goods when they have been placed at his/her disposal in accordance with the designated INCOTERM.

## DEFINITION OF KEY TERMS

Before going into further details for each of the 13 INCOTERMS 2000, a description of the diagram we use to clarify the 13 INCOTERMS and definitions of the terms used will help clarify the discussion and allow the reader a better understanding. Refer to Figure 1 for the location of each of these activities in the goods movement.

FIGURE 1



- **Pre-carriage:** also called “domestic pre-carriage” or “local cartage,” consists of a point-to-point carriage from the shipper’s premises or warehouse to the first carrier’s terminal or to the freight forwarder’s warehouse. Usually covered by inland carriers via road, or rail, or a combination of road-rail (for full container loads moves – FCL), symbolized in the scheme by a truck.
- **Export formalities:** include export licenses & authorizations (obtained through Chambers of Commerce), export declaration (when the value of the shipment is over U.S. \$2,000, also called Exdec for Export Declaration), certificate of origin, and more if needed.
- **Export customs clearance:** encompasses export taxes, duties and fees if required by the customs of country of exportation.
- **Terminal:** means cargo terminal, railway station, quay/wharf/port warehouse and/or airport.
- **Terminal Handling Charges (THC) at origin:** also called “FOB charges” by freight forwarders, include such charges as handling fee, storage fee, transfer charges (for transferring from the freight forwarder’s warehouse to the main carrier’s terminal at the airport or at the port terminal), file fee, air way bill or bill of lading fee (for issuing the transport document), and exceptional charges by international organizations.
- **Main carriage:** deals with the carriage from a terminal in the country of origin to a terminal in an overseas country. It can be air (from airport to airport), ocean (from seaport to seaport, more usually called “from quay to quay”), road, rail, inland waterway, or a combination of such modes.
- **Terminal Handling Charges (THC) at destination:** also called “arrival charges,” include such charges as transfer charges (for transferring from the main carrier’s terminal to the freight forwarder’s warehouse), handling fee, storage fee, and dispatch fee.

- **Import formalities:** includes import licenses and authorization.
- **Import customs clearance:** involves duties, import taxes, fees and other charges related to customs.
- **On-carriage:** also called “local cartage” or “domestic on-carriage,” or simply “delivery,” consists of a point-to-point carriage from the carrier’s terminal to the consignee’s premises (most likely the buyer’s premises). Usually covered by inland carriers via road, or rail, or a combination of road-rail (for full container loads moves–FCL), symbolized in the scheme by a truck.
- **Multimodal:** several different modes of transport used successively on one single shipment.

- **Carrier:** a person or entity whom commences to perform or to procure the performance of transport by rail, road, air, ocean, inland waterway or by a combination of such modes.

### COMPARING THE OLD AND THE NEW

For each of the INCOTERMS 2000, a description of the responsibilities and obligations of each party is stated. Any change between the INCOTERMS 1990 and INCOTERMS 2000 is emphasized in bold. Figure 2 provides a summary of the characteristics of each of the 13 INCOTERMS.

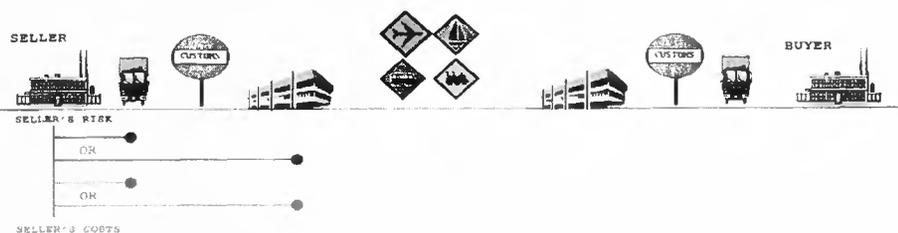
<b>EXW</b>	<p><b>EX WORKS (...named place)</b></p> <p>The seller delivers by placing the goods at the disposal of the buyer at the named place of delivery, usually the seller’s premises or another named place.</p>
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Seller Must	Buyer Must
<ul style="list-style-type: none"> <li>• Make the goods available at the agreed place, usually his/her premises.</li> </ul>	<ul style="list-style-type: none"> <li>• Take delivery of the goods at the agreed place when available.</li> <li>• Load goods on the collecting vehicle.</li> <li>• Provide export customs clearance.</li> <li>• Bear all costs and risks involved in bringing the goods from the place of delivery to the desired destination, including: <ul style="list-style-type: none"> <li>➔ Pre-carriage,</li> <li>➔ THC at origin,</li> </ul> </li> </ul> <p style="text-align: right;">(continued)</p>

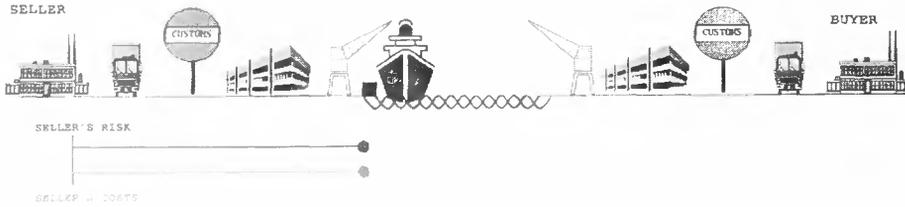
Seller Must	Buyer Must
	<ul style="list-style-type: none"> <li>➤ Main carriage,</li> <li>➤ THC at destination, and</li> <li>➤ On-carriage.</li> </ul> <ul style="list-style-type: none"> <li>• Provide import customs clearance.</li> </ul>

<b>FCA</b>	<p><b>FREE CARRIER (...named place)</b></p> <p>The seller delivers the goods to the carrier selected by the buyer at the named place.</p>
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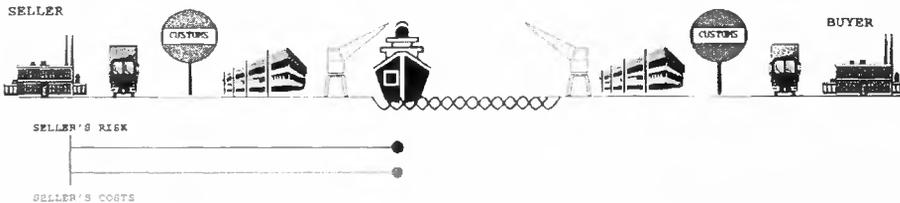
Seller must	Buyer must
<ul style="list-style-type: none"> <li>• Deliver the goods to the named place.</li> <li>• <b>Load goods on the collecting vehicle, if the delivery occurs at the seller's premises.</b></li> <li>• Provide export customs clearance.</li> <li>• Bear all costs and risks involved in bringing the goods to the place of delivery, including: <ul style="list-style-type: none"> <li>➤ Pre-carriage if the delivery occurs at any other place but the seller's premises.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Unload goods from the collecting vehicle if delivery occurs at a place other than the seller's premises.</b></li> <li>• Contract at his/her own expense for the carriage of the goods from the named place.</li> <li>• Bear all costs and risks involved in bringing the goods from the place of delivery to the desired destination, including: <ul style="list-style-type: none"> <li>➤ Pre-carriage,</li> <li>➤ THC at origin,</li> <li>➤ Main carriage,</li> <li>➤ THC at destination, and</li> <li>➤ On-carriage.</li> </ul> </li> <li>• Provide import customs clearance.</li> </ul>

<b>FAS</b>	<p><b>FREE ALONGSIDE SHIP (...named port of shipment)</b></p> <p>The seller delivers when the goods are placed alongside the vessel selected by the buyer at the loading place named by the buyer at the named port of shipment.</p>
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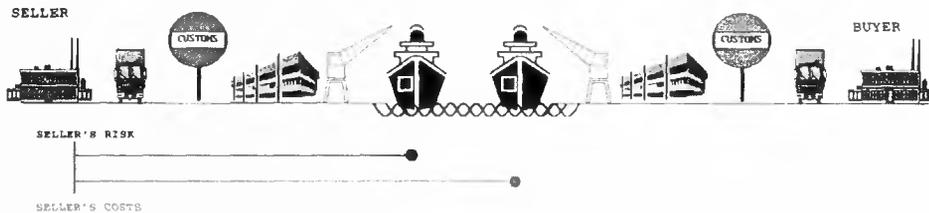
Seller Must	Buyer Must
<ul style="list-style-type: none"> <li>• Deliver the goods to the named port of shipment alongside the selected vessel.</li> <li>• <b>Provide export customs clearance.</b></li> <li>• Bear all costs and risks involved in bringing the goods to the place delivery, including: <ul style="list-style-type: none"> <li>▀ Pre-carriage</li> <li>▀ THC at origin</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Select the carrier.</li> <li>• Contract at his/her own expense for the carriage of the goods from the named port of shipment.</li> <li>• Bear all costs and risks involved in bringing the goods from the place of delivery to the desired destination, including: <ul style="list-style-type: none"> <li>▀ Loading costs: lighterage and wharfage charges</li> <li>▀ Main carriage,</li> <li>▀ THC at destination, and</li> <li>▀ On-carriage.</li> </ul> </li> <li>• Provide import customs clearance.</li> </ul>

<b>FOB</b>	<p><b>FREE ON BOARD (...named port of Shipment)</b></p> <p>The seller delivers when the goods pass the ship's rail at the named port of shipment.</p>
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Seller Must	Buyer Must
<ul style="list-style-type: none"> <li>• Deliver the goods on board the vessel selected by the buyer at the named port of shipment.</li> <li>• Provide export customs clearance.</li> <li>• Bear all costs and risks involved in bringing the goods to the place of delivery, including:               <ul style="list-style-type: none"> <li>➔ Pre-carriage</li> <li>➔ THC at origin</li> <li>➔ Loading costs: lightering and wharfage charges to the extent that they are not included in the freight.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Select the carrier.</li> <li>• Contract at his/her own expense for the carriage of the goods from the named port of shipment.</li> <li>• Bear all costs and risks involved in bringing the goods from the place of delivery to the desired destination, including:               <ul style="list-style-type: none"> <li>➔ Loading costs: lightering and wharfage charges to the extent that they are not included in the freight,</li> <li>➔ Main carriage,</li> <li>➔ THC at destination, and</li> <li>➔ On-carriage.</li> </ul> </li> <li>• Provide import customs clearance.</li> </ul>

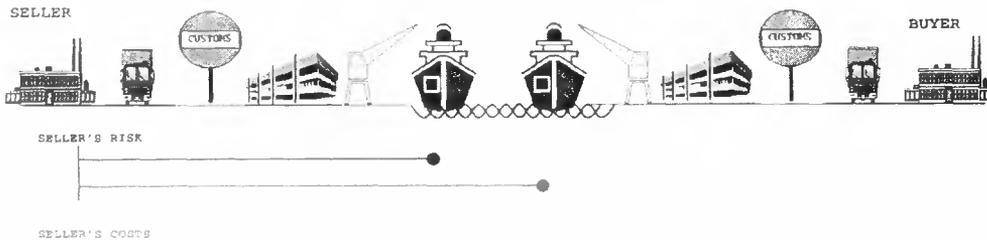
<b>CFR</b>	<p><b>COST and FREIGHT (...named port of destination)</b></p> <p>The seller delivers when the goods pass the ship's rail in the port of shipment.</p>
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Seller Must	Buyer Must
<ul style="list-style-type: none"> <li>• Deliver the goods on board the vessel selected by the buyer at the named port of shipment.</li> <li>• Select the carrier.</li> <li>• Contract at his/her own expense for the carriage of the goods to the named port of destination.</li> <li>• Provide export customs clearance.</li> <li>• Bear all costs and risks (but only in the country of origin) involved in bringing the goods to the place delivery, including:               <ul style="list-style-type: none"> <li>➔ Pre-carriage</li> <li>➔ THC at origin</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Bear all risks of loss or of damage to the goods from the time they have passed the ship's rail at the port of shipment.</li> <li>• Bear all costs and risks involved in bringing the goods from the place of delivery to the desired destination, including:               <ul style="list-style-type: none"> <li>➔ Unloading costs: lightering and wharfage charges to the extent that they are not included in the freight,</li> <li>➔ THC at destination, and</li> <li>➔ On-carriage.</li> </ul> <p style="text-align: center;">(continued)</p> </li> </ul>

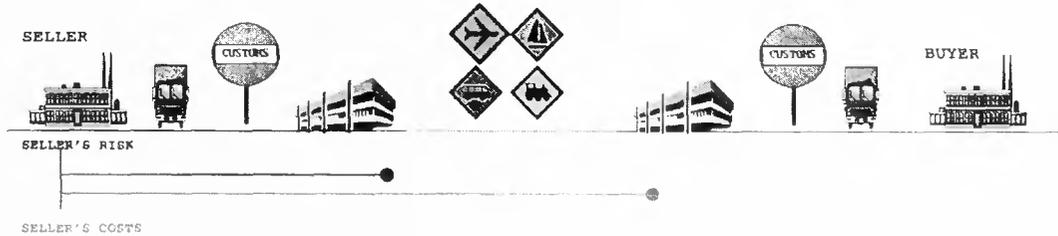
Seller Must	Buyer Must
<ul style="list-style-type: none"> <li>➤ Main carriage</li> <li>➤ Loading costs: lighterage and wharfage charges to the extent that they are not included in the freight.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide import customs clearance.</li> </ul>

CIF	<b>COST, INSURANCE, and FREIGHT (...named port of destination)</b> The seller delivers when the goods pass the ship's rail in the port of shipment.
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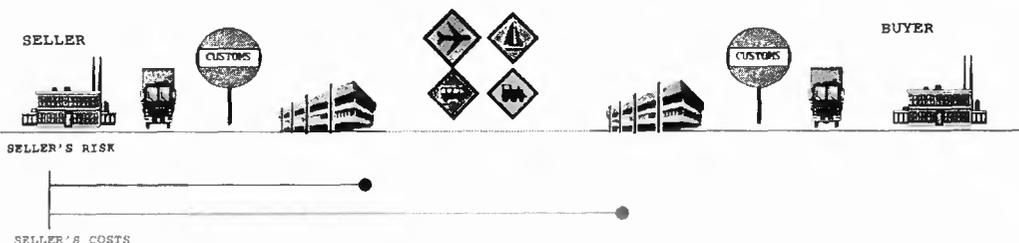
Seller Must	Buyer Must
<ul style="list-style-type: none"> <li>• Deliver the goods on board the vessel selected by the buyer at the named port of shipment.</li> <li>• Select the carrier.</li> <li>• Contract at his/her own expense for the carriage of the goods to the named port of destination.</li> <li>• Provide export customs clearance.</li> <li>• Contract for the insurance of goods during the carriage and pay the insurance premium.</li> <li>• Bear all costs and risks, but only in the country of origin, involved in bringing the goods to the place of delivery, including:           <ul style="list-style-type: none"> <li>➤ Pre-carriage</li> <li>➤ THC at origin</li> <li>➤ Main carriage</li> <li>➤ Unloading costs: lighterage and wharfage charges to the extent that they are not included in the freight.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Bear all risks of loss or of damage to the goods from the time they have passed the ship's rail at the port of shipment.</li> <li>• Bear all costs and risks involved in bringing the goods from the place of delivery to the desired destination, including:           <ul style="list-style-type: none"> <li>➤ Unloading costs: lighterage and wharfage charges to the extent that they are not included in the freight,</li> <li>➤ THC at destination, and</li> <li>➤ On-carriage.</li> </ul> </li> <li>• Provide import customs clearance.</li> </ul>

<b>CPT</b>	<p><b>CARRIAGE PAID TO (...named place of destination)</b></p> <p>The seller delivers the goods to the carrier selected by him/her and pays the cost of carriage necessary to bring the goods to the named destination. The buyer bears all risks and any other costs occurring after the goods have been delivered.</p>
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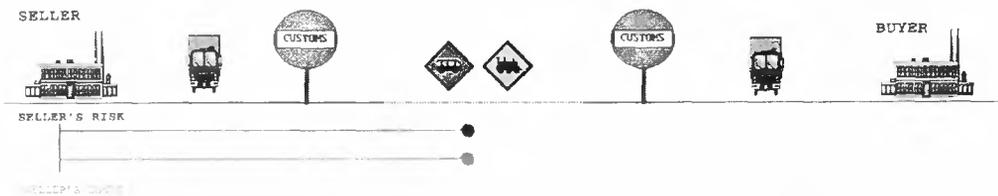
Seller Must	Buyer Must
<ul style="list-style-type: none"> <li>• Deliver the goods into the custody of the first carrier.</li> <li>• Select the carrier.</li> <li>• Contract at his/her own expense for the carriage of the goods to the named place of destination.</li> <li>• Provide export customs clearance.</li> <li>• Bear all costs and risks, but only in the country of origin, involved in bringing the goods to the place delivery, including: <ul style="list-style-type: none"> <li>➔ Pre-carriage</li> <li>➔ THC at origin</li> <li>➔ Main carriage</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Bear all risks of loss or of damage to the goods from the time they are into the custody of the carrier.</li> <li>• Bear all costs and risks involved in bringing the goods from the place of delivery to the desired destination, including: <ul style="list-style-type: none"> <li>➔ THC at destination, and</li> <li>➔ On-carriage.</li> </ul> </li> <li>• Provide import customs clearance.</li> </ul>

<b>CIP</b>	<p><b>CARRIAGE and INSURANCE PAID TO (...named place of destination)</b></p> <p>The seller delivers goods to the carrier selected by him/her and pays the cost of carriage necessary to bring the goods to the named destination. The buyer bears all risks and any other costs occurring after the goods have been delivered.</p>
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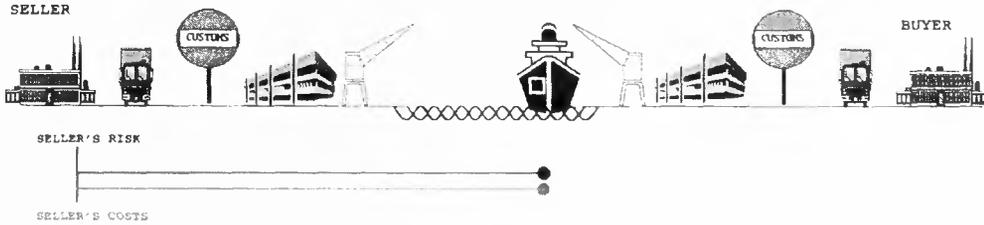
Seller Must	Buyer Must
<ul style="list-style-type: none"> <li>• Deliver the goods into the custody of the first carrier.</li> <li>• Select the carrier.</li> <li>• Contract at his/her own expense for the carriage of the goods to the named place of destination.</li> <li>• Provide export customs clearance.</li> <li>• Contract for the insurance of goods during the carriage and pay the insurance premium.</li> <li>• Bear all costs and risks, but only in the country of origin, involved in bringing the goods to the place delivery, including:               <ul style="list-style-type: none"> <li>➤ Pre-carriage</li> <li>➤ THC at origin</li> <li>➤ Main carriage</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Bear all risks of loss or of damage to the goods from the time they are into the custody of the carrier.</li> <li>• Bear all costs and risks involved in bringing the goods from the place of delivery to the desired destination, including:               <ul style="list-style-type: none"> <li>➤ THC at destination, and</li> <li>➤ On-carriage.</li> </ul> </li> <li>• Provide import customs clearance.</li> </ul>

<b>DAF</b>	<p><b>DELIVERED AT FRONTIER (...named place)</b></p> <p>The seller delivers when the goods are placed at the disposal of the buyer on the arriving means of transport (not unloaded) before the customs border of the adjoining country.</p>
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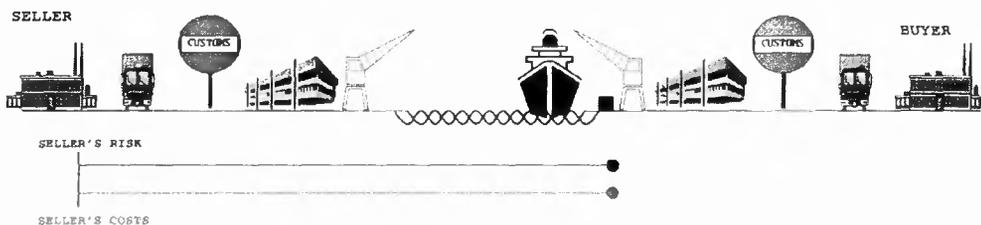
Seller Must	Buyer Must
<ul style="list-style-type: none"> <li>• Deliver the goods at the named frontier (or the named place at the frontier) but before the customers border of the adjoining country.</li> <li>• Contract at his/her own expense for the pre-carriage of the goods to the named point.</li> <li>• Provide export customs clearance.</li> </ul>	<ul style="list-style-type: none"> <li>• Take delivery of the goods at the named frontier.</li> <li>• Unload goods from the arriving means of transport at the named place of delivery.</li> <li>• Contract at his/her own expense for the on-carriage of the goods to the desired destination.</li> <li>• Provide import customs clearance.</li> </ul>

<b>DES</b>	<p><b>DELIVERED EX SHIP (...named port of destination)</b></p> <p>The seller delivers when the goods are placed at the disposal of the buyer on board the ship at the named port of destination.</p>
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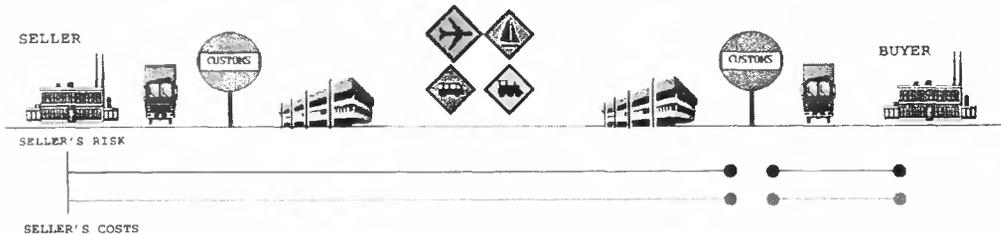
Seller Must	Buyer Must
<ul style="list-style-type: none"> <li>• Deliver the goods on board the ship at the named port of destination.</li> <li>• Select the carrier.</li> <li>• Contact at his/her own expense for the carriage of the goods to the named port of destination.</li> <li>• Provide export customs clearance.</li> <li>• Bear all costs and risks involved in bringing the goods to the place of delivery, including: <ul style="list-style-type: none"> <li>➔ Pre-carriage</li> <li>➔ THC at origin</li> <li>➔ Main carriage</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Take delivery of the goods from the ship at the port of destination.</li> <li>• Bear all costs and risks involved in bringing the goods from the place of delivery to the desired destination, including: <ul style="list-style-type: none"> <li>➔ Unloading costs: lighterage and wharfage charges</li> <li>➔ THC at destination</li> <li>➔ On-carriage</li> </ul> </li> <li>• Provide import customs clearance.</li> </ul>

<b>DEQ</b>	<p><b>DELIVERED EX QUAY - DUTY PAID (...named port of destination)</b></p> <p>The seller delivers when the goods are placed at the disposal of the buyer on the quay (wharf) at the named port of destination.</p>
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Seller Must	Buyer Must
<ul style="list-style-type: none"> <li>• Deliver the goods on the quay at the named port of destination.</li> <li>• Select the carrier.</li> <li>• Contract at his/her own expense for the carriage of the goods to the named port of destination.</li> <li>• Provide export customs clearance.</li> <li>• Bear all costs and risks involved in bringing the goods to the place of delivery, including:               <ul style="list-style-type: none"> <li>➔ Pre-carriage</li> <li>➔ THC at origin</li> <li>➔ Main carriage</li> <li>➔ Unloading costs: lighterage and wharfage charges.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Take delivery of the goods from the ship at the port of destination.</li> <li>• Bear all costs and risks involved in bringing the goods from the place of delivery to the desired destination, including:               <ul style="list-style-type: none"> <li>➔ THC at destination (other than costs of unloading the goods from the ship).</li> <li>➔ On-carriage.</li> </ul> </li> <li>• Provide import customs clearance.</li> </ul>

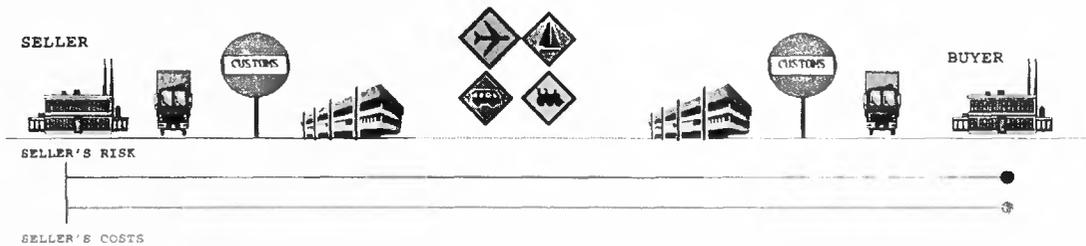
<b>DDU</b>	<p><b>DELIVERY DUTY UNPAID (...named place of destination)</b></p> <p>The seller delivers the goods to the buyer, not cleared for import, and not unloaded from any arriving means of transport at the named place of destination.</p>
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Seller Must	Buyer Must
<ul style="list-style-type: none"> <li>• Deliver the goods at the named place of destination (usually the buyer's premises).</li> <li>• Contract at his/her own expense for the carriage of the goods to the named place of destination.</li> <li>• Provide export customs clearance.</li> <li>• Bear all costs and risks involved in bringing the goods to the place of delivery, including:               <ul style="list-style-type: none"> <li>➔ Pre-carriage</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Take delivery of the goods at the named place of destination.</li> <li>• Unload the goods from any arriving means of transport.</li> <li>• Provide import customs clearance.</li> </ul> <p>(continued)</p>

Seller Must	Buyer Must
<ul style="list-style-type: none"> <li>➔ THC at origin</li> <li>➔ Main carriage</li> <li>➔ THC at destination</li> <li>➔ On-carriage.</li> </ul>	

<b>DDP</b>	<p><b>DELIVERED DUTY PAID (...named place of destination)</b></p> <p>The seller delivers the goods to the buyer, cleared for import, and not unloaded from any arriving means of transport at the named place of destination.</p>
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Seller Must	Buyer Must
<ul style="list-style-type: none"> <li>• Deliver the goods at the named place of destination (usually the buyer's premises).</li> <li>• Contract at his/her own expense for the carriage of the goods to the named place of destination.</li> <li>• Provide export customs clearance.</li> <li>• Bear all costs and risks involved in bringing the goods to the place of delivery, including: <ul style="list-style-type: none"> <li>➔ Pre-carriage</li> <li>➔ THC at origin</li> <li>➔ Main carriage</li> <li>➔ THC at destination</li> <li>➔ On-carriage.</li> </ul> </li> <li>• Provide import customs clearance.</li> </ul>	<ul style="list-style-type: none"> <li>• Take delivery of the goods at the named place of destination.</li> <li>• Unload goods from any arriving means of transport.</li> </ul>

**FIGURE 2  
SUMMARY OF THE 13 INCOTERMS**

	EXW	FCA	<i>FAS</i>	<i>FOB</i>	<i>CFR</i>	<i>CIF</i>	CPT	CIP	DAF	<i>DES</i>	<i>DEQ</i>	DDU	DDP
Packaging & marking	X	X	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	X	X	X	<u>X</u>	<u>X</u>	X	X
Checking	X	X	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	X	X	X	<u>X</u>	<u>X</u>	X	X
Loading on the collecting vehicle		X	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	X	X	X	<u>X</u>	<u>X</u>	X	X
Pre-carriage		X <sup>1</sup>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	X	X	X	<u>X</u>	<u>X</u>	X	X
Export formalities		X	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	X	X	X	<u>X</u>	<u>X</u>	X	X
Export customs formalities		X	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	X	X	X	<u>X</u>	<u>X</u>	X	X
THC at origin			<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	X	X	X	<u>X</u>	<u>X</u>	X	X
Loading in the vessel				X <sup>2</sup>	X	X				X	X		
Contract of main carriage					<u>X</u>	<u>X</u>	X	X	X	<u>X</u>	<u>X</u>	X	X
Main carriage costs					<u>X</u>	<u>X</u>	X	X	(X) <sup>4</sup>	<u>X</u>	<u>X</u>	X	X
Main carriage risks									(X) <sup>4</sup>	<u>X</u>	<u>X</u>	X	X
Insurance						<u>X</u>		X					
Unloading from the vessel					<u>X</u> <sup>3</sup>	<u>X</u> <sup>3</sup>					<u>X</u>		
THC at destination												X	X
On-Carriage												X	X
Import customs formalities													X
Unloading from a delivering vehicle													

X = Seller pays or is in charge of.

*Italic* = ocean and inland waterway terms

1. If FCA Seller's premises: Pre-carriage is to be borne by the Buyer; if FCA other named place: Pre-carriage is to be borne by the Seller.
2. If loading charges are not included in the freight, the Seller pays; if loading charges are included in the freight, the Buyer pays.
3. If unloading charges are included in the freight, the Seller pays; if unloading charges are not included in the freight, the Buyer pays.
4. The main carriage does not really exist under DAF. The carriage up to the border is just commonly called pre-carriage, and beyond the border on-carriage.

## **ANALYSIS OF THE 2000 CHANGES AND STRATEGIC IMPLICATIONS**

The first part of this discussion identifies extrinsic changes related to the 2000 revision, whereas the second part focuses on intrinsic changes of specific terms under which the obligations and responsibilities of each party have been modified from the INCOTERMS 1990 to INCOTERMS 2000.

### **Extrinsic Changes**

The general extrinsic changes incorporated in INCOTERMS 2000 over INCOTERMS 1990 relate to: 1) further standardization; 2) greater international participation; 3) enhanced language translation; and, 4) a reflection of increased concerns from U.S. traders. Standard sales terms fit in with the trend toward standardization in accordance with The Harmonized System, Uniform Customs and Practices for Documentary Credits in ISO Certification. In addition, the new INCOTERMS are more in line with the terms used in the United Nations Convention on Contracts for International Sales of Goods (C.I.S.G.). The latest revision of INCOTERMS is truly global in nature and process. Though the International Chamber of Commerce is based in Paris and most of the creators were from the European Community, this 21<sup>st</sup> century revision received inputs from outside Western Europe at record levels. As listed in the acknowledgements, the ICC worked with participants in Canada, China, Ecuador, Hungary, India, Islamic Republic of Iran, Israel, Japan, Mexico, Peru, Singapore, South Africa, Spain, Sweden, and the United States. Though INCOTERMS 2000 is currently available in English and French, the ICC will for the first time publish the new version in 20 languages, a deviation from the traditional French and English-only publications of the first seven decades of INCOTERMS.

Anecdotally, U.S. traders have appeared more and more concerned with the advantages INCOTERMS provide. In fact, changes in the new version better reflect U.S. business

practices. Moreover, the USCIB, the powerful ICC United States affiliate showed an unusually active interest in this INCOTERMS revision. This organization consists of many "heavyweight" members, some of them large enough to force any issue with their vendors and customers. In practice, therefore, this contingent was instrumental in the revisions completed by the ICC in 1999.

### **Intrinsic Changes**

The changes in the new version salient to the various 13 INCOTERMS include specific changes in: 1) FCA, 2) FAS, 3) DEQ, and, 4) DAF. The biggest change in the revisions concerns INCOTERM FCA, Free Carrier. In INCOTERMS 1990, FCA referred to seven different modes of transport: air, ocean, inland waterway, container, multimodal, highway, and unnamed modes of transport. Recognizing that multimodal transport is now the norm, under INCOTERMS 2000 FCA has now a single application. If the goods have to be delivered at the seller's premises, then the delivery is contractually completed, and the seller's responsibility ends when the goods have been loaded in the collecting vehicle provided by the carrier that will deliver the goods to the buyer. If the delivery occurs at a place other than the seller's premises, the seller's responsibility ends when the goods are placed at the disposal of the carrier designated by the buyer.

In other words, if the delivery is not made at the seller's premises, then the seller is not obliged to unload the goods when the goods arrived in the collecting vehicle at the carrier's terminal or freight forwarder's warehouse. The seller just leaves the goods at the disposal of the international carrier, who will unload goods from the truck, but under the buyer's responsibility. Consequently, FCA now allocates more precisely the costs and risks for unloading operations. This change is significant because transshipments are likely to be a source of litigation due to losses and damages occurring frequently during transshipments, depending on the trade lane(s) involved.

Under INCOTERMS 1990, FAS implied that the buyer had the responsibility to provide export customs clearance. This responsibility has been transferred to the seller under INCOTERMS 2000. Consequently, EXW is now the only term under which the buyer is responsible for export clearance; under any INCOTERMS other than EXW, it is now the responsibility of the seller to clear goods for export. Similar to FAS, under INCOTERMS 1990, import clearance was the responsibility of the seller. However, with INCOTERMS 2000, it is now the buyer who has the responsibility of clearing the goods for import. These two changes significantly ease the fulfillment of such a legal obligation.

In fact, under INCOTERMS 1990, one party was forced to deal with the customs rules in the home country of the other party. Under INCOTERMS 2000, customs issues are now handled by the local party. Emmanuel Jolivet, ICC's policy manager for international commercial practice, reasons "The reason for the changes, clearly, is that it is easier for a party living in a particular country to clear goods for import or export in his/her own country" (Freudmann 1999). Reflecting the urgency the ICC working group desired on this issue, these changes were made right at the very start of the revision process. Finally, the term "DAF" now applies only to land borders, whereas under INCOTERMS 1990, it could be used for all modes of transport. Consequently, DAF is now only applicable for rail or road shipments, or a combination of both modes of transport.

## IMPLICATIONS

Understanding the differences between the various INCOTERMS will allow for better negotiation, fewer misunderstandings, and reduced costs (e.g., financial and opportunity costs) of conducting trade internationally. There is strong anecdotal evidence that suggests it is extremely costly to misunderstand the critical points at which cost and responsibility legally transfer from buyer to seller.

On one account the authors are familiar with, a U.S. Midwestern firm was shipping a full container load (FCL) of pens and other items from a seller in Asia. The U.S. firm would periodically procure items from their Asian supplier and would engrave corporate logos and re-sell them to clients throughout the globe. The INCOTERM negotiated and used was usually FOB – Singapore, though the seller was willing to take on more risk and responsibility (i.e., use another INCOTERM in the C or D range) for a nominal cost. Recall, under FOB, the buyer must contract at his/her own expense for the carriage of the goods from the named port of shipment, including the procurement of marine insurance. Under the Carriage of Goods by Sea Act (COGSA), which ratified the 1937 Hague Rules in the U.S., the steamship line is only responsible for \$500 per container if the container is lost or destroyed at sea. The steamship line carrying the container load of pens hit rough waters and several containers were lost at sea. The importer, who was not insured, received \$500 for the loss from the steamship line, though the value of the cargo was worth well over \$125,000 U.S. Dollars. The firm made a costly mistake that could have been easily avoided. The implications for not understanding the strategic usage of INCOTERMS can be very detrimental to firms.

Similarly, since May 1<sup>st</sup>, 1999, the Ocean Shipping Reform Act of 1998 (OSRA) went into effect on U.S. trade lanes. The law effectively scrapped the century-old concept of "common carriage" — the notion of equal treatment for similarly situated shippers (Stapleton and Ghosh 1999). The new law encouraged a landmark shift from common carriage to contract carriage (Beargie 1998), by disallowing the practice of a firm allowing another to undertake the costs of negotiating with steamship lines for carriage and simply claiming "similarly situated status" and demanding a "me-too" rate. OSRA deregulated the maritime environment and allowed firms to contract confidentially with steamship lines. Competitors are no longer allowed to let the industry leader garner the best possible rate

(due to volume and negotiating power) and sit back and claim "similarly situated status." Since contracts are now confidential between shippers and carriers, competing shippers can no longer figure out the critical elements of a contract, including the cost and INCOTERM specified between buyer and seller, or consignee and consignor. Therefore, a firm who strategically takes on more cost and risk (by changing to a Group C or Group D INCOTERM), though nominal, stands a good chance of increasing market share.

### CONCLUSION AND DIRECTIONS FOR FUTURE RESEARCH

The main reason for a new revision of INCOTERMS 1990 was the need to adapt them to contemporary commercial practice. The intent of the revision process, which has taken about two years, was not merely to review each of the 13 INCOTERMS, but to bring them in their entirety in line with contemporary global trade. Indeed, the motivation was far beyond formal or substantial changes. The ICC meant to extend the use of its trade terms by further globalizing their concept. Consequently, the ICC concentrated on simplifying and standardizing its terminology to harmonize it with international trade practices.

This goal seems to have been reached since a wide-range of world traders participated in this revision process. It appears more and more clearly that INCOTERMS now enjoy worldwide recognition.

Finally, considering that any change involves adaptation, it should be interesting to study how these changes affect international trade practices between buyers and sellers, and how carriers and freight forwarders react to them. This can be the subject for a later study in the new millennium.

As markets continue to expand due to technological developments in transportation and logistics, distribution networks will extend well beyond national frontiers. With obstacles such as distance, language and business customs, the allocation of responsibility between a buyer and a seller of goods becomes even more crucial. This is where INCOTERMS strategies will continue to remain critical in international commerce.

It is hoped that our extensive review of the 13 INCOTERMS and their revision will help practitioners in both the understanding of the terms and in realizing their strategic implications for transporting cargo in the vastly changing international context of global commerce. Further, it is our hope that this discussion will lead to better understanding among academicians in both the importance of teaching these rich concepts and in research. Future research can seek to understand the strategic implications in the usage of INCOTERMS; whether adopting one INCOTERM strategy over another will lead to competitive advantage; and whether changes in terminology impact shipping practices similarly on both sides of the buyer-seller dyad.

### ACKNOWLEDGMENT

We would like to acknowledge a grant from Penn State University and the Industrial Studies of British Markets (ISBM) for their aid in this research project.

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