

# UN/CEFACT – ISC-PDA/Trade Finance Facilitation – P1116(3)

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INTERNATIONAL SUPPLY CHAIN PROGRAMME DEVELOPMENT AREA  
FINANCE AND PROCUREMENT DOMAIN

TRADE FINANCE FACILITATION REFERENCE DATA MODEL  
(TFFRDM) : DRAFT FOR THE TEAM REVIEW

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## Document Summary

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## Log of Changes

Date of Change	Version	Paragraph Changed	Summary of Changes
20 January 2025	1.01.00		The 1 <sup>st</sup> draft of the BRS.
22 January 2025	1.01.01		Corrected according to editorial comments from the team

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## **1. Preamble**

The deferent domains (Finance domain, Commerce domain and Transport and Logistics domain) are involved in the international trade. Up to now, several e-documents standardized in each domain, and those have been contributing to improve the processes in each domain. But unfortunately, inconsistencies and shortfalls in the information entities referenced in each document among industries are evident.

The purpose of the UN/CEFACT Trade Facilitation project is to organize these inconsistent and underorganized information items and electronic documents in accordance with the MLETR rules, and to build a semantic infrastructure on which a continuous data pipeline can be built.

This Trade Finance Facilitation Reference Data Model Business Requirement Specification (TFFRDM-BRS), in combination with the BRS for the Supply Chain Reference Data Model (SCRDM) and the BRS for the Multi-Modal Transport Reference Data Model (MMTRDM) provides the framework for trade finance business including cargo insurance domain to specify their own specific information exchange requirements whilst complying with the overall process and data structures.

The TFFRDM business standard is a reference data model based on the UN/CEFACT Core Component Library (CCL). It forms the basis for constructing Business Data Exchange Structure(s), following the UN/CEFACT Core Components Business Document Assembly Technical Specification (CCBDA) and a methodology for developing business documents.

## **2. Reference**

- UML Profile for UN/CEFACT's Modeling Methodology (UMM) Base Module Technical Specification - Version 2.0, 01 April 2011
- UML Profile for UN/CEFACT's Modeling Methodology (UMM) Foundation Module Technical Specification - Version 2.0, 01 April 2011
- Core Components Technical Specification -Version 2.01,15 November 2003
- Core Components Business Document Assembly Technical Specification - Version 1.0, 27 June 2012
- BUY – SHIP – PAY Reference Data Model (BSP-RDM) - Version 1.0, 13 August 2019
- Supply Chain Reference Data Model (SCRDM) - Version: 1.0.2, 9 January 2017
- Multi Modal Transport Reference Data Model (MMTRDM) – Version 1.0, 01 March 2018
- UNECE Recommendation No.5 Rev.1 Abbreviation of INCOTERMS, 2020

- ICC DSI: Key Trade Documents and Data Elements, April 2024
- SWIFT: Documentary Credits and Guarantees/Standby Letters of Credit Message Reference Guide - November 2021
- ICC: Uniform Customs and Practice for Documentary Credits, Revision 2007, Publication no. 600
- ICC: ISBP International Standard Bank Practice Revision 2023, Publication no- 821

### **3. Objective**

The objective of this document is to standardize the framework of the business processes, the business transactions and the information entities for the trade finance facilitation used by the industries in the trade finance, the cargo insurance, the supply chain and the transport and logistics. The business process is the description of the way trading partners, transport and logistics players, financial institutes and insurance players intend to play their respective roles, establish business relations and share responsibilities to interact efficiently with the support of their respective information systems.

Each business transaction is realized by an exchange of business documents (also called messages). The sequence in which these documents are used, composes a particular instance of a scenario and are presented as use cases in the document.

The business documents are composed of business information entities (BIE), which are preferably taken from libraries of reusable business information entities. The contents of the business documents and the business information entities are presented using class diagrams and/or requirement lists.

### **4. Scope**

This section describes the aspects of the international purchase and supply chain supported by the financial credit and the risk covered by the cargo insurance.

The extent and limits of the business processes described in this document have been developed in such a way that it allows application of TFFRDM-based implementations of national, regional or industry specific cross-border scenarios. Only the high-level process descriptions are described in order that the detailed process analysis of the subset scenarios can be provided in further refined Business Requirements Specifications (BRSs).

The business goal of this guideline is:

- To support easy interchange of information models within the trade finance and between different domains.
- To facilitate the use of the UN/CEFACT standardized and harmonized semantic framework.

- To encourage the use of UN/CEFACT CCTS 2.01 compliant information models.
- To support alignment between UN/CEFACT Reference Data Models.
- To support UN/CEFACT CCBDA implementation.

## **5. Business Requirement**

The Trade Finance Facilitation Reference Data Model (TFFRDM) process includes interrelated business areas representing Documentary Credit and Cargo Insurance processes together with the corresponding information used within the Supply Chain Reference Data Model (SCRDM) and the Multi Modal Transport Reference Data Model (MMTRDM) business area and which passes between them.

### **5.1 Documentary Credit**

A documentary credit (also called Letter of Credit) means any arrangement, however named or described, that is irrevocable and constitutes a definite undertaking of the Issuing bank to:

- pay at sight if the credit is available by sight payment.
- incur a deferred payment undertaking and pay at maturity if the credit is available by deferred payment.
- accept a bill of exchange ("draft") drawn by the beneficiary and pay at maturity if the credit is available by acceptance.
- negotiate as purchase by the nominated bank of drafts (drawn on a bank other than the nominated bank) and/or documents, by advancing or agreeing to advance funds to the beneficiary on or before the banking day on which reimbursement is due to the nominated bank.

The documentary credit process begins with the importer's (called Applicant) application for a documentary credit and covers the activities that the exporter (called Beneficiary) must carry out in order to utilize the Documentary Credits.

Note: A presentation that is in accordance with the terms and conditions of the credit, the applicable provisions of the ICC Rules (actually UCP 600), when the text of Documentary Credit expressly indicates that it is subject to those rules and to International Standard Banking Practice (Complying Presentation).

#### **5.1.1 Process**

The documentary credit process covers everything from the importer's application for a documentary credit, the bank's issuance of the documentary credit, notification of the

documentary credit to the exporter, modification of the documentary credit, and the settlement process by the exporter and the importer. It does not go into the details of the process and the information model of a documentary credit issuance procedures which comply with banking industry standards, such as the SWIFT standard.

Figure 5.1-1 shows the collaborative use cases for the documentary credit process.

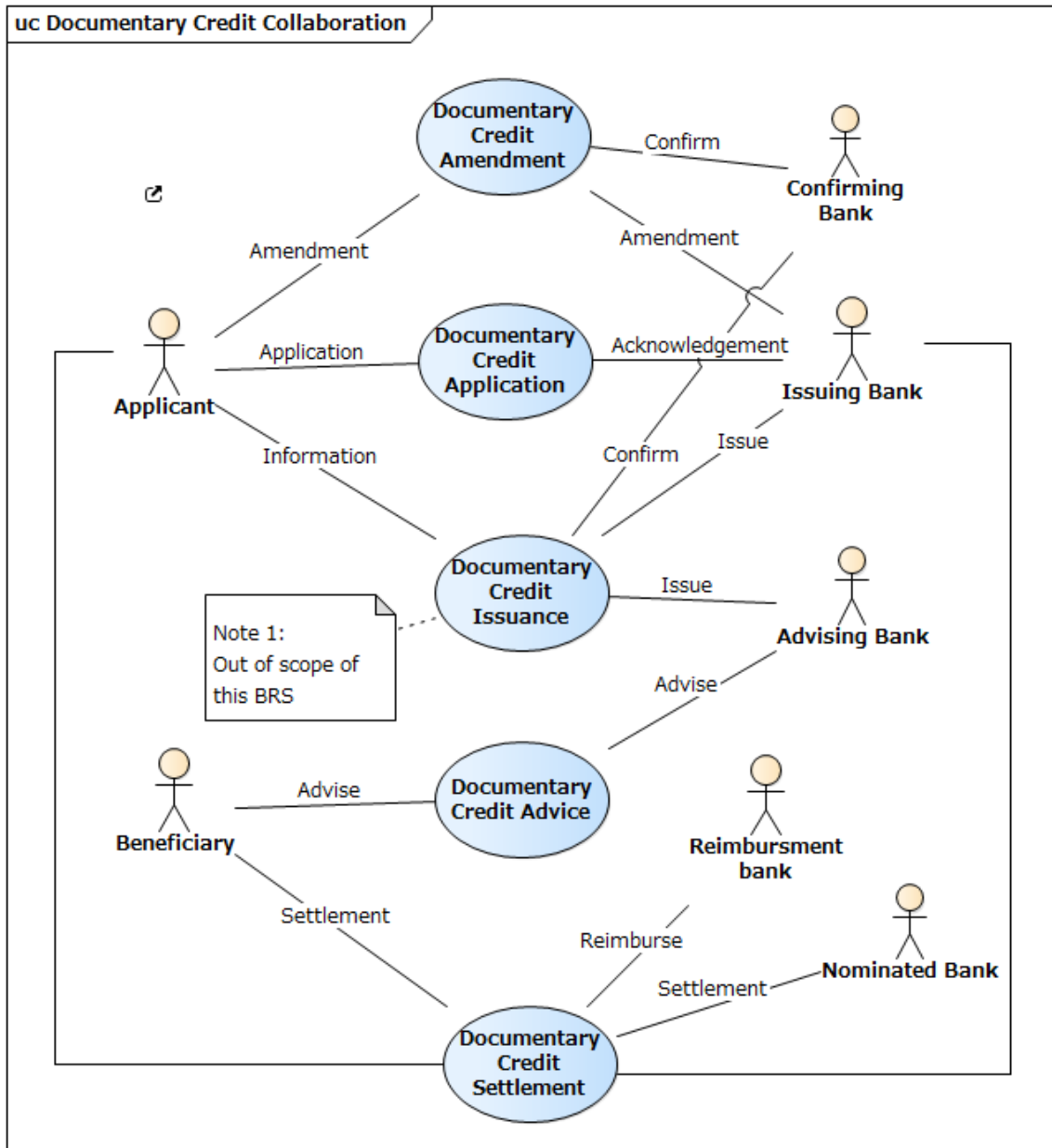


Figure 5.1-1 Documentary Credit Collaboration Use Case

### 5.1.2 Stakeholders

There are several stake holders involved in the documentary credit process. Those stake holders

involved are named from a financial perspective and their roles are defined.

**Applicant**

The trade party for this documentary credit process on whose request the credit is issued. The applicant is likely to be the consignee and importer of the goods that are the subject of the credit.

**Beneficiary**

The trade party for this documentary credit process in whose favour a credit is issued. The beneficiary is likely to be the consignor and exporter of the goods that are the subject of the credit.

**Issuing Bank**

The financial institution that services the applicant of this documentary credit. The service includes issuing documentary credit.

**Advising Bank**

The financial institution that advises the intended beneficiary of this documentary credit.

**Nominated Bank**

The financial institution with which the credit is available or any bank in the case of a credit available with any bank. The bank that can honour or negotiate.

**Confirming Bank**

The financial institution that adds its confirmation to a credit upon the issuing bank's authorization or request.

**Reimbursing Bank**

The financial institution that instructed or authorized to provide reimbursement pursuant to a reimbursement authorization issued by the issuing bank.

**5.1.3 Business Documents**

There are several business documents used in the documentary credit process as follows.

**Documentary Credit Application**

This document is the Applicant's (Importer) request for the issuance of the documentary credit. After receiving it, the issuing bank examines (check on the capacity of the Applicant's overdraft facilities, the type of goods, the Parties and the Countries involved) it and informs the Applicant



whether or not it is prepared to issue the credit.

### **Documentary Credit Advice**

This document is the notification to the beneficiary by the advising bank that receives the documentary credit.

### **Documentary Credit Amendment**

At the applicant's amendment request for the issued documentary credit, the issuing bank (after checking its ability to proceed with the Applicant's requests) issues the amended documentary credit and forwards it to the advising bank.

The amendment may include adding the confirmation to the original documentary credit upon request.

### **Bill of Exchange**

A bill of exchange is a financial instrument used in trade finance to facilitate transactions between buyers and sellers, especially in international trade. It is a written, unconditional order by one party (the drawer) to another party (the drawee) to pay a specific sum of money to a third party (the payee) or the bearer of the bill, either on demand or at a predetermined future date.

**Note: It should be noted that the use of Draft (Bill of Exchange/Promissory Note) in the context of a documentary credit is discouraged by experts, and in any case a credit with payment at sight requiring a promissory note should never be issued.**

### **5.1.4 Business Entities**

The Documentary Credit of the Trade Finance Facilitation Reference Data Model (TFFRDM) provides trade finance processes with information models that are interoperable with information processing based on the Supply Chain Reference Data Model (SCRDM) and the Multi Modal Transport Reference Data Model (MMTRDM).

The Figure 5.1-2 shows the high-level information entities for the Documentary Credit of TFFRDM.

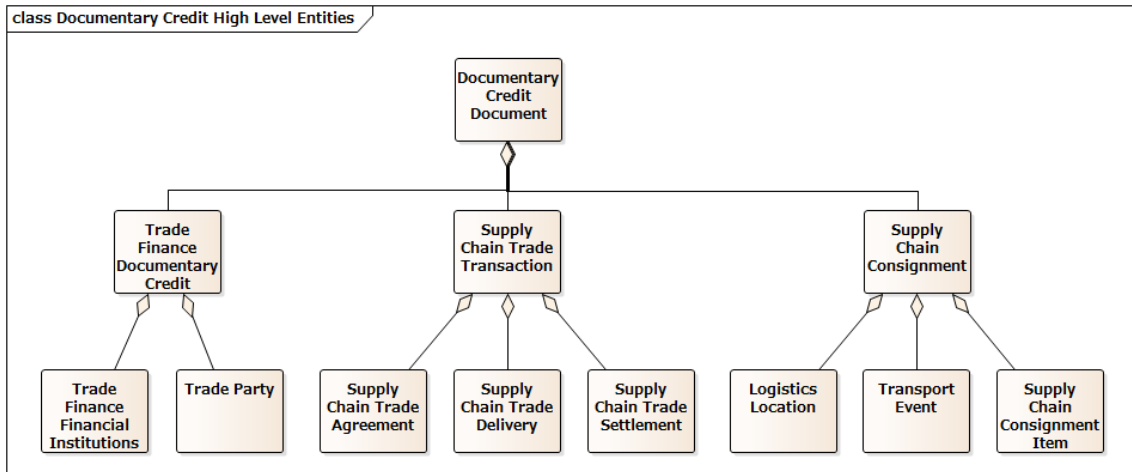


Figure 5.1-2 Documentary Credit of TFFRDM High Level Information Entities

### Documentary Credit Document

The documentary credit document specifies several types of documents defined in the section 5.1.3, such as Documentary Credit Application, Documentary Credit Advice, Documentary Credit Amendment and Bill of Exchange.

### Trade Finance Documentary Credit

A trade finance arrangement in which a financial institution in a country importing goods agrees to pay for goods being exported when it receives documents showing that the goods have been sent.

The Trade Finance Documentary Credit aggregates the following information entities.

#### Trade Finance Financial Institution

An institution that provides financial services and financial transactions to support trade finance. The financial institutions with different roles are defined, such as the issuing bank, the nominated bank, the confirming bank, the advising bank and the reimbursing bank.

#### Trade Party

The documentary credit applicant and beneficiary are defined.

#### Trade Finance Instructions

Rules and information of an instructive nature for trade finance purposes.

### Supply Chain Trade Transaction

A group of supply chain trade agreement, trade delivery and trade settlement details are defined as follows.

#### Supply Chain Trade Agreement

The contractual terms of a supply chain trade agreement.

**Supply Chain Trade Delivery**

Conditions agreed upon between the parties with regard to the delivery of goods and or services for trade purposes.

**Supply Chain Trade Settlement**

The information that enables the financial reconciliation of a supply chain transaction with the item(s) that the financial transaction is intended to settle.

**Supply Chain Consignment**

A separately identifiable collection of goods items to be transported or available to be transported from one consignor to one consignee in a supply chain via one or more modes of transport where each consignment is the subject of one single transport contract. The consignment details are defined as follows.

**Logistics Location**

A logistics related physical location or place, such as the loading base port and the unloading base port.

**Transport Event**

The event occurring during the transport of this supply chain consignment.

**Supply Chain Consignment Item**

An item within a supply chain consignment of goods separately identified for transport and customs purposes.

**5.2 Cargo Insurance**

The cargo insurance is a type of insurance that protects goods or merchandise during transport against loss or damage. In the context of trade, where goods are often transported across long distances by various modes of transportation such as ships, airplanes, trucks, or trains, cargo insurance plays a role in mitigating the risks associated with trade transactions (Buy- Ship-Pay). The cargo insurance process which is included in trade transactions plays one of the trade finance roles.

**5.2.1 Process**

This BRS covers the process and the information model for the application of a cargo insurance, the issuance of the insurance policy or the insurance certificate by the insurer, the claim notice by the assured and the settlement of the insurance payment.

In particular, we would like to point out the necessary precautions to be taken if the insurance document is to be presented in use of a documentary credit.

Figure 5.2-1 shows the collaborative use cases for the cargo insurance process.

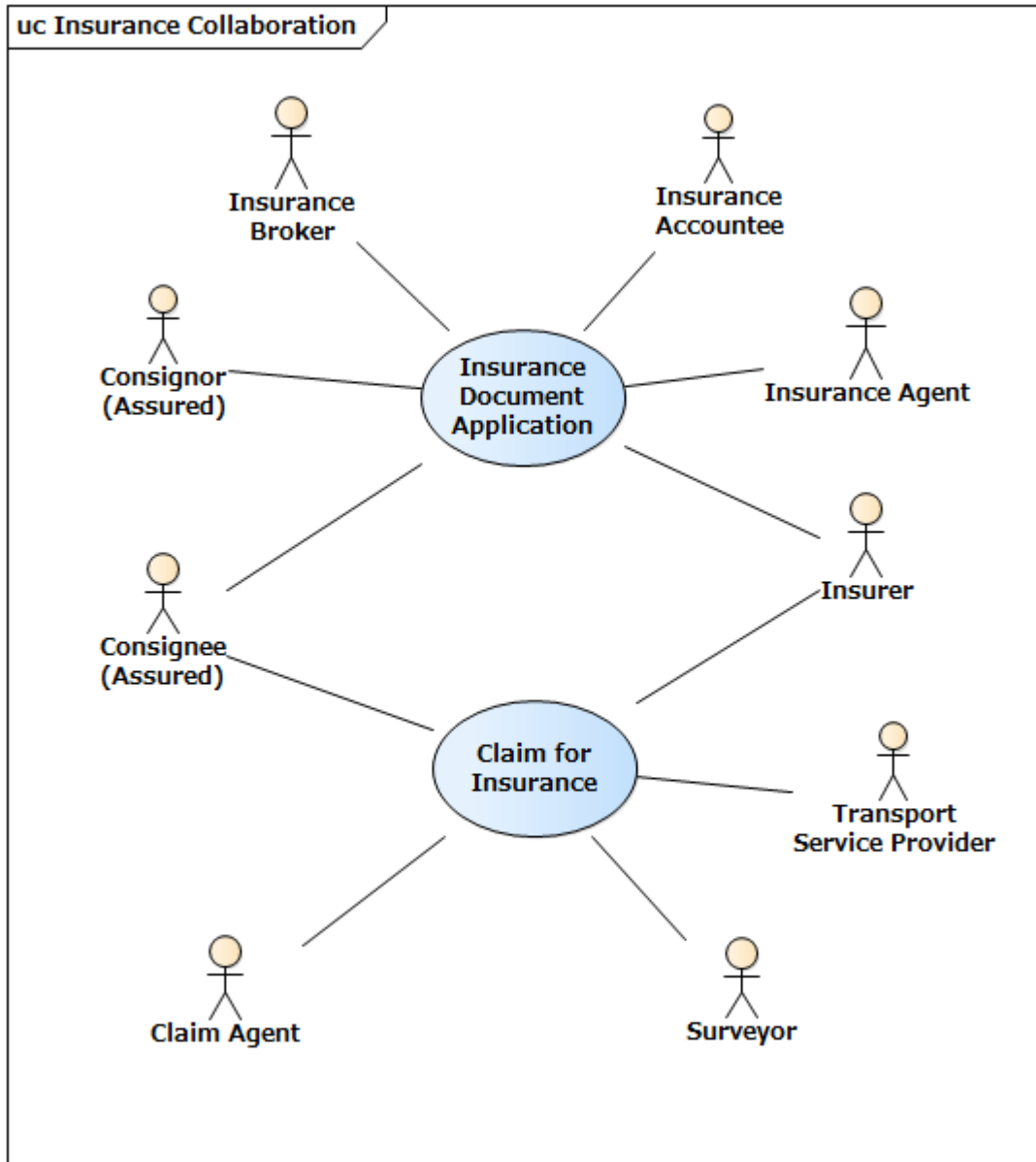


Figure 5.2-1 Cargo Insurance Collaboration Use Case

### 5.2.2 Stakeholders

There are several stake holders involved in the cargo insurance process. Those stake holders involved are named from an insurance perspective and their roles are defined.

#### Assured

An assured party insured by this insurance. The assured is the party who receives the financial

protection or indemnity against specified risks, such as damage to a vessel or cargo during transit.

**Insurance Accountee**

The party named in the insurance document to receive the benefits of the insurance coverage.

**Insurance Applicant**

The party applies for an insurance document seeking to obtain insurance coverage. The consigner, the consignee, the insurance broker or the forwarder may become the applicant of the insurance.

**Insurer**

An insurer or insurers including coinsurer(s), also known as an insurance company, is a party who sells insurance policies in exchange for premiums. The insurer agrees to provide financial protection or reimbursement against specified risks in the insurance policy. When an assured experiences a covered loss or event, the insurer is responsible for paying out the agreed-upon benefits or compensation according to the terms of the policy.

**Insurance Intermediary**

An insurance intermediary is a party that acts as a middleman between insurance buyers (policyholders) and insurance providers (insurers). There are two types of the intermediary, insurance broker on behalf of the assured and insurance agent on behalf of insurer or managing general agent.

**Claim Agent**

A party who processes claims from an assured, conduct investigations, and manage the claims payment on behalf of the insurer.

**Surveyor**

An independent party who investigates claims such as the damage or the loss.

**Transport Service Provider**

A party that provides a transport service, such as carrier.

**5.2.3 Business Documents**

There are several business documents used in the cargo insurance process as follows.

**Insurance Certificate**

An insurance certificate is a document issued by an insurance company to provide evidence of insurance coverage. It serves as proof that the assured has purchased insurance and is covered against specific risks or liabilities.

If the Documentary Credit require a presentation of Insurance Policy a presentation of an Insurance Certificate is not allowed.

### **Insurance Policy**

An insurance policy is a contract between the assured and the insurer that outlines the terms and conditions of the insurance coverage. The policy specifies the type of insurance coverage provided, the risks covered, the coverage limits, the premium amount, and other important details.

If the Documentary Credit require a presentation of Insurance Certificate a presentation of an Insurance Policy is allowed.

### **Insurance Application**

The applicant trade party for this cargo insurance process. The consigner, the consignee, the insurance broker or the forwarder may become the applicant of the insurance.

### **Insurance Premium Invoice**

The invoice for the insurance premium. An insurance premium invoice is a document issued by an insurer to an assured involved in the transaction to outline the cost of the insurance coverage for goods being shipped.

### **Insurance Claim Form**

An insurance claim form is a document used by policyholders to formally request payment or compensation from an insurance company for a covered loss, damage, or event under their policy.

### **Notice of Payable Amount**

A formal document issued by the insurer to notify the policyholder or claimant about the amount that has been determined as payable under a cargo insurance claim.

## **5.2.4 Business Entities**

The Cargo Insurance of the Trade Finance Facilitation Reference Data Model (TFFRDM) provides trade finance processes with information models that are interoperable with information processing based on the Supply Chain Reference Data Model (SCRDM) and the Multi Modal Transport Reference Data Model (MMTRDM).

The Figure 5.2-2 shows the high-level information entities for the Cargo Insurance of TFFRDM.

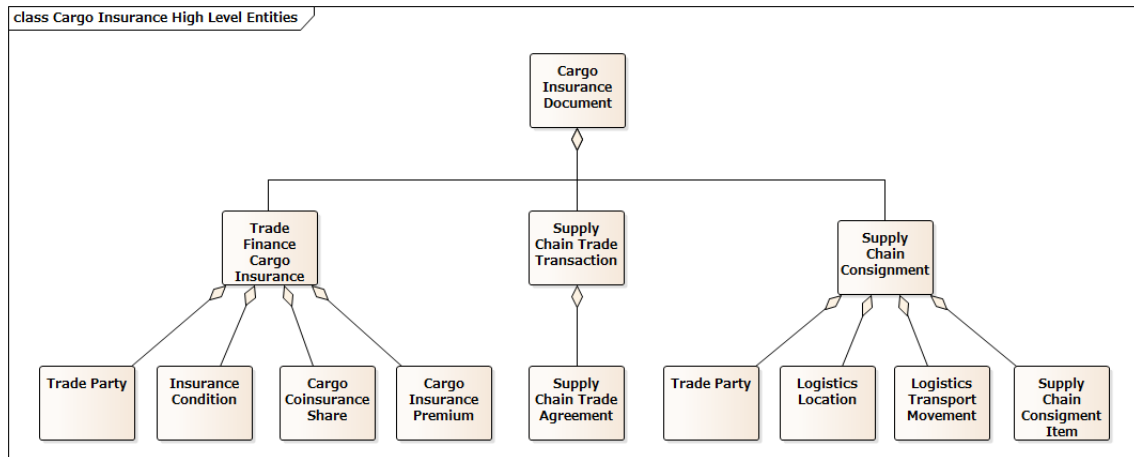


Figure 5.2-2 Cargo Insurance of TFFRDM High-Level Information Entities

### **Cargo Insurance Document**

The cargo insurance document specifies several types of documents defined in the section 5.2.3, such as Insurance Policy, Insurance Certificate, Insurance Application, Insurance Premium Invoice, Insurance Claim Form, Notice of Payable Amount.

### **Trade Finance Cargo Insurance**

A cargo insurance is a type of insurance that protects the owner's financial interests in goods, merchandise, or commodities while they are in transit from one location to another. The Trade Finance Cargo Insurance aggregates the following information entities.

#### **Trade Party**

There are several trade parties are involved in the cargo insurance process, such as insurer, assured, applicant, accountee, claim agent, surveyor, insurance agent and insurance broker.

#### **Specified Location**

The issued location where the cargo insurance policy or the insurance certificate is issued and the payment location where the cargo insurance is paid are defined.

#### **Insurance Condition**

An insurance condition is a provision within an insurance policy or an insurance certificate that sets forth specific requirements or actions that the policyholder/certificate holder must meet or perform in order for the coverage to be valid and for claims to be honored.

#### **Cargo Coinsurance Share**

A share of coverage provided by a single coinsurer or coinsurance agent if the insurance is not provided by a single insurer for the cargo insurance.

**Cargo Insurance Premium**

The cargo insurance premium applicable to this trade finance cargo insurance.

**Supply Chain Trade Transaction**

A trade agreement is defined as follows.

**Supply Chain Trade Agreement**

The contractual terms of a supply chain trade agreement to define the trade delivery terms.

**Supply Chain Consignment**

A separately identifiable collection of goods items to be transported or available to be transported from one consignor to one consignee in a supply chain via one or more modes of transport where each consignment is the subject of one single transport contract. A cargo insurance may cover multiple consignments. The consignment details are defined as follows.

**Trade Party**

The consignor and the consignee are defined.

**Logistics Location**

A logistics related physical location or place, such as the loading port, the unloading port, the transshipment location, the final destination and the original dispatch location.

**Transport Movement**

The conveyance (physical carriage) of goods or other objects used for logistics transport purposes. The 3 types of transport movements are defined, namely the pre carriage, the main carriage and the on carriage.

**Supply Chain Consignment Item**

An item within a supply chain consignment of goods separately identified for transport and customs purposes.