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INLAND TRANSPORT COMMITTEE

Working Party on Customs Questions affecting Transport

Informal Ad hoc Expert Group on Conceptual and
Technical aspects of Computerization of the TIR Procedure

Eleventh session
Geneva, 29 January 2007
Item 2 (c) of the provisional agenda

ACTIVITIES OF THE INFORMAL AD HOC EXPERT GROUP

World Customs Organisation transit data model

Note by the secretariat[*]

A.   BACKGROUND

1.   As the Expert Group may recall, the secretariat actively participates in the elaboration of
version 3 of the World Customs Organisation (WCO) transit data model. This latest version of
the data model will be devised on the basis of the previous version, which, for the transit part of
the data model, only encompasses the requirement of the European Community common transit
and in particular the New Computerized Transit System (NCTS). The modifications to the
existing data model should be brought to the WCO in the form of Data Maintenance Requests
(DMR).

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[*] The UNECE Transport Division has submitted the present document after the official documentation deadline.

2.   This document is organized as follows:

−   Chapters B and C present the particularities of the TIR and WCO data models.
−   Chapter D highlights the main differences between the current version of the WCO transit data model and the requirements of the current TIR system as well as those of the eTIR system.
−   Chapter E contains further considerations.

B.   TIR DATA MODEL AND DATA ELEMENTS

3.   The eTIR class diagram presented in Annex 1 is built on the basis of the one presented in document ECE/TRANS/WP.30/GE.1/2007/2 and includes the relevant data elements listed in Annex 3 of the Reference Model contained in document ECE/TRANS/WP.30/GE.1/2006/7. The eTIR class diagram is articulated around 3 main classes (in gray): the guarantee, the consignment and the TIR operation.

C.   WCO TRANSIT DATA MODEL AND DATA SETS

4.   At the last session of the Data Model Project Team (DMPT), a sub group of the Information Management Sub-Committee (IMSC), the transit sub group has identified the transit data sets and organized them according to the classes defined in the general WCO data model. The table in Annex 2 presents all data sets used in the current transit data model, organized by classes and with the relevant references to the United Nations Trade Data Elements Directory (UNTDED) classification. Annex 3 contains version 2 of the transit data model.

D.   DIFFERENCES BETWEEN THE DATA MODELS

5.   Major differences between the two data model are due to differences in their scope. Where the WCO data model aims at modelling Business to Government (B2G) data exchanges, in particular the declaration submission (possibly also G2B in the next version of the data model since response messages are in scope), the eTIR data model additionally depicts information exchanged between Customs (G2G). As a consequence, all information related to the TIR operations, which is mainly exchanged among Customs authorities, is missing from the WCO data model. Since the G2G information exchange is not in scope of version 3 of the WCO data model, it seems unnecessary to propose any modifications related to those differences between the models.

6.   With regard to the guarantee part of the models, it is obvious that the eTIR class diagram provides more details regarding the guarantee modelling. This is due to the fact that the guarantee information is only partly transmitted with the declaration. The rest of the guarantee part of the eTIR class diagram is aimed at being used for the guarantee registration and guarantee checks by Customs authorities. Therefore, it might be preferable to keep the differences between the two models in view of the different scopes they have.
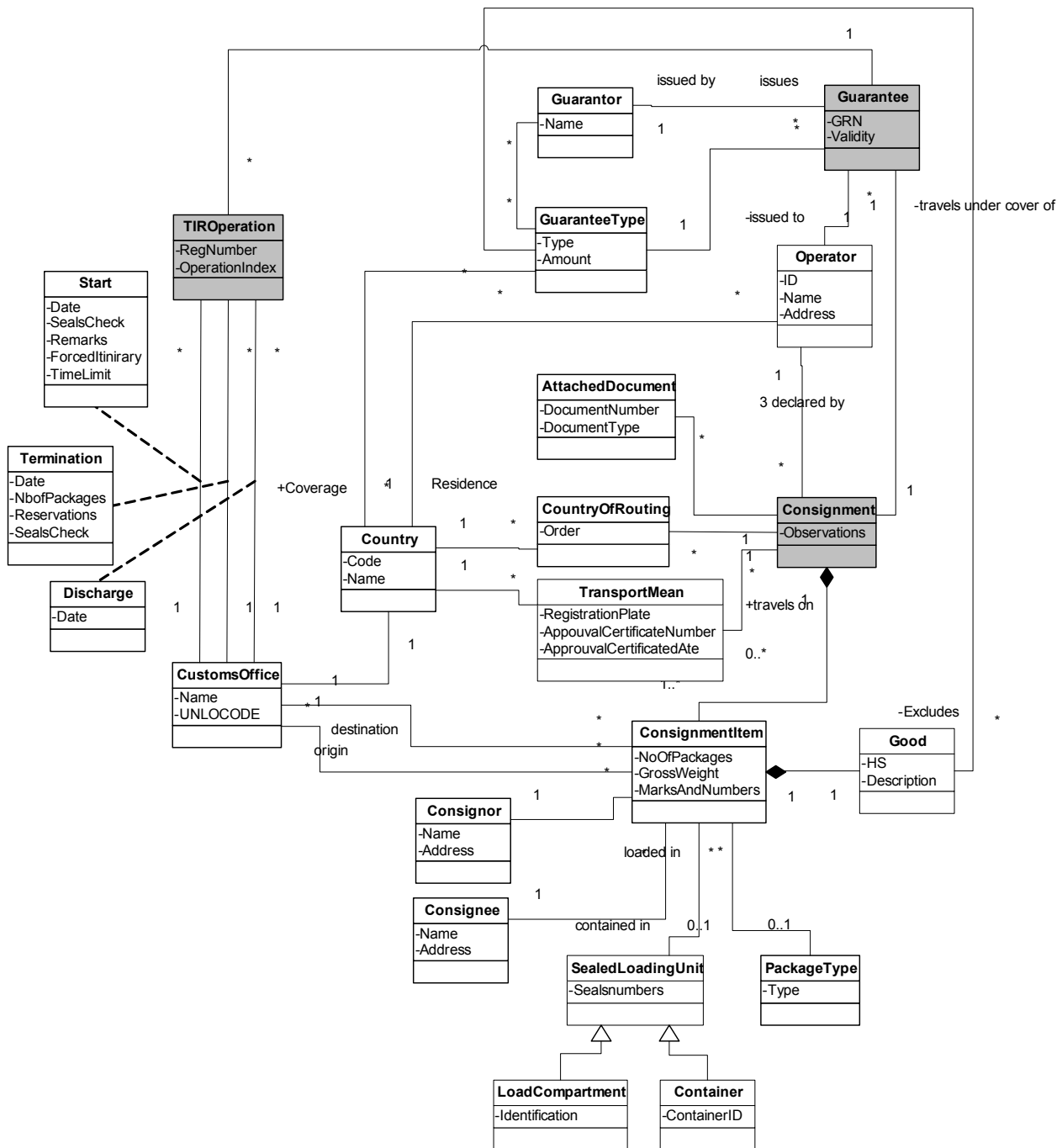
7.   The consignment part of the model is the one that will be used to submit a declaration and therefore it requires alignment with the WCO standards. The main differences are:

−   The "attached documents" class is linked at the level of the consignment in the eTIR class diagram whereas it is linked at the level of the "ConsignmentItem" in the WCO data model. There might be a need to also request its inclusion at a higher level.
−   The certificate of approval number and date of vehicles is missing form the WCO data model. Their inclusion might have to be requested.
−   The complete list of countries making up the expected itinerary of the transport (CountryOfRouting) is missing from the WCO. Its inclusion might have to be requested.
−   The "TransitDestination" class allows to specify a single destination Customs office for the whole Consignment whereas in the eTIR class diagram "ConsignmentItems" can have different Customs office of destination. An update might have to be requested.
−   It is not clear if the data set 202 in the "GoodsConsignedPlace" class (Place or country whence consigned, coded) would be suited to store the Customs offices of departure for the different "ConsignemntItems". A clarification as well as the addition of a "TransitDeparture" might have to be requested.

E.   FURTHER CONSIDERATIONS

8.   The Expert Group may wish to discuss which of these differences should lead to modification requests of the WCO data model. The secretariat will then submit DMR's to the DMPT in order to encompass the TIR requirements into the next version of the WCO transit data model.

Annex 1
eTIR class diagram

Guarantor
-Name

Guarantee
-GRN
-Validity

issued by   issues

GuaranteeType
-Type
-Amount

-issued to

-travels under cover of

Operator
-ID
-Name
-Address

3 declared by

TIROperation
-RegNumber
-OperationIndex

Start
-Date
-SealsCheck
-Remarks
-ForcedItinirary
-TimeLimit

Termination
-Date
-NbofPackages
-Reservations
-SealsCheck

Discharge
-Date

+Coverage

Residence

AttachedDocument
-DocumentNumber
-DocumentType

CountryOfRouting
-Order

Consignment
-Observations

Country
-Code
-Name

TransportMean
-RegistrationPlate
-AppouvalCertificateNumber
-ApprouvalCertificatedAte

+travels on

0..*

-Excludes

CustomsOffice
-Name
-UNLOCODE

destination
origin

ConsignmentItem
-NoOfPackages
-GrossWeight
-MarksAndNumbers

Good
-HS
-Description

Consignor
-Name
-Address

Consignee
-Name
-Address

loaded in

contained in

SealedLoadingUnit
-Sealsnumbers

PackageType
-Type

LoadCompartment
-Identification

Container
-ContainerID

Annex 2

WCO data sets used in the transit data model version 2

WCO ID	Name	Definition	Data model classes	UID	Name	Format	Code remarks
003	Additional document reference number	Identifier of a document providing additional information.	AdditionalDocument	1004	Document.Identifier	an..35	
170	Additional document type, coded	Code specifying the name of an additional document.	AdditionalDocument	1001	Document.Type.Code	an..3	National codes. EDIFACT codes available.
105	Free text	Free text field available to the message sender for information.	AdditionalInformation	4440	FreeText.Text	an..512	
225	Additional statement text	Description of an additional statement	AdditionalInformation	4440	FreeText.Text	an..512	
226	Additional statement, coded	Coded form of an additional statement.	AdditionalInformation	4441	FreeText.Code	an..17	User codes
239	Street and number/P.O. Box	Specification of the postal delivery point such as street and number or post office box.	Address	3042	PostalService.DeliveryPoint.Text	an..35	
241	City name	Name of a city.	Address	3164	Address.City.Text	an..35	
242	Country, coded	Identification of the name of the country or other geographical entity as specified in ISO 3166 and UN/ECE Rec 3	Address	3207	Country.Identifier	a2	ISO 3166-1 2-alpha code
243	Country sub-entity name	Name of a country subdivision.	Address	3228	Country.Subdivision.Text	an..35	

WCO ID	Name	Definition	Data model classes	UID	Name	Format	Code remarks
244	Country sub-entity identification	Code specifying the name of a country subdivision.	Address	3229	Country.Subdivision.Identifier	an..9	ISO 3166-2 2-alpha code or user codes
245	Postcode identification	Code specifying a postal zone or address.	Address	3251	Address.Postcode.Identifier	an..9	National codes
160	Identification of means of transport crossing the border	Name to identify the means of transport used in crossing the border.	BorderTransportMeans	8212	TransportMeans.Identifier.Text	an..35	Sea: Vessel name
175	Nationality of means of transport crossing the border, coded	Nationality of the active means of transport used in crossing the border, coded.	BorderTransportMeans	8453	TransportMeans.RegistrationNationality.Identifier	a2	ISO 3166-1 2-alpha code
183	Mode/type of means of transport crossing the border, coded	Means and mode of transport used for crossing the border, coded.	BorderTransportMeans	8179	TransportMeans.Type.Code	an..4	UN/ECE Recommendation 28
138	Brief cargo description	Plain language description of the cargo of a means of transport, in general terms only.	Commodity	7004	Consignment.SummaryDescription.Text	an..256	
145	Tariff code number (Customs)	Code specifying a type of goods for Customs, transport, statistical or other regulatory purposes (generic term).	Commodity	7357	GoodsItem.Type.Code	an..12	First 6 digits must be the HS code
234	Sensitive goods code	Codes for goods presenting increased risks of fraud in the course of a transit procedure in accordance with national law.	Commodity			n..2	User codes
051	Consignee name	Name [and address] of party to which goods are consigned.	Consignee	3036	Party.Name.Text	an..35	
052	Consignee, coded	Identifier of party to which goods are consigned.	Consignee	3039	Party.Identifier	an..17	International codes (e.g. DUNS, EAN) or user codes

WCO ID	Name	Definition	Data model classes	UID	Name	Format	Code remarks
096	Container transport indicator	An indication whether or not goods are transported in a container.	Consignment	7365	Process.Indicator.Code	n1	0 = no, 1 = yes
094	Customs status of goods, coded	Status of goods as identified by customs for regulation purposes.	ConsignmentItem	4095	GoodsItem.CustomsStatus.Code	an..3	National codes
006	Sequence number	Number indicating the position in a sequence.	ConsignmentItem	1050	Sequence. Position.Identifier	n..5	
233	Associated Customs Procedure Code	Code indicating which Customs procedure is associated with the declaration.	ConsignmentItem	7365	Process.Indicator.Code	an..4	User codes
139	Number of packages per commodity	Number of packages per consignment item packaged in such a way that they cannot be divided without first undoing the package.	ConsignmentItemPackaging	6061	Quantity.Quantity	n..8	
099	Amendment code	Code specifying the reason for a change.	Declaration TransportContractDocument	4295	Change.Reason.Code	an..3	EDIFACT codes
142	Shipping marks	Free form description of the marks and numbers on a transport unit or package.	ConsignmentItemPackaging	7102	GoodsItem.ShippingMarks.Text	an..512	UN/ECE Recommendation 15
141	Type of packages identification	Code specifying the type of package of an item.	ConsignmentItemPackaging	7065	Package.Type.Code	an..2	UN/ECE Recommendation 21 Annex VI
146	Total number of packages	Count of total number of packages of the entire declaration/ consignment.	DeclarationPackaging	6061	Quantity.Quantity	n..8	

WCO ID	Name	Definition	Data model classes	UID	Name	Format	Code remarks
071	Consignor - name	Name [and address] of the party consigning goods as stipulated in the transport contract by the party ordering transport.	Consignor	3036	Party.Name.Text	an..35	
072	Consignor, coded	To identify the party consigning goods as stipulated in the transport contract by the party ordering transport.	Consignor	3039	Party.Identifier	an..17	International codes (e.g. DUNS, EAN) or user codes
001	Declaration name, coded	Code specifying the name of a document.	Declaration	1001	Document.Type.Code	an..3	EDIFACT codes
002	Declaration reference number	Reference number identifying a specific document.	Declaration	1004	Document.Identifier	an..35	
017	Message function, coded	Code indicating the function of a document.	Declaration	1225	Document.Function.Code	n..2	EDIFACT codes
022	Declaration issuing date	Date at which a declaration was issued and when appropriate, signed or otherwise authenticated.	Declaration	2001	Date.Date.DateTime		n8 (CCYYMMDD)
065	Customs office of declaration, coded	To identify a location at which a declaration is lodged.	Declaration	3225	Location.Identifier	an..11	UN/LOCODE (an..5) + user code (an..6), or user code (an..11)
082	Declaration issuing place, coded	Place at which a declaration was issued and when appropriate, signed or otherwise authenticated	Declaration	3411	Document.IssueLocation.Identifier	an..11	UN/LOCODE (an..5) + user codes (an..6)
131	Total gross weight	Weight (mass) of goods including packaging but excluding the carrier's equipment for a declaration.	Declaration	6092	DocumentDeclaredGrossWeight.Measure		n..11,3 (Floating delimiter with maximum decimals as defined)
227	Number of seals	To specify the number of seals affixed.	Declaration	6061	Quantity.Quantity	n..4	
228	Total number of items	Count of the total number of goods items within a declaration	Declaration	6061	Quantity.Quantity	n..5	

WCO ID	Name	Definition	Data model classes	UID	Name	Format	Code remarks
034	Delivery destination	The address to which goods are to be delivered. Address, region and/or country as required by national legislation or according to national requirements.	DeliveryDestination	3042 3164 3228 3229 3251 3207	Various		
158	Identification of means of transport at departure	To identify the means of transport used at the time of presentation of the consignment to a Customs office in the context of a goods declaration.	DepartureTransportMeans	8212	TransportMeans.Identifier.Text	an..35	
176	Mode/type of means of transport at departure, coded	Means and mode of transport used for the carriage of the goods at departure, coded.	DepartureTransportMeans	8179	TransportMeans.Type.Code	an..4	UN/ECE Recommendation 28
178	Nationality of means of transport at departure, coded	Nationality of the active means of transport used at place of departure.	DepartureTransportMeans	8453	TransportMeans.RegistrationNationality.Identifier	a2	ISO 3166-1 2-alpha code
159	Equipment identification number	Marks (letters and/or numbers) which identify equipment e.g. unit load device.	EquipmentIdentification	8260	TransportEquipment.Identifier	an..17	ISO 6346, IATA
086	Place of physical examination, coded	Identification of a place where goods are to be examined if this place is different from the place where the goods are located (WCO Ref. 078).	ExaminationPlace	3225	Location.Identifier	an..11	UN/LOCODE (an..5) + user codes (an..6)

WCO ID	Name	Definition	Data model classes	UID	Name	Format	Code remarks
202	Place or country whence consigned, coded	Identification of the place in country or country from which the goods were initially despatched to the importing country.	GoodsConsignedPlace	3225	Location.Identifier	an..11	UN/LOCODE (an..5) and user code (an..6), or ISO 3166-1 2-alpha code
077	Location of goods	Name of the place where goods are located.	GoodsLocation	3224	Location.Name.Text	an..70	
078	Location of goods, coded	To identify the place where goods are located.	GoodsLocation	3225	Location.Identifier	an..11	UN/LOCODE (an..5) + user codes (an..6)
126	Gross weight item level	Weight of line item including packaging but excluding the transport equipment.	GoodsMeasure	6018	LineItem.GrossWeight.Measure		n..11,3 (Floating delimiter with maximum decimals as defined)
128	Net net weight	Weight (mass) of the goods themselves without any packing.	GoodsMeasure	6048	NetNetWeight.Measure		n..11,3 (Floating delimiter with maximum decimals as defined)
130	Tariff quantity/Supplementary quantity	Quantity of the goods in the unit as required by Customs for tariff, statistical or fiscal purposes.	GoodsMeasure	6102	GoodsItem.CustomsTariff.Quantity		n..14,3 (Floating delimiter with maximum decimals as defined)
069	Place of loading	Name of a seaport, airport, freight terminal, rail station or other place at which goods are loaded onto the means of transport being used for their carriage	LoadingLocation	3224	Location.Name.Text	an..70	
232	Guarantee invalid country, coded	Code identifying the country where the guarantee is invalid.	ObligationGuarantee	3207	Country.Identifier	a2	ISO 3166-1 2-alpha code
100	Guarantee reference identifier	Details regarding undertaking given in cash, bond or as a written guarantee to ensure that an obligation will be fulfilled, e.g. under a transit procedure.	ObligationGuarantee	1154	Reference.Identifier	an..35	

WCO ID	Name	Definition	Data model classes	UID	Name	Format	Code remarks
101	Security details, coded	Codes specifying details regarding undertaking given in cash, bond or as a written guarantee to ensure that an obligation will be fulfilled, e.g. under a transit procedure	ObligationGuarantee	4377	Obligation.Guarantee.Code	an..3	WCO codes or user codes
007	Previous Customs document number	The number of a previous Customs document.	PreviousCustomsDocument	1004	Document.Identifier	an..35	
186	Previous Customs document type, coded	Type of document used for declaration previously presented on Customs territory, coded.	PreviousCustomsDocument	1001	Document.Type.Code	an..3	EDIFACT codes or user codes
248	Representative person function text	To specify the capacity in which the representative person acts on behalf of the party responsible for the declaration.	RepresentativePerson	4440	FreeText.Text	an..35	
256	Representative person name	Name of the representative of the party making the declaration.	RepresentativePerson	3412	Contact.Name.Text	an..35	
264	Limit Date	Date by when the transit movement has to be completed.	Transit Control	2001	Date.Date.DateTime	n8 (CCYYMMDD)	
235	Control results at departure, coded	Code indicating the results of the controls carried out by the authorized consignor prior to departure.	TransitControl	7365	Process.Indicator.Code	an2	User codes
048	Customs office of transit, coded	To identify the customs office which is responsible for transit formalities en route.	TransitCustomsOffice	3225	Location.Identifier	an..11	UN/LOCODE (an..5) + user codes (an..6)
182	Place of destination of the transit, coded	Identification of the place at which the goods are destined under Customs control of transit procedure.	TransitDestination	3225	Location.Identifier	an..11	UN/LOCODE (an..5) + user codes (an..6)

WCO ID	Name	Definition	Data model classes	UID	Name	Format	Code remarks
073	Transit principal - name	Name [and address] of party accepting liability for goods held or moving under a Customs authorization and - when applicable - a guarantee.	TransitPrincipal	3036	Party.Name.Text	an..35	
074	Transit principal, coded	Identifier of party accepting liability for goods held or moving under a Customs authorization and - when applicable - a guarantee.	TransitPrincipal	3039	Party.Identifier	an..17	International codes (e.g. DUNS, EAN) or user codes
165	Seal number	The identification number of a seal affixed to a piece of transport equipment.	TransportEquipment	9308	TransportEquipment.SeaI.Identifier	an..35	
016	Unique consignment reference number	Unique number assigned to goods, both for import and export.	UCR	1202	Consignment.Identifier	an..35	WCO (ISO15459) or equivalent

Annex 3
WCO transit data model version 2

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