

Interoperability for Railway Consignment Notes

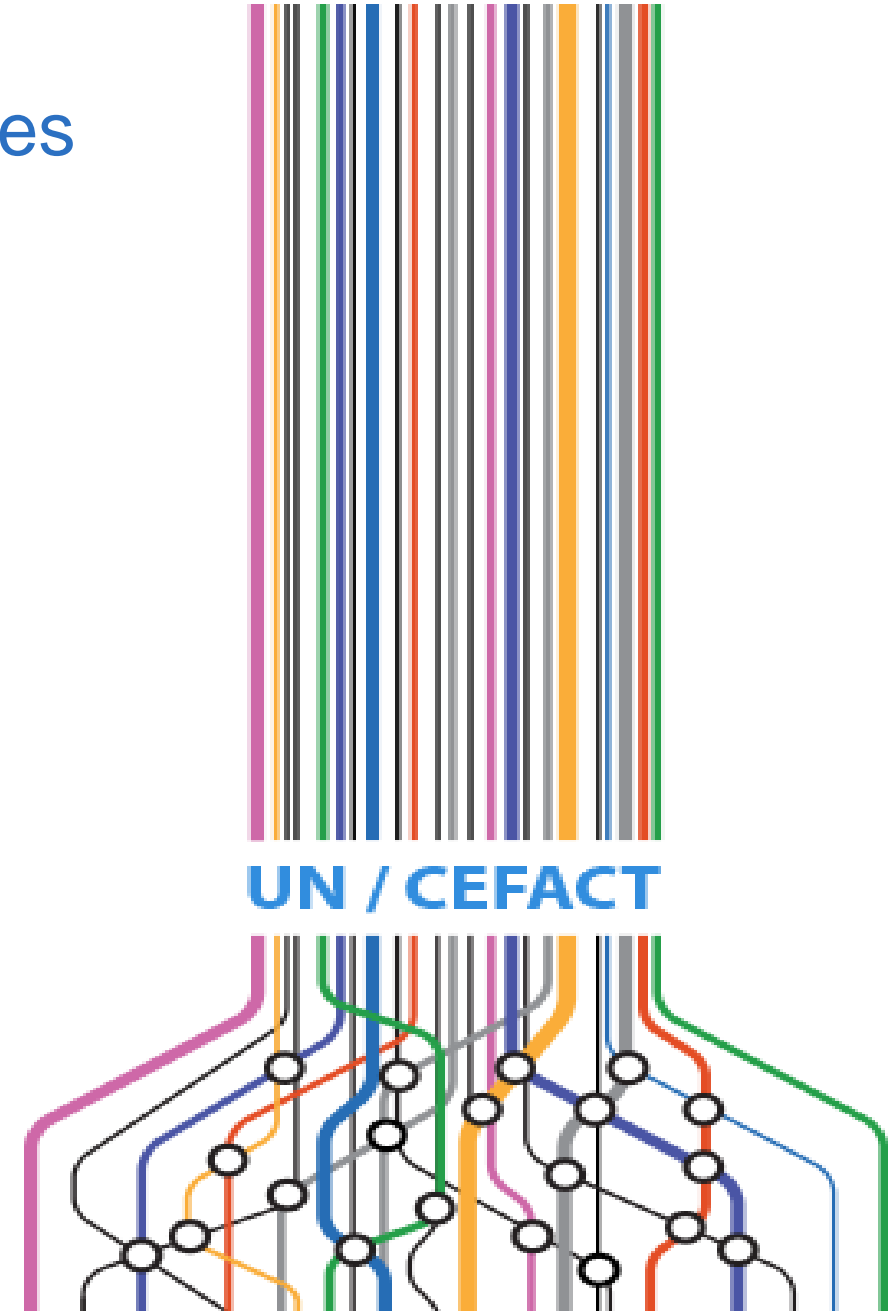
14th International Capacity-Building Seminar on
Trade and Transport Facilitation

22 May 2023

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UN/CEFACT Expert

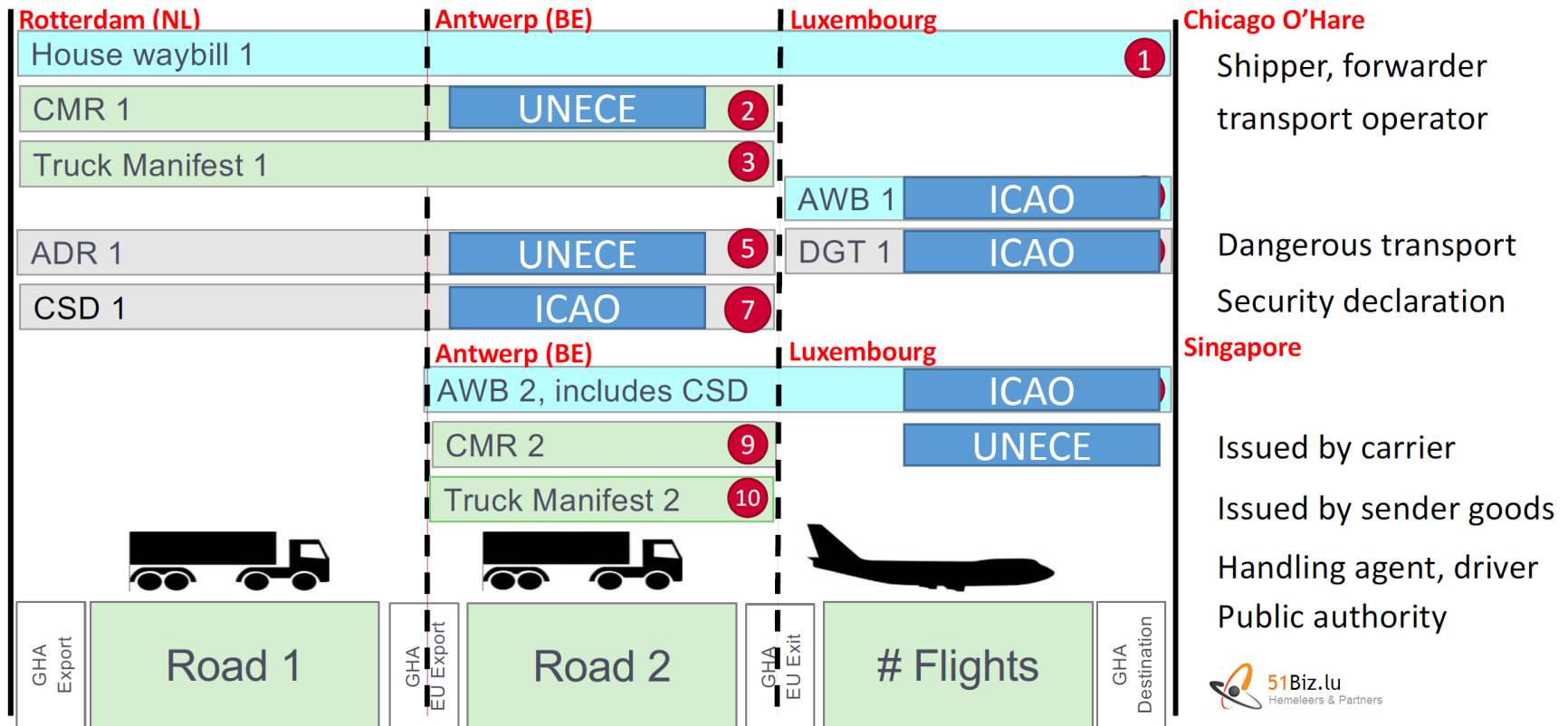
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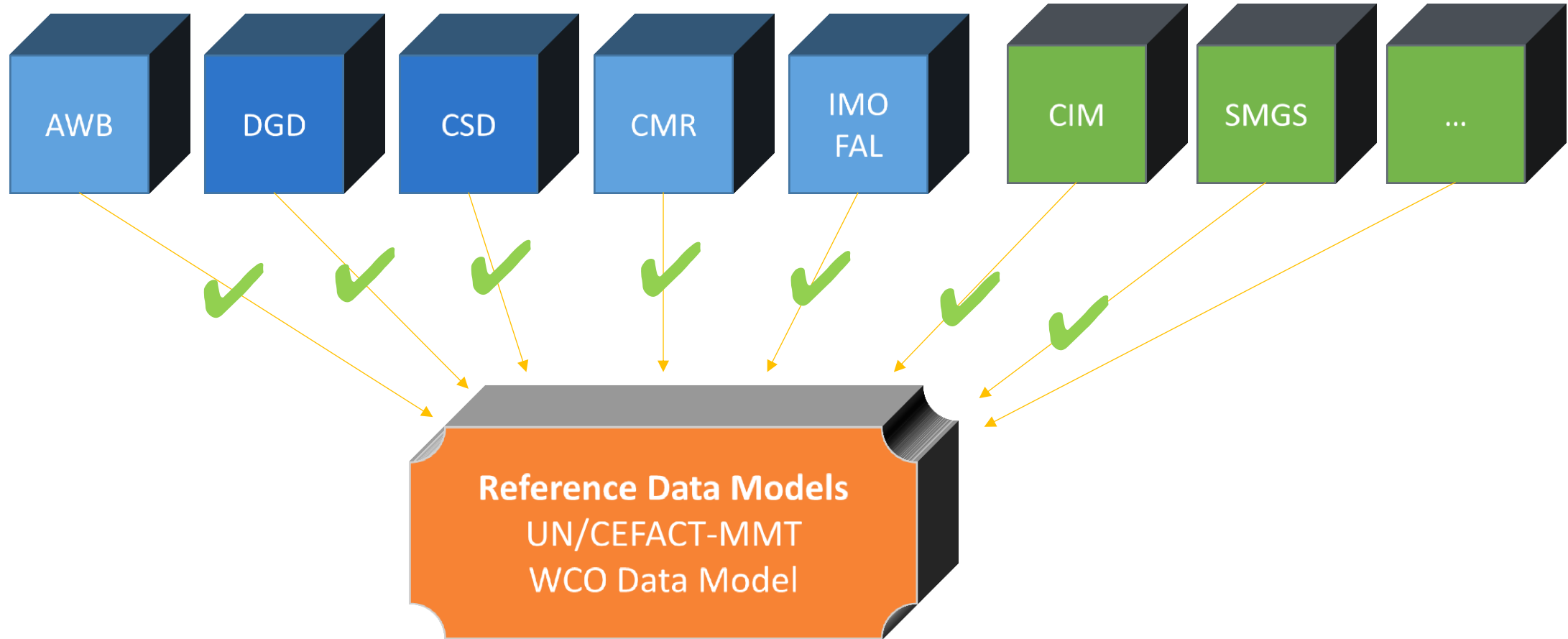


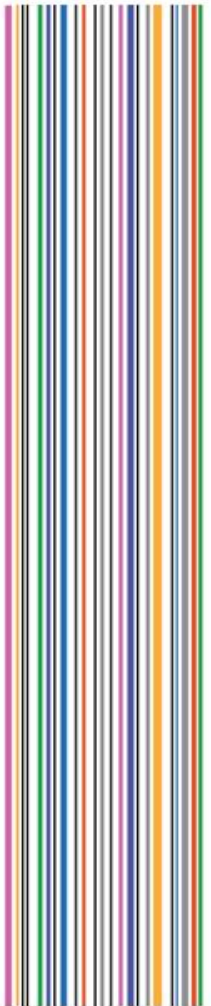
A secure end-to-end Supply Chain requires multimodal interoperability

Interoperable transport information



Mapping of conventions and regulations to RDMs



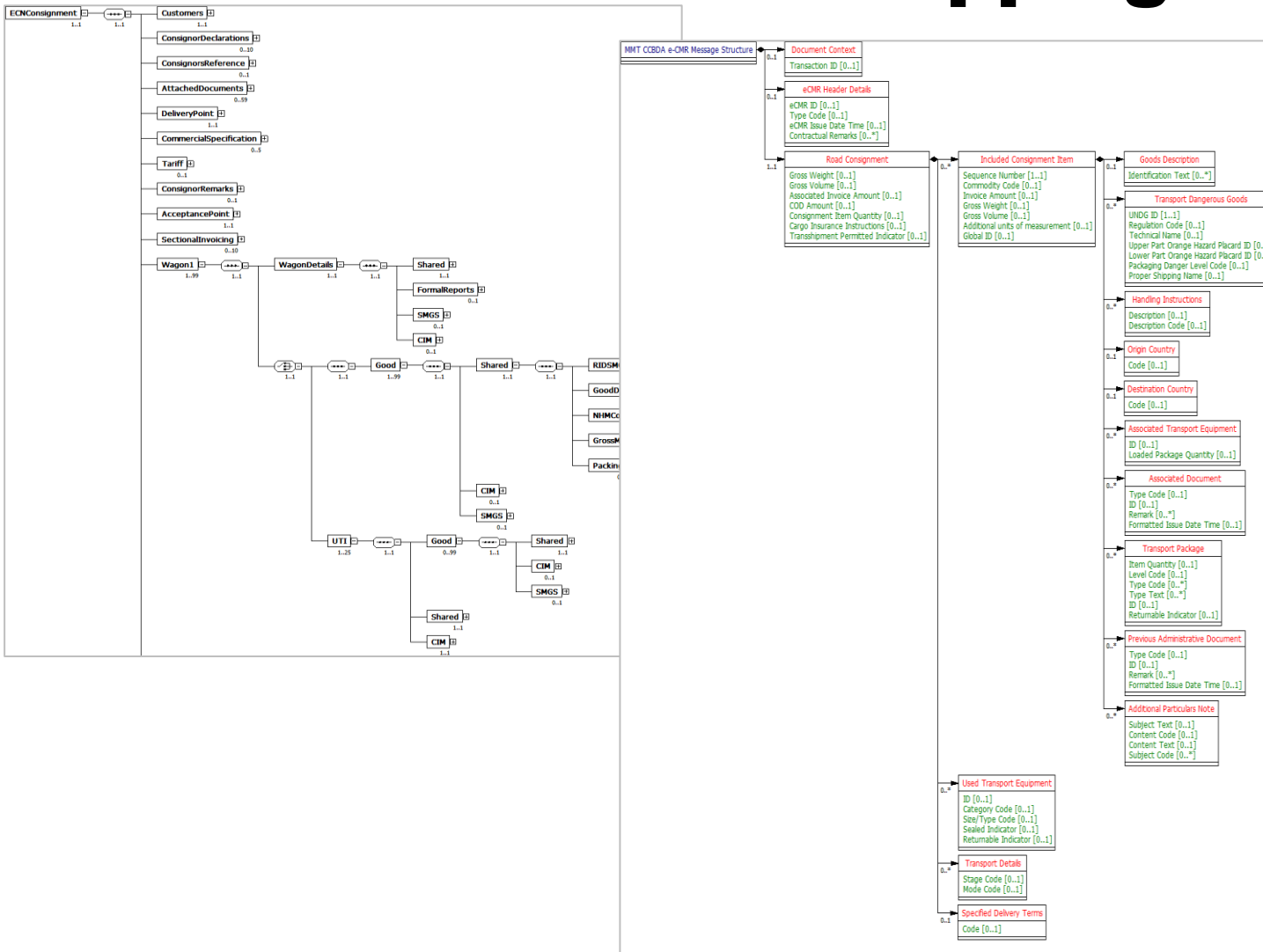


UNTTC

Transport & Trade Connectivity in the age of pandemics

- UN New York launched **COVID-19 initiative to encourage exchange of digitised electronic data** rather than paper documents in transport contract related data exchanges
- **UNECE and UN/CEFACT joint contribution:**
 - UN/CEFACT Cross-modal project to develop modal data exchange guides as subsets of the UN/CEFACT MMT Reference Data Model to support digitised data exchanges between transport modes
 - **7 Heads of Delegation** supported the Project (Germany, Spain, Greece, Russia, Italy, US and Ukraine)
 - Project completed all ODP steps successfully and published on UN/CEFACT website plus links to UNTTC website

ECN Schema Mappings to MMT RDM



X Differences in relationships, used in both structures, for connecting transport equipment and cargo items

X The Railway ECN is based on wagon list, each wagon includes different cargoes and consignment can be the whole train, several wagons, wagon or just cargo item in certain wagon.

✓ In MMT there are “many to many” relationship between used transport means and cargo items, that provides much more flexible solution



- Developed SMGS data structures as a subset of MMT subset and mapped it to IFTMIN EDIFACT message
- Developed combined CIM/SMGS and CIM/SMGS ECN data structure under the Unified Railway Law (URL) as subsets of MMT
- Developed CIM/SMGS Wagon list data structure as a subset of MMT
- Mapped the possible data elements from railway documents for the purpose of achieving multimodality using MMT RDM
- Further updates of the CIM/SMGS and SMGS consignment notes for possible pilot project in the Eurasian and Western European region following collaborative calls with regional rail experts
- Publication of the railway MMT subset artefacts on the UNTTC.org website (Component Library (CCL) Structure, Dataset alignment with other 'document' objects, XSD schema, UML diagrams, HTML index)

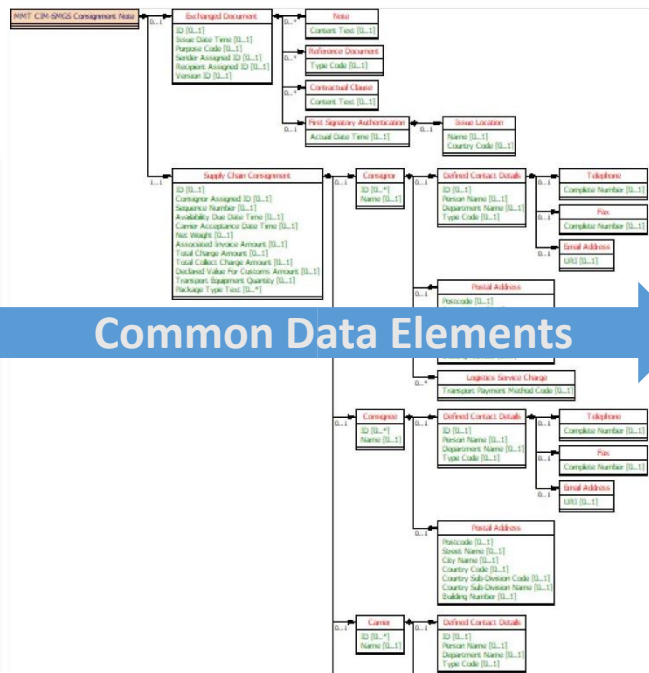
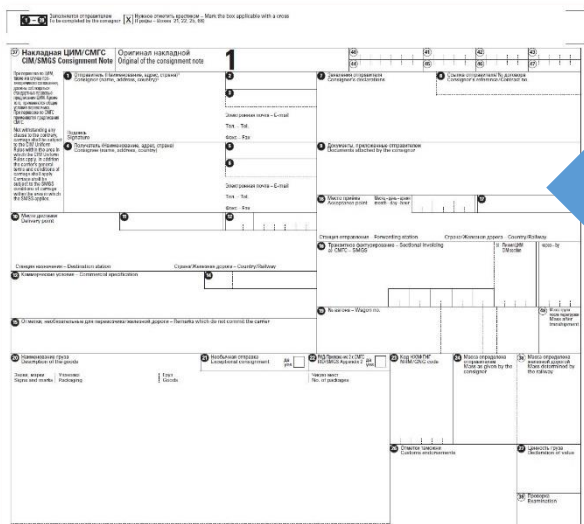


Core Mappings

CIM-SMGS MMT Subset

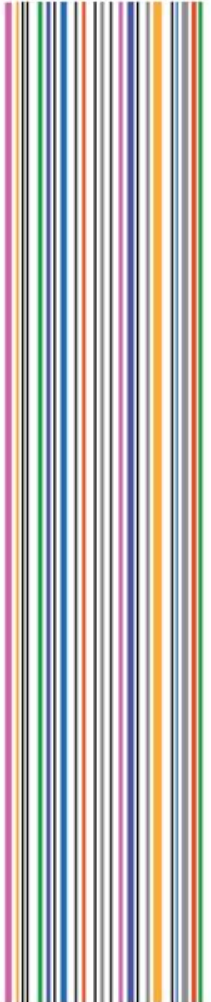
IFTMIN (SMGS)

CIM-SMGS



Common Data Elements

```
UNH+UNOA:1+GVCPSPRU:HOST+RCV:HOST+200101:2340+00000007989646++IFTMIN_21'
UNH#012340238986+IFTMIN:D:97A:UN:OSJD'
BGH+722+28371545+4'
DTM+143:201912281608:203'
TSR++42:1:2'
CUX+1:RUB+7:RUB'
MOA+132:49701:RUB'
MOA+133:49701:RUB'
MOA+135:0'
MOA+154:0'
FTX+DCL+++AAAI(ΕΙΘΑΕ) Ε ΑΔΙΑΟΔΑ ΕΝΙΔΑΙΟΥ Ε ΝΙΙΟΑΑΟΝΟΟΠΟ ΟΝΟΑΙΕΑΙΙΟΥ ΟΔΑΙΑΑ:ΙΕΡΙ. Ν ΙΑ
FTX+RQR+++20067405'
FTX+HSA+EEJQ 31 ΑΕΑ ΙΟΠ. ΑΙ'
DOC+916:::AAEEADADER IA ΟΙΑΔΟΥ+10006060/271219/0014799:2'
DOC+916:::AD0EA IDEEAAAIOA AIEGAIIOU+AAEEADADER IA ΟΙΑΔΟΥ IDEEAAAONR Ε:2'
DOC+916:::AAEADAEIIOAI I OAOIE+AREI I NIINOI+578:2'
DOC+294:::IAIIOO IA IDOC +219:2'
DOC+916:::AD0EA IDEEAAAIOA AIEGAIIOU+NOIE IINOAAEE AAEADU 2019 Α.:2'
DOC+916:::R+O+466I0 26.12.2019A.:2'
DTM+12+20067405:37:288:CAABAAGUA YE+DEA+0020'
DTM+219:202001012003:203'
TOD+5+50'
RFF+ADF:40 IO 18.01.2019A,NAEEA 15371 IO'
RFF+ADF:14.11.2019A. N IAI NOGAGIOAIOAACC'
RFF+ADF: EEIOOAEQ 2019-17/05 IO 17.05.2019'
RFF+ADF:A.A.G. 29-D IO 14.11.2019A. N RIII'
RFF+ADF:ODAINYENIAE0EB N IINEAAGUAE IOI'
RFF+ADF:DAAEIE AD0CA A OARIOAEEEO IIEOQA .A'
RFF+ADF:IAIAIO IOOE 02-242-18-IA.'
GON+1+5'
TDI+21+2'
LOC+5+20045209:37:288:EEDEQE+DEA'
LOC+8+21166009:37:288:AE0UAA+AX'
LOC+17+20067405:37:288:CAABAAGUA VE'
NAD+CN+1318:201+RIII OBAINVENIAE0EB+210040 OARIOAEEEA AAEADORU X.AEOA:ARE OE.AODAAAE.
NAD+CN+1318:203'
NAD+GS+1000082570:200+AI NA-ODAIN-IAI "DEA"+0020'
NAD+GS+1318:200+RIII OBAINVENIAE0EB+AX+0021'
NAD+CZ+6745:201+EEDEQE EE0EEA II OBAINIIOO XACA: AI NA-ODAIN+187110 EAIETADAAEAS IA
NAD+CZ+40736583:202'
NAD+CZ+1000082570:203'
NAD+CZ+7740000100:204'
```

UNLK CIM/SMGS Mapping Examples

Rail

Consignor – TDED 3336

Consignee – TDED 3132

Destination Station Code – TDED 3259

2006-09-01

Заполняется отправителем To be completed by the consignor Нужно отметить крестиком – Mark the box applicable with a cross (Графы – Boxes 21, 22, 25, 66)

37 Накладная ЦИМ/СМГС CIM/SMGS Consignment Note		Оригинал накладной Original of the consignment note		40	41	42	43
1		2		44	45	46	47
При перевозке по ЦИМ, также в случае противоречия отправления, должны соблюдаться стандартные правовые предписания ЦИМ. Кроме того, применяются общие условия перевозчика. При перевозке по СМГС применяются предписания СМГС. Notwithstanding any clause to the contrary, carriage shall be subject to the CIM Uniform Rules within the area in which the CIM Uniform Rules apply. In addition the carrier's general terms and conditions of carriage shall apply. Carriage shall be subject to the SMGS conditions of carriage within the area in which the SMGS applies.		1 Отправитель (Наименование, адрес, страна) ¹ Consignor (name, address, country) ¹ 2 3 Электронная почта – E-mail Тел. – Tel. Факс – Fax Подпись Signature 4 Получатель (Наименование, адрес, страна) Consignee (name, address, country)		7 Заявления отправителя Consignor's declarations 8 Ссылка отправителя/№ договора Consignor's reference/Contract no.			
10 Место доставки Delivery point		11		15 Место приёма Acceptance point		17	
13 Коммерческие условия – Commercial specification		14		16 Станция отправления – Forwarding station		Страна/Железная дорога – Country/Railway	
Станция назначения – Destination station		Страна/Железная дорога – Country/Railway		18 Транзитное фактурирование – Sectional invoicing а) СМГС – SMGS		б) Лицевая ЦИМ CIM section	

Place of Acceptance – TDED 3348

Date/Time of Acceptance – TDED 2037

5/30/2023

Inter Modal Matrix with MMT as Reference Data Model (Auto-generated)

	C	D	E	F	G	H	I	J	K	L	M	N	O
1	BN	FIATA Bill	CIM-SMGS	CIM-SMGS URL	Wagon List	River B/L	Maritime B/L	eCMR	EFTI DR FEB2021	EFTI DG to	Air Waybill	Air CSD	Air DG
2	BN	FIATA Bill	CIM-SMGS Co	CIM-SMGS Co	Wagon list; Co	River Bill of Lading	Maritime B/L	eCMR MMT; R	eFTI DESCopy	MMT Cont	Air Waybill	CSD; D21	DG Decla
3	MMT CCBDA IFTM** Data Exchange Structure	X	X	X	X	X	X	X	X	X	X	X	X
4	Exchanged Document Context							X					
10	Exchanged Document	X	X	X	X	X	X	X			X	X	X
11	ID	X	X	X	X	X	X	X			X	X	X
12	Name												
13	Type Code					X	X	X			X	X	X
14	Issue Date Time	X	X	X	X	X	X	X			X	X	X
15	Remark							X					
16	Original Issued Quantity	X				X							
17	Copy Issued Quantity	X				X							
18	Purpose Code		X	X							X	X	X
19	Sender Assigned ID		X	X									
20	Recipient Assigned ID		X	X									
21	Version ID		X										
22	Note		X	X				X				X	
23	Subject Text							X					
24	Content Code							X					
25	Content Text		X	X				X				X	
26	Subject Code							X				X	
27	Reference Document		X	X									
28	Type Code		X	X									
29	Issue Location	X				X	X	X			X		X
30	ID	X				X	X	X			X		X
31	Name	X				X	X	X			X		X
32	Country Code	X						X					
33	Contractual Clause	X	X	X							X		
34	ID	X									X		
35	Content Text	X	X	X							X		
36	Air Waybill Consignor Signatory Authentication	X	X	X	X						X		
37	Actual Date Time	X	X	X							X		

UN/CEFACT Reference Data Models - Where we are heading

