

The logo for dbh, with 'dbh' in a bold, lowercase sans-serif font. The 'd' is red, and 'bh' is grey. A red horizontal line is positioned below the letters, ending in a small red square on the right side.

dbh Logistics IT AG



**Implementation Guide IFTSAI D.00B
Version 2.0**

Document Maintenance

If there are any remarks, amendments or change requests concerning this document please contact:

dbh Logistics IT AG
Martinistr. 47 – 49, 28195 Bremen
www.dbh.de

Tel. +49 421 30902-33
Fax +49 421 30902-57
E-Mail: support@dbh.de

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Introduction

The EDIFACT message **IFTSAI** – „*Forwarding and transport schedule and availability information message*” is used in the port industries to exchange sailing schedules.

dbh's Port Community System (**PCS**) accepts sailing schedules and makes them available to all participants taking part in the logistics and supply chain process. For this purpose the sailing schedule is stored in dbh's **SIS** – *Ship Information System*.

dbh's current implementation guide for the IFTSAI message is based upon the manual which is provided by SMDG (IFTSAI Version 2.0 D00B, www.smdg.org).

In addition to SMDG's guide there were several necessary accommodations made, owed to the special requirements of the dbh's PCS and the utilization of the sailing schedule.

1. General

1.1. Data Flow

Each data transfer to dbh may contain several messages for different schedules. Schedules with different processing flags for “Initial application”, “Update existing schedule”, “Cancellation” may be sent within one data file. Each IFTSAI message contains exactly one voyage for one vessel.

Each sailing schedule will be acknowledged by the EDIFACT message “APERAK”.

A data file for the acknowledgement may contain several APERAK messages.

The recipient of the APERAK message will be determined by the value in segment UNB S002/0004 – *Interchange sender identification* of the IFTSAI data file.

Please contact dbh to consult on the proper value to use.

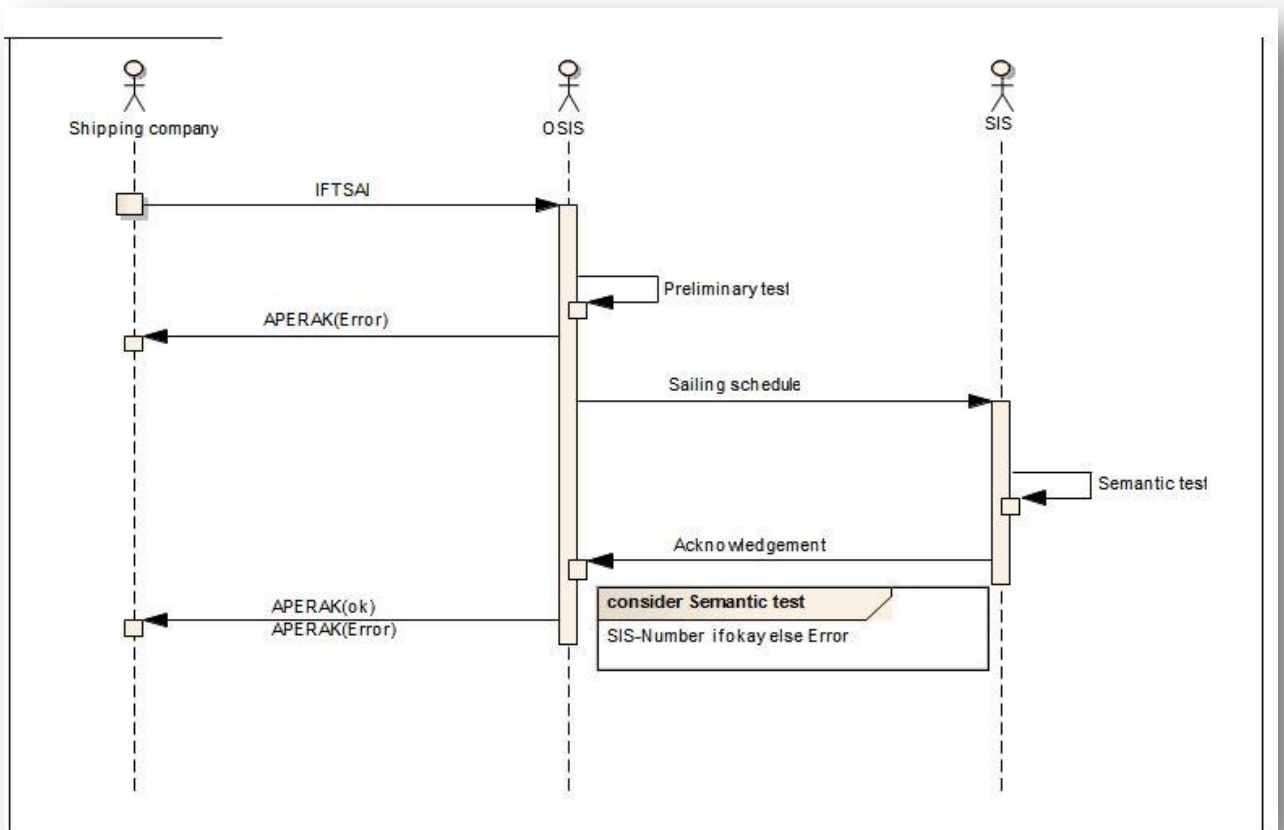


Fig. 1 – Data flow IFTSAI / APERAK

1.2. Functional Scope

The vessel schedule is incorporated into dbh's Ship Information System (SIS).

It is available to parties involved in the logistics processes as well as to the PCS itself. For example the port orders for BHT (Bremen/Bremerhaven Harbour Telematics) and WHT (Wilhelmshaven Harbour Telematics) are based on the voyages in SIS.

From this fact some basic requirements result for using of the IFTSAI message:

1.2.1. Creating a New Schedule

The carrier's internal reference is the essential attribute in the communication between the shipping company's system and SIS. In case of successfully creating a new voyage from IFTSAI, SIS provides its own serial number for each new voyage and links it to the carrier's reference from the RFF-Segment of the IFTSAI message. The SIS number will be returned in the APERAK message to the carrier's system.

1.2.2. Updating an Existing Schedule

The voyage to be updated in SIS is identified by the carrier's internal reference from the RFF-Segment of the IFTSAI message.

The change message will completely replace the existing voyage. For reasons of consistency with BHT there is just one exception: Ports that were reported in a previous message but are not contained in the current replacement will not be deleted from the voyage in SIS. They will be marked as "Not called" instead.

1.2.3. Cancellation Of an Existing Schedule

The cancellation message will cancel the voyage in SIS and change the status of each port to "Not called". The corresponding voyage cannot be used for subsequent port orders anymore.

1.2.4. Determination Of the Relevant Port Of Call From the PCS's Point Of View

It must be evident from the schedule which port can be considered as the relevant port of call from the PCS's point of view, e.g. DEBRV – Bremerhaven. This port is considered to be the port of operation.

Every port in the schedule that precedes the port of operation will be inserted into the import part of the voyage in SIS and every port after the port of operation will be inserted into the export part of the voyage.

This rule presumes that the list of scheduled ports (LOC segments) are transmitted in chronological sequence, not in alphabetical order !

A maximum of 99 ports per import voyage and export voyage is permitted.

The so-called "Mainline ports" within the schedule are identified by qualifier "9", "11", "153" and "7" from the LOC segment.

Note:

The standard process provides for at least one LOC segment containing the location code "DEBRE", "DEBRV" or "DEWVN".

However there is the possibility to install other ways of generating voyages from the transmitted schedule on request. So please contact dbh to coordinate how to handle the LOC segments if necessary.

1.2.5. Internal And External Voyage Number

A distinction is made between internal and external voyage number in SIS. The internal voyage number usually originates from the shipping company's computer system and uniquely identifies the schedule. It is used in SIS to locate the appropriate voyage.

The external voyage number can be a consortium number or any reference which is published with the voyage to third parties. They may use this external reference to locate the voyage in SIS.

1.2.6. Vessel Master Data

SIS contains master data for almost all ocean vessels. They are identified by IMO number and a date of validity.

The IMO number transmitted by IFTSAI will be checked against the master data of SIS. If no match is found, the call sign will be used for the search as a substitute.

If a matching master data record can be located in SIS it will be added to the voyage in SIS.

If no matching master data exists for IMO number or call sign a new record set for the master data will be created in SIS. This record contains IMO number, call sign, vessel name, type of vessel and flag from the TDT segment of the IFTSAI message. All other attributes in SIS will contain standard values.

1.2.7. NSW Interface

Since June 1, 2015, EU Directive 2010/65 is in effect, which governs the reporting formalities for vessels arriving in or departing from a German Port (or transiting the Kiel Canal). (see also "NSW – National Single Window")

To comply with these legal requirements dbh provides the software product "ANSW- Advantage National Single Window". This application allows to fulfill all required reporting formalities for each vessel call in a German Port. By using the software all obligations concerning dangerous goods or other reports for the port authorities are complied with. Every ship call will be identified by a so-called "Visit ID".

For more information about dbh's ANSW application, please see

https://www.dbh.de/fileadmin/uploads/pdf/broschueren/Port_Solutions/dbh_Advantage_National_Single_Window.pdf

By using the IFTSAI message a carrier can steer the process of generating a Visit ID in conjunction with creating the voyage in SIS. There is also the possibility of not generating the Visit ID at once but defining a time delay which can be set individually.

The generated Visit ID will be transmitted back to the originator of the IFTSAI message via APERAK. Thereafter additional data for the visit can be added by means of ANSW web client, XML data file or excel sheet respectively.

The standard way to apply for a Visit ID is to use an additional FTX segment in the TDT group. But depending on the handling of the port of operation in the IFTSAI message there might be the necessity to find another way to transmit the request. In this case please contact dbh to discuss alternatives.

2. Message Structure

2.1. Segment Table

Pos.No.	Segm. ID	Name	Req.	Max. Use	Level	Notes and Comments
0010	UNH	Message Header	M	1	0	
0020	BGM	Beginning of Message	M	1	0	
0030	DTM	Date/Time/Period	C	9	1	
0040	FTX	Free Text	C	99	1	
0200		Segment Group 4: TDT-RFF-FTX-SG5	M	1	1	
0210	TDT	Details of Transport	M	1	1	
0285	RFF	Reference	C	9	2	
0287	FTX	Free Text	C	9	2	
0290		Segment Group 5: LOC-DTM-RFF-FTX	R	99	2	
0300	LOC	Place/Location Identification	M	1	2	
0310	DTM	Date/Time/Period	C	9	3	
0320	RFF	Reference	C	9	3	
0325	FTX	Free Text	C	9	3	<i>Not used</i>
0330		Segment Group 6: NAD-LOC-SG7	C	9	1	<i>Not used</i>
0340	NAD	Name and Address	M	1	1	
0350	LOC	Place/Location Identification	C	9	2	
0360		Segment Group 7: CTA-COM	C	9	2	
0370	CTA	Contact Information	M	1	2	
0380	COM	Communication Contact	C	9	3	
0550	UNT	Message Trailer	M	1	0	

2.2. Segment Clarification

UNH Message Header

A service segment starting and uniquely identifying a message

The message type code for the “*Forwarding and transport schedule and availability information message*” is IFTSAI.

Note:

- Data Element 0062 – MESSAGE REFERENCE NUMBER:
The message must be identified uniquely by this reference number.

BGM Beginning of Message

A segment to indicate the type and function of the message and to transmit the identifying number

Note:

- Data Element 1004 in Composite C106 – Document identifier:
The document must be identified uniquely by this reference number.

DTM Date/Time/Period

A segment to indicate date(s) and time(s) applying to the whole message

Segment Group 4: TDT-DTM-FTX

A group of segments to specify the schedule and to detail the schedule being provided

TDT Details of Transport

A segment to indicate information related to the mode and means of transport

Note:

- Data Element 8213 in C222 - Transport means identification name identifier:
Here the vessel's IMO-number has to be transmitted, as indicated in Data Element 1131 in C222 by using qualifier “146”.
- Data Element 8179 - Transport means description code:
If no code is transmitted the value “XX” (unknown) will be used instead.
- Data Element 8179 - Transport means nationality code:
If no code is transmitted the value “XX” (unknown) will be used instead.
- Data Element 8101 - Transit direction indicator code:
This information has to be provided. Use “P” to indicate that the message sender is the primary carrier, use “S” otherwise.
- Data Element 8457 in Composite C401 - Excess transportation reason code:
Use “S” to indicate that the voyage is for short shipping.
- Data Element 8459 in Composite C401 - Excess transportation responsibility code:
Use “F” (for “Feeder”) to indicate that the transmitted voyage is for a feeder port.

RFF Reference

A segment to provide a reference related to the transport details, such as the published line or route number.

Note:

- Use qualifier “VM” to transmit a call sign. The length of the call sign is restricted to 7 digits.
- Use qualifier “ANK” to transmit the internal reference from the carrier’s system. It will be used to identify the voyage in dbh’s SIS.

FTX Free Text

A segment to specify free form or machine-processable supplementary information related to the means of transport or the associated port call.

Note:

- Use qualifier “AIQ” to transmit a tally company in FTX segment.
Please use the dbh-code to identify the tally company. If no FTX-segment with qualifier “AIQ” is sent a tally code from the configuration table will be used.
In this case please contact dbh.
- Use qualifier “SSR” to request a Visit ID from NSW.

Segment Group 5: LOC-DTM-RFF-FTX

A group of segments to identify the routing and indicate corresponding date(s) and time(s).

LOC Place/Location Identification

A segment to identify a location, e.g.: place of departure/arrival (main line vessel), place of cargo acceptance (original port of loading) and place for cargo delivery (final port of discharge)

Note:

- According to specific rules (*see chapter 1.2.4*) at least one LOC segment has to be identified as the relevant port of operation for the PCS. This special LOC segment must contain a terminal code in data element “3223 - First related location name code in segment group C519”.
Either the dbh code can be used to identify the proper terminal or a code generated in the carrier’s system.
If a translation from carrier’s into dbh’s code has to be done - or no code can be provided at all - please contact dbh.

DTM Date/Time/Period

A segment to indicate date(s) and time(s) related to the location, e.g. date/time of scheduled departure/arrival.

Note:

- According to specific rules (*see chapter 1.2.4*) at least one LOC segment has to be identified as the relevant port of operation for the PCS. This special LOC segment has to be followed by at least one DTM segment which provides the date for arrival and/or departure in the relevant port of operation.

FTX Free Text

A segment to specify free form or machine-processable supplementary information related to the means of transport.

Not used

Segment Group 6: NAD-LOC-SG7

A group of segments to indicate all parties involved in the transaction and relevant locations, contacts and communication channels.

Not used

NAD Name and Address

A segment to identify the party's name, address and function

Not used

LOC Place/Location Identification

A segment to identify a location

Not used

Segment Group 7: CTA-COM

A group of segments to indicate the person responsible within an organization

This segment group is not used. Values for person of contact (segment CTA) and office telephone number (segment COM) are provided by a configuration table. Please contact dbh to define the proper values for your company.

Not used

CTA Contact Information

A segment to identify a person or department within a party

Not used

COM Communication Contact

A segment to identify the communication numbers of person or department to whom communication should be directed

Not used

UNT Message Trailer

A service segment ending a message, giving the total number of segments in the message (including the UNH & UNT) and the control reference number of the message (used in UNH).

3. Branching Diagram

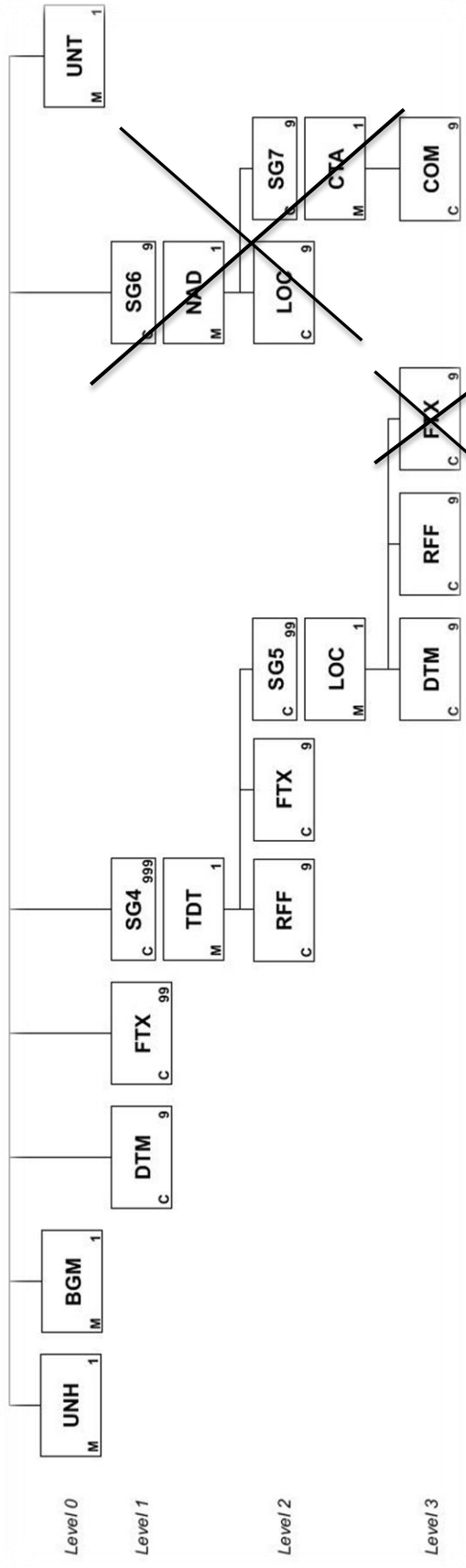


Fig. 2 – IFTSAI Branching Diagram

4. Segment Description

4.1. Notice

The description of segments contains the standard definition as well as the implementation version adapted to the needs of IFTSAI and its use in dbh's PCS.

In the EDIFACT standard segment description data groups and data elements are labeled as "M" – Mandatory or "C" – Conditional.

For implementation purposes however there is the need to define the properties of the segments much more precise. So the indicators are extended to the following: "R" – Required, "D" – Dependent, "O" – Optional and "X" – Not used.

4.2. List of Segments

UNH – Message Header

Pos	Count	Segment	St	MaxUse	Level	Purpose
0010	1	UNH	M	1	0	Service segment starting and uniquely identifying a message

Standard				Implementation		
Tag	Name	St	Format	St	Format	Notes and comments
0062	MESSAGE REFERENCE NUMBER	M	an..14	M	an..14	<i>A reference allocated by the sender, uniquely identifying the message. This reference must also be transmitted in the UNT segment.</i>
S009	MESSAGE IDENTIFIER	M		M		
0065	Message type identifier	M	an..6	M	an..6	IFTSAI
0052	Message type version number	M	an..3	M	an..3	D
0054	Message type release number	M	an..3	M	an..3	00B
0051	Controlling agency	M	an..2	M	an..2	UN
0057	Association assigned code	M	an..6	M	an..6	DBH01
0068	COMMON ACCESS REFERENCE	C	an..35	O	an..35	
S010	STATUS OF THE TRANSFER	C		O		
0070	Sequence message transfer number	C	n..2	O	n..2	
0073	First/last sequence message transfer indication	C	a1	O	a1	

Notes:

The message type code for the “Forwarding and transport schedule and availability information message” is **IFTSAI**.

Example:

UNH+34798668+I FTSAI : D: 00B: UN: DBH01‘

BGM – Beginning of Message

Pos	Count	Segment	St	MaxUse	Level	Purpose
0020	2	BGM	M	1	0	Segment to indicate the type and function of the message and to transmit the identifying number

		Standard		Implementation		
Tag	Name	St	Format	St	Format	Notes and comments
C002	DOCUMENT/MESSAGE NAME	M		M		
1001	Document name code	M	an..3	M	an..3	TS2 <i>Transport schedule</i>
1131	Code list identification code	C	an..17	C	an..17	
3055	Code list responsible agency code	C	an..3	C	an..3	
1000	Document name	C	an..35	C	an..35	
C106	DOCUMENT/MESSAGE IDENTIFICATION	C		C		
1004	Document identifier	M	an..35	M	an..35	<i>Sender's unique reference number. Must be a unique identifier per document</i>
1056	Version identifier	C	an..9	C	an..9	
1060	Revision identifier	C	an..6	C	an..6	
1225	MESSAGE FUNCTION CODE	C	an..3	R	an..3	1 <i>Cancellation</i> 5 <i>Replacement</i> 9 <i>Original</i>
4343	RESPONSE TYPE CODE	C	an..3	C	an..3	

Notes:

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Example:

BGM#TS2+0000102936+9'

DTM – Date/time/period

Pos	Count	Segment	St	MaxUse	Level	Purpose
0030	3	DTM	C	9	1	Segment to indicate date(s) and time(s) applying to the whole message.

				Standard	Implementation		
Tag	Name	St	Format	St	Format	Notes and comments	
C507	DATE/TIME/PERIOD	M		M			
2005	Date or time or period function code qualifier	C	an..3	R	an..3	137 <i>Document/message date/time</i>	
2380	Date or time or period value	C	an..35	R	an..35		
2379	Date or time or period format code	C	an..3	R	an..3	203 <i>CCYYMMDDHHMM</i> 102 <i>CCYYMMDD</i>	

Notes:

The use of “203” in data element 2379 is to be preferred.

Example:

DTM#137: 201511180641: 203'

FTX – Free text

Pos	Count	Segment	St	MaxUse	Level	Purpose
0040	4	FTX	C	99	1	Segment to provide free form or coded text information.

				Standard		Implementation	
Tag	Name	St	Format	St	Format	Notes and comments	
4451	TEXT SUBJECT CODE QUALIFIER	C	an..3	C	an..3	AAI <i>General Information</i>	
4453	FREE TEXT FUNCTION CODE	C	an..3	X			
C107	TEXT REFERENCE	C		X			
4441	Free text value code	C	an..17	X			
1131	Code list identification code	C	an..17	X			
3055	Code list responsible agency code	C	an..3	X			
C108	TEXT LITERAL	C					
4440	Free text value	C	an..512	C	an..512	<i>Consortia or Alliance name</i>	
4440	Free text value	C	an..512	C	an..512		
4440	Free text value	C	an..512	C	an..512		
4440	Free text value	C	an..512	C	an..512		
4440	Free text value	C	an..512	C	an..512		
3453	LANGUAGE NAME CODE	C	an..3	C	an..3		
4447	FREE TEXT FORMAT CODE	C	an..3	C	an..3		

Notes:

-

Example:

FTX+AAI ++GRAND ALLI ANCE'

TDT – Details of Transport

Pos	Count	Segment	St	MaxUse	Level	Purpose
0200		SG4	M	1	1	TDT-RFF-FTX-SG5
0210	5	TDT	M	1	1	Segment to specify the transport details such as identification of the means of transport and its conveyance reference number.

Standard				Implementation			
Tag	Name	St	Format	St	Format	Notes and comments	
8051	TRANSPORT STAGE CODE QUALIFIER	M	an..3	M	an..3	20	Main-carriage transport
8028	MEANS OF TRANSPORT JOURNEY IDENTIFIER	M	an..17	M	an..17		Consortia voyage number or carrier's internal voyage number
C220	MODE OF TRANSPORT	C		C			
8067	Transport mode name code	C	an..3	C	an..3	1	
8066	Transport mode name	C	an..17	X			
C228	TRANSPORT MEANS	C		C			
8179	Transport means description code	C	an..8	C	an..8	3 8 11 13 50 52 54 55 56 59 63 64 66 67	Dry bulk carrier Container ship Ship Ocean vessel Passenger vessel General cargo vessel Liquefied Petroleum Gas (LPG) carrier Liquefied Natural Gas (LNG) carrier Grain carrier Steel products vessel Ore carrier Car carrier Roll on - roll off vessel Ferry
8178	Transport means description	C	an..17	C	an..17		
C040	CARRIER						
3127	Carrier identifier	C	an..17	R	an..17		Vessel operator's name coded
1131	Code list identification code	C	an..17	C	an..17	172	Carriers
3055	Code list responsible agency code	C	an..3	C	an..3	182 ZZZ	SCAC (Standard Carrier Alpha Code) Mutually defined
3128	Carrier name	C	an..35	C	an..35		Free text
8101	TRANSIT DIRECTION INDICATOR CODE	C	an..3	R	an..3	P S	Primary carrier Secondary carrier
C401	EXCESS TRANSPORTATION INFORMATION	C		C			
8457	Excess transportation reason code	C	an..3	C	an..3	S	Short Shipping
8459	Excess transportation responsibility	C	an..3	C	an..3	F	Feeder port

	code					
7130	Customer shipment authorization identifier	C	an..17	X		
C222	TRANSPORT IDENTIFICATION	C		R		
8213	Transport means identification name identifier	C	an..9	R	an..9	<i>IMO-number</i>
1131	Code list identification code	C	an..17	C	an..17	146 <i>Means of transport identification</i>
3055	Code list responsible agency code	C	an..3	C	an..3	11 <i>Lloyd's register of shipping</i>
8212	Transport means identification name	C	an..35	C	an..35	<i>Vessel name</i>
8453	Transport means nationality code	C	an..3	C	an..3	<i>ISO country code, e.g. DE for Germany</i>
8281	TRANSPORT MEANS OWNERSHIP INDICATOR CODE	C	an..3	X		

Notes:

Only the IMO-number will be accepted as Transport means identification (Data element 8213).

Example:

TDT+20+547W*1+13+ABC: 172: ZZZ+S++7396666: 146: 11: OCEAN PRI DE: NO

RFF – Reference

Pos	Count	Segment	St	MaxUse	Level	Purpose
0200		SG4	M	1	1	TDT-RFF-FTX-SG5
0285	6	RFF	C	9	2	Segment to specify a reference.

Standard				Implementation		
Tag	Name	St	Format	St	Format	Notes and comments
C506	REFERENCE	C		M		
1153	Reference code qualifier	C	an..3	R	an..3	VM Vessel identification (Call sign) VON Voyage number ANK Reference number assigned by third party CRN Conveyance reference number ZZZ Mutually defined reference number
1154	Reference identifier	C	an..70	R	an..70	
1156	Document line identifier	C	an..6	X	an..6	
4000	Reference version identifier	C	an..35	X	an..35	
1060	Revision identifier	C	an..6	X	an..6	

Notes:

- **VM – Vessel Identification:**
Since the vessel is uniquely identified by the IMO number in segment TDT the call sign sent here is an additional information.
- **VON – Voyage number:**
The voyage number in segment TDT (data element 8028) is used as the default value for both the internal and external voyage number. If a segment RFF with qualifier “VON” is transmitted, the value in RFF data element 1154 will be used as the external voyage number.
- **ANK – Reference number assigned by third party:**
The voyage number in segment TDT (data element 8028) is used as the default value for both the internal and external voyage number. If a segment RFF with qualifier “ANK” is transmitted, the value in RFF data element 1154 will be used as the internal voyage number.
- For the difference between external and internal voyage number please see chapter 1.2.5.

Example:

RFF+VM MLE2'
RFF+VON: 1517'
RFF+ANK: MLE21517'

FTX – Free Text

Pos	Count	Segment	St	MaxUse	Level	Purpose
0200		SG4	M	1	1	TDT-RFF-FTX-SG5
0287	7	FTX	C	9	2	Segment to provide free form or coded text information.

Standard				Implementation		
Tag	Name	St	Format	St	Format	Notes and comments
4451	TEXT SUBJECT CODE QUALIFIER	C	an..3	M	an..3	AAI General information (Service name or loop) ACB Additional information (present Master's name) AIQ Party information (Tally company) SSR Request for Visit ID NSW
4453	FREE TEXT FUNCTION CODE	C	an..3	X		
C107	TEXT REFERENCE	C		X		
4441	Free text value code	C	an..17	X		
1131	Code list identification code	C	an..17	X		
3055	Code list responsible agency code	C	an..3	X		
C108	TEXT LITERAL	C		C		
4440	Free text value	C	an..512	C	an..512	
4440	Free text value	C	an..512	C	an..512	
4440	Free text value	C	an..512	C	an..512	
4440	Free text value	C	an..512	C	an..512	
4440	Free text value	C	an..512	C	an..512	
3453	LANGUAGE NAME CODE	C	an..3	C	an..3	
4447	FREE TEXT FORMAT CODE	C	an..3	C	an..3	

Notes:

- Use qualifier "AIQ" to transmit the tally company involved in the visit in the relevant port of operation (regarding the PCS). Please use the dbh code for the proper addressing. If no segment "RFF" with qualifier "AIQ" is transmitted a default value will be used. In this case please contact dbh to agree upon the value to use.
- Use qualifier "SSR" to request a Visit ID from NSW. In this case data element 4453 should contain the value "J".

Example:

```
FTX+AI Q+++00007000'
FTX+SSR+J'
```

LOC – Place/Location Identification

Pos	Count	Segment	St	MaxUse	Level	Purpose
0290		SG5	R	99	2	LOC-DTM-RFF-FTX
0300	8	LOC	M	1	2	Segment to identify a place or a location and/or related locations.

Standard				Implementation			
Tag	Name	St	Format	St	Format	Notes and comments	
3227	LOCATION FUNCTION CODE QUALIFIER	M	an..3	M	an..3	7 Place of delivery 9 Place/port of loading 10 Place/port of acceptance 11 Place/port of discharge 13 Place of transshipment 65 Final place/port of discharge 88 Place of receipt 103 Place of transfer 153 Port of call (=Discharging and loading operations to be performed) 225 Place of refuelling	
C517	LOCATION IDENTIFICATION	C		R			
3225	Location name code	C	an..25	R	an5	United Nation Location Code	
1131	Code list identification code	C	an..17	R	an..17	139 Port	
3055	Code list responsible agency code	C	an..3	R	an..3	6 UN/ECE	
3224	Location name	C	an..256	C	an..256		
C519	RELATED LOCATION ONE IDENTIFICATION	C		D		Terminal/Berth information	
3223	First related location name code	C	an..25	C	an..25	Code for terminal/berth	
1131	Code list identification code	C	an..17	C	an..17	72 Container terminal	
3055	Code list responsible agency code	C	an..3	C	an..3	ZZZ Mutually defined	
3222	First related location name	C	an..70	C	an..70		
C553	RELATED LOCATION TWO IDENTIFICATION	C		C		FCL/LCL packing facility	
3233	Second related location name code	C	an..25	C	an..25	Code for FCL/LCL packing facility	
1131	Code list identification code	C	an..17	C	an..17	263 Packing/unpacking facility 266 Marine berth 269 Warehouse	
3055	Code list responsible agency code	C	an..3	C	an..3	ZZZ Mutually defined	
3232	Second related location name	C	an..70	C	an..70		
5479	RELATION CODE	C	an..3	C	an..3	This element may be used to link a location to other locations (eg. link a "Place of Acceptance" to a "Port of Loading"). This element should contain a number (1,2,3, etc.) which corresponds to the same element in other LOC segments for related ports.	

Notes:

- One of the LOC segments must represent the port of operation referring to the port community system (PCS). (see also chapter 1.2.4)
- Since the Ship Information System (SIS) which will receive the schedule is limited to 99 ports per voyage and direction (export/import in regard to the PCS), only particular LOC segments of the schedule will be included:
For the export schedule only LOC segments with qualifier “7”, “9” or “11” will be mapped.
For the import schedule only LOC segments with qualifier “9” or “11” will be mapped.
- In SIS those ports which will be called by the vessel during the voyage have a “mainline” tag. All other ports are supposed to be ports that are served by feeder operators. To map this mainline tag into the scheduled port information one of the qualifiers “11”, “153” (export) or “9”, “153” (import) has to be transmitted.
- Terminal/berth code:
In the LOC segment which represents the port of operation (see chapter 1.2.4) a code for the respective terminal can be transmitted. The dbh code list should be used, but it’s also possible to use your own code list. In this case please contact dbh to arrange the required code translation. If no code for terminal/berth is transmitted, a default value will be used. To agree upon the proper value to use please contact dbh as well.
- FCL/LCL packing facility:
A second facility supplementary to the terminal code may be transmitted to indicate packing/unpacking activities concerning the port of operation.

Example:

LOC+9+DEBRV: 139: 6+NT: 72: ZZZ’

DTM – Date/time/period

Pos	Count	Segment	St	MaxUse	Level	Purpose
0290		SG5	R	99	2	LOC-DTM-RFF-FTX
0310	9	DTM	C	9	3	Segment to indicate date(s) and time(s) related to the previous LOC segment.

Standard				Implementation		
Tag	Name	St	Format	St	Format	Notes and comments
C507	DATE/TIME/PERIOD	M		M		
2005	Date or time or period function code qualifier	M	an..3	R	an..3	132 Arrival date/time, estimated 133 Departure date/time, estimated 141 Code to be used as "closing time for the acceptance of Dangerous Goods" 178 Arrival date/time, actual 180 Closing date/time Final date for delivering FCL cargo to a liner ship, respectively "cut off time" for cargo receipt of FCL 186 Departure date/time, actual 189 Departure date/time, scheduled 232 Arrival date/time, scheduled 392 Equipment collection or pick-up date/time, earliest 411 Closing time (cut off time) for LCL cargo
2380	Date or time or period value	C	an..35	R	an..35	
2379	Date or time or period format code	C	an..3	R	an..3	203 CCYYMMDDHHMM 102 CCYYMMDD

Notes:

- The local time zone of the port of operation must be used.
- The LOC segment which represents the port of operation (see *chapter 1.2.4*) must be followed by at least one DTM segment which indicates date/time of arrival or departure respectively. All other LOC segments may be followed by DTM segments but don't have to.
- To transmit the arrival date/time in the port of operation one of the qualifiers "132", "178" or "232" have to be used.
To transmit the departure date/time in the port of operation one of the qualifiers "133", "186" or "189" have to be used.
If either arrival date or departure date is missing, the available date/time information will be used for both dates.
- The given date/time information will be taken as closing time for FCL cargo if qualifier "180" is used and as closing time for LCL cargo if one of "411" or "141" is used.

Example:

DTM#133: 201511190600: 203'

RFF – Reference

Pos	Count	Segment	St	MaxUse	Level	Purpose
0290		SG5	R	99	2	LOC-DTM-RFF-FTX
0320	10	RFF	C	9	3	Segment to specify a reference.

Standard				Implementation		
Tag	Name	St	Format	St	Format	Notes and comments
C506	REFERENCE	M		M		
1153	Reference code qualifier	M	an..3	M	an..3	ANK Reference number assigned by third party ASO Password ATZ Ship's stay reference number MA Ship notice/manifest number
1154	Reference identifier	C	an..70	C	an..70	
1156	Document line identifier	C	an..6	C	an..6	
4000	Reference version identifier	C	an..35	C	an..35	
1060	Revision identifier	C	an..6	C	an..6	

Notes:

- May be used to transmit a reference information related to a special port in the schedule

Example:

RFF+ANK: 34256'

FTX – Free text

Pos	Count	Segment	St	MaxUse	Level	Purpose
0290		SG5	R	99	2	LOC-DTM-RFF-FTX
0325	-	FTX	X	-	3	Segment to provide free form or coded text information.

Standard				Implementation		
Tag	Name	St	Format	St	Format	Notes and comments
4451	TEXT SUBJECT CODE QUALIFIER	C	an..3	X		
4453	FREE TEXT FUNCTION CODE	C	an..3	X		
C107	TEXT REFERENCE	C		X		
4441	Free text value code	C	an..17	X		
1131	Code list identification code	C	an..17	X		
3055	Code list responsible agency code	C	an..3	X		
C108	TEXT LITERAL	C		X		
4440	Free text value	C	an..512	X		
4440	Free text value	C	an..512	X		
4440	Free text value	C	an..512	X		
4440	Free text value	C	an..512	X		
4440	Free text value	C	an..512	X		
3453	LANGUAGE NAME CODE	C	an..3	X		
4447	FREE TEXT FORMAT CODE	C	an..3	X		

Notes:**NOT USED**Example:

-

NAD – Name and Address

Pos	Count	Segment	St	MaxUse	Level	Purpose
0330		SG6	X	-	1	NAD-LOC-SG7
0340	-	NAD	X	-	1	Segment to identify the party's name, address and function

		Standard		Implementation		
Tag	Name	St	Format	St	Format	Notes and comments
3035	PARTY FUNCTION CODE QUALIFIER	M	an..3	X		
C082	PARTY IDENTIFICATION DETAILS	C		X		
3039	Party identifier	M	an..35	X		
1131	Code list identification code	C	an..17	X		
3055	Code list responsible agency code	C	an..3	X		
C058	NAME AND ADDRESS	C		X		
3124	Name and address description	C	an..35	X		
3124	Name and address description	C	an..35	X		
3124	Name and address description	C	an..35	X		
3124	Name and address description	C	an..35	X		
3124	Name and address description	C	an..35	X		
C080	PARTY NAME	C		X		
3036	Party name	C	an..35	X		
3036	Party name	C	an..35	X		
3036	Party name	C	an..35	X		
3036	Party name	C	an..35	X		
3036	Party name	C	an..35	X		
3045	Party name format code	C	an..3	X		
C059	STREET	C		X		
3042	Street and number or post office box identifier	C	an..35	X		
3042	Street and number or post office box identifier	C	an..35	X		
3042	Street and number or post office box identifier	C	an..35	X		
3042	Street and number or post office box identifier	C	an..35	X		
3164	CITY NAME	C	an..35	X		
C819	COUNTRY SUB-ENTITY DETAILS	C		X		
3229	Country sub-entity name code	C	an..9	X		
1131	Code list identification code	C	an..17	X		
3055	Code list responsible agency code	C	an..3	X		
3228	Country sub-entity name	C	an..35	X		
3251	POSTAL IDENTIFICATION CODE	C	an..17	X		

3207	COUNTRY NAME CODE	C	an..3	X		
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Notes:

NOT USED

Example:

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LOC – Place/Location Identification

Pos	Count	Segment	St	MaxUse	Level	Purpose
0330		SG6	M	99	2	NAD-LOC-SG7
0350	-	LOC	X	-	2	Segment to identify a place or a location and/or related locations.

		Standard		Implementation		
Tag	Name	St	Format	St	Format	Notes and comments
3227	LOCATION FUNCTION CODE QUALIFIER	M	an..3	X		
C517	LOCATION IDENTIFICATION	C		X		
3225	Location name code	C	an..25	X		
1131	Code list identification code	C	an..17	X		
3055	Code list responsible agency code	C	an..3	X		
3224	Location name	C	an..256	X		
C519	RELATED LOCATION ONE IDENTIFICATION	C		X		
3223	First related location name code	C	an..25	X		
1131	Code list identification code	C	an..17	X		
3055	Code list responsible agency code	C	an..3	X		
3222	First related location name	C	an..70	X		
C553	RELATED LOCATION TWO IDENTIFICATION	C		X		
3233	Second related location name code	C	an..25	X		
1131	Code list identification code	C	an..17	X		
3055	Code list responsible agency code	C	an..3	X		
3232	Second related location name	C	an..70	X		
5479	RELATION CODE	C	an..3	X		

Notes:

NOT USED

Example:

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CTA – Contact Information

Pos	Count	Segment	St	MaxUse	Level	Purpose
0360		SG7	X	-	2	CTA-COM
0370	-	CTA	X	-	2	Segment to identify a person or a department to whom communication should be directed

		Standard		Implementation		
Tag	Name	St	Format	St	Format	Notes and comments
3139	CONTACT FUNCTION CODE	C	an..3	X		
C056	DEPARTMENT OR EMPLOYEE DETAILS	C		X		
3413	Department or employee name code	C	an..17	X		
3412	Department or employee name	C	an..35	X		

Notes:

NOT USED

Example:

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COM – Communication Contact

Pos	Count	Segment	St	MaxUse	Level	Purpose
0360		SG7	X	-	2	CTA-COM
0380	-	COM	X	-	3	Segment to identify a communication number of a department or a person to whom communication should be directed

Standard				Implementation		
Tag	Name	St	Format	St	Format	Notes and comments
C076	COMMUNICATION CONTACT	C		X		
3148	Communication address identifier	C	an..512	X		
3155	Communication address code qualifier	C	an..3	X		

Notes:

NOT USED

Example:

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UNT – Message Trailer

Pos	Count	Segment	St	MaxUse	Level	Purpose
0550	11	UNT	M	1	0	Service segment ending a message, giving the total number of segments in the message (including UNH, UNT) and the control reference number of the message

		Standard		Implementation		
Tag	Name	St	Format	St	Format	Notes and comments
0074	NUMBER OF SEGMENTS IN A MESSAGE	M	n..6	M	n..6	
0062	MESSAGE REFERENCE NUMBER	M	an..14	M	an..14	<i>Identical to reference in UNH 0062</i>

Notes:

- The message reference number must be identical to the reference number used in UNH data element 0062.
- Since a message covers the segments from UNH to UNT, the number of segments includes UNH and UNT, but excludes UNA, UNB and UNZ.

Example:

UNT+123+34798668'

5. Example

Segment	Explanation
UNA:+,?'	Special characters to be used
UNB+UNOA:1+00003999+DBH01+151118:0413+3796'	Interchange header for the following set of messages 00003999 – The identifier for the message sender and recipient of the APERAK message. Please contact dbh to agree on the proper code. 3796 – unique reference for the interchange, to be repeated in UNZ segment
UNH+379600003+IFTSAI:D:00B:UN'	379600003 – unique reference for the message, to be repeated in UNT segment
BGM+TS2+000000000591411+9'	
DTM+137:201511180413:203'	
TDT+20+547W+1+13+ABC:172:ZZZ+P++7396666:146:11:OCEAN PRIDE:NO'	P – The primary carrier for this voyage
RFF+VM:LAZF4'	LAZF4 – Additional information call sign
RFF+VON:547W'	547W – External voyage number
RFF+ANK:LAZF4547W'	LAZF4547W – Internal voyage number
FTX+AIQ+++00007000'	00007000 – Tally company to address
FTX+SSR+J'	J – Apply for a visit ID from NSW
LOC+9+DEBRV:139:6+C1:72:ZZZ'	DEBRV – The relevant port of operations C1 – The terminal for operations Since no ports are given before “DEBRV” in this example only a export voyage will be created in SIS.
DTM+133:201511192200:203'	Since only a departure date/time in the port of operations is given in this example the arrival date/time will be assumed to be the same in SIS.
LOC+11+USORF:139:6'	Mainline port
DTM+132:201511280800:203'	Arrival date of ocean vessel in mainline port
LOC+11+USCHS:139:6'	Mainline port
DTM+132:201511300800:203'	Arrival date of ocean vessel in mainline port
LOC+11+USMIA:139:6'	Mainline port
DTM+132:201512020800:203'	Arrival date of ocean vessel in mainline port
LOC+11+USHOU:139:6'	Mainline port
DTM+132:201512050800:203'	Arrival date of ocean vessel in mainline port
UNT+20+379600003'	20 – total number of segments in this message

	379600003 – message reference, repeated from segment UNH
UNZ+1+3796'	Interchange trailer segment 1 – number of messages within this interchange 3796 – interchange reference from segment UNB

6. APERAK D.01B

Each IFTSAI message will be acknowledged by an APERAK message. The APERAK message refers to the IFTSAI message by using the same internal voyage number.

In case the processing of the IFTSAI message was successful, the serial number which was generated by the SIS system will be returned.

In case of rejection the APERAK message will contain the error messages instead.

6.1. Segment Table

Pos.No.	Segm. ID	Name	Req.	Max.Use	Level	Notes and Comments
0010	UNH	Message Header	M	1	0	
0020	BGM	Beginning of Message	M	1	0	
0030	DTM	Date/Time/Period	C	9	1	
0090		Segment Group 2: RFF	C	9	1	
0100	RFF	Reference	M	1	1	
0120		Segment Group 3: NAD-CTA-COM	C	9	1	
0130	NAD	Name and Address	M	1	1	
0140	CTA	Contact Information	C	9	2	
0150	COM	Communication Contact	C	9	2	
0160		Segment Group 4: ERC-FTX	C	9999	1	
0170	ERC	Application error information	M	1	1	
0180	FTX	Free Text	C	1	2	
0220	UNT	Message Trailer	M	1	0	

6.2. Branching Diagram

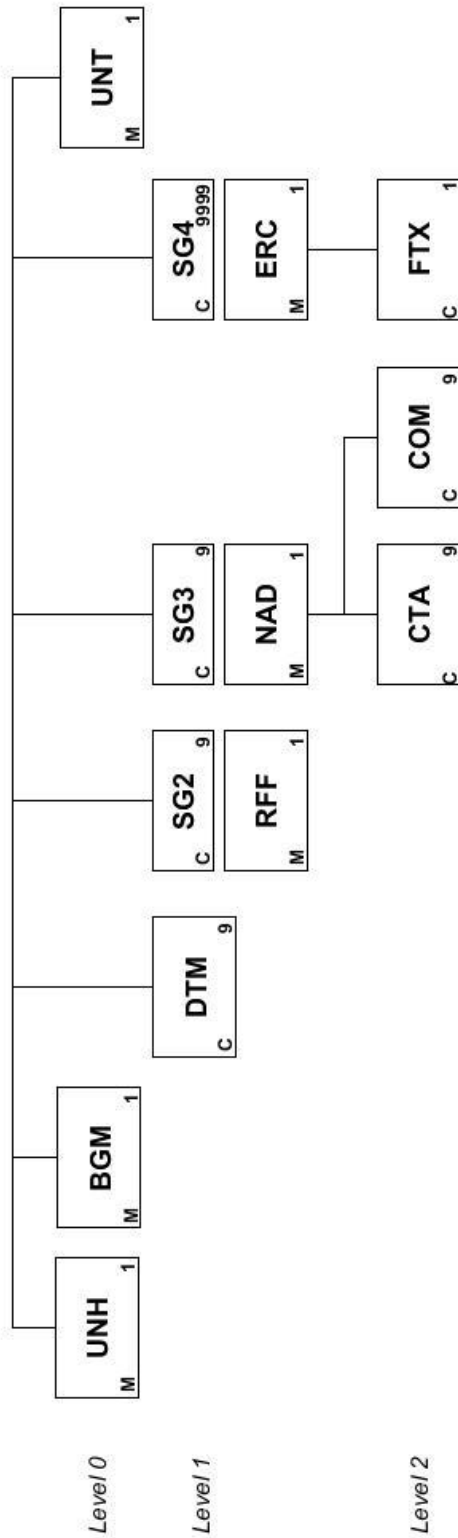


Fig. 3 – APERAK Branching Diagram

6.3. Segment Description

UNH – Message Header

Pos	Count	Segment	St	MaxUse	Level	Purpose
0010	1	UNH	M	1	0	Service segment starting and uniquely identifying a message

Standard				Implementation		
Tag	Name	St	Format	St	Format	Notes and comments
0062	MESSAGE REFERENCE NUMBER	M	an..14	M	an..14	<i>A reference allocated by the sender, uniquely identifying the message. This reference must also be transmitted in the UNT segment.</i>
S009	MESSAGE IDENTIFIER	M		M		
0065	Message type identifier	M	an..6	M	an..6	APERAK
0052	Message type version number	M	an..3	M	an..3	D
0054	Message type release number	M	an..3	M	an..3	01B
0051	Controlling agency	M	an..2	M	an..2	UN
0057	Association assigned code	M	an..6	M	an..6	
0068	COMMON ACCESS REFERENCE	C	an..35	O	an..35	
S010	STATUS OF THE TRANSFER	C		O		
0070	Sequence message transfer number	C	n..2	O	n..2	
0073	First/last sequence message transfer indication	C	a1	O	a1	

Notes:

The message type code for the “Application error and acknowledgement message” is **APERAK**.

Example:

UNH+00000000019947+APERAK: D: 01B: UN

BGM – Beginning of Message

Pos	Count	Segment	St	MaxUse	Level	Purpose
0020	2	BGM	M	1	0	Segment to indicate the type and function of the message and to transmit the identifying number

		Standard		Implementation		
Tag	Name	St	Format	St	Format	Notes and comments
C002	DOCUMENT/MESSAGE NAME	M		M		
1001	Document name code	M	an..3	M	an..3	TS2 <i>Transport schedule</i>
1131	Code list identification code	C	an..17	C	an..17	
3055	Code list responsible agency code	C	an..3	C	an..3	
1000	Document name	C	an..35	C	an..35	
C106	DOCUMENT/MESSAGE IDENTIFICATION	C		C		
1004	Document identifier	M	an..35	M	an..35	<i>Sender's unique reference number. In this case dbh generates an unique identifier per document</i>
1056	Version identifier	C	an..9	C	an..9	
1060	Revision identifier	C	an..6	C	an..6	
1225	MESSAGE FUNCTION CODE	C	an..3	C	an..3	9 <i>Original</i>
4343	RESPONSE TYPE CODE	C	an..3	C	an..3	AP <i>Accepted</i> CA <i>Conditionally accepted</i> RE <i>Rejected</i>

Notes:

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Example:

BGM#TS2+000000000199403+9+AP'

DTM – Date/time/period

Pos	Count	Segment	St	MaxUse	Level	Purpose
0030	3	DTM	C	9	1	Segment to indicate date(s) and time(s) applying to the whole message.

		Standard		Implementation		
Tag	Name	St	Format	St	Format	Notes and comments
C507	DATE/TIME/PERIOD	M		M		
2005	Date or time or period function code qualifier	C	an..3	R	an..3	9 <i>Processing date/time</i>
2380	Date or time or period value	C	an..35	R	an..35	<i>Timestamp of the message</i>
2379	Date or time or period format code	C	an..3	R	an..3	203 <i>CCYYMMDDHHMM</i>

Notes:

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Example:

DTM#9: 201512070535: 203'

RFF – Reference

Pos	Count	Segment	St	MaxUse	Level	Purpose
0090		SG2	C	9	1	RFF
0120	4	RFF	M	1	1	Segment to specify a reference.

Standard				Implementation		
Tag	Name	St	Format	St	Format	Notes and comments
C506	REFERENCE	C		M		
1153	Reference code qualifier	C	an..3	R	an..3	ANK Reference number assigned by third party AGO Sender's reference to the original message ATZ Ship's stay reference number
1154	Reference identifier	C	an..70	R	an..70	
1156	Document line identifier	C	an..6	X	an..6	
4000	Reference version identifier	C	an..35	X	an..35	
1060	Revision identifier	C	an..6	X	an..6	

Notes:

- **ANK** – Reference number assigned by third party:
In case of acceptance the serial number is transmitted, which was generated by SIS.
- **AGO** – Sender's reference to the original message:
The internal voyage number from the shipping company is sent back to allow matching in the corresponding computer system.
- **ATZ** – Ship's stay reference number:
In case a Visit ID from NSW was successfully applied for the value will be sent back here.

Example:

RFF+AGO: VRGJ61601'
 RFF+ANK: JP32'
 RFF+ATZ: DEBRV- 2015- YG TW

NAD – Name and Address

Pos	Count	Segment	St	MaxUse	Level	Purpose
0120		SG3	C	9	1	NAD-CTA-COM
0130	5	NAD	M	1	1	Segment to identify the party's name, address and function

Standard				Implementation			
Tag	Name	St	Format	St	Format	Notes and comments	
3035	PARTY FUNCTION CODE QUALIFIER	M	an..3	M	an..3	MS Document/message sender	
C082	PARTY IDENTIFICATION DETAILS	C		R			
3039	Party identifier	M	an..35	M	an..35	DBH	
1131	Code list identification code	C	an..17	X			
3055	Code list responsible agency code	C	an..3	X			
C058	NAME AND ADDRESS	C		X			
3124	Name and address description	C	an..35				
3124	Name and address description	C	an..35				
3124	Name and address description	C	an..35				
3124	Name and address description	C	an..35				
3124	Name and address description	C	an..35				
C080	PARTY NAME	C		C			
3036	Party name	C	an..35	C	an..35	DBH LOGISTICS IT AG	
3036	Party name	C	an..35	X			
3036	Party name	C	an..35	X			
3036	Party name	C	an..35	X			
3036	Party name	C	an..35	X			
3045	Party name format code	C	an..3	X			
C059	STREET	C		C			
3042	Street and number or post office box identifier	C	an..35	C	an..35	MARTINISTR. 47-49	
3042	Street and number or post office box identifier	C	an..35	X			
3042	Street and number or post office box identifier	C	an..35	X			
3042	Street and number or post office box identifier	C	an..35	X			
3164	CITY NAME	C	an..35	C		BREMEN	
C819	COUNTRY SUB-ENTITY DETAILS	C		X			
3229	Country sub-entity name code	C	an..9				
1131	Code list identification code	C	an..17				
3055	Code list responsible agency code	C	an..3				
3228	Country sub-entity name	C	an..35				
3251	POSTAL IDENTIFICATION CODE	C	an..17	C	an..17	28195	

3207	COUNTRY NAME CODE	C	an..3	C	an..3	<i>DE</i>
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Notes:

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Example:

NAD+MS+DBH++DBH LOGI STI CS I T AG+MARTI NI STR. 47- 49+BREMEN++28195+DE'

CTA – Contact Information

Pos	Count	Segment	St	MaxUse	Level	Purpose
0120		SG3	C	9	1	NAD-CTA-COM
0140	6	CTA	C	9	2	Segment to identify a person or a department to whom communication should be directed

		Standard		Implementation		
Tag	Name	St	Format	St	Format	Notes and comments
3139	CONTACT FUNCTION CODE	C	an..3	R	an..3	AL <i>Personal contact</i>
C056	DEPARTMENT OR EMPLOYEE DETAILS	C		C		
3413	Department or employee name code	C	an..17	X		
3412	Department or employee name	C	an..35	C	an..35	<i>Name of contact person</i>

Notes:

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Example:

CTA+AL+: DBH

COM – Communication Contact

Pos	Count	Segment	St	MaxUse	Level	Purpose
0120		SG3	C	9	2	NAD-CTA-COM
0150	7	COM	C	9	2	Segment to identify a communication number of a department or a person to whom communication should be directed

Standard				Implementation		
Tag	Name	St	Format	St	Format	Notes and comments
C076	COMMUNICATION CONTACT	C		C		
3148	Communication address identifier	C	an..512	C	an..512	<i>Telephone number</i>
3155	Communication address code qualifier	C	an..3	C	an..3	TE <i>Telephone number</i>

Notes:

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Example:

COM#01801/ 309020: TE'

ERC – Application Error Information

Pos	Count	Segment	St	MaxUse	Level	Purpose
0160		SG4	C	9999	1	ERC-FTX
0170	8	ERC	M	1	1	Segment to identify the type of application error or acknowledgement within the referenced message.

Standard				Implementation		
Tag	Name	St	Format	St	Format	Notes and comments
C901	APPLICATION ERROR DETAIL	M		M		
9321	Application error code	M	an..8	M	an..8	<i>For the list of error codes see chapter 6.4</i>
1131	Code list identification code	C	an..17	X		
3055	Code list responsible agency	C	an..3	X		

Notes:

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Example:

ERC+212'

FTX – Free text

Pos	Count	Segment	St	MaxUse	Level	Purpose
0160		SG4	C	9999	1	ERC-FTX
0180	9	FTX	C	1	2	Segment to provide free form or coded text information.

Standard				Implementation		
Tag	Name	St	Format	St	Format	Notes and comments
4451	TEXT SUBJECT CODE QUALIFIER	C	an..3	C	an..3	AAO <i>Error description</i>
4453	FREE TEXT FUNCTION CODE	C	an..3	X		
C107	TEXT REFERENCE	C		C		
4441	Free text value code	C	an..17	C	an..17	
1131	Code list identification code	C	an..17	C	an..17	
3055	Code list responsible agency code	C	an..3	C	an..3	
C108	TEXT LITERAL	C		C		
4440	Free text value	C	an..512	C	an..512	
4440	Free text value	C	an..512	C	an..512	
4440	Free text value	C	an..512	C	an..512	
4440	Free text value	C	an..512	C	an..512	
4440	Free text value	C	an..512	C	an..512	
3453	LANGUAGE NAME CODE	C	an..3	X		
4447	FREE TEXT FORMAT CODE	C	an..3	X		

Notes:

-

Example:

FTX+AAO+++SG5 LOC?: kei n Rei sehaf en er mi t t el bar '

UNT – Message Trailer

Pos	Count	Segment	St	MaxUse	Level	Purpose
0220	10	UNT	M	1	0	Service segment ending a message, giving the total number of segments in the message (including UNH, UNT) and the control reference number of the message

				Standard	Implementation		
Tag	Name	St	Format	St	Format	Notes and comments	
0074	NUMBER OF SEGMENTS IN A MESSAGE	M	n..6	M	n..6		
0062	MESSAGE REFERENCE NUMBER	M	an..14	M	an..14	<i>Identical to reference in UNH 0062</i>	

Notes:

- The message reference number must be identical to the reference number used in segment UNH data element 0062.
- Since a message covers the segments from UNH to UNT, the number of segments includes UNH and UNT, but excludes UNA, UNB and UNZ.

Example:

UNT+123+00000000019947'

6.4. List of Error Codes

AP - Accepted		
Category	Code	Description
Acceptance	000	The IFTSAI message was accepted with no errors. The corresponding SIS number will be returned.
CA – Conditionally Accepted		
Category	Code	Description
Acceptance with warnings	-	Currently there are no error cases in this category.
RE – Rejected		
Category	Code	Description
Allocation errors	100	Unknown sender of message (UNB) The value in <i>S002/0004 Interchange sender identification</i> is unknown to dbh. Please contact dbh to consult on the proper value.
	150	In case of update: Multiple voyages are located in SIS regarding the internal reference. Please contact dbh to help you solve the problem.
Logic errors	200	Message function code (BGM – data element 1225) does not correspond to the given internal reference. In case of creation: Internal reference already exists in SIS In case of update or cancellation: Internal reference does not exist in SIS
	201	Call sign: RFF segment with qualifier “VM” is missing
	202	Wrong format of IMO number
	203	Internal reference: RFF segment with qualifier “ANK” is missing
	204	RFF segment: Value for reference is missing
	205	<i>Not used</i>
	206	More than 99 ports (LOC segments) transmitted
	207	No port of operation could be identified from the list of LOC segments.
	208	Terminal/berth: The given value is wrong or no value could be determined. In case of missing value: If no terminal/berth is transmitted, dbh will add a constant value from your configuration file. So please contact dbh to agree upon an appropriate value. In case of using your own codes instead of the codes from the PCS: A recoding into the PCS’s code has to be done by dbh. Please contact dbh to set up a conversion table.
	209	ETA/ETS for the port of operation is missing There is no DTM segment (One of qualifiers: 132,178,232 or 133,186,189) following the LOC segment which is assumed to be the port of operation.
210	The date in DTM segment for port of operation is missing or has the wrong format.	

	211	More than one LOC segment fulfills the condition for the port of operation.
	212	There are no LOC segments except for the port of operation. At least one other LOC segment has to be provided.
	213	More than one master data record for the vessel has been located in SIS.
Severe encoding errors	300	Wrong or missing message function code (BGM – data element 1225)
	301	Wrong or missing value for TDT – Transport stage code qualifier (data element 8051)
	302	Wrong or missing carrier identifier (TDT – data element 3127) In case of wrong code: Please contact dbh
	303	Vessel name is missing (TDT – data element 8212) In case of creating a new master data record in SIS for the given IMO number the vessel name is mandatory.
Medium encoding errors	400	Wrong value for document name code (BGM – data element 1001)
	401	Wrong or missing qualifier for document/message date/time (DTM – data element 2005)
	402	Missing date value (DTM – data element 2380)
	403	Wrong value for format code (DTM – data element 2379)
	404	Date format code and date value don't match
	405	Wrong or missing code for transport mode (TDT – data element 8067)
	406	<i>Not used</i>
	407	Wrong or missing code for code list identification (TDT – data element 1131 in C040)
	408	Wrong or missing code for code list responsible agency (TDT – data element 3055 in C040)
	409	Wrong or missing code for code list responsible agency (TDT – data element 3055 in C222)
	410	Wrong or missing code for code list identification (TDT – data element 1131 in C222)
	411	Wrong code for transport means nationality (TDT – data element 8453) If no value is transmitted "XX" – unknown will be assumed
	412	None of the following qualifiers were used with segment RFF (Group 4): VM, VON, ANK, CRN, ZZZ
	413	None of the following qualifiers were used with segment FTX (Group 4): AAI, ACB, AIQ, SSR
	414	Wrong or missing qualifier for Location function code (Data element 3227) in segment LOC (Group 5)

	415	Wrong or missing UN Location code (LOC – data element 3225)
	416	Wrong or missing code for code list identification (LOC – data element 1131 in C517)
	417	Wrong or missing code for code list responsible agency (LOC – data element 3055 in C517)
	418	Wrong or missing code for code list identification (LOC – data element 1131 in C519)
	419	Wrong or missing code for code list responsible agency (LOC – data element 3055 in C519)
	420	Wrong or missing code for code list identification (LOC – data element 1131 in C553)
	421	Wrong or missing code for code list responsible agency (LOC – data element 3055 in C553)
	422	Wrong or missing qualifier for Date or time or period function code (DTM (Group 5) – data element 2005)
	423	Wrong or missing date value (DTM Group 5 Data element 2380)
	424	Wrong or missing code for Date/time/period format (DTM Group 5 – data element 2379)
	425	Date format code and date value don't match (DTM Group 5)
	433	FCL/LCL packing facility: The given value is wrong or no value could be determined. (LOC Group 5 Data element 3233)
	434	Tally company: The given value is wrong or no value could be determined. (FTX in Group 4 Data element 4441) In case of missing value: If no tally company is transmitted, dbh will add a constant value from your configuration file. So please contact dbh to agree upon an appropriate value.
	435	No value for Transit direction indicator code was given (TDT – data element 8101)
	436	Wrong value for Transit direction indicator code was given (TDT – data element 8101)
	437	Wrong value for Excess transportation reason code was given (TDT – data element 8457)
	438	Value “P” for “Primary carrier” was transmitted (TDT – data element 8101) but in SIS there is already another carrier known as the Primary carrier. Please contact dbh to help you solve the problem.
	439	Wrong value for Excess transportation responsibility was given (TDT – data element 8459).
Syntax errors	999	Syntax errors originate from the EDIFACT converter tool. For every syntax error a segment “ERC” with error code “999” will be generated. The cause of the error will be transmitted in a subsequent FTX segment.

6.5. Examples

6.5.1. IFTSAI Message Accepted

Segment	Explanation
UNA:+,? '	Special characters to be used
UNB+UNOB:2+DBH+SEJJ+151207:0535+53025766'	Interchange header for the following set of messages DBH – the identifier for the APERAK message sender 53025766 – unique reference for the interchange, to be repeated in UNZ segment
UNH+00000000019947+APERAK:D:01B:UN'	00000000019947 – unique reference for the message, to be repeated in UNT segment
BGM+TS2+000000000199470+9+AP'	AP – Accepted. The IFTSAI message was successfully processed and a voyage was created (or updated) in SIS.
DTM+9:201512070535:203'	
RFF+AGO:PDHY1603'	The internal reference which was transmitted in IFTSAI message
RFF+ANK:JQS8'	The serial number from SIS for this voyage.
NAD+MS+DBH++DBH LOGISTICS IT AG+MARTINISTR.47-49+BREMEN++28195+DE'	
CTA+AL+:DBH'	
COM+01801/309020:TE'	
ERC+000'	Error code 000 indicates successful processing
FTX+AAO+++Schiffsreise JQS8 wurde erfolgreich eingebucht'	Explanatory text to supplement the error code. For English translation see “List of Error codes” (chapter 6.4)
UNT+11+00000000019947'	11 – total number of segments in this message 00000000019947 – message reference from segment UNH
UNZ+1+53025766'	Interchange trailer segment 1 – number of messages within this interchange 53025766 – interchange reference from segment UNB

6.5.2. IFTSAI Message Accepted With Visit Id

Segment	Explanation
UNA:+.? UNB+UNOB:2+DBH+SEJJ+15120 7:0535+53025766 UNH+00000000019947+APERAK: D:01B:UN BGM+TS2+000000000199470+9+ AP DTM+9:201512070535:203 RFF+AGO:PDHY1603 RFF+ANK:JQS8	Same as above
RFF+ATZ:DEBRV-2015-YGIGDP'	Additional RFF segment to transmit the Visit ID from NSW (DEBRV-2015-YGIGDP)
NAD+MS+DBH++DBH LOGISTICS IT AG+MARTINISTR. 47-49+BREMEN++28195+DE' CTA+AL+:DBH' COM+01801/309020:TE' ERC+000' FTX+AAO+++Schiffsreise JQS8 wurde erfolgreich eingebucht' UNT+12+00000000019947' UNZ+1+53025766'	Same as above

6.5.3. IFTSAI Message Rejected With Several Errors

Segment	Explanation
UNA:+,? ' UNB+UNOB:2+DBH+00003035+2 01512:0435+000001' UNH+34914401+APERAK:D:01B: UN'	Same as above
BGM+TS2+0000106818+9+RE'	RE – Rejected. The IFTSAI message was NOT successfully processed and a voyage was NOT created (or updated) in SIS.
DTM+9:201512070535:203'	
RFF+AGO:0000106818	The internal reference which was transmitted in IFTSAI message
NAD+MS+DBH++DBH LOGISTICS IT AG+MARTINISTR. 47-49+BREMEN++28195+DE' CTA+AL+:DBH'	Same as above

COM+01801/309020:TE'	
ERC+212'	Error code 212
FTX+AAO+++SG5 LOC?': kein Reisehafen ermittelbar'	Explanatory text to supplement the error code. <i>For English translation see "List of Error codes" (chapter 6.4)</i>
ERC+408'	Error code 408
FTX+AAO+++SG4 TDT?': 3055C040 - Warning - Wert ungleich "ZZZ"	Explanatory text to supplement the error code. <i>For English translation see "List of Error codes" (chapter 6.4)</i>
ERC+420'	Error code 420
FTX+AAO+++SG5 LOC?': 1131C553 - Warning - Wert ungleich "263", "266" oder "269"	Explanatory text to supplement the error code. <i>For English translation see "List of Error codes" (chapter 6.4)</i>
UNT+14+34914401' UNZ+1+000001'	Same as above

7. Appendix

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7.2. List of Abbreviations

Abbreviation	Description
ANSW	Advantage National Single Window <i>dbh's application to address the NSW</i>
BHT	Bremen/Bremerhaven Harbour Telematics <i>Part of the PCS for the ports of Bremen/Bremerhaven</i>
dbh	dbh Logistics IT AG https://www.dbh.de/
IMO	International Maritime Organization <i>United Nations specialized agency with responsibility for the safety and security of shipping and the prevention of marine pollution by ships</i>
NSW	National Single Window <i>Institution to implement the EU directive 2010/65 for Germany.</i> http://www.dlz-it.de/DE/IT-Loesungen/NSW/NSW_node.html
PCS	Port Community System <i>An electronic platform to connect multiple systems involved in the logistic processes concerning a seaport.</i>
SIS	Ship Information System <i>A centralized system build and operated by dbh which contains voyages for seagoing vessels</i>
SMDG	Shipplanning Message Development Group <i>A non-profit foundation, run by and on behalf of companies and organizations working in the maritime industry</i>
WHT	Wilhelmshaven Harbour Telematics <i>Part of the PCS for the port of Wilhelmshaven</i>
XML	Extensible Markup Language <i>An international standard metalanguage for creating markup languages that structure digital information in a way that allows for the exchange, display, and storage of data independent of proprietary operating systems and hardware devices</i>

7.3. Glossary

Term	Definition
APERAK	Application Error and Acknowledgement Message <i>EDIFACT message from the receiver of a message to the issuer of a message. With this message the receipt of the original message by the recipient's application is acknowledged and errors made during the processing within the application are returned.</i>
EDIFACT	Electronic Data Interchange For Administration, Commerce and Transport <i>International EDI standard developed under the United Nations, providing a set of syntax rules for the exchanged data and standard messages for multi-industry and multi-country data exchange.</i>
IFTSAI	Forwarding and Transport Schedule and Availability Information Message <i>EDIFACT message to exchange vessel schedules</i>
IMO number	A unique reference for a vessel, linked to it through its whole lifetime. Issuer of the IMO number is the IMO.
Mainline port	A port at which a seagoing vessel calls for operations.
Visit ID	A unique reference which is issued by the NSW to identify a ship call in a German seaport.

7.4. List of References

Reference	Source citation
IFTSAI Guide of SMDG	http://www.smdg.org/index.php/documents/vessel-schedules/
NSW Objectives and Requirements	http://www.dlz-it.de/DE/IT-Loesungen/NSW/NSW_node.html
ANSW Information	https://www.dbh.de/fileadmin/uploads/pdf/broschueren/Port_Solutions/dbh_Advantage_National_Single_Window.pdf