

CBP Automated Export System Trade Interface Requirements

Vessel Departure/Inspection Message

December 2024



U.S. Customs and
Border Protection



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Revision Number	Date of Change	Brief Description of Change
1.7	12/2024	Updated table format for 508 compliance (no data changes)

Vessel Departure / Inspection Message

Provides descriptions and format requirements for each data element contained within a transaction record input by a carrier, port authority, or service bureau to transmit in-bond or vessel departure/arrival to the U.S. Customs and Border Protection (CBP) Data Center.

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TRANSACTION PROCESSING

This function may be used to arrive or export in-bond movements in destination ports, depart vessels from a foreign port, arrive vessels in discharge ports, change the EDA for a vessel, and transfer in-bond liability.

A vessel departure message (HI) must be sent for each domestic port of load where cargo (including FROB and IIT) is loaded on a vessel destined for foreign.

This transaction can also be used to replace the Unique Voyage Identifier for a vessel. When the vessel operator replaces the Unique Voyage Identifier, the update is cascaded to all related manifests. When a SLOT charter replaces the Unique Voyage Identifier, the update applies only to the individual manifest. **The Unique Voyage Identifier cannot be changed after a vessel is arrived.** The ability to **replace** the Unique Voyage Identifier is for **FUTURE USE**.

When an in-bond movement arrives at the port of in-bond destination, participating carriers, NVOCC, port authorities, and service bureaus must transmit the arrival data. In-bond and Vessel Departure/Arrival Messages are reported using an Application Identifier (on ACR record) of “HI”. The corresponding outbound response Application Identifier (on ACR record) is “HR”.

This chapter provides descriptions and format requirements for each data element contained within each In-bond and Vessel Departure/Arrival input or output response record. Format the accumulated data into the prescribed record formats as outlined in this chapter. Refer to the sections on Input Record Usage Map and Output Record Usage Map for a layout of mandatory, conditional, and optional records and looping structures.

General Rules for Input Transmissions and Responses from CBP:

- Spaces are transmitted in all data elements marked ‘filler’. □ Transmit ONLY uppercase ENGLISH alphabetic data.
- Transmit ONLY displayable characters found on a standard keyboard. Low-values, carriage return characters, or other non-standard characters must NOT be transmitted.

INPUT RECORD USAGE MAP

The following table illustrates how the automated interface expects repeating groups to be structured within an In-bond and Vessel Departure/Arrival Message. Additional notes are provided for clarification on looping structures.

In-bond and Vessel Departure/Arrival (HI) Record Usage Map:

Record ID	Name	Req. Des.	Max Use	Loop Repeat	Notes
	Block Control Grouping	M	1	1	1
ACR	Transaction Control Header	M	1		
	Manifest Grouping	M		99	
M01	Manifest	M	1		1
M02	Manifest Continuation Record	C	1		
	Port Grouping	M		20	
P01	Port	M	1		1
	Arrival Grouping	M		9999	
H01	In-bond and Vessel Arrival	M	1		2
H02	Arrival/Export Reference Information	C	1		3
ZCR	Transaction Control Trailer	M	1		

Designation: M = Reporting Mandatory; C = Reporting Conditional; O = Reporting Optional

Note 1:

Under certain conditions AMS will not edit all of the typically required fields for the header records (M01 and P01) in In-bond and Vessel Departure/Arrival Messages at the container/equipment level. The conditions for when specific fields are required are included in the detailed record descriptions.

Note 2:

The In-bond and Vessel Departure/Arrival Record (H01) is transmitted to notify CBP of an arrival, or export for in-bond movement, vessel departure/arrival, or a transfer of in-bond liability.

Note 3:

The In-bond and Vessel Departure/Arrive Record (H02) is transmitted to notify CBP of an in-bond arrival, export, and transfer of liability at the container/ equipment level. It is a conditional record that accompanies an H01. It may also be used to identify the foreign port of lading. Lastly, it contains the exporting vessel name and method of transportation for in-bonds exported by water. This record may be used instead of the I02 Record, Export vessel information in the MI application, when it was not known at the time of bill creation.

OUTPUT RECORD USAGE MAP

The M01, M02, and P01 are always returned in the response from CBP. Additionally the H01 record will be conditionally returned in the response message when one or more errors are determined for the H01/H02 grouping. When one or more error(s) are determined as a result of processing a given transaction, each record in-error is returned in the response message and is immediately followed by one or more Error records (W01) describing the nature of the error. The Message Acceptance/Rejection record (W02) provides summary information on the number of Inbond and Vessel Events accepted/rejected, and is included at the end of a response transaction prior to the ZCR record.

Conditional output records and fields will be populated only if the corresponding records and fields were included in the inbound In-bond and Vessel Departure and Arrival transmission.

The following table illustrates how the automated interface expects repeating groups to be structured within an In-bond and Vessel Departure and Arrival Response (HR). Additional notes are provided for clarification on looping structures.

Outbound Response for In-bond and Vessel Departure and Arrival (HR) Record Usage Map:

Record ID	Name	Req. Des.	Max Use	Loop Repeat	Notes
	Block Control Grouping	M	1	1	1
ACR	Transaction Control Header	M	1		
	Manifest Grouping	M		99	1
M01	Manifest	M	1		2
W01	Error Record	C	10		
M02	Manifest Continuation Record	C	1		2
W01	Error Record	C	10		
	Port Grouping	M		20	
P01	Port	M	1		2, 3
W01	Error Record	C	10		3
	Event Grouping	C		9999	4
H01	In-bond and Vessel Event	M	1		5
W01	Error Record	C	10		
H02	Reference Information	C	1		
W01	Error Record	C	10		
W01	Error Record	C	10		7
W02	Message Acceptance/Rejection	M	1		6
ZCR	Transaction Control Trailer	M	1		

Designation: M = Reporting Mandatory; C = Reporting Conditional

Note 1:

When In-bond and Vessel Departure and Arrival (HI) messages are received with multiple Manifest groupings in a single input message, a separate outbound response is generated for each separate Manifest grouping (M01 through H02 records), each with its own Transaction Control Header and Trailer records.

Note 2:

The Manifest records (M01) and Port record (P01) are always returned in the response. If the M02 record is provided on the inbound message, it will be returned in the response.

Note 3:

For an error at the Manifest level (M01 or M02), all In-bond and Vessel events will be rejected.

Note 4:

For an error on a specific Event grouping (records H01 and H02), only the affected Event grouping is rejected, and processing continues to the next Event grouping.

Note 5:

For error(s) on any H02 record in a given Event grouping, the H01 record for that Event will be returned in the response message prior to the record(s) in error.

For error(s) on the H01 record, the H01 record will be returned in the response message, immediately followed by 1 or more W01 records describing the specific error condition(s); if present, the H02 record within that group will still be validated and if in error, returned in the response, immediately followed by 1 or more W01 records as appropriate.

Note 6:

The Message Acceptance/Rejection record (W02) is always included immediately prior to the Transaction Control Trailer record (ZCR) and provides summary information including number of In-bond and Vessel Events accepted and rejected.

A successful (error-free) input transaction will result in a response consisting only of the records: ACR, M01, M02 (optional), P01, W02, and ZCR.

Note 7:

This occurrence of the W01 Record is used to report errors at the ACR or ZCR level.

Record Identifier ACR*Transaction Control Header Record*

This record signals the beginning of a transaction file.

Data Element	Length/ Class	Position	Status	Description	Note
Control Identifier	3A	1-3	M	Must always equal ACR.	
AMS User Code	4AN	4-7	M	A code representing the carrier, CBP assigned port authority, or service bureau.	
Filler	6AN	8-13	M	Space fill.	
Application Identifier	2A	14-15	M	A code representing the type of application detail data contained within the block. For the vessel departure/inspection incoming message, it is HI For vessel departure the outbound response is HR	
Date	6N	16-21	C	A date in YYMMDD (year, month, day) format representing the date of processing.	1
Time	6N	22-27	C	A time in HHMMSS (hours, minutes, seconds) format representing the time of processing. Eastern Standard/Daylight Time should be reported.	1
Batch Number	5N	28-32	C	A CBP-generated 5-position numeric code from 00001 to 99999. The batch number is used in conjunction with the date of transmission to uniquely identify a user transmission.	1
Filler	48AN	33-80	M	Space fill.	

Note 1:

This data is not transmitted by the participant in input transaction control records. It is returned to the participant in output transaction control records. Do not use this field on input.

Record Identifier M01

Manifest Record

This is a mandatory record used to transmit vessel information and specific manifest data. Once the original manifest (ACR record positions 14-15 code 'MI') has been transmitted and accepted, the M01 record becomes 'frozen'. In any subsequent amendments or actions (ACR record positions 14-15 code 'UI','HI') the mandatory and required elements in the M01 record in the original manifest must be submitted. This means if the vessel name (positions 12-34) were submitted in the original manifest it is required in any subsequent amendments or actions. If the IMO Lloyds vessel code (positions 35-39) were submitted in the original manifest it is required in any subsequent amendments or actions. If both a vessel name (positions 12-34) and the IMO Lloyds vessel code (positions 52-58) were submitted in the original manifest, they are required in any subsequent amendments or actions

Data Element	Length/ Class	Position	Status	Description	Note
Control Identifier	3AN	1-3	M	Must always equal M01.	
Carrier Code	4AN	4-7	M	A Standard Carrier Alpha Code (SCAC) representing the automated carrier/NVOCC reporting the In-bond and Vessel Departure/Arrival Message.	1
Mode of Transportation Code	2N	8-9	M	A code indicating the Mode of Transport of the Carrier in the Carrier Code data element. Valid codes are: 10 = Vessel, non-container, or unable to determine if container (Including Lightered, Land Bridge and LASH) 11 = Vessel Containerized (Container)	2
Vessel Country Code	2A	10-11	M	An International Organization for Standardization (ISO) country code representing the flag country of the vessel. Refer to CAMIR Appendix G for valid codes.	2
Vessel Name	23AN	12-34	C	A valid vessel name entered using no slashes. The vessel name will always be populated in the response transmission from CBP when either the Vessel Name or Vessel Code is provided in the input transaction.	2
Voyage Number	5AN	35-39	M	The voyage number entered using no slashes.	2
Filler	5AN	40-44	M	Space fill.	

Data Element	Length/ Class	Position	Status	Description	Note
Manifest Sequence Number	6N	45-50	C	The manifest sequence number. This number is a carrier-assigned sequence number. The system-generated default is one (000001). It may be a date. Once transmitted, it cannot be changed. All subsequent transmissions for the manifest must use the original manifest sequence number.	2
Filler	1AN	51	M	Space fill.	
Vessel Code	7AN	52-58	C	International Maritime Organization (IMO) Code issued by Lloyds representing the importing vessel.	2
Filler	22AN	59-80	M	Space fill.	

Note 1:

The Standard Carrier Alpha Code (SCAC) is issued by the National Motor Freight Traffic Association, Inc. located at 1001 North Fairfax Street, Suite 600, Alexandria, VA 22314. The Internet URL is: www.NMFTA.org. In the case of water carriers who own their containers, the SCAC is issued by the Intermodal Association of North America located at 6410 Kenilworth Ave., Suite 108, Riverdale, MD 20737.

Note 2:

The M01 record must be provided for all actions performed.

- Mode of Transportation, Vessel Country Code and Voyage number are required fields □
The Vessel Name, the Vessel Code, or both must be provided on the M01 record.
- The Manifest Sequence Number field is required if it was provided in the original manifest.

Record Identifier M02*Manifest Continuation Record*

This is a conditional record used to transmit the carrier-assigned batch number.

Data Element	Length/ Class	Position	Status	Description	Note
Control Identifier	3AN	1-3	M	Must always equal M02.	
Carrier-Assigned Batch Number	30AN	4-33	M	The carrier-assigned batch number. The participants may use this field for internal tracking purposes.	
Filler	47AN	34-80	M	Space fill.	

Record Identifier P01*Port Record*

This is a mandatory record used to transmit port data.

Data Element	Length/ Class	Position	Status	Description	Note
Control Identifier	3AN	1-3	M	Must always equal P01.	
Port of Departure Code	4N	4-7	C	A code representing the U.S. port of export. See Census Schedule D in CAMIR Appendix E for valid port codes. Each U.S. coastwise port of export including the last U.S. port of export	1
Original Estimated Date	6N	8-13	C	A date in MMDDYY (month, day, year) format representing the original scheduled date of arrival (for imports) or departure (for exports) at the port indicated in P401.	1
Filler	67AN	14-80	M	Space fill.	

Note 1:

The Port of Unlading Code and Original Estimated Date are required fields for vessel arrival (H01 Message Code = 4), vessel foreign port departure (H01 Message Code = 9), replace Unique Voyage Identifier (H01 Message Code = U-Future Use), and change in Estimated Date of Arrival (H01 Message Code = Y); these fields are not validated for all other message codes.

Record Identifier H01

In-bond and Vessel Event Record

This is a mandatory record used to notify CBP of an in-bond arrival/export, vessel departure/arrival, or transfer of in-bond liability.

Data Element	Length/ Class	Position	Status	Description	Note
Control Identifier	3AN	1-3	M	Must always equal H01.	
Message Code	1AN	4	M	A code representing the action of the message.	1
In-bond Entity	14AN	5-18	C	The In-bond Number, Bill of Lading Number, or Container/Equipment Number associated with the action performed.	2
Date	6N	19-24	M	A date in YYMMDD (year, month, day) format representing the date of: actual arrival/export in the destination port, transfer of in-bond liability, vessel arrival, Vessel Foreign Departure, or the new Estimated Date of Arrival (for a change in EDA). For a change in EDA (message code Y), this field must be a future date. For all other message codes, this field cannot be a future date.	
CBP Port	4N	25-28	C	This field is required when the message code is 1, 2, 3, 4, or Z. See Census Schedule D in CAMIR Appendix E for valid port codes. For Message Codes 1, 2, or 3 this field represents the Port of In-bond Arrival. For Message code 4 this field represents the Port of Unlading and must equal the value in the P01 Port of Unlading. For message code 8 this represents departure of vessel for foreign. For Message Code Z, this field represents the Port the In-bond is being Diverted to.	
Issuer Code	4AN	29-32	C	The SCAC of the issuer of the bill of lading. This is a required data element when the message code is R.	
Time	6N	33-38	C	A time in HHMMSS (hour, minute, second) 24-hour clock format representing the time the transmission was processed. Eastern Standard/Daylight Time should be reported. The time can be reported as HHMM with positions 37 and 38 space filled.	

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Data Element	Length/ Class	Position	Status	Description	Note
In-bond Carrier Code	4AN	39-42	C	A code representing the in-bond carrier assuming liability for the in-bond movement. This field is required when the message code is A.	
Bonded Carrier ID	12X	43-54	C	<p>A code representing the identification (ID) number of the bonded carrier assuming liability for the in-bond movement (also referred to as the importer number or IRS number). This must include embedded hyphens. Valid formats for importer numbers are:</p> <p>NN-NNNNNNNXXX = IRS number YYDDPP-NNNNN = CBP assigned number NNN-NN-NNNN = Social Security number</p> <p>The system will validate the ID is on file and has a valid Bond type. This field is required when the message code is A or Z.</p>	
City Name	19AN	55-73	C	The name or identification of the city where the transfer of liability occurs. This field is required when the message code is A.	
State Code	2AN	74-75	C	A code representing the U.S. state where the transfer of liability occurs. This field is required when the message code is A.	
FIRMS Location	4AN	76-79	C	For Message Code of '8' or 'R' report Facilities Information and Resource Management Systems (FIRMS) Code when available. The FIRMS location must be on file and match the Port of In-bond Arrival given in the CBP Port field.	
Filler	1AN	80	M	Space fill.	

Note 1:

Valid Message Codes are:

Code	Description
8	Departure of conveyance for foreign
R	Ready for Inspection

The following conditions apply to the Message Codes:

- If the message code is R, do not input the issuer code as it is contained in "issuer" element, positions 29-32.
- If the message code is 8 (foreign departure), the vessel has departed the U.S. port of export. This message should be reported for each U.S. port of export.

Note 2:

For message code is R, the Bill of Lading must be provided in the H02 Reference Identifier and Reference Identifier Qualifier fields.

Record Identifier H02

In-bond and Vessel Event Reference Information Record

This is a conditional record used to notify CBP of an in-bond arrival, cargo ready for inspection, export, or transfer of liability at the container/equipment level. In addition, it is used to report the foreign departure port(s) that cargo was loaded to the vessel destined to the U.S. Lastly, it contains exporting vessel information for in-bonds exported by water.

Data Element	Length/ Class	Position	Status	Description	Note
Control Identifier	3AN	1-3	M	Must always equal H02.	
Reference Identifier Qualifier	2AN	4-5	C	A code qualifying the reference number, in-bond number, or ocean bill of lading. Valid codes are: BM = Bill of Lading IB = In-bond Number OB = Ocean Bill of Lading Required if the message code in H01 is R.	
Reference Identifier	16AN	6-21	C	A code representing the bill of lading, in-bond number, or ocean bill of lading associated with the shipment. Required if the message code in H01 is R.	1
Vessel Name	23AN	22-44	C	Valid name of exporting vessel. Optional for H01 message codes 5, 6, or 7.	2
Transportation Method	1A	45	C	Code specifying method of transportation (MOT) of export. Code S = Ocean. Optional for H01 message codes 5, 6, or 7.	2
Foreign Departure Port	5N	46-50	C	Foreign port where vessel was destined . Refer to Schedule K in Appendix F of the CAMIR documentation.	
Unique Voyage Identifier	30AN	51-80	C	This field is used to provide the Unique Voyage Identifier for the manifest. The field must be at least 5 characters in length, where the first 4 characters must equal the SCAC for the Vessel Operator. To ensure uniqueness, the Unique Voyage Identifier cannot be re-used for another voyage for a period of 5 years. Required for H01 message code U. FOR FUTURE USE.	

Note 1:

When supplying the ocean bill number include SCAC (i.e., ABCD12345).

Note 2:

If either Vessel Name or Transportation Method is provided for message codes 5, 6, or 7, then both of these fields must be populated. If provided, these values will overwrite the exporting Vessel Name and Transportation Method provided with the original manifest submission or subsequent in-bond.

Record Identifier W01 (Output Only)*Error Record*

This is a conditional record returned for each data element that is in error. Output record only.

Data Element	Length/ Class	Position	Status	Description	Note
Control Identifier	3AN	1-3	M	Must always equal W01	
Entity Number	14AN	4-17	M	A code representing the bill of lading sequence number on which the error occurred.	1
Filler	12AN	18-29	M	Space fill.	
CBP Port	4N	30-33	M	A code representing the CBP port of departure. Use Census Schedule D in CAMIR Appendix E for valid port codes.	1
Manifest Sequence Number	6N	34-39	M	A code representing the manifest sequence number. This number is an optional, carrier assigned sequence number. The default is one (000001).	1
Error Message	40X	40-79	M	A narrative explaining the error.	
Filler	1AN	80	M	Space fill.	

Note 1:

See CAMIR Change Log for future use.

Record Identifier W02 (Output Only)*Message Acceptance Record*

This is a mandatory record used to return the cumulative result of a transmission to AMS. Output record only.

Data Element	Length/ Class	Position	Status	Description	Note
Control Identifier	3AN	1-3	M	Must always equal W02.	
Carrier Code	4AN	4-7	M	A SCAC representing the automated carrier/NVOCC reporting the In-bond and Vessel Departure/Arrival Message.	
Date of Transmission	6N	8-13	M	A date in YYMMDD (year, month, day) format representing the date that the inbound transmission to CBP was processed. In most cases the date of processing and the date of transmission will be the same.	
Time of Transmission	6N	14-19	M	A time in HHMMSS (hour, minute, second) 24-hour clock format representing the time that the inbound transmission to CBP was processed. Eastern Standard/Daylight Time should be reported.	
Total Manifests Read	2N	20-21	M	The total number of manifests (M01 records) read on a given transmission.	
Total Ports Read	3N	22-24	M	The total number of ports (P01 records) read on a single transmission.	
Total Bills Read	5N	25-29	M	Zero filled for response to In-bond and Vessel Departure Message (HR).	
Total House Bills Read	5N	30-34	M	Zero filled. This field is not used by CBP.	
Total Amendments Read	5N	35-39	M	Zero filled for response to In-bond and Vessel Departure Message (HR).	
Total H01 Records Input	5N	40-44	M	The total number of H01 records input.	
Total Rejected	5N	45-49	M	The total number of In-bond and Vessel Events (H01 record groupings) that were rejected for a single transmission.	
Total Accepted	5N	50-54	M	The total number of In-bond and Vessels Events (H01 record groupings) that were accepted into the database.	
Total Records Read	5N	55-59	M	The total number of records read on a single transmission (excludes the ACR and ZCR).	
Filler	21AN	60-80	M	Space fill.	

Record Identifier ZCR*Transaction Control Trailer Record*

This record signals the end of a transaction file.

Data Element	Length/ Class	Position	Status	Description	Note
Control Identifier	3A	1-3	M	Must always equal ZCR.	
AMS User Code	4AN	4-7	M	A code representing the carrier, CBP assigned port authority, or service bureau. Not validated upon input. AMS User Code from the ACR record will be returned in response.	
Filler	6AN	8-13	M	Space fill.	
Application Identifier	2AN	14-15	C	Output application identifier. Always equal to RC. This data element is not included in input transactions (HI) but is returned to the AMS participant in output transaction trailer records. Application Identifier is HR for response to HI.	
Filler	19AN	16-34	M	Space fill.	
Number of Transaction Detail Records	5AN	35-39	C	The total number of records transmitted (excludes the ACR and ZCR). Not validated upon input. Valid number will be returned in response.	
Filler	41AN	40-80	M	Space fill.	