ITMREF/REFRSP implementation guide

Date of approval of this version: **8 February 2024**

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Contents

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I.   Introduction to ITMREF and REFRSP

ITMREF V1 – Item referral, as published in M53, contains a list of referral instructions for mail items. It is sent from the destination designated operator (DO) of the mail to the origin DO immediately after information on the pre-loading advance cargo information (PLACI) risk assessment has been received from the destination customs authority, or after the destination DO's assessment has identified the lack of the 7+1 data set in an ITMATT message received from the origin DO.

Note. – PLACI systems should not unnecessarily impede or delay the flow of mail through the postal supply chain. Except in the case of a Do Not Load (DNL) message being issued, mail keeps moving through the postal supply chain during the PLACI process.

REFRSP V1 – Referral response, as published in M54, shares the outcome of referral requests for mail items, as well as information on action taken and/or information required subsequent to the requests.

The risk assessment and response process flow is documented in Annex C of M53. The flowchart below (extract from M53) outlines the flows. This document details how to handle/populate a specific set of requests through the ITMREF message. It handles information at item level only.

Risk assessment and response process flow
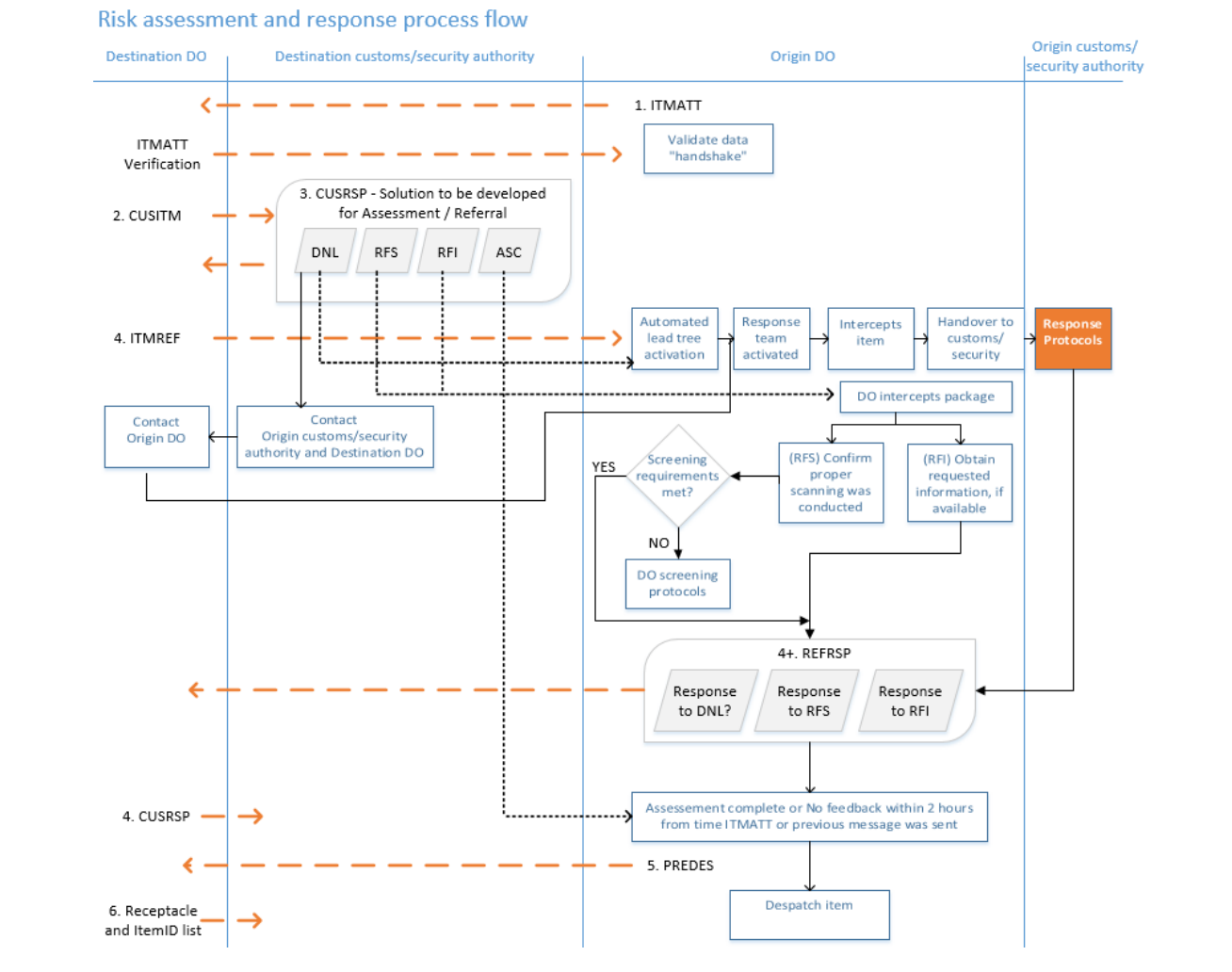
II.   Background on PLACI, ITMREF–REFRSP and the UPU Regulations

In the context of aviation security, electronic advance data (EAD) may be incorporated as an additional layer that aims to identify potentially high-risk cargo and mail through PLACI risk assessments of item data. EAD and PLACI complement existing aviation security controls and screening procedures for air cargo and mail, with minimal disruption to the global postal supply chain.

Since 1 January 2021, DOs are required to capture and exchange EAD for international postal items containing goods, as these items may be subject to specific import customs- and security-based requirements regarding EAD provisions. EAD may be utilized by destination customs and security authorities to conduct advance risk assessments on international postal items.

Flows 3, 4 and 4+ of the UPU EAD Global Postal Model (GPM) provide a framework for exchanges related to PLACI risk assessment, concerning aviation security, in the UPU global postal supply chain.

–   Flow 3 refers to the communication from the destination customs authority to the destination DO regarding the result of the initial risk assessment, which could convey confirmation that the initial risk assessment is complete or that a referral message has been raised, requiring action from the origin DO.

–   Flow 4 refers to the transmission from the destination DO to the origin DO of this customs assessment information via an ITMREF message.

–   Flow 4+ refers to the response to a referral, transmitted from the origin DO to the destination DO via a REFRSP message.

Article 08-002 of the UPU Convention Regulations specifies the implementing provisions for providing **EAD**. With regard to GPM flows 3, 4 and 4+, the 2023.1 Postal Operations Council (S3) decided to create new paragraphs 7 and 8 (provisionally 6bis and 6ter), with a date of entry into force of 1 January 2025, as follows:

"7   When dispatching international postal items for which electronic advance data is required for certain destination countries, the designated operator of origin shall take reasonable measures to ensure that all such requirements (as referred to in paragraph 1) have been duly met and no "**Request for Information**", "**Request for Screening**" or "**Do Not Load**" referrals have been received via ITMREF, in compliance with UPU EDI Messaging Standard M53."

"8   When dispatching international postal items for which electronic advance data is required for certain destination countries, the designated operator of origin shall take reasonable measures to ensure that any "Request for Information" or "Request for Screening" referrals received via ITMREF have been processed and responded to via REFRSP, in compliance with UPU EDI Messaging Standards M53 and M54."

Additionally, since 1 January 2023, article 08-002, paragraph 6, of the UPU Convention Regulations requires the origin DO to ensure that EAD requirements have been met and the relevant CARDIT message is transmitted, including any applicable regulations (AR) information, in compliance with UPU EDI Messaging Standard M48. The AR information within the CARDIT message serves as confirmation from the origin DO that all required EAD has been submitted to the applicable authority in line with all applicable regulations, and that there was no known outstanding referral (i.e. Request for Information (RFI), Request for Screening (RFS) or DNL) at the time of transmission of the CARDIT message and handover to the carrier.

III.   ITMREF ASC – Assessment Complete

When no PLACI security-related risk has been identified by the destination customs authority or when a RFI, RFS or DNL referral has been successfully resolved, an "Assessment Complete" (ASC) outcome is transmitted by the destination **customs authority** to the destination DO, which then relays it via ITMREF to the origin DO, allowing it to proceed with preparing an item for dispatch with certainty that the destination Customs has completed the initial PLACI security-related risk assessment. There is no requirement to transmit an ASC message.

If the destination customs authority does not transmit an ASC, the origin DO can assume that the item is clear to load, provided sufficient time (e.g. at least 120 minutes) has elapsed and no referral (RFI, RFS, DNL) has been issued.

If destination Customs has opted to provide an ASC code for all pre-advised items, then the origin DO can dispatch the item after the actual arrival of the message. If the ASC has not been received at the time of dispatching, the origin DO should wait sufficient time (e.g. at least 120 minutes) before assuming the destination customs authority has satisfactorily completed the initial risk assessment. Issuance of an ASC by destination customs/security authorities is not a guarantee to the origin DO that there is no risk in dispatching the item, or that a subsequent risk will not be identified and an associated referral issued at a later stage.

Attribute name	Mandatory/ conditional	Population of data element
item.idref.value	M	Unique item identifier
item.idref.idtype	C	(Required if the ID is not an S10 item ID)
item.idref_referral_reference	M	Reference of the referral for the item
item.referral_code	M	ASC
item.referral_datetime	M	Local date/time when the referral message was issued by the customs authority
item.referral_reason_code	N/A	Not used with ASC
item.referral_reason_text	N/A	Not used with ASC

IV.   ITMREF RFI – Request for Information

The ITMREF RFI message is used as a possible consequence of the **initial PLACI assessment** by the destination **customs authority of the item-level data**, i.e. the 7+1 dataset in the ITMATT.

RFI is not to be used to request from the origin other information that a destination Customs might desire to facilitate its fiscal or other processing. PLACI risk management principles should guide the issuance of RFIs to avoid hindering the flow of cross-border mail, which is already undergoing traditional screening. Therefore, destination Customs must consider – before issuance of an RFI – what types of situations the analysis of 7+1 data could exceed a "reasonable risk" threshold, to the point where the item might be deemed high-risk owing to faulty or missing 7+1 data.

The destination DO should communicate the reason code for the referral (i.e. the type of data issue triggering the RFI message) using one of the codes available in UPU code list 214:

Code	Interpretation	ITMATT attribute name
A10	sender name	sender.identification.name
A21	sender postal address street or premises	sender.postal-address.premises
A22	sender postal address locality	sender.postal-address.locality.name
A23	sender postal address country code	sender.postal-address.country-code
A24	sender postal address postcode	sender.postal-address.locality.code **Note.** – Postcodes are mandatory if the country requires them and if a postcode exists in the origin country
A25	sender postal address locality region (country subdivision, state, province)	sender.postal-address.locality.region
A26	sender contact e-mail	sender.contact.email **Note.** – Conditional and should be supplied if applicable and known
A27	sender contact telephone	sender.contact.telephone **Note.** – Conditional and should be supplied if applicable and known
B30	addressee name	addressee.identification.name
B41	addressee postal address street or premises	addressee.postal-address.premises
B42	addressee postal address locality	addressee.postal-address.locality.name
B43	addressee postal address country code	addressee.postal-address.country-code
B44	addressee postal address postcode	addressee.postal-address.locality.code **Note.** – Postcodes are mandatory if the country requires them and if a postcode exists in the origin country
B45	addressee postal address locality region (country subdivision, state, province)	addressee.postal-address.locality.region
B46	addressee contact e-mail	addressee.contact.email **Note.** – Conditional and should be supplied if applicable and known

Code	Interpretation	ITMATT attribute name
B47	addressee contact telephone	addressee.contact.telephone **Note. –** Conditional and should be supplied if applicable and known
C50	detailed content description	content-piece.description
D60	gross weight	item.measured-gross-weight
E80	unique item identifier	item.ID

Notes. – The following codes corresponding to information on the CN 22/CN 23 are mandatory:

A10, A20, A21, A22, A23, A24* and A25 (sender's full name and address, including business name on CN 23);

B30, B40, B41, B42, B43, B44* and B45 (recipient's full name and address, including business name on CN 23), C50, C70 and D60.

*Codes A24 and B44 refer to the postcode. Postcodes are mandatory if the country requires them and if a postcode exists in the origin country.

The following code corresponds to a mandatory field: E80.

The following codes are conditional and should be supplied if applicable and known: A26, A27, B46 and B47.

The origin DO should always respond to an ITMREF RFI message with a REFRSP message, using one of the following codes, as the case may be:

i   Requested information cannot be provided (response code R50);

ii   Export cancelled (R10);

iii   Requested information provided in REFRSP (R20); or

iv   ITMATT updated and re-sent (R40).

If the origin DOs respond with a REFRSP R20 code (requested information provided), they should populate the REFRSP *item.response_action_taken_code* element with the corresponding attribute identification code from the above UPU code list 214, and provide the actual value for that attribute (i.e. the information requested) in the REFRSP *item.response_action_taken_text* element.

Origin DOs should allow sufficient time (e.g. at least 120 minutes) after transmitting the response to the RFI (via REFRSP) to the destination Customs. This allows time for the destination Customs to issue either an ASC, RFS or DNL, and for those codes to be received into the origin DO's IT systems.

Attribute name	Mandatory/ conditional	Population of data element
item.idref.value	M	Unique item identifier
item.idref.idtype	C	(Required if the ID is not an S10 item ID)
item.idref_referral_reference	M	Reference of the referral for the item
item.referral_code	M	RFI
item.referral_datetime	M	Local date/time when the referral message was issued by the customs authority
item.referral_reason_code	M	Reason codes from code list 214 (RFI data elements)
item.referral_reason_text	N/A	Not used with RFI (as the codes in code list 214 map to specific ITMATT data elements)

V. ITMREF RFS – Request for Screening

The ITMREF RFS message is used as a possible consequence of the initial PLACI assessment conducted by the destination **customs authority**, and can be used to confirm that the item was screened in accordance with national security requirements at origin, or to request a specific additional screening method. It indicates that the destination Customs requires additional screening of the item to determine if a risk to aviation security exists, as it is not possible to determine risk with the information available. In accordance with Annex 17 to the Convention of the International Civil Aviation Organization (ICAO), the origin's national security authorities determine how high-risk screening procedures are performed.

PLACI risk management principles are expected to guide the issuance of an RFS. This should take into account the additional processes an RFS requires of the origin and the challenges posed by requesting an RFS too frequently for minor issues, to avoid hampering international mail flows.

An RFS may be issued (per timing rules) as follow-up to the origin's provision of the additional 7+1 information, requested in an earlier RFI, or may be submitted based on a specific threat suspected by the destination customs authority.

The destination DO should communicate the reason code for the referral (i.e. the type of high-risk screening method requested) using one of the codes available in UPU code list 215, which reproduces the three-character screening codes developed by the International Air Transport Association (IATA). Code list 215 is based on the IATA screening method code list published in the IATA Cargo-XML Manual and Toolkit, under the section code list 1.102 (Screening codes):

Code	Interpretation
AOM	Any other method - if any other high-risk cargo screening method may be used, in accordance with the origin DO's nationally accepted screening methods.
CMD	Cargo metal detection - if the requested screening should involve metal detection equipment.
EDD	Explosive detection dogs - if the use of specialized dogs that are able to detect and indicate the presence of explosive material is requested.
EDS	Explosive detection system - if the requested screening should involve the use of EDS equipment.
ETD	Explosives trace detection equipment, particles or vapour - if ETD equipment should be used.
PHS	Physical inspection and/or hand search - if physical inspection and/or hand search is to be carried out so as to reasonably ensure that the postal item is not carrying dangerous or prohibited articles.
VCK	Visual check - if a visual check is to be conducted for any signs of irregularities on the item (e.g. leaks).
XRY	X-ray equipment - if the requested screening should involve the use of X-ray equipment.

The origin DO should always respond to an ITMREF RFS message with a REFRSP, using one of the following codes, as the case may be:

i Export cancelled (R10);

ii Additional screening conducted - no risk or alarm identified (R30); or

iii Additional screening not performed (R60). Response code R60 may lead to a subsequent RFS message requesting a different screening method, or to a DNL message from destination.

If origin DOs respond with a REFRSP response code 30 (additional screening conducted), they should populate the REFRSP *item.response_action_taken_code* element with the corresponding screening method code from UPU code list 215, and provide the result of the screening in the REFRSP *item.response_action_taken_text* element.

Attribute name	Mandatory/ conditional	Population of data element
item.idref.value	M	Unique item identifier
item.idref.idtype	C	(Required if the ID is not an S10 item ID)
item.idref_referral_reference	M	Reference of the referral for the item
item.referral_code	M	RFS
item.referral_datetime	M	Local date/time when the referral message was issued
item.referral_reason_code	M	Screening method code from code list 215 (RFS screening method codes)
item.referral_reason_text	N/A	Not used with RFS

VI.   ITMREF DNL – Do Not Load

The ITMREF DNL message is used as a possible consequence of the PLACI security risk assessment conducted by the destination **customs authority**. DNL indicates an imminent threat to aviation security. In accordance with ICAO Annex 17 requirements, members must have existing protocols in place to address an imminent threat to aircraft presented by an air cargo shipment. These protocols can be leveraged by authorities in the context of PLACI.

DNLs should be extremely rare, representing a "bomb-in-the-box" scenario only. When approaching this risk threshold, the question needs to be asked as to whether an RFS would be the reasonable first step. Naturally, there may be situations where DNL is completely called for based on other intelligence; however, it must also be understood that high-risk screening processes are also well designed, with emergency protocols built in.

The DNL message would be relayed back to the origin DO from the destination DO, in an ITMREF message. There are other emergency communication protocols available for this type of emergency; however, any Customs-to-Customs communication falls outside the scope of ITMREF-REFRSP exchanges.

Attribute name	Mandatory/ conditional	Population of data element
item.idref.value	M	Unique item identifier
item.idref.idtype	C	(Required if the ID is not an S10 item ID)
item.idref_referral_reference	M	Reference of the referral for the item
item.referral_code	M	DNL
item.referral_datetime	M	Local date/time when the referral message was issued by the customs authority
item.referral_reason_code	N/A	Not used with DNL
item.referral_reason_text	N/A	Not used with DNL

The origin DO should respond to the DNL ITMREF message with a REFRSP message, using the code for export cancelled (R10), so that the destination DO may receive confirmation that the DNL was received and acted upon.

VII.   ITMREF INC – ITMATT data provided is incomplete

The ITMREF "Incomplete" (INC) message is used as a consequence of the **destination DO's assessment of the item-level data**, to indicate that data is missing or incomplete in the ITMATT message. The ITMREF INC message uses reason codes to pinpoint where data may be missing or incomplete in order to facilitate updating of the information by the origin DO. The expectation is an updated ITMATT message that can be forwarded to the customs authority for assessment.

The destination DO should communicate the reason code for the referral (i.e. the type of data issue triggering the INC message) using one of the codes available in UPU code list 218:

Code	Interpretation
12	Invalid value – if the value provided for the data element is invalid (e.g. non-WCO Harmonized System code in tariff-heading)
13	Notification that a mandatory (or otherwise required) data element is missing
14	Value not supported in this position (e.g. content-piece.declared-value.amount contains non-numeric characters)
26	Duplicate detected (not applicable to ITMREF INC)
39	Data element too long (e.g. 13-digit code in tariff-heading)
40	Data element too short (e.g. 3-digit code in tariff-heading)
46	Character set not supported (e.g. use of non-Latin ISO 8859-1 character "™" in content-piece description)

The destination DO should populate the "*item.referral_reason_text*" ITMREF field with the name of the ITMATT data element concerned (e.g. *addressee.identification.name* will signal to the origin DO that there is an issue with the sender name field).

The origin DO may opt for one of the following responses to an INC message:

i   Requested information cannot be provided (R50);

ii   Export cancelled (R10); or

iii   ITMATT updated and re-sent (R40).

Attribute name	Mandatory/ conditional	Population of data element
item.idref.value	M	Unique item identifier
item.idref.idtype	C	(Required if the ID is not an S10 item ID)
item.idref_referral_reference	M	Reference of the referral for the item
item.referral_code	M	INC
item.referral_datetime	M	Local date/time when the referral message was issued by the customs authority
item.referral_reason_code	M	Reason codes from code list 218 (Data element message error codes). The code typically used is code 13 – notification that a mandatory (or otherwise required) data element is missing.
item.referral_reason_text	M	ITMATT attribute name

VIII.   ITMREF ERR – Error with the ITMATT message (e.g. non-compliance with standard)

The ITMREF "Error" (ERR) message is used as a consequence of the **destination DO's assessment of the item-level data**, to indicate when it is established that the data related to the item in the ITMATT file was erroneous (i.e. it did not meet the requirements of the ITMATT standard). The generation of ITMREF ERR messages should be limited to mandatory data values that are used in the PLACI risk analysis process. The ITMREF ERR message uses reason codes to pinpoint where data may be erroneous, in order to facilitate updating of the information by the origin DO. The expectation is an updated ITMATT message that can be forwarded to the customs authority for assessment.

The destination DO should communicate the reason code for the referral (i.e. the type of data issue triggering the ERR message) using one of the codes available in UPU code list 218 (see values in section VII above).

The destination DO must populate the "*item.referral_reason_text*" ITMREF field with the name of the ITMATT data element concerned (e.g. s*ender.postal-address.country-code* will signal to the origin DO that there is an issue with the sender country code field).

The origin DO may opt for one of the following responses to an ERR message:

i   Export cancelled (R10); or

ii   ITMATT updated and re-sent (R40).

   Note. – A new ITMATT message with updated information must be sent if code R40 is used. Details of an individual item described in one ITMATT message can be updated or complemented by means of information on the same item in a new ITMATT message with a later date of generation. In such cases, the value of *item.attributes-version-number* will be increased. The item details provided complement or replace the corresponding data provided previously.

Attribute name	Mandatory/ conditional	Population of data element
item.idref.value	M	Unique item identifier
item.idref.idtype	C	(Required if the ID is not an S10 item ID)
item.idref_referral_reference	M	Reference of the referral for the item
item.referral_code	M	ERR
item.referral_datetime	M	Local date/time when the referral message was issued by the customs authority
item.referral_reason_code	M	Reason codes from code list 218 (Data element message error codes)
		Codes typically used are:
		12 Invalid value
		13 Missing
		14 Value not supported in this position
		26 Duplicate detected
		39 Data element too long
		40 Data element too short
		46 Character set not supported
item.referral_reason_text	M	ITMATT attribute name

IX.   ITMREF ACK – Acknowledgement of receipt of ITMATT data

The ITMREF "Acknowledgment" (ACK) message is sent **by the destination DO** to the origin DO to indicate either that it has correctly received the ITMATT data, or that the destination customs authority has received the CUSITM (or equivalent) message and has provided acknowledgement of the data to the destination DO. No response is expected from the origin DO to an ACK ITMREF message.

Attribute name	Mandatory/ conditional	Population of data element
item.idref.value	M	Unique item identifier
item.idref.idtype	C	(Required if the ID is not an S10 item ID)
item.idref_referral_reference	M	Reference of the referral for the item
item.referral_code	M	ACK
item.referral_datetime	M	Local date/time when the referral message was issued by the customs authority
item.referral_reason_code	N/A	Not used with ACK
item.referral_reason_text	N/A	Not used with ACK

X.   REFRSP V1 – Referral response

REFRSP shares the outcome of referral requests for mail items, as well as information on action taken and/or information required subsequent to the requests. A REFRSP message should be sent back from the origin DO, whenever a referral has been raised by the destination customs authority, and transmitted by the destination DO as an ITMREF RFI, RFS or DNL message.

Additionally, origin DOs may opt to respond to ITMREF INC or ERR messages initiated by the destination DO using a REFRSP message, in order to communicate how the ITMREF INC or ERR message has been processed.

Attribute name	Mandatory/ conditional	Population of data element
item.idref_value	M	Postal mail item identifier
item.idref_idtype	C	Type of postal mail identifier, as per code list 185
item.idref_referral_reference	M	As provided in the ITMREF message
item.referral_reason_code	M	As provided in the ITMREF message
item.response_code	M	Code that describes the response to a referral received in ITMREF Use values from code list 217 (REFRSP response codes)
(Can be used to reply to DNL, ERR, INC, RFI or RFS)		R10 Export cancelled
(Use to reply to RFI)		R20 Requested information, REFRSP data provided
(Use to reply to RFS)		R30 Additional screening conducted – no risk or alarm identified
(Can be used to reply to RFI, ERR or INC)		R40 ITMATT updated and re-sent
(Can be used to reply to RFI or INC)		R50 Requested information cannot be provided
(Can be used to reply to RFS)		R60 Additional screening not performed
item.response_datetime	M	Date and time when the response was issued
item.response_action_taken_code	M	Code that describes the action taken Only populated if item.response_code is: R20, then use codes from code list 214 (RFI data elements), or R30, use codes from code list 215 (RFS screening method codes)
item.response_action_taken_text	M	Free text providing additional information on the action taken or the information requested
item.response_authority	M	Name of the person or authority providing the response