

Explanatory notes: received CARDIT compliance report

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Introduction

The received CARDIT compliance report gives an overview of issues in CARDIT messages received by partner posts. So unlike the other compliance reports, the issues shown are not on the airline side, but on the posts side. Information is provided by partner post, based on the EDI address they use for sending CARDIT to airlines.

The report is not based on all EDI exchanges during the month. Instead, it is based on a sample consisting of 7 consecutive days in the month. The sampling period is displayed in the top right corner of the first page.

Report organization

The report provides results for two different checks:

- Analysis of CARDIT messages received from partner posts
- Separate analysis of flight data contained in the CARDIT messages

The analysis of CARDIT messages is quite similar to what is performed in the RESDIT compliance report: it is a detailed analysis of all information in messages received, as well as the structure of the messages.

The analysis of flight data consists in extracting all flight data (list of flight numbers with their origin, destination, departure day, departure and arrival times) and in comparing the information with the OAG reference. The UPU subscribes to a monthly update of OAG flight data.

The report is divided in the following three parts:

1. Compliance overview
2. CARDIT compliance
3. Flight data quality

Each section is detailed in the sections below.

A fictitious and anonymized report is provided below, to illustrate:

Compliance of CARDIT received - January 2021

Sampling period: 18-24 Jan 2021

Airline: [REDACTED]

1. Compliance overview

EDI address	CARDIT compliance			Flight correctness		
	# messages	# with issues	% with issues	# flights	# with issues	% with issues
[REDACTED]101	2	0	0.0%	8	4	50.0%
[REDACTED]102	10	0	0.0%	9	2	22.2%
[REDACTED]101	370	217	58.6%	146	69	47.3%
[REDACTED]01	3	0	0.0%	2	1	50.0%
[REDACTED]03	19	0	0.0%	8	5	62.5%
[REDACTED]101	11	2	18.2%	16	11	68.8%
[REDACTED]101	15	2	13.3%	15	7	46.7%

2. CARDIT compliance

orig EDI	Description	No. msg	% msg
[REDACTED]101	142>Main flight departure date-time before consignment completion date-time	217	58.6%
[REDACTED]101	142>Main flight departure date-time before consignment completion date-time	2	18.2%
[REDACTED]101	142>Main flight departure date-time before consignment completion date-time	2	13.3%

3. Flight data quality

sending EDI	number of flights with issues					total errors	total flights
	does not exist	invalid	wrong orig/dest	wrong day of week	wrong time		
[REDACTED]101	0	3	0	0	1	4	8
[REDACTED]102	0	0	0	2	0	2	9
[REDACTED]101	2	14	9	21	23	69	146
[REDACTED]01	0	0	0	0	1	1	2
[REDACTED]03	0	0	0	4	1	5	8
[REDACTED]101	1	0	2	3	5	11	16
[REDACTED]101	0	0	3	2	2	7	15

Compliance overview

This section provides an overview of the two checks performed (CARDIT message, flight data) and displays one line per partner post (EDI address).

For CARDIT, the table displays:

- The total number of messages received from an address
- The number of messages having at least one compliance issue
- The percentage of messages with a compliance issue.

For flight data, the table displays:

- The total number of flights;
- The number of flights having at least one issue
- The percentage of flights with issues

A flight may appear in more than one CARDIT message. In that case, it is counted as one only. For the calculations performed here, a flight has the following characteristics that make it unique:

- An origin EDI address
- A destination EDI address

- An airline code
- A flight number
- An origin airport
- A destination airport
- A departure date

Percentages are provided with a background color to visually indicate the level of compliance/quality.

The following color codes are used for the percentages:

Indicator	Flashy green	green	orange	red
Percentage of message or flights with issues	0%	between 0 and 3%	between 3% and 20%	> 20%

CARDIT compliance

This section of the report displays a summary of compliance issues in CARDIT messages received, grouping information per partner post (EDI address), with one row per error and indication of the number of messages affected by the error.

The exhaustive list of CARDIT compliance checks and associated errors is provided in annex. The issue numbers provided here correspond to what posts receive in their CARDIT compliance report, in case they participate to the compliance project.

Flight data quality

The following data quality checks are performed and reported:

Five types of flight anomalies are reported:

Flight anomaly	Description
Flight unknown	The combination of airline code + flight number does not exist in the flight reference database
Flight invalid on day used	The flight exists in the reference database, but its validity ranges do not include the day when it is used. Typically, it may have been valid in the recent past, but it is not valid anymore. Or it is not yet valid, or is temporarily not valid (in between two validity periods).
Incorrect origin and/or destination airport	The flight is valid, but its origin and/or destination airport is/are not.
Flight not valid on this day of week	The flight is valid, but not on the weekday (Monday to Sunday) it is used.
Incorrect planned departure and/or arrival time	The flight is valid, but its departure and/or arrival time is incorrect. Note: allowance is given for +/- 10 minutes, so this anomaly is raised only when the planned departure or arrival time has a difference of more than 10 minutes compared to the flight reference database.

The table reports one row per partner post (EDI address) and provides:

- The number of flights for each issue listed in the table above
- The total number of flights having an error

- The total number of flights used for the check (=all flights in the CARDIT messages received from this partner during the 7 days used for all compliance checks)

Annex: list of CARDIT compliance errors and explanations

Error code	Counted in dash-board?	Description	Explanations
140	Yes	Message structure error	<p>This error is raised when the structure of the message is not compliant with the standard. This usually happens when segments are in the wrong order or a segment/group of segments is missing.</p> <p>The message structure differs from the normal one in case of a cancellation CARDIT: in that case, only a few segments are expected. If too many segments are provided in that case, this is reported as a structure error.</p>
141	Yes	Mismatch consignment ID - orig EDI address	<p>When the consignment identifier provided in the BGM segment does not start with the same country code as the country code of the origin EDI address of the CARDIT message (the first two letters of the EDI address).</p> <p>In order to cover the special case of consignments from ETOEs having an ID starting with the sending IMPC code, the system does not raise an error for such consignments if CARDIT is sent from an EDI address belonging to the ETOE owner.</p>
142	Yes	Main flight departure date-time before consignment completion date-time	Error raised when the departure date-time of the first main transport is before the announced consignment completion date-time.
143	Yes	Handover at origin before consignment completion date-time	Error raised when the handover date-time at origin is before the consignment completion date-time.
144	Yes	Invalid location code for handover at destination	Error raised when the handover location at destination is declared as an IATA airport code but is not a valid IATA airport code
145	Yes	Handover at destination before consignment arrival date-time	Error raised when the declare date-time of handover at destination is before the declared consignment arrival date-time
146	Yes	Invalid receptacle type	Error raised when the receptacle type is not in UPU code list 121
147	Yes	Invalid IATA airline code	Error raised when the airline code used is not a valid IATA airline code
148	Yes	Invalid IATA airport code	Error raised when the origin or destination airport code is not a valid IATA airport code
149	Yes	Duplicate receptacle ID in consignment	Error raised when at least one receptacle in the consignment is repeated more than once in the message.

Error code	Counted in dash-board?	Description	Explanations
150	Yes	Inconsistent location: UN/LOCODE announced, 3-char code provided	Error raised when, in a LOC segment, the announced location type is UN/LOCODE (type 6 in data element handover/origin/destination/ <i>location-code-source</i>), but the location provided has 3 characters. NOTE: a UN/LOCODE has 5 characters.
151	Yes	Transit time too short between two flights	Error raised when the transit time between two consecutive flights is less than 90 minutes. More technically, this is when the following conditions are met: <ul style="list-style-type: none"> - There are multiple transport segments listed in the message - For two consecutive segments: <ul style="list-style-type: none"> o Transport is by air for each segment o The departure time or arrival time is not '0000' for each segment o The time difference between the arrival of the first flight and departure of the second flight is less than 90 minutes
152	Yes	Invalid flight date	When the flight date is not valid or is not in the current or next year. For example, when the report is run for December 2018, a date in 2020 or later is considered invalid.
153	Yes	Invalid flight time	When the flight departure or arrival time is not between 00:00 and 23:59
154	Yes	Comma as decimal separator	Error raised when the decimal separator used for reporting weights is the comma instead of the point.
155	Yes	Handover information provided but not expected	When the message includes transport information with qualifier 10 (pre-carriage transport), handover <u>at origin</u> should not be provided. The error is raised if handover information at origin is provided in this case. When the message includes transport information with qualifier 30 (on-carriage transport), handover <u>at destination</u> should not be provided. The error is raised if it is provided in this case.

Error code	Counted in dashboard?	Description	Explanations
156	Yes	Issues with totals	<p>CARDIT includes a totals section, with the total number of receptacles and total weight, per mail class.</p> <p>The issue is raised when there is one of the following issues with the totals section, for one of the mail classes:</p> <ul style="list-style-type: none"> - Incorrect mail class: a mail class other than 'E', 'C', 'U' or 'T'; - Wrong total number of receptacles: the total count in the totals section does not match the number of receptacles listed in the message, for this mail class; - Wrong total weight: the total weight in the totals section does not match the sum of individual receptacle weights listed in the message, for this mail class.
157	Yes	Invalid EAD information	<p>When one of the EAD (Electronic Advance Data) data elements is not valid:</p> <ul style="list-style-type: none"> - <u>ar-border-agency-authority</u> does not contain one of the authorized codes (CUS, AVS, BOC, QRT); - <u>ar-flag</u> does not contain one of the authorized codes (1, 2, 3, X, N).
158	Yes	Static transport (orig = dest)	<p>When a transport segment has the same origin and destination location.</p>