Royal Mail Mailmark®

Mailmark Direct Data Technical Specification

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Summary of changes: v2 to v2.1

Issue Date: 20 March 2022 (pre-release 11th March 2022)

Page 13. Section 4.2 MDD - Detail Report Dictionary

- Footnote (3) removed - 'Currently this detail is only available for Network Access Economy Letter format products'.

Pages 20-21. FAQ

- Predicted Delivery FAQs update
- Additional FAQ's added



1. Introduction

1. Overview

Mailmark® requires a number of technical solutions to; store all Mailmark data; present report visuals to users; correlate items declared, processed and billed and share status information for mailings handed over.

2. Reporting

Customers have two options to view the performance of their mailings.

- a. See at a glance, through PDF report visuals for both Active (live mailings handed over within 5 days of the report being viewed) and historic (mail handed over between 5 and 14 days previously) mailings.
- b. In-depth reporting through the use of Mailmark Direct Data which provides item level information at Summary and Detail levels in a variable length file, in a format known as CSV (Comma-Separated Variable length) with a header record giving a name to each field. The file, in the standardized well-documented published format, will not change for the foreseeable future.

Please note: For the avoidance of doubt, we will only provide Mailmark Direct Data in respect of General Large Letter items to the extent we process such items via our Large Letter automation machines.

3. Document purpose

The focus of this document is to provide the technical detail to support customers and software providers to enable;

- a. secure, customer specific, retrieval of data files
- b. development of an external solution to deliver data in a format and medium requested by end clients
- c. data integration with external customer solutions

4. Intended Audience:

This document is primarily for providers or customers who wish to develop a software solution or integrate the Mailmark Direct Data into their systems.

5. Additional Documentation

Mailmark Direct Data - How to download data files

Please note: the data received will essentially be as a single csv. output so it is essential, for the data to be used meaningfully, that a solution is created to effectively split the data into the categories mentioned later in this guide.



2. Onboarding process

The onboarding process requires the recipient of the Mailmark Direct Data transfer (MDD) to reguest access from Royal Mail.

The process is as follows:

1. Request Access from Royal Mail

Customer (Mailmark User) contacts mailmark@royalmail.com and provides;

- a. Mailmark Participant ID(s) and Participant Name(s)
- b. Company / Business name and, where applicable, Company Registration number
- c. Contact details including name, email address, contact number, job title
- d. Confirmation that the email address provided has been registered on www.royalmail.com as a business user
- e. If in the event of a customer wishing a password free connection, the SSH Public¹ key must be provided to mailmark@royalmail.com

2. Royal Mail provides access details to Requestor

Royal Mail will action the request and send to the contact provided;

- a. A unique User name
- b. A unique password which is formatted as: 9 characters long with letters (capital and small caps), numbers and symbols, randomly sequenced.
- c. A unique directory structure where the ZIP files will be available.

This directory can only be accessed by the user.

The directory structure is: /pub/1036/out. The ZIP files are found in the folder "out".

Note:

- 1. The DNS and IP are common across all customers
- 2. SFTP Password free connection is an option and not mandatory.
- 3. A contract needs to be signed to access Mailmark Direct Data
- 4. The set-up process can take 48 hours
- 5. When downloading data for the first time, please refer to the *Mailmark Direct Data How to download data files* document. You will need an opensource tool e.g. WinSCP, FileZilla, PuttyGen or 7-Zip to access the domain server.

¹ SSH keys are a matching set of cryptographic keys which can be used for authentication. The public key can be shared freely without concern, while a private key is guarded and never exposed to anyone.



3. Mailmark Direct Data

The Mailmark Direct Data (MDD) solution will provide detailed data on all Mailmark items for a Supply Chain. This data will be provided through two automated reports in the following sequence.

Please note:

- For the avoidance of doubt, we will only provide Mailmark Direct Data in respect of General Large Letter items to the extent we process such items via our Large Letter automation machines.
- Each customer signed up for MDD will receive at least one daily file.
 - a. where there is data, the final file will include an 'end of extraction message',
 - b. where there is no data, an empty file will be shared.

1. MDD Summary Report (Max file size 5MB)

This will be created first as soon as the data has been aggregated. This the day after the 'Handover Date' on an eManifest.

The report will be shared using the following naming convention:

Summary-{Customer id}-{DATE}-{Time}.csv

2. MDD Detail Report (Max file size: 2GB)

These will be created in CSV format using eManifest and Supply Chain ID (SCID) detail to drive data extraction.

The report will be extracted and split into files with up to 1m rows with the following naming convention:

Detail-{Customer id}-{DATE}-{Time}-{nnn}. csv.gz

The data within the files are sorted as follows:

- a. in order of Handover Date, in descending order then,
- b. SCID in ascending order

This will deliver the latest posting in the first customer file

The file will need to be retrieved by the user through;

- a. Accessing the SFTP
- b. Retrieving the file from the secure host platform
 - The format is zipped file(s) transmitted via SFTP.
- c. Transferring the selected file(s) to the customer's destination of choice
 - The data file will be in a variable length file (CSV).
 - It will have a header record that gives a name to each field.
 - The Data in the files is sorted by Handover date in descending order and then SCID in ascending order in order to have the latest item in the 1st file for your Participant ID.



3.1 MDD - Opening Reports

The MDD files will be exported as a CSV file, therefore can be opened in Excel for ease of use. The file can also be opened as a .txt file in Notepad++ if required.

As noted previously, comma-separated values (CSV) file is a delimited text file that uses a comma to separate values. Each line of the file is a data record. Each record consists of one or more fields, separated by commas. As the file is now produced in a CSV format, commas will be used to separate the values instead of pipes, illustrated below.

HANDOVER DATE, SCID, MANIFESTID, BATCH 13/10/2020, 1000196, 552802, 4296963, 043

Please note: When opening the CSV file in Excel, the date format applied by the customer must be in British format (dd/mm/yyyy). If the date format shows in a different format, then the user should check the regional settings on their local machine.

3.2 MDD - Summary Level Report

The eManifest Summary Report shows a daily snapshot of all current postings during the active 5-day window that an eManifest is open.

The report is accessed via: /data/FDP/extract_files/MDD/ MDD_Summary The report layout shows:

- a. a summarised view of the posting volumes vs the eManifest
- b. eManifests showing summarised item numbers linked to potential non-compliance. This data can be used to pinpoint the item level reports that are needed.

Example of raw MDD Summary Data

This is in CSV format, for the purposes of this example, the headers have been listed in order and, as in the raw file will be separated by a comma (,)

Please note spaces < > have been added for visual purposes to show the headers more clearly. In addition, the fields headers Item not seen, item not expected to be seen will be changed at a later date to match the Data Dictionary wording.

HANDOVER DATE, MANIFEST ID, SCID, RAG FLAG, DAY NO, PREDICTED DELIVERY, VOLUME DECLARED, SPARE1, ITEMS SEEN, ITEMS NOT SEEN, ITEMS NOT EXPECTED TO BE SEEN, MISSORT, INACCURATE POSTCODE, INACCURATE DELIVERY POINT, INCORRECT CLASS, INCORRECT FORMAT, INTERNATIONAL, DUPLICATE MANIFESTED, DUPLICATE SEEN, AVERAGE ERROR CORRECTION %, SPARE2, SPARE3



3.3 MDD - Item Level Report (Detail)

The full eManifest item event data report, shows active data (data within five days of an open eManifest).

The report is accessed via: /data/FDP/extract_files/MDD/ MDD_LineItem/

The report layout is:

- a. specified by eManifest
- b. contains all the items, (positive and negative) that our machines have seen,
- c. details of potential non-compliance at item level

Example of raw MDD Detail Data

This is in CSV format, for the purposes of this example, the headers have been listed in order and, as in the raw file will be separated by a comma (,)

Please note spaces < > have been added for visual purposes to show the headers more clearly. In addition, the fields headers Item not seen, item not expected to be seen will be changed at a later date to match the Data Dictionary wording.

HANDOVER DATE, SCID, MANIFEST ID, BATCH ID, ITEM ID, BATCH REF, CUSTOMER REFERENCE, DEPARTMENT, CAMPAIGN NAME, CONTAINER FIELD, FIRST MAIL CENTRE SEEN DATE, FIRST MAIL CENTRE SEEN TIME, PREDICTED DELIVERY DATE, DECLARED PRODUCT, DECLARED CLASS, DECLARED FORMAT, DECLARED PC&DPS, SORTED POSTCODE, UNMANIFESTED FLAG, MACHINABILITY, DUE MAIL CENTRE, MAIL CENTRE FIRST SEEN, UNSEEN EXPECTED TO BE SEEN, UNSEEN NOT EXPECTED TO BE SEEN, MISSORTED, INACCURATE POSTCODE, INACCURATE DELIVERY POINT, INCORRECT CLASS, INCORRECT FORMAT, INTERNATIONAL, DUPLICATE MANIFESTED, DUPLICATE SEEN, SPARE 1, SPARE 2, SPARE 3

3.4 MDD - Empty and complete files

Where a customer has no data, an empty file will be generated that will only contain the file header and an end of extract message as follows: ****Summary Data Extraction Ends****

Where a customer has data and the final record has been extracted, a message indicating the end of the Files is included in the Summary and Detailed Reports as follows: ****FILE EXTRACT END****





4. Mailmark Direct Data Dictionary

The following detail provides you with the fields which will be shown in the report and the source of data.

eManifest = details within the file a Participant within the Supply Chain has uploaded

Barcode = details included in the barcode string and should be reflected in the eManifest

Derived = data outputs during processing e.g. an item is missorted as was due in Newcastle Upon Tyne but was first seen in Aberdeen

The purpose of this detail is to enable you to develop your software / integration solution to separate the Variable length file data files (CSV) with associated header records giving a name to each field) at specific points to enable the data to be used in a meaningful way.

Please note:

- where there are fields with a longer length than the characters required, no solutions will require padding
- all the fields will be separated by commas, including where there is no data, so a solution should look for a comma to separate values
- we have not explicitly specified minimum length at database level
- when opening the CSV file in Excel, the date format applied must be in British format (dd/mm/yyyy). If the date format shows in a
 different format, please check the regional settings on your computer
- if commas are added to the data fields during eManifest creation and during the upload process, data values may not replicate correctly within the data files.

4.1 MDD – Summary Report Dictionary

DATA FIELD	DESCRIPTION	FORMAT	Nullability	MAX	MIN	VALUES	DATA
				LENGTH	LENGTH	examples	SOURCE
Handover Date	The date the mail was due to be handed over to Royal Mail.	dd/mm/yyyy	Null	10	BLANK	01/01/1999 Blank = unManifested	eManifest
Manifest ID	Unique number linked to a posting.	Integer	Not null	11	BLANK	677090 0 = unManifested	eManifest
SCID	Number unique to a set of four Participants.	Integer	Not null	11	1	1000196	eManifest & barcode
RAG FLAG	Status of posting. GREEN Successful mailing, AMBER some minor errors RED Multiple or significant issues	Varchar	Not null	5	BLANK	AMBER Blank = unManifested	Derived
Day No	Number of days after the Handover Date.	Varchar	Not null	10	BLANK	1 5 Blank = unManifested	Derived
Predicted Delivery	This field is defaulted to NULL	(dd/mm/yyyy)	Null	10	BLANK	Blank	Derived
Volume Declared	Number of items declared in the eManifest.	Integer	Null	11	0	52173 Blank = unManifested	eManifest
SPARE1 ²	For future development	Varchar	Null	255			Varchar
Items Seen	Based on the declared Postcode and product, Royal Mail has a machine that can process the item at the declared location.	Integer	Null	11	BLANK, 0	20408	eManifest and barcode

² "Please note that the Mailmark Direct Data file columns 'SPARE1, SPARE2 and SPARE3' are reserved for future RM use and are not in any way linked to the eManifest upload fields of the same naming convention"

Items Not Seen	Declared in the eManifest as a machineable item and if presented to the correct Mail Centre should be machined	Integer	Null	11	0	31771 0 = unManifested	Derived
Items Not Expected to be Seen	Declared in the eManifest as a machineable item and if presented to the correct Mail Centre cannot be machined by Royal Mail due to machine coverage	Integer	Null	11	0	167 0 = unManifested	Derived
Missort	Number of items processed at the wrong Mail Centre that have been re-routed to the correct Mail Centre for delivery.	Integer	Null	11	0	1	Derived
Inaccurate Postcode	Number of items where the Postcode declared within the eManifest or barcode is inaccurate (versus PAF) or missing or 9z used.	Integer	Null	11	0	26	Derived
Inaccurate Delivery Point	Number of items where the Delivery Point Suffix (DP) declared within the eManifest or barcode is inaccurate (versus PAF) or missing or 9z used.	Integer	Null	11	0	167	Derived
Incorrect Class	Number of items that do not match the class declared within the eManifest.	Integer	Null	11	0	0	Derived
Incorrect Format	Number of items that do not match the format declared within the eManifest.	Integer	Null	11	0	0	Derived
International	Number of items declared as Domestic but identified as International by Royal Mail's sorting machines.	Integer	Null	11	0	1	Derived
Duplicate Manifested	Number of items where the item ID is duplicated in the eManifest.	Integer	Null	11	0	0	eManifest & barcode

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Issue: 22/11/2021 Effective 10/12/2020

Duplicate Seen	Number of items with multiple track events on Royal Mail's sorting machines where tracking information identifies more than one physical item with the same unique ID.	Integer	Null	11	BLANK	6 Blank = unManifested	Barcode
Average Error Correction %	Royal Mail's sorting machines made corrections while processing the barcode. The higher the Average Error Correction, the more indication there is an issue with barcode quality or ability to read the barcode. An error correction of more than 1 could potentially cause an issue which may have adjustments applied	VARCHAR (23)	Null	23	BLANK	18.01% Blank = unManifested	Derived
SPARE2	For future development	VARCHAR	Null	255			
SPARE3	For future development	VARCHAR	Null	255			

4.2 MDD – Detail Report Dictionary

Data Field	DESCRIPTION	FORMAT	Nullability	MAX LENGTH	MIN LENGTH	Values - example	Data source
Handover Date	The date the mail was due to be handed over to Royal Mail.	(dd/mm/yyyy)	Null	10	BLANK	13/10/2020 If BLANK – there is handover date and this item is unmanifested	eManifest
SCID	Number unique to a set of four Participants.	Integer	Not null	7	1	1000196 0 13 200 1222 11781	eManifest & barcode
Manifest ID	Unique number linked to a posting.	Integer	Null	10	BLANK	123456, BLANK - unmanifested	eManifest
Batch ID	Unique number to describe a subset of an eManifest.	Integer	Null	7	BLANK	4296963, 987654, BLANK	eManifest
Item ID	The mail item ID to identify the individual item. Maintained per Supply Chain ID and must remain unique for 90 days	Char	Null	8	BLANK	00000000, 9999999, BLANK	eManifest & barcode
Batch Ref	Customer reference given to the Batch ID.	Varchar	Null	30	BLANK	M00665 - 1330 JACARANDA RADIO, BLANK	eManifest
Customer Reference	Optional field for customer specified reference.	Varchar	Null	200	BLANK	919R15ZLJ00960-	eManifest

Department	Optional field for customer specified department name.	Varchar	Null	200	BLANK	ZBC. BLANK	eManifest
Campaign Name	Optional Customer Specified Campaign Name.	Varchar	Null	200	BLANK	JACARANDA RADIO, Unified Post BLANK	eManifest
Container Field	Container ID of the container the mail item was handed over within, declared in the eManifest in SPARE10 field.	Varchar	Null	200	BLANK	919R15ZLJ00960	eManifest
First Mail Centre Seen Date	The date of the first track event on Royal Mail's sorting machines.	(dd/mm/yyyy)	Null	10	BLANK	13/10/2020 BLANK - where there is no date provided, this means that the item has not been seen	Derived
First Mail Centre Seen Time	The time of the first track event on Royal Mail's sorting machines.	Varchar	Null	200	BLANK	14:54 BLANK - where there is no time provided, this means that the item has not been seen	Derived
Predicted Delivery Date	This is the date we predict the item will be delivered to the recipient.	(dd/mm/yyyy)	Null	10	BLANK	18/06/2021	Calculated from: eManifest; product declared; product in the barcode; first track event and final walk sequence sort.
Declared Product	The declared product matching the 3 Character Code within SAP OBA (RM billing system).	Char	Null	3	BLANK	ZSB DZ2 Unmanifested items are displayed as BLANK	eManifest

Declared Class	The declared class, identified by a 1 Character Code.	Varchar	Null	3	BLANK	0 = Null/Test 1 = 1c (Retail) 2 = 2c (Retail) 3 = Economy (Retail) 4 = Premium (Retail Publishing Mail) 5 = Deferred (Retail) - For use with Deferred 6 = Air (Retail) 7 = Surface (Retail) 8 = Premium (Network Access) 9 = Standard (Network Access) E = Economy (Network Access) A-D and F-Z = Spare	eManifest & barcode
Declared Format	The declared format, identified by a 1 Character Code.	Small INT ³	Null	6	BLANK	1 = Letter 2 = Large Letter 3 = Not in use 4 = Parcel 5 to 9 = Not in use A to Z = Not in use	eManifest & barcode
Declared PC and DPS ⁴	Postcode and Delivery Point declared in the eManifest.	Varchar Please note: a space will be added between the inward Postcode and the DPS	Null	10	BLANK	EC1V1AA 1R EC1V1AA 9Z BLANK	eManifest
Sorted Postcode	Postcode determined by Royal Mail and location sent for delivery.	Varchar	Null	10	BLANK	LS101JE BLANK	Barcode

 $^{^{3}}$ "The SMALLINT data type stores small whole numbers and is stored as a signed binary integer.

⁴ Declared Postcode and Delivery Point Suffix

Unmanifested Flag	Items that Royal Mail has seen but does not have a corresponding eManifest	Integer	Not null	1	1	0 = Manifested 1 = Unmanifested	Derived
Machinability This field is for future use	This is an additional spare column being requested to add for future use. At present it will be displayed as blank.	Varchar	Null	255	NA	Currently not populated.	Derived
Due Mail Centre (ID)	The Mail Centre where the first track event on Royal Mail's sorting machines was expected to occur with correct routing.	Integer	Null	2	Blank	See Appendix 5.1	Derived
Mail Centre First Seen (ID)	The Mail Centre where the first track event on Royal Mail's sorting machines occurred.	Integer	Null	2	Blank	See Appendix 5.1	Derived
Unseen Expected to be Seen	Declared in the eManifest as a machineable item and if presented to the correct Mail Centre should be machined	Integer	Not null	1	1	0 = the item was not expected to be machine processed. 1 = The item could have been machine processed. However, the item was not seen.	Derived
Unseen Not Expected to be Seen	Declared in the eManifest as a machineable item and if presented to the correct Mail Centre cannot be machined by Royal Mail due to machine coverage	Integer	Not null	1	1	0 = The item was expected to be machine processed. 1 = The item was not expected to be machine processed. And, the item was not seen.	Derived
Missorted	Received and processed at the wrong Mail Centre and needs to be rerouted to the correct Mail Centre for delivery.	Integer	Not null	1	1	0 = Not Missort 1 = Missort	Derived
Inaccurate Postcode	The Postcode contained in the barcode is inaccurate when measured by Royal Mail systems.	Integer	Not null	1	1	0 = Accurate Postcode 1 = Inaccurate Postcode	Derived

Inaccurate Delivery Point	The Delivery Point Suffix (DPS) contained in the barcode is inaccurate when measured by Royal Mail systems.	Integer	Not null	1	1	0 = Accurate DP 1 = Inaccurate DP	Derived
Incorrect Class	Does not match the class declared within the barcode.	Integer	Not null	1	1	0 = Correct class 1 = Incorrect class	Derived
Incorrect Format	The physical dimensions measured by Royal Mail's machines does not match the format declared within the eManifest	Integer	Not null	1	1	0 = Correct format 1 = Incorrect format	Derived
International	Declared as Domestic but identified as International on Royal Mail's sorting machines.	Integer	Not null	1	1	0 = Domestic 1 = International	Derived
Duplicate Manifested	Item ID is duplicated in the eManifest.	Integer	Not null	1	1	0 = Not duplicate manifested 1 = Duplicate manifested	Derived
Duplicate Seen	Identifies an item that has multiple track events on Royal Mail's sorting machines.	Integer	Not null	1	1	0 = Not duplicate 1 = Duplicate	Derived
SPARE1 ⁵	For future development	Varchar	Null	255	0	BLANK	
SPARE2	For future development	Varchar	Null	255	0	BLANK	
SPARE3	For future development	Varchar	Null	255	0	BLANK	

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⁵ "Please note that the Mailmark Direct Data file columns 'SPARE1, SPARE2 and SPARE3' are reserved for future RM use and are not in any way linked to the eManifest upload fields of the same naming convention"

5. Appendix - Mail Centre Lookup table

LOCATION NAME DIN	MC ID
LOCATION_NAME_RLN	MC_ID
Plymouth Mail Centre	1
Tyneside Mail Centre	2
Sheffield Mail Centre	3
Warrington Mail Centre	4
Nottingham Mail Centre	5
Gatwick Mail Centre	6
Cardiff Mail Centre	7
Bristol Mail Centre	8
Swindon Mail Centre	9
London Central Mail Centre	10
Preston Mail Centre	11
Manchester Mail Centre	12
NW Midlands Mail Centre	13
Dorset Mail Centre	14
Croydon Mail Centre	15
Inverness Mail Centre	16
Medway Mail Centre	17
Norwich Mail Centre	18
Exeter Mail Centre	19
Chester Mail Centre	20
Southampton Mail Centre	21
Truro Mail Centre	22
Chelmsford Mail Centre	23
Leeds Mail Centre	24
Romford Mail Centre	25
Northern Ireland Mail Centre	26
Birmingham Mail Centre	27
Aberdeen Mail Centre	28
Home Counties North MC	29
Glasgow Mail Centre	30
Swansea Mail Centre	31
Edinburgh Mail Centre	32
Jubilee Mail Centre	33
Carlisle Mail Centre	34
Greenford Mail Centre	35
South Midlands Mail Centre	36
Peterborough Mail Centre	37

6. Frequently Asked Questions

ACCESS TO MDD

1. When are Mailmark Direct Data files available to download?

Every day, Monday to Sunday including Bank Holidays/Public Holidays.

2. Which days of the week will I receive data for?

Monday to Saturday, excluding Bank Holidays/Public Holidays.

3. What time will the files be available for retrieval?

At 15:00 by the latest.

4. I cannot connect / I am getting a message saying the URL is unavailable?

This may be because access to the FTP site is being attempted as if it was a website. Access can only be gained through an FTP client such as WinSCP or FileZilla – please refer to the Technical Specification (downloading data). Alternatively, check you are not connected via VPN.

5. What is the process for archiving or deleting files which have been opened?

Files are not archived; they are available for 7 days in the server and then deleted by Royal Mail.

DATA

6. What data will be within the files and are there any exclusions?

The files will include active (live) data.

The MDD data retrieval process will run from Monday to Saturday, irrespective of Bank / Public holidays. For the avoidance of doubt, we will only provide Mailmark Direct Data in respect of General Large Letter items to the extent we process such items via our Large Letter automation machines.

7. How long will my data files be available?

The server to access files is available 24 hours a day, 7 days a week. All files will remain in the repository for 7 calendar days, after which time they will be removed.

8. How will you return my data if errors have been made when the files were 'Mailmarked' e.g. I included AB22 222 as the postcode.

We will simply replicate the data entered onto the eMHS system. You will see the same details e.g. AB22 222 will show in the 'Declared Postcode and Delivery Point Suffix' in the designated field.

9. Why is the 'Sorted Postcode' sometimes different to the 'Declared Postcode'?

This is the Postcode determined by Royal Mail systems from the detail on the item.

10. Why do you only share the Postcode you have derived in the 'Sorted Postcode' field and not the Delivery Point Suffix information?

Various Address Management products and solutions are available from a number of suppliers and Value-Added Resellers (VARs) for customers to ensure their data matches the Postcode Address File (PAF).

11. Why is my data file empty?

If no data has been uploaded the file will be empty and a notification will be provided to indicate this is not a system error. Please see section 3.4. If you believe data is missing, please contact your Account Manager.

12. Why are some item records listed more than once on the same date?

If there are multiple issues with an item of mail, it will have a separate reference each time. For example, if there are no issues with a letter, it will simply have a single line reference on that day. If, however, it is a missort and the address is incorrect and the format is incorrect, it will be listed 3 times for each individual error to be highlighted.

13. Why am I seeing items with very old seen dates in the unManifested field?

These items may be those which have been put back in the system by the intended recipient or 'returned to sender'. These are always excluded from any potential unManifested charges and tend to be the first items showing on any 'unManifested' item list.

14. Why are items still showing as unManifested when I have uploaded an eManifest within the 5-day window?

Information for each day an eManifest is open is shown daily. If an item of mail was unManifested on day 1 and an eManifest was uploaded on day 2, the item would no longer show as unManifested on day 3. This is because the report metrics work on the previous 24 hours. However, the original data detail from day 1 would still show in the older active records.

15. Why there are unmanifested flags set to '1' and '0' for the same item ID and why are these shown on multiple rows?

Mailmark Direct Data (MDD) files will retain the historic view for data. Therefore, if an item is unManifested it will have a flag initially set as '1'. Once the eManifest has been received, the unManifested flag will be set to '0'. As MDD shows the data for historical records i.e. those seen in open eManifests, there will be one record for the historic record (for a specific item) with the unManifested flag set to '1' and new record showing it has been eManifested with the unManifested flag set to '0' (meaning the item has been eManifested). Note: Every new flag triggered within the MDD data set will show the records on a new line.

MDD FILE DATE	ITEM ID	UNMANIFESTED FLAG	COMMENTS
25th Jan	ABC	1	The item is unmanifested.
26th Jan	ABC	1	The item is unmanifested.
27th Jan	ABC	1	The item is unmanifested.
28th Jan	ABC	1	
28th Jan	ABC	0	Manifest received on 27th Jan 15:00

In the example above, on 28th January in the MDD file there will be 2 rows of data for the item ID. One showing the unManifested flag set to 1 (for previous days) and one with the unManifested flag set to 0 for that same item because an eManifest was uploaded.

FILE FORMAT

16. Will the Summary file be compressed or zipped?

There is currently no intention to make changes to the Summary file.

17. Will the Detail file ever be decompressed or unzipped?

Due to the file size, it will always be compressed.

The Detail file is compressed as GZ. today. It may be changed to a ZIP file in the future. 7-Zip is able to decompress GZ files.

18. What will happen if I use 'commas' in any text field?

The MDD files are CSV (Comma-separated values) files, and we chose Comma as the separator. If commas are included in free text fields, new columns will be created, this seriously changes the formatting of the file output. If a field contains any commas, could you please enclose the entire field within double guotes, or failing that, remove the comma before outputting it.

19. Why increase file size by maintaining the SPARE fields?

These have been included for future use and to enable customers to build their solutions accordingly. The increase in file size is negligible.

PREDICTED DELIVERY

20. Why is there no Predicted Delivery date shown in my Summary file(s)?

The Summary File is a summary of individual Supply Chains and eManifests. As items may have different Predicted Delivery Dates the MDD Summary file will return a null value.

21. What products will show me Predicted Delivery information?

The second release of Predicted Delivery in March 2022 was extended to include additional Mailmark products. These are: Network Access Standard, Retail 1st Class and Retail 2nd Class sorted and unsorted and Retail Economy.

22. When will you expand the products which receive Predicted Delivery information?

Predicted Delivery was originally rolled out for Network Access Economy in June 2021 and then in March 2022, Detail files include additional bulk mail Mailmark Letter and Large Letter products in March 2022.

23. Predicted Delivery dates.

- a. Data is not available or predicted for Bank Holidays. i.e. if Monday is a Bank Holiday then data will be visible for Tuesday.
- b. If mail is processed on a Sunday by our weekend operation, regardless of the time, the Predicted Delivery date will be the next working day i.e. a Monday.
- c. NA Standard and Retail 1st Class are a next working day service: Date shown = first seen date on the automation + 1 working day
- d. Retail 2^{nd} Class is a 3 working day service: Date shown = first seen date on the automation + 2 working days.
- e. NA Economy is a 5 working day service: Date shown = first seen date on the automation + 4 working days.
- f. Retail Economy is a 6 workday day service: Date shown = first date seen on the automation + 5 working days.

Effective: 10/12/2020

Issue: 20/03/2022

24. How do you calculate Predicted Delivery?

A number of sources of data are used. Assuming all the data provided by the customer in the eManifest and barcode is correct the Predicted Delivery Date is derived from:

- the handover date, format and class stated in the eManifest
- the date and time the letter or large letter was first seen on our automation
- the date and time the letter or large letter receives its final sort on our automation
- If the item is a customer missort, this will be factored in and an additional delivery day added to the first predicted delivery date

25. Perceived anomalies with the Predicted Date

- a. If the mail cannot be walk sequenced or is processed on the large letter automation (because it is out of specification for example) the Predicted Delivery date will remain as the indicative 'predicted Delivery Date'
- b. If the item is a customer missort, this will be factored in and an additional delivery day added to the first predicted delivery date
- c. A letter has had its final sort at 05.53 on 10th March and it's predicted delivery date is 10th March, yet another letter seen at the same time has a predicted delivery date for the 11th March. Why is this? It is probable that the item of mail did not receive its final machine sort. The data reflects the delivery based on the final machine sort + time seen.
 - sorted on any machine before 6am, the Predicted Delivery date will be the same working day
 - walk sequenced or batched after midnight and before 10am, the Predicted Delivery date will be the same working day.
 - walk sequenced or batched after 10am up to 11.59pm, the Predicted Delivery date will be the following working day.

26. Reasons why there may be no data visible i.e. NULL entries.

- a. If the item has been unManifested, the Predicted Delivery will show as NULL.
- b. If the barcode string is correct but we have not machine sorted the item then the final report will show Predicted Delivery as NULL and there will be an additional entry on the report showing the item was not seen (i.e. will show as '1' in the MDD file).

GENERAL

27. Multiple references for the same item i.e. the same item ID e.g. Item 12345678 are showing on more than one line in your MDD file.

- a. You may see an individual item on multiple lines. The reason for this is because if there are flags for an item it will be listed each time. E.g. if the letter is a missort and the address is incorrect, it will show on two lines. In these cases, assuming the item is not a duplicate item, the Predicted Delivery rules are as follows for the same item (same unique ID, Postcode and DPS).:
- b. Different Predicted Delivery dates. This will be because we have allocated the item different machine ID's during sorting.

28. Why does the file header in the Detail Report no longer state 'Flag'?

We changed 'Flag' to 'Date' in the November 2021 release to provide better clarity of the data in this field.

29. What are the postcodes used for Partially Addressed Mail?

Postcode E1W 9PZ to be used for Network Access and E1W 9NG for Retail postings.

ADVERTISING MAIL

Using MDD item data to determine if RM have seen an advertising mail seed. Step-by-step process:

- a. Once you have downloaded and incorporated the MDD item level files into your systems; you will start by filtering the data for all Advertising Mail products (column N Declared Product).
- b. Then you will need to determine how many unique eManifest and Campaign name combinations there are using columns C (Manifest ID) & (I Campaign name). How you go about this will depend on functionality you have built into your own unique system or the software package you are using.
- c. For each unique eManifest/Campaign name combination you will search column Q (Declared PC&DPS) to see if a seed has been sent to the correct postcode. (For Retail this would be: E11AA and for Wholesale this would be: E1W9LD).
- d. At this stage you can now tell if you forgot to include a seed line in your eManifest every eManifest/campaign combination should have had a seed postcode entry.
- e. Now you can see if the seeds you have sent to RM have been seen by RM on the machines. You can do this by filtering for only the seed postcode in column Q (Declared PC&DPS) and then using column K (first mail centre seen date). A null entry means we have not seen this item (although it doesn't necessarily mean we don't have it).
- f. This data can be used to support the weekly emails from DSACC/IRP about the Advertising seed adjustments.

7. Change Control log (historic)

Summary of changes: v1.5.1 to v2

Issue Date: 22 November 2021. Pre-release date 2nd November 2021.

Page 6. Section 3.2 MDD - Summary Level Report Header.

- HANDOVER DT to HANDOVER DATE (document correction, the file name header hasn't changed)

Page 7. Section 3.3 MDD - Detail Level Report.

- 'Unseen' prefix added to EXPECTED TO BE SEEN and NOT EXPECTED TO BE SEEN. Now reads UNSEEN EXPECTED TO BE SEEN and UNSEEN NOT EXPECTED TO BE SEEN
- Predicted Delivery Flag changed to Predicted Delivery Date.

Page 9. Section 4.1 – MDD Summary Report Dictionary.

- Multiple: Value example and data source updated
- Page 9. Handover DT to Handover Date (*document correction, the file name header hasn't changed*). Value example updated.
- Page 9. Addition of the word 'Items' to read 'Items Expected to be Seen' and 'Items Not Expected to be Seen'. (Document correction, the file name header hasn't changed).
- Page 9. comma (,) removed after Unseen for the Unseen Expected to be Seen and Unseen Not Expected to be Seen references
- Page 9. Predicted Delivery. 'Nullability' changed from Not null to Null. Accordingly, the min length, date example and value example text have been removed.
- Page 9. Clarity in footnote that SPARE3 is reserved for future RM use.
- Page 10. Column header change for consistency: "Items Expected to be seen" is "Items not seen" and "Unseen, Not Expected to be Seen" is "Items not Expected to be seen"

Page 11. Section 4.2 - MDD Detail Report Dictionary.

- Page 13. Predicted Delivery Flag changed to Predicted Delivery Date. Footnote added 'Currently this detail is only available for Network Access Economy Letter format products'. Addition of the word 'Seen' to read "First Mail Centre Seen Date" and "First Mail Centre Seen Time".
- Page 14. Truncation of "Declared Postcode & Delivery Point Suffix" to "Declared PC & DPS"
- Page 15. Machinability. Clarity that this field is not in use.
- Page 15. 'Unseen' prefix added to 'Expected to be Seen' and 'Not Expected to be Seen'. Now reads 'Unseen Expected to be seen' and 'Unseen Not Expected to be Seen'.

Page 19-22. FAQ

- 20. Clarity around Predicted Delivery not showing in the Summary MDD files.
- **25.** Further clarity provided confirmation this is specific to NA Economy only.
- 26. Removal of the reference to Multiple Predicted Delivery dates as this issue is resolved in the Nov 21 update.
- 27. Clarity around proposal to change 'Flag' to 'Date'.
- 28. Addition of FAQ re: Partially Addressed Mailing postcodes

Summary of changes v1.5 to v1.5.1

Pages 7 Section 3.3 MDD raw data file . Predicted Delivery Date reverted to Predicted Delivery Flag
Pages 7 Section 3.3 MDD raw data file . Sorted PC changed to Sorted Postcode (to match the Data Dictionary)

Pages 7 Section 3.3 MDD raw data file. Machineability changed to Machinability (to match the Data Dictionary)

Page 13 Section 4.2 MDD Detail Report Dictionary: Predicted Delivery Date reverted to Predicted Delivery Flag Pages 23 Additional section. Historic change control log.

Summary of changed v1.4 to v1.5

Royal Mail Mailmark®

Effective: 10/12/2020

Issue: 20/03/2022

Pages 7 Section 3.3 MDD raw data file. Predicted Delivery Flag changed to Predicted Delivery Date Page 9 Section 4.1 MDD Summary Report Dictionary. Predicted Delivery explanation updated.

Page 13 Section 4.2 MDD Detail Report Dictionary: Predicted Delivery Flag changed to Predicted Delivery Date and explanation updated.

Pages 20-21. FAQs. Additional FAQs specific to Predicted Delivery

Summary of changes v1.3 to v1.4

File name change from MDD Technical Specification (MDD Access and Onboarding)

Pages 3 and 4: 5. File name change from MDD Technical Specification (downloading data) to Mailmark Direct Data - How to download data files

Pages 3 (point 2) and 5 and FAQ no 6: Clarity provided: For the avoidance of doubt, we will only provide Mailmark Direct Data in respect of General Large Letter items to the extent we process such items via our Large Letter automation machines.

Summary of changes v1.2 to v1.3

Page 16: Duplicate seen incorrectly stated 0 = Accurate Postcode and 1 = Inaccurate Postcode. Changed to state 0= Not Duplicate and 1 = Duplicate

Summary of changes V1.1 to V1.2 19th February 2021

- 1. Page 4: 2. Clarity provided that an opensource tool e.g. WinSCP, FileZilla, PuttyGen or 7-Zip is required to access the domain server.
- 2. Page 6. 3.2. Summary file. Docket volume replaced with SPARE1, subsequent fields SPARE1 and SPARE2 changed to SPARE2 and SPARE 3 respectively.
- 3. Page 7. 3.4. Change of text to the end of both Summary and Detail files where data has been shared. From 'Summary Data Extraction Ends' to 'FILE EXTRACT END'
- 4. Page 8. 4. Reference included to the use of British Date format and the implications of customers using commas in uploaded data files.
- 5. Page 9. 4.1. MDD Summary table replaced and some clarifications added. Docket Volume replaced with SPARE1.
- 6. Page 12.4.2. Advertising Seed not Seen replaced as SPARE1, subsequent fields SPARE1 and SPARE2 changed to SPARE2 and SPARE 3 respectively.
- 7. Page 15. 4.2 MDD Detail table. Replaced and some clarifications added.