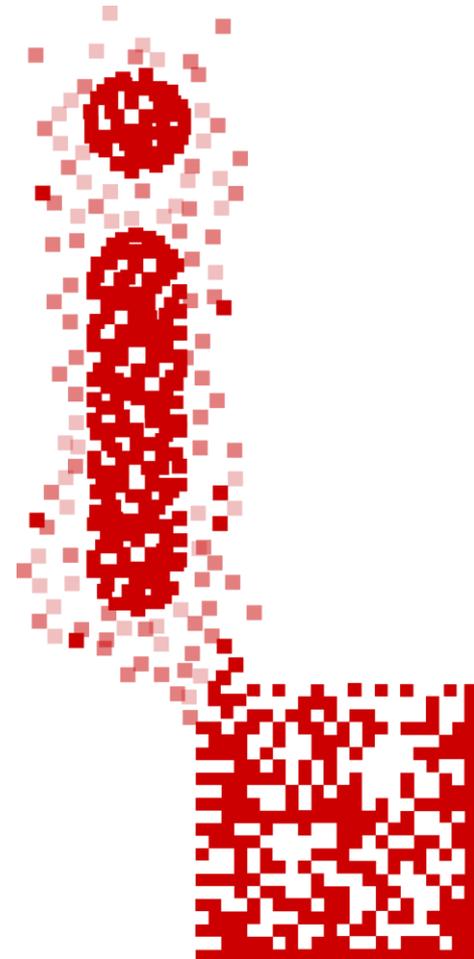


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# Royal Mail Mailmark<sup>®</sup>

## Summary of Technical Requirements



# I am here... Royal Mail Mailmark®

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## Barcode

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A new barcode standard for machinable Business, Advertising and Publishing Mail

## Technology

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Sorting machines that read the new barcode and collect mail data.

## Reporting

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A Mail Analytics platform that reports on volume, compliance, predicted delivery and overall performance of consignments.

# Topics Covered in this Guide

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Mailmark™ Summary	
Technical Development	
IT Development Options	
Technical Take-on Process	
What do the barcodes look like	
Mailmark™ Barcode Data contents	
Supply Chain ID Information	
Uploading of batches to Royal Mail	
eManifest – Simplified Overview	
eManifest Information	
EMHS Web Service Methods	
Testing Process & Validation	
Mailmark™ Quality Assurance	
Further information	
Key Terms	

# Royal Mail Mailmark<sup>®</sup>

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**Reporting** –  
know how to  
maximise  
performance  
at every step

**Transparency**  
– know where  
your mail is

**Timing** – know  
when your  
mail arrives for  
better planning

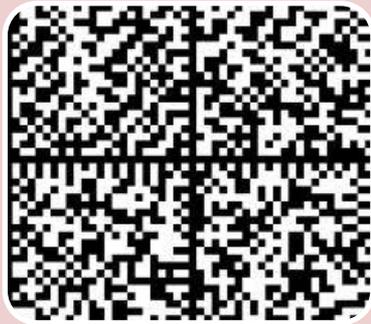
Royal Mail is introducing services that use a Royal Mail Mailmark<sup>®</sup> barcode. These services require the Mail Producer to apply a Mailmark<sup>™</sup> barcode to each mail piece, and provide an eManifest to accompany the mailing.

Each item of mail carries a unique item number within the Mailmark<sup>™</sup> barcode, so that when Royal Mail receives the mail piece, it can be read when it is processed and checked against the eManifest, so that Royal Mail can provide information regarding the successful processing of the item.

# Technical Development

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What is required...



Production  
of a  
Mailmark™  
Barcode



eManifest  
creation &  
upload

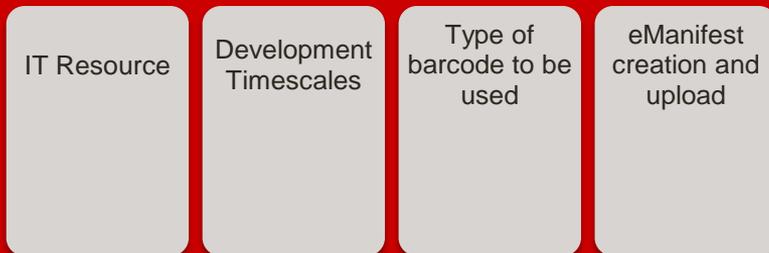
# IT Development Options

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Customers wishing to use Mailmark™ will need to consider developing an In-house IT Solution or purchasing Third Party Software.

## In-House IT Development

### *Considerations*



## Third Party Mailmark Enabled Software

### *Considerations*



# Technical Take-on Process

## STAGE 1

- During this stage customers will need to:
1. define the barcode type to be used.
  2. Consider how the eManifest will be created and submitted.
  3. Consider operational processes for Mailmark.

### STARTING-UP

## STAGE 2

At this stage customers will have started the IT development work for Mailmark. The required barcode(s) will have been agreed alongside the interface for submitting the eManifest. In addition, checking/testing of barcodes and eManifest submission will take place.

### IN-DEVELOPMENT & TESTING

## STAGE 3

A Pre-Live Test using LIVE account details  
This will include submission of physical mail items and an eManifest file

### QUALITY ASSURANCE (Live Test)

## STAGE 4

Customers ready to post using Mailmark enabled mail

### READY TO POST

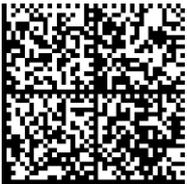
## STAGE 5

Customers have submitted first Mailmark mailing.  
Reports are reviewed and feedback given on any mail issues encountered.

### GONE-LIVE

# What do the barcodes look like?

## 2D Mailmark™ Type 9



**Size:**  
16mm x 16mm

**Usage:**  
90 characters  
45 for customer use

**Module Size:**  
32 x 32 modules

**Product:**  
Full reporting  
All mail types  
Account only

## 2D Mailmark™ Type 7



**Size:**  
12mm x 12mm

**Usage:**  
51 characters  
6 for customer use

**Module Size:**  
24 x 24 modules

**Product:**  
Full reporting  
All mail types  
Account only

## 2D Mailmark™ Type 29



**Size:**  
8mm x 24mm

**Usage:**  
70 characters  
25 for customer use

**Module Size:**  
16 x 48 modules

**Product:**  
Full reporting  
All mail types  
Account and meter

## 4-state Mailmark™ L



**Size:**  
Up to 89mm

**Usage:**  
No characters for  
customer use

**Product:**  
Full reporting  
All mail types  
Account only

# Mailmark Barcode Data Contents

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## 2D Mailmark Barcode Content

1. UPU country ID

2. Info type ID

3. Version ID

4. Format

5. Class

6. SCID

7. Item ID

8. Destination Postcode and Delivery Point Suffix (DPS)

9. Return to Sender (RTS)

10. RTS Postcode

11. Reserved for Royal Mail

12. Spare for customer and/or Mailing House use

## 4-state Barcode Content

1. Format

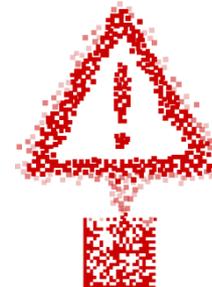
2. Version ID

3. Class

4. SCID

5. Item ID

6. Destination Postcode and DPS



**Please view Barcode Definition Document for full barcode contents and data structure**

# Supply Chain ID Information

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The SCID is the unique identifier for the Supply Chain which in combination refers to the participants of a supply chain.

The Supply Chain ID is a 6 (4 state) or 7 (2D) digit identifier.

For Consolidators there is a unique 2 digit Supply Chain ID.

Participant IDs allocated by Customer Take-on Team

Supply Chains available 24 hours after request

Supply Chains not transferable – specific to poster and client

Poster can't use existing supply chain for a different client

Client can't use an existing supply chain with a different Mailing Agent

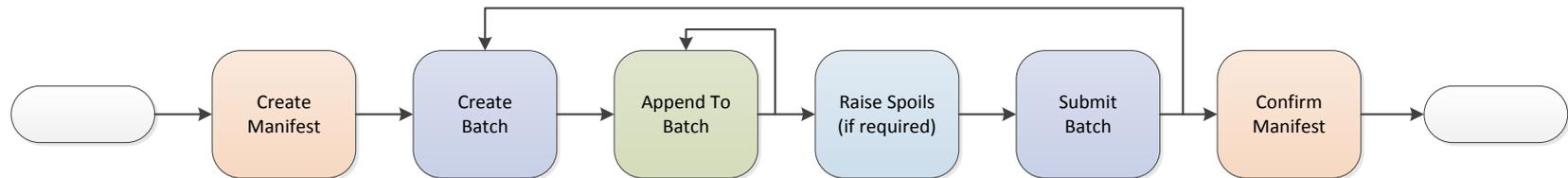
Supply chains are defined by the participants involved in the preparation and handling of each mailing: the Mail Originator of the mailing, the Mail Producer (responsible for printing and enclosing the mail pieces), the Bill Payer (the account holder responsible for paying Royal Mail), and the Carrier (responsible for collecting and conveying the mailing from the Mail Producer, whether Royal Mail or a Down Stream Access/Wholesale Carrier).

Each combination of participants has a unique Mailmark Supply Chain ID, and each Mailmark mailing is recorded against this ID.

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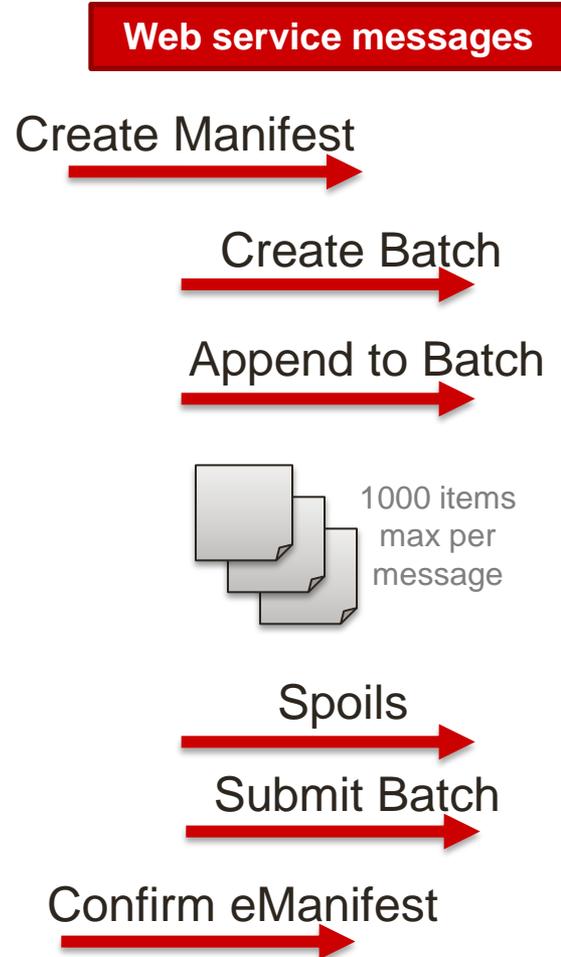
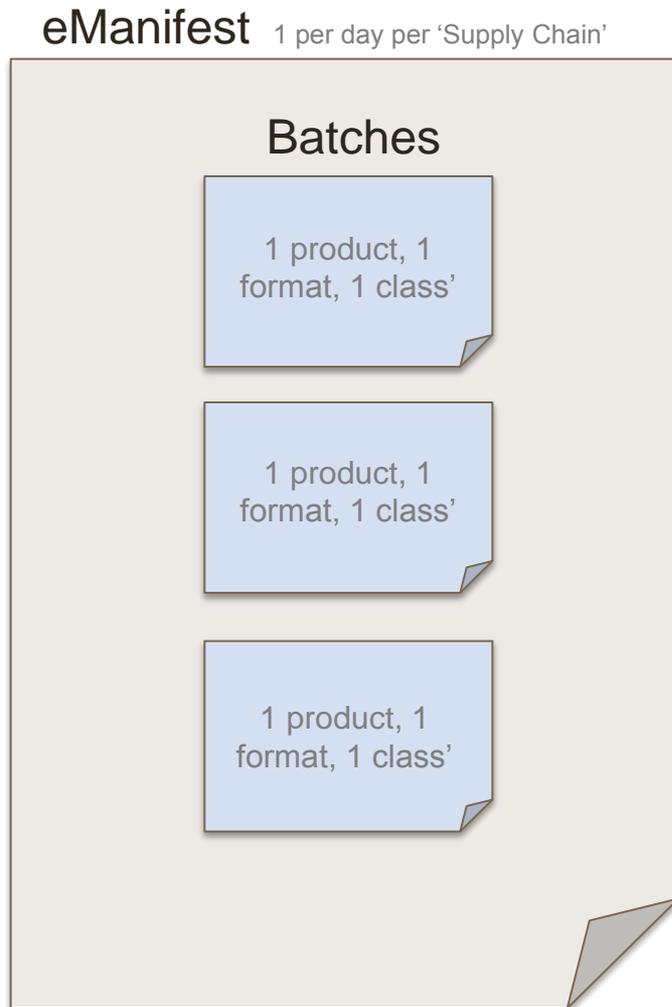
# Uploading of Batches to Royal Mail

The process for uploading an eManifest to Royal Mail is as follows:-



Step	Activity	Description
1	Create an eManifest	This involves opening a new eManifest with Royal Mail for each Supply Chain that the Mail Producer intends to despatch each day.
2	Create a Batch	This involves creating a new Batch associated with the eManifest for that Supply Chain.
3	Upload the Mailmark™ items within the Batch	This involves uploading the individual Mailmark™ barcode item details to Royal Mail for each Batch within the eManifest.
4	Raise any Spoils	This involves raising any 'spoils' – i.e. items that were originally uploaded as part of the Batch, but where the item has not been printed and enclosed successfully, and therefore will not be posted.
5	Submit the Batch	This indicates that no further changes to the Batch are expected.
6	Confirm the eManifest	This marks the eManifest for a particular Supply Chain as complete. All Batches are submitted and no further changes to the eManifest are then permitted.

# eManifest - Simplified overview



# eManifest Information

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eManifest uploaded against a specific Supply Chain

Item eManifests to be uploaded for both Non-Regulated and Network Access, but never mixed

Sales orders will continue to be raised via OBA (for non-regulated)

Network Access billing will continue to be driven from Bag Manifest

Available as a web-service URL, supporting SOAP-based Web Services secured over HTTPS

One eManifest per Supply Chain Per Day

An eManifest can contain one or more Batches

A Batch can contain any number of Mailmark™ Items subject to the minimum volume requirements for the service selected.

Each Batch to contain only a single Product, Class and Format

Mailmark™ items must be uniquely identified with a number

Mailmark™ item numbers must be kept unique for 90 days within each Supply Chain

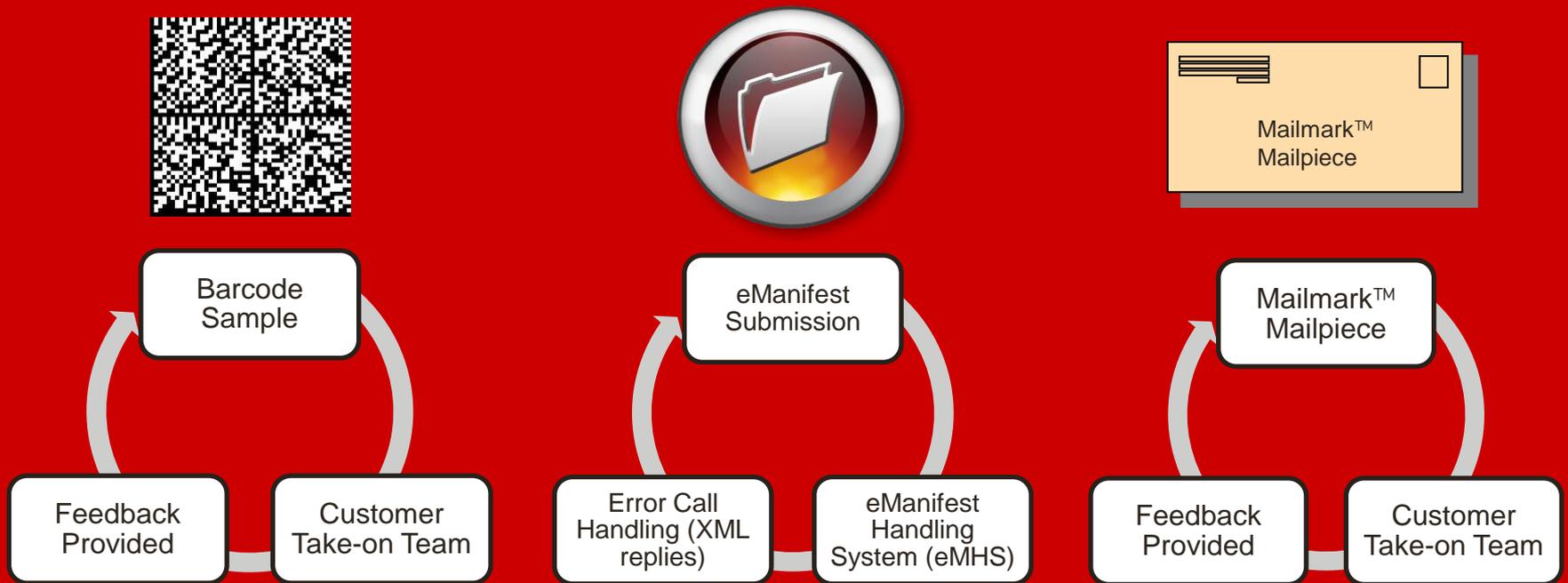
# eMHS Web Service Methods

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Web Service Method	Description
CreateManifest	This web method is used to create a new eManifest for the specified Supply Chain on the specified date. The web service returns an eManifestId and a Submission Deadline.
CreateBatch	This web method is used to create a new Batch associated within a specified eManifestId. The web service returns an BatchId.
AppendToBatch	This web method is used to upload (up to 1000) EIB Items within a block into a specified BatchId.
RecordSpoilsForBatch	This web method is used to identify spoil (up to 1000) EIB Items for a specified BatchId. These items are removed from the Batch.
CancelBatch	This web method is used to cancel a specified BatchId from a eManifest. The items in the Batch are discarded.
RescheduleBatch	This web method is used to reschedule a specified BatchId from one open eManifest to another open eManifest.
SubmitBatch	This web method is used to submit a specified BatchId to a eManifest. No future changes to the Batch is allowed.
RevieweManifest	This web method is used to review an eManifest's status. The web service returns an overview of the eManifest and Batches for a specified eManifestId.
ConfirmeManifest	This web method is used to confirm and close a specified eManifest. No future changes to the Batch is allowed.
ReviewUploadActivity	This web method is used to review the entire upload activity of a Mailing Agent.
RetrieveActiveSupplyChains	This web method is used to retrieve a list of active Supply Chain against which a Mailing Agent can upload eManifests.

# Testing Process & Validation

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# Mailmark™ Quality Assurance

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To give you reassurance that you are able to produce Mailmark™ barcodes which Royal Mail can read, and an eManifest which we can link to physical mail, Royal Mail offers a four stage quality assurance process:

Initial barcode check (data string and encoding)

Single mailpiece check (design and layout)

eManifest upload (using a test environment)

Mail Processing and eManifest check in live environment

## Further information

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There is a wealth of useful information on our website:

**[www.royalmail.com/mailmark](http://www.royalmail.com/mailmark)**

This information includes:

- A list of Software Suppliers who can supply Mailmark™ enabled software solutions
- Implementation guidelines
- The steps towards sending your first Mailmark™ mailing
- Technical documentation
- Barcode encoders

# Key Terms

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Barcode	the current Royal Mail 4-state barcode (RM4SCC or custcode.ttf) which is an iteration of the postcode and DPS and is an option for making letters and large letters machine-readable. Please note: Barcode is not the Mailmark™ barcode and does not offer reporting
Barcode item	an item to which you have applied a software-generated Barcode
Batch	a selection of Mailmark™ barcode items that meet the minimum entry volume requirement for the service being used and which are all of the same class, format, sortation and machine-readability option. A Batch is submitted to the eManifest as part of a Mailmark™ barcode mailing. A Batch is also commonly referred to as a consignment or mailing;
Batch ID	the unique identifier that is assigned to a Batch once it has been submitted to the eManifest
Bill Payer	for Mailmark™ barcode mailings the Bill Payer is the Participant in a Supply Chain responsible for paying Royal Mail
Carrier	for Mailmark™ mailings the Carrier is the Participant in a Supply Chain responsible for carrying the Mailmark™ barcode items to Royal Mail's inward Mail Centre
Delivery Point Suffix or DPS	an element within the Barcode, Mailmark™ barcode and/or eManifest which identifies a house number/name or, where registered on PAF, the delivery point for business addresses. It is always made up of a letter and a number

eManifest	this is the electronic file created via the eManifest Handling System (eMHS) for each Supply Chain per day. A Batch or Batches are submitted to the eManifest, and once confirmed the eManifest contains a record of your Mailmark™ barcode items which is used to provide Batch level reporting.
eManifest Confirmation Receipt or eCR	if you are set up for automatic sales order generation, the eManifest Confirmation Receipt (eCR) is generated automatically once the eManifest is confirmed. The eManifest Confirmation Receipt (eCR) must be presented instead of a confirmed sales order with the last collection on each handover date. It provides evidence that the eManifest has been created and confirmed.
eManifest Handling System or eMHS	the web based interface which enables the creation of the eManifest and is used for all actions relating to the eManifest (such as submitting Batches)
eManifest ID	the unique identifier that is assigned to an eManifest once that eManifest has been created.
Mail Originator	for Mailmark™ barcode mailings the Mail Originator is the Participant in a Supply Chain on whose behalf the Mailmark™ barcode items are produced and delivered

Mail Producer	for Mailmark™ barcode mailings the Mail Producer is the Participant in a Supply Chain responsible for producing (including printing and enclosing) the Mailmark™ barcode items
mailing	this is the element of a single posting which is handed over to us. A number of mailings which are all clearly identified on the same set of documentation (line listing, planning report) may make up a posting
Mailmark™ barcode	a barcode which is either a Royal Mail 2D data matrix barcode or a Royal Mail 4-state barcode which contains encoded data and offers Batch level reporting
Mailmark™ Management System or MMS	this is the IT system that manages the allocation of Participant and Supply Chain IDs and provides Participants with access to Royal Mail Mailmark™ barcode reporting.
Mailmark™ option	an option for making letters and large letters machine-readable, involving the addition of a Mailmark™ barcode to each item to make that item uniquely identifiable. The Mailmark™ option provides Batch level reporting

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Participant	for Mailmark™ barcode mailings, a Participant is each of the Mail Originator, Mail Producer, Carrier and Bill Payer Legal entity, which together make up the Supply Chain
Participant ID	for Mailmark™ barcode mailings this is the unique identity number assigned to a Participant. Only one Participant ID is permitted per [Legal entity].
Online Business Account or OBA	a specific online business account giving you access to our secure online system through which you can order the products on account
Supply Chain	a Supply Chain is formed of all four Participants (Mail Originator, Mail Producer, Carrier and Bill Payer) and is required for each Mailmark™ barcode mailing relating to those specific Participants
Supply Chain ID or SCID	this is the unique identifier assigned to each Supply Chain
Unique Item ID	this is the unique identifier assigned to each Mailmark™ barcode item (uploaded and submitted to the eManifest in Batches). The Unique Item ID must remain unique for 90 days before it can be used again within the same Supply Chain ID (SCID)