# STANDARD SPECIFICATION FOR JOB TRANSFER TO FMS APPLICATIONS

Version 1.2

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## TRANSFER MECHANISM

The standard transfer mechanism is via FTP. The specific host and login details will be provided as necessary for individual installations. Within the FTP there will traditionally be a directory for storing incoming job requests and a separate file for outgoing status files from the FMS server. Files transferred should have unique filenames. If you are receiving response files with your job booking details it is your responsibility to remove files from the system once you have processed them.

Status files in the outgoing directory will typically be named based on the filename of the incoming directory. Usually the file name will be a the same as the incoming filename but preceded with a 6 character random unique code and a dash. For example if the input file was SOMEFILE123.csv the output file may be 076ec3-SOMEFILE123.csv. The unique code prefix will ensure that if the same input file is sent multiple times and processed separate output files will be available.

If you require some other form of transfer (such as SFTP, FTP/S or email gateway) these can be arranged as required.

Additionally, if you require a pure XML web service, that can be offered using the XML format below.

## SIMPLE CSV FORMAT

In the simple format, files are in CSV (Comma Separated Values) format. Each data field is separated by a simple comma (,) character. Any field can be optionally encased by double quotes ("). Any comma within quoted text is not counted as a comma. Any single character (either inside or outside quoted text) can be escape by a backslash (\). If you wish to include a quote character or backslash character in a field you MUST escape it with a backslash.

Each file has 1 line per job (with an optional header row) with simple job information in each line. For more complex job descriptions you will need to use the XML job format described below.

## **CSV FORMAT FIELDS**

The fields in the CSV format are as described below. All fields must be present, whether Mandatory or Optional, but may be empty in the case of Option. If you wish to include a header row in the file then it must be the first row of the file and the header for the Account field must be the word "ACCOUNT"

Field Name	Size/Format	Optional/Mandatory	Description
ACCOUNT	8 (Alpha Numeric)	М	Supplied by the carrier. Your FMS account code to book the job under.
REFERENCE	16 (Alpha Numeric)	0	Customer Reference
OWNNO	16 (Alpha Numeric)	0	Customer Internal Job Number
SENDER NAME	30 (Alpha Numeric)	0	Name of sender. If not present, customer details from FMS are used
SENDER ADDRESS 1	30 (Alpha Numeric)	0	Address of sender. If not present, customer details from FMS are used.
SENDER ADDRESS 2	30 (Alpha Numeric)	0	Address of sender. If not present, customer details from FMS are used.
SENDER SUBURB	20 (Alpha Numeric)	0	Suburb/town of sender.  If not present, customer details from FMS are used.
SENDER POSTCODE	4 (Numeric)	0	Postcode of sender. If not present, customer details from FMS are used.
RECEIVER NAME	30 (Alpha Numeric)	M	Receiver Name
<b>RECEIVER ADDRESS 1</b>	30 (Alpha Numeric)	M	Receiver Address
RECEIVER ADDRESS 2	30 (Alpha Numeric)	0	Receiver Address
RECEIVER SUBURB	20 (Alpha Numeric)	M	Receiver Suburb
RECEIVER POSTCODE	4 (Numeric0	M	Receiver Postcode
ITEMS	5 (Numeric)	M	Number of items
WEIGHT	5 (Numeric)	M	Total charge weight of goods
SERVICE	3 (Alpha Numeric)	M	Service Code (as provided by carrier)
LABELS	200 (Alpha Numeric)	0	Space separated list of tracking labels attached to goods.

READY TIME	23 (In the form of	0	Time for pickup. If
	dd/mm/yyyy hh:mm:ss		omitted, or the time
	am)		defined is prior to the
			current time, the job will
			be booked as "ready
			now"

## **RESPONSE INFORMATION**

A response file is available, if required, for simple CSV format bookings. The format of this file is a CSV file with no headings and the following fields

Field Name	Size/Format	Description
ACCOUNT	8 (Alpha Numeric)	FMS Account Code – from incoming file
REFERENCE	16 (Alpha Numeric)	Customer Reference – from incoming file
OWNNO	16 (Alpha Numeric)	Customer internal job – from incoming file
FMS JOB NUMBER	6 (Numeric)	FMS Job Number
FMS JOB DATE	10 (dd/mm/yyyy)	FMS Job Date. The FMS Job Number and FMS Job Date can be used to uniquely identify the job within the FMS system.

## SAMPLE CSV JOB BOOKING

## Sample Input:

FMSACC,,JJ82922,JOHN SMITH SENDERS,14 WATERS LANE,,NORTHBRIDGE,2063,FRED ORANGEBLOSSOM,23 FROZEN LAKE RD,,MOUNT COLAH,2079,1,7,STD,, FMSACC,MYREF,JJ82923,JOHN SMITH SENDERS,14 WATERS LANE,,NORTHBRIDGE,2063,JASON AUTOMOTIVE,SUITE 23,101 GRANGE PDE,TUGGERAH,2259,2,20,VIP,,"20/1/2012 10:00:00 am"

## Sample Output:

FMSACC,,JJ82922,2051,19/1/2012 FMSACC,MYREF,JJ82923,2052,19/1/2012

## **XML FORMAT**

The XML format can be used for more complex job bookings. This includes the ability to book "followon" style jobs (point A -> point B -> point C) as well as include more detailed information on the goods being shipped.

XML needs to be valid XML data correctly encoding the various special characters of the data (&, ", < and >). An XML Schema (XSD) can be provided if required for this data. The import process, however, does not require strict adherence to the XSD in order to process files. Additional data can be included in the manifest that will simply be ignored by the FMS server during import.

Each file defines a single manifest, where a manifest is simply defined as a group of jobs. While traditionally a manifest may suggest a single pick up location, this is not a requirement in this case, and multiple pickup and drop locations can appear in a single file. Similarly, the jobs are referred to as consignments within the import files, but more accurately represent a point to point courier job.

All data in the XML format is stored as node text within child nodes, rather than as attributes on a node. For example

The root node of the file is a <MANIFEST> node, which can contain an optional FILE node with details on the file, and a number of <CONSIGNMENT> nodes defining the individual jobs. Each consignment node, as well as the basic consignment detail will contain at least two <ADDRESS> children to define the pickup and delivery locations (and subsequent stops if desired) as well as 0 or more <ITEM> children defining the goods, if desired.

## MANIFEST NODE DEFINITION

The root node of a manifest is the MANIFEST node.

Child Name	Size/Format	<b>Optional/Mandatory</b>	Description
FILE	Child Node	O (maximum 1)	Definition of file details if desired. See File Node Definition
CONSIGNMENT	Child Node	M (minimum 1)	Definition of consignment details. See Consignment Node Definition

#### FILE NODE DEFINITION

The FILE node defines information about the manifest file and the manifest as a whole. The information in this node is not required for processing, but is defined as a simple way to include this information.

Child Name	Size/Format	Optional/Mandatory	Description
FILENAME	Alpha Numeric	0	Filename of manifest file
CREATIONSTAMP	Timestamp (YYYY-MM-DDTHH:MM:SS)	0	Timestamp of creation of the manifest file
SENDER	Alpha Numeric	0	Sending company/entity

			code
RECEIVER	Alpha Numeric	0	Receiving company/entity code
ID	Alpha Numeric	0	Manifest ID (should be unique for the customer)

# CONSIGNMENT NODE DEFINITION

The consignment node contains the information for a single job. The child <ADDRESS> nodes are assumed to be in the correct travel/processing order (ie pickup <ADDRESS> should be before the delivery <ADDRESS>

Child Name	Size/Format	Optional/Mandatory	Description
ACCOUNT	8 Alpha Numeric	M	FMS Account code (as provided by the carrier)
CONSIGNMENTNUMBER	16 Alpha Numeric	0	Unique Consignment Number (treated as internal job number)
SERVICE	3 Alpha Numeric	M	Service code (as provided by the carrier)
REFERENCE	16 Alpha Numeric	0	Additional customer reference
PICKUPTIME	Timestamp (YYYY-MM- DDTHH:MM:SS)	0	Requested pickup time for the job
ADDRESS	Child Node	M (at least 2, for pickup and delivery)	Address details. See Address Node Definition
ADDITIONALINSTRUCTIONS	Alpha Numeric (250 characters maximum)	0	Any additional instructions for the job
ITEM	Child Node	O (multiple permitted)	Item details. See Item Node Definition
TOTALITEMS	Numeric	O (required if no ITEM child nodes defined)	Total number of items for the job. If specific ITEM nodes are present, the counts within those nodes will be used in preference to this number.
TOTALWEIGHT	Numeric	O (required if no ITEM child nodes defined)	Total weight of goods for the job. If ITEM nodes are present, they will override this value
LABELS	Alpha Numeric	0	Labels attached to the goods. If any ITEM nodes are present the LABEL fields within them will override this field.

## ADDRESS NODE DEFINITION

Each consignment/job needs to have at least 2 address nodes. You may include an attribute in the node of type with a possible value of "pickup" or "delivery", but this information is not specifically required for processing – the order of the address nodes is what is used to determine the order of stops for the job. The information in an address node is as follows.

Child Name	Size/Format	Optional/Mandatory	Description
NAME	30 Alpha Numeric	M	Company/Receiver name
ADDRESS1	30 Alpha Numeric	M	First line of address detail
ADDRESS2	30 Alpha Numeric	0	Second line of address detail
ADDRESS3	30 Alpha Numeric	0	Third line of address detail
SUBURB	20 Alpha Numeric	M	Suburb Name
STATE	3 Alpha Numeric	0	State Abbreviation
POSTCODE	4 Numeric (zero padded for Northern Territory postcodes)	M	Postcode
CONTACT	16 Alpha Numeric	0	Contact Name
PHONE	16 Alpha Numeric	0	Contact Phone

## ITEM NODE DEFINITION

Item nodes are optional, but if not supplied the TOTALITEMS and TOTALWEIGHT values must be defined within the CONSIGNMENT node. If, however, ITEM nodes are defined, they are used in preference to the TOTALITEMS/TOTALWEIGHT values. Item nodes have the following definition

Child Name	Size/Format	<b>Optional/Mandatory</b>	Description
QUANTITY	Numeric	M	Number of this item
WEIGHT	Numeric	M	Dead weight in kg of a single item
VOLUME	Numeric	0	Cubic volume (in m3) of a single item. Either VOLUME or X, Y, Z should be supplied. If both are supplied then X, Y, Z are used in preference
X	Numeric	0	X Dimension in CM
Υ	Numeric	0	Y Dimension in CM
Z	Numeric	0	Z Dimension in CM
DESCRIPTION	Alpha Numeric	0	Brief description of goods
LABEL	Alpha Numeric	0	Tracking label attached to goods. If QUANTITY is greater than zero, then multiple labels can be included in this child as a space separated list

## **RESPONSE XML FORMAT**

The response XML format has a similar format to the incoming format. The differences are as follows:

In the <FILE> node, there is an additional field <PROCESSSTAMP> which contains the timestamp of when the file was processed.

In each <CONSIGNMENT> node there is an additional node <STATUS> which contains either SUCCESS or FAIL.

If the status is FAIL there is an additional node <REASON> with a descriptive reason for the failure

If the status is SUCCESS there are two additional nodes <FMSJOB> and <FMSDATE> containing the unique FMS Job Number and Date of the job.

#### SAMPLE XML JOB BOOKING

```
<MANIFEST>
 <FILE>
  <FILENAME>SAMPLE.XML</fileNAME>
  <CREATIONSTAMP>2012-01-12T10:00:00/CREATIONSTAMP>
  <SENDER>MYCOMPANY</SENDER>
  <RECEIVER>THECARRIER</RECEIVER>
  <ID>MAN1234123</ID>
 </FILE>
 <CONSIGNMENT>
  <ACCOUNT>FMSACC</ACCOUNT>
  <CONSIGNMENTNUMBER>AAA12345//CONSIGNMENTNUMBER>
  <SERVICE>STD</SERVICE>
  <REFERENCE>JJ9208
  <PICKUPTIME>2012-01-18T12:00:00
  <ADDRESS type="pickup">
   <NAME>JOHN SMITH SEDNERS</NAME>
   <address1>14 waters Lane</address1>
   <SUBURB>NORTHBRIDGE</SUBURB>
   <STATE>NSW</STATE>
   <POSTCODE>2063</POSTCODE>
  <CONTACT>Michael</CONTACT>
  </ADDRESS>
  <ADDRESS type="delivery">
   <NAME>FRED ORANGEBLOSSOM</NAME>
   <ADDRESS1>23 FROZEN LAKE RD</ADDRESS1>
   <ADDRESS2>BEHIND HEDGE</ADDRESS2>
   <SUBURB>MOUNT COLAH</SUBURB>
  <POSTCODE>2079</POSTCODE>
  </ADDRESS>
  <ITEM>
  <QUANTITY>1</QUANTITY>
  <WEIGHT>7</WEIGHT>
  <DESCRIPTION>BOX</DESCRIPTION>
  <LABEL>AA12345001
  </ITEM>
  <ITEM>
  <QUANTITY>2</QUANTITY>
  <WEIGHT>6</WEIGHT>
  < x > 20 < / x >
  <Y>30</Y>
   <Z>30</Z>
  <DESCRIPTION>CARRY CASE/DESCRIPTION>
  <LABEL>AA12345002 AA12345003</LABEL>
  </ITEM>
 </CONSIGNMENT>
</MANIFEST>
```

## SAMPLE XML JOB BOOKING RESPONSE

Note: Not all the fields from the original request will necessarily be returned, but those important to identifying the job (specific MANIFEST FILENAME, MANIFEST ID, CONSIGNMENT ACCOUNT, CONSIGNMENT CONSIGNMENTNUMBER, CONSIGNMENT REFERENCE and the validated ADDRESS details will be). The following is only a sample

```
<MANIFEST>
 <FILE>
 <FILENAME>SAMPLE.XML</FILENAME>
 <ID>MAN1234123</ID>
 <PROCESSSTAMP>2012-01-13T09:45:00
</FILE>
 <CONSIGNMENT>
 <ACCOUNT>FMSACC</ACCOUNT>
 <CONSIGNMENTNUMBER>AAA12345//CONSIGNMENTNUMBER>
 <SERVICE>STD</SERVICE>
 <REFERENCE>JJ9208</REFERENCE>
 <PICKUPTIME>2012-01-18T12:00:00
 <aDDRESS type="pickup">
  <NAME>JOHN SMITH SEDNERS</NAME>
  <address1>14 Waters Lane</address1>
  <SUBURB>NORTHBRIDGE</SUBURB>
  <POSTCODE>2063</POSTCODE>
  <CONTACT>Michael</CONTACT>
 </ADDRESS>
 <ADDRESS type="delivery">
  <NAME>FRED ORANGEBLOSSOM</NAME>
  <address1>23 frozen lake rd</address1>
  <address2>Behind Hedge</address2>
  <SUBURB>MOUNT COLAH</SUBURB>
  <POSTCODE>2079</POSTCODE>
 </ADDRESS>
 <TOTALITEMS>3</TOTALITEMS>
 <TOTALWEIGHT>19</TOTALWEIGHT>
 <STATUS>SUCCESS</STATUS>
 <FMSJOB>2013</FMSJOB>
 <FMSDATE>2012-01-13
</CONSIGNMENT>
</MANIFEST>
```