National Routeing Guide
Data Feed Specification

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Version History

Version	Date	Author	Comments
00-00-A	26-Mar-2014	Edna Kelly	First draft. JIRA STD-537: 'Review of codes for Route Data .MODE_CODE' addressed.
00-00-B	21-Apr-2014	Edna Kelly	Reviewed by iBlocks. JIRA STD-613: 'Copyright text to be added' addressed.
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Release Control

The following personnel must formally approve the document prior to assigning a non-draft version number.

Organisation	Role	Name
RSF	Approval of Standards	Retail Systems Forum
RDG	Document Owner	Compliance Standards

Distribution

Organisation	Role	Name
TIS Suppliers	N/A	N/A
TOCs	N/A	N/A
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Contents

Glossary

Term	Meaning
ASCII	American Standard Code for Information Interchange
CRS	Computerised Reservation System (the predecessor to current reservation service)
CSV	Comma-Separated Values
DTD	Data Transformation and Distribution Service
FTP	File Transfer Protocol
NLC	National Location Code
NRG	National Routeing Guide
RDG	Rail Delivery Group
RSP	Rail Settlement Plan
TOC	Train Operating Company
UID	Unique Identifier

1.   Introduction

1.1   This document describes the Data Feed for the extraction of National Routeing Guide (NRG) data from the Data Transformation and Distribution (DTD) Service. The DTD is a service owned by RDG. The service is built and supported by iBlocks.

1.2   The Routeing Guide can be found online at http://data.atoc.org/routeing-guide .

2.   Scope

2.1   The scope of this document is the interface specification of Routeing Guide Data Feeds provided by the DTD service.

2.2   This document describes the file structure of all the Routeing Guide files of the Routeing Guide Feed and provides technical details of how these files are made available to registered recipients of the data.

3.   Approach

3.1   This document describes the Data Feed for Routeing Guide Data extracted from the DTD Service.

3.2   The DTD Service is responsible for managing and distributing other Data Feeds and the following documents describe the interfaces for these Data Feeds:

- RSPS5045: Fares and Associated Data Feed Interface Specification.
- RSPS5046: Timetable Information Data Feed Interface Specification.

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3.3   The diagram below is an overview of the 'Feed Processing and Transformation Service', which transforms the imported feed data and generates output feed files. The output feed files are distributed to those registered Data Feed recipients with appropriate entitlements via SFTP Pull, FTP Push or SFTP Push. The Data Feeds contain an approved set of files.
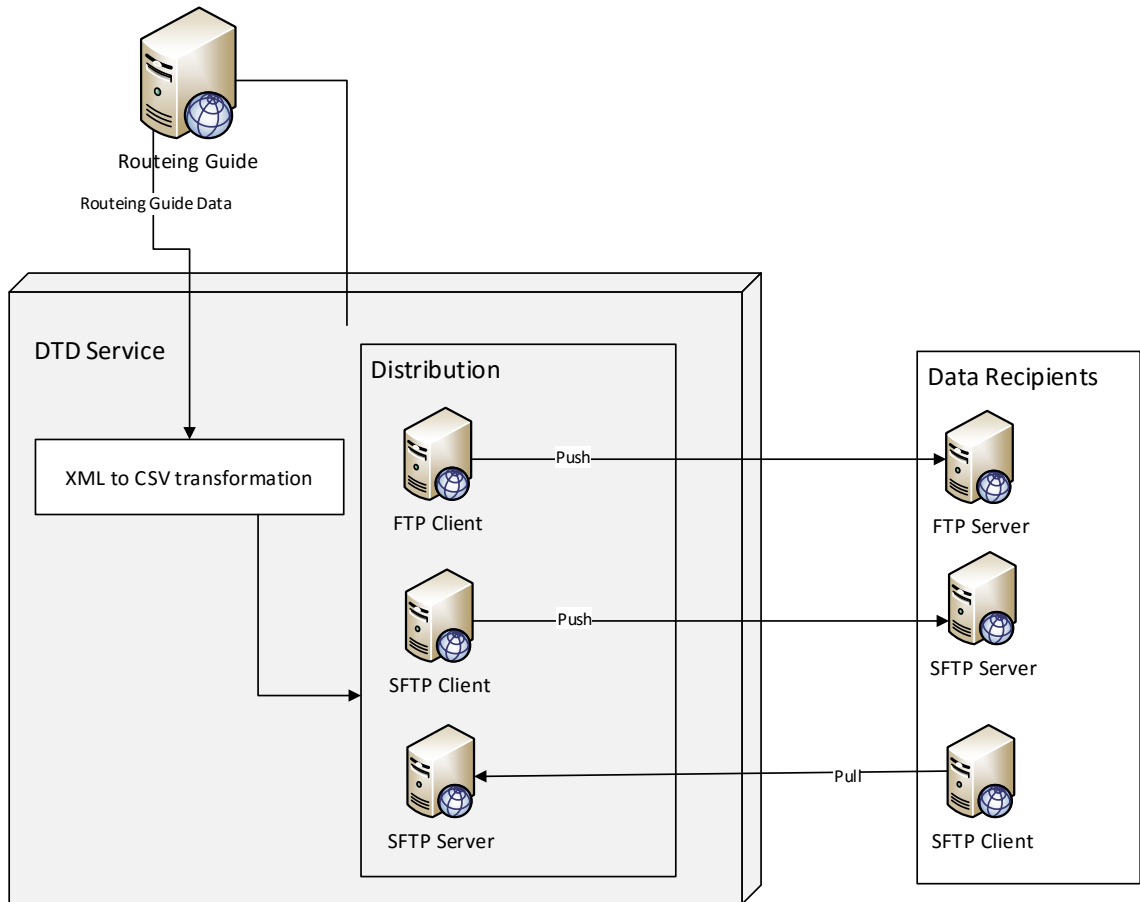
4.   Structure

4.1   Data Feeds will be delivered in fixed format flat text files containing a number of records. Some files contain several record types.

4.2   The following export file types are defined for the NRG export (where *nnnn* is a sequence number defined by the file's exporter):

File type	Contents	Typical size	Generic filename
Station file	Lists all stations in the NRG.	80 Kb	RJRG*nnnn*.RGS
Station-Group file	Lists all station groups and the preferred station of each.	3 Kb	RJRG*nnnn*.RGG
Routeing point file	Lists all routeing points.	4 Kb	RJRG*nnnn*.RGP
Node file	Lists all nodes (routeing points & interchanges).	4 Kb	RJRG*nnnn*.RGN
Map file	Lists all maps in section D of the NRG (plus the LO map).	5 Kb	RJRG*nnnn*.RGM
Link file	Lists all links (between nodes) appearing on any map.	180 Kb	RJRG*nnnn*.RGL
Permitted routes file	Lists all routes (between routeing points) permitted by section C of the NRG.	3 Mb	RJRG*nnnn*.RGR
Station-Link file	Lists physical distance between every pair of adjacent stations.	80 Kb	RJRG*nnnn*.RGD
Easement Text	Text information regarding an Easement.	25 kb	RJRG*nnnn*.RGE
Easement Definition	Details of the type of easement and the affected TOCs, locations, etc.	60 kb	RJRG*nnnn*.RGF
Easement TOC	TOC that publishes the easement.	3 kb	RJRG*nnnn*.RGH
Routes	Route Details and Route Data.	15 kb	RJRG*nnnn*.RGK
London Stations	Details of stations which are included in Cross London processing.	< 1k	RJRG*nnnn*.RGC
New Stations	New Stations file.	1 kb	RJRG*nnnn*.RGX
Locations	Locations cross ref. File (CRS/NLC codes).	250 kb	RJRG*nnnn*.RGY
Zonal routes	Lists zonal routes and the zones covered by those routes.	<1 Kb	RJRG*nnnn*.RGV
Zonal fare locations	Lists zonal fare locations and the zones covered by those locations.	<1 Kb	RJRG*nnnn*.RGB
Zonal system locations	Lists locations which are included in a zonal system, and the zones in which the location exists.	3.5 Kb	RJRG*nnnn*.RGA
Download Index	List of files in the download.	< 1k	RJRG*nnnn*.RGI

4.3   Each file will contain *all* appropriate records from the DTD NRG database. The files for the National Routeing Guide Data Feed are available as full files only, and not as changes only updates.

4.4   The format of the files for the National Routeing Guide Data Feed is defined in the next section. These have taken into account all the necessary standards.

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5. Key technical details

5.1 Output from the NRG Data Feed will comprise a number of separate CSV files containing data records. Each file will comprise an informational header, followed by an ordered sequence of records, followed by a terminator.

5.2 All records will be produced in ASCII.

5.3 Every line of every file will be either a comment (introduced by a leading '/' character) or a record. Each record will comprise of a sequence of fields separated by commas or in fixed character positions. For comma separated files where there is no data present in a field then the commas will be adjacent (i.e. not space filled).

5.4 Every file will commence with the following sequence of comments:

/!! Start of file
/!! Content type: type
/!! Sequence: nnnn   (incl. preceding zeroes)
/!! Generated: dd/mm/yyyy
/!! Exporter: DTD_module version

where type is one of:
- stations
- station-groups
- routeing points
- nodes
- maps
- links
- permitted routes
- station-links
- easement text
- easement definition
- easement TOC
- routes
- London station list
- new stations
- locations
- index
- zonal routes
- zonal system locations
- zonal fare locations

5.5 The sequence number listed in the header will match that in the filename (see above); the number of records reported will not include comment lines.

5.6 The records in each export file will be sorted in increasing order (according to the standard ASCII collating sequence) on all fields, in the order in which they appear in records.

5.7 Every file will terminate with a comment line of the form:

/!! End of file (nnnnnnn records) (dd/mm/yyyy)

thus providing some protection against inadvertent file truncation.

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6. File types

6.1 General

6.1.1 The following record layouts define the full file layouts. Note that file layouts may change in later versions of this document. In each of the output files the fields are comma separated, with empty fields having zero length. The 'Length' column in the tables shows the maximum length of the fields.

6.2 File: STATION

6.2.1 Description

6.2.1.1 All stations relevant to the National Routeing Guide are included in this file.

6.2.1.2 Stations that are routeing points, or members of station groups which are routeing points, will have no related routeing points. Other stations will have between 1 and 4 related routeing points as given in section B of the NRG.

6.2.1.3 Station-group identifier data is required for those stations in the station-groups defined in section A of the NRG.

6.2.2 Station record

Key	Field	Field Name	Length	Description
Y	1	STATION_IDENTIFIER	3	Station Identifier (CRS code).
	2	ROUTEING_POINT_1	3	First related routeing point, either a station CRS code or a Routeing Guide Group code. No value will be specified in this field if the station is a routeing point.
	3	ROUTEING_POINT_2	3	Second related routeing point, if applicable, either a station CRS code or a Routeing Guide Group code.
	4	ROUTEING_POINT_3	3	Third related routeing point, if applicable, either a station CRS code or a Routeing Guide Group code.
	5	ROUTEING_POINT_4	3	Fourth related routeing point, if applicable, either a station CRS code or a Routeing Guide Group code.
	6	STATION_GROUP_ID	3	Identifies the Routeing Guide group in which the station resides, if applicable.

Example Records for Abbey Wood, Aberdeen (a routeing point), Aston (part of Birmingham group) and Stevenage (has 3 routeing points and is in Stevenage group).
ABW,DFD,G17,G01,,
ABD,,,,,
AST,,,,,G02
SVG,CBG,FPK,PBO,,G28

6.3　File: STATION GROUP

6.3.1　Description

6.3.1.1　This file does not include the list of stations which comprise the station group, as this data is present in the station records themselves.

6.3.2　Station Group record

Key	Field	Field Name	Length	Description
Y	1	STATION_GROUP_ID	3	3-character code, with format Gnn, where nn is 2 numeric characters.
	2	MAIN_STATION	3	The CRS code of the main station in the routeing point group.

Example station-group records:
G02,BHM　　　　　　　　　/ Birmingham Group
G09,DBY　　　　　　　　　/ Derby Group

6.4　File: ROUTEING POINTS

6.4.1　Description

6.4.1.1　This file contains a list of the routeing points and does not associate any other data with them.

6.4.2　Routeing Points record

Key	Field	Field Name	Length	Description
Y	1	ROUTEING_POINT	3	This field contains either a CRS code, or a Station Group identifier.

Example routeing point records, for Aberdeen and Birmingham Group:
ABD
G02

6.5　File: NODE

6.5.1　Description

6.5.1.1　This file consists of a list of nodes (i.e. the routeing points and interchanges) and does not associate any other data with them.

6.5.2　Node record

Key	Field	Field Name	Length	Description
Y	1	NODE	3	This field contains either a CRS code, or a Station Group identifier.

Example node records, for Loughborough and Stevenage Group:
LBO
G28

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6.6 File: MAP

6.6.1 Description

6.6.1.1 This file consists of a list of map codes, and does not associate any other data with them. An entry exists in this file for the map LO, which is used when validating journeys via Thameslink.

6.6.2 Map record

Key	Field	Field Name	Length	Description
Y	1	MAP_IDENTIFIER	2	A Routeing Guide map code, as defined in Section D of the NRG.

Example map records:
AS
BD

6.7 File: LINK

6.7.1 Description

6.7.1.1 The records in this file apply to routeing points and interchange points and define the links between the nodes which are represented on the maps in section D of the NRG.

6.7.1.2 Each link is directional, therefore each link record has a corresponding record with the start and end nodes reversed, which will also be explicitly included in the link file.

6.7.1.3 If a link appears on more than one map then a separate link record is required for each map which contains the link.

6.7.2 Link record

Key	Field	Field Name	Length	Description
Y	1	START_NODE	3	Either a CRS code or Station Group identifier which identifies a routeing point or interchange point.
Y	2	END_NODE	3	Either a CRS code or Station Group identifier which identifies a routeing point or interchange point.
Y	3	MAP_CODE	2	A map code, as identified in the MAP file.

Example link data, for Norwich to Peterborough, and Nuneaton to Birmingham:
G02,NUN,CN
G02,NUN,CS
NRW,PBO,CN
NUN,G02,CN
NUN,G02,CS
PBO,NRW,CN

6.8 File: PERMITTED ROUTES

6.8.1 Description

6.8.1.1 These records define the permitted routes between all pairs of routeing points which are defined in section C of the NRG.

6.8.1.2 The map sequence consists of an ordered list of map identifiers. The maps will appear in the correct geographical sequence so that the sequence defines a continuous route from the start routeing point on the first map to the end routeing point on the last map.

6.8.1.3 Permitted routes shown in the NRG as "LONDON" are represented by a map sequence consisting of the single map "LO".

6.8.1.4 Each permitted route is directional so each permitted route has a corresponding record with the start and end routeing points and the map sequence reversed.

6.8.2 Permitted Routes record

Key	Field	Field Name	Length	Description
Y	1	START_ROUTEING_POINT	3	Either a CRS code or Station Group identifier which identifies a routeing point or interchange point.
Y	2	END_ROUTEING_POINT	3	Either a CRS code or Station Group identifier which identifies a routeing point or interchange point.
Y	3	MAP_CODE	2*n	One or more map codes which define a map sequence between the start and end routeing points. Where more than one map code exists, they are comma separated.

Example permitted routes data:
/ Bedford to Aberdeen
BDM,ABD,LO
BDM,ABD,MM,LM
BDM,ABD,MM,ER
BDM,ABD,LM
BDM,ABD,MM,PS,LM
BDM,ADB,MM,CN,LM
/ Ashford International to Bristol Group
ASI,G05,LO
ASI,G05,CS,WR
ASI,G05,CS,WE,CE
ASI,G05,CW,BD

6.9   File: STATION LINKS

6.9.1   Description

6.9.1.1   These records define the distances between the stations as represented on the Great Britain Passenger Railway Timetable map.

6.9.1.2   The distance format is of the form NN.NN where leading and/or trailing zeroes are not mandatory but the decimal place is.

6.9.1.3   Each station-link record is directional so each station-link record has a corresponding record with the start and end stations reversed.

6.9.2   Station Links record

Key	Field	Field Name	Length	Description
Y	1	START_STATION	3	CRS code of station.
Y	2	END_STATION	3	CRS code of station.
	3	DISTANCE	4 or 5	Mileage between start station and end station to the nearest hundredth of a mile.

Example station-link data for Kidsgrove to Alsager and Kidsgrove to Congleton:
KDG,ASG,2.34
KDG,CNG,5.63

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6.10 File: EASEMENT DEFINITION

6.10.1 Description

6.10.1.1 This file contains details of the easements described in the Easement Text file. There are several record types in this file, each of which is identified by the RECORD_TYPE field.

6.10.2 Easement record

Key	Field	Field Name	Length	Description
Y	1	RECORD_TYPE	1	Value = 'E' (Easement).
Y	2	EASEMENT_REF	6	A unique identifier for this easement.
	3	START_DATE	8	The date from which this easement applies in the format ddmmyyyy.
	4	END_DATE	8	The date to which this easement applies in the format ddmmyyyy. A high date value 31122999 indicates that the easement applies until further notice.
	5	TEXT_REF	6	This identifies the textual description of this easement. Several easements may refer to the same textual description.
	6	EASEMENT_TYPE	1	Indicates the type of easement. Values are as follows: '1' = Sleeper. '2' = Disabled Passenger. '3' = Normal. '4' = Service Variation.
	7	EASEMENT_CLASS	1	Indicates whether the easement is a positive easement, or a negative easement. Values are as follows: '1' = Positive. '2' = Negative.
	8	CATEGORY	1	Indicates the category of the easement. Values are as follows: '1' = Local easement. '2' = Map easement. '3' = Routeing point easement. '4' = Doubleback easement. '5' = Fare route easement. '6' = Manual easement. '7' = Circuitous Route easement.
	9	VALID_DAYS	7	A flag for each day to indicate whether the easement applies on that day. The first flag represents Monday. Each flag has a value 'Y' or 'N'.
	10	START_TIME	4	The time of day from which the easement applies, in the format hhmm. There will be no value in this field if the easement applies at all times. Both START_TIME and END_TIME will be specified if relevant.
	11	END_TIME	4	The time of day to which the easement applies, in the format hhmm. There will be no value in this field if the easement applies at all times.

Example Easement record
E,000509,01012000,31122999,000001,3,1,1,YYYYYYY,,

6.10.3   Easement Location record

Key	Field	Field Name	Length	Description
Y	1	RECORD_TYPE	1	Value = 'L' (Easement Location).
Y	2	EASEMENT_REF	6	A unique identifier for this easement.
Y	3	LOCATION_CODE	3	CRS code identifying a location associated with the easement.
	4	LOCATION_MODIFIER	1	Indicates the type of location, as follows: '1' = Applicable location. The easement applies to journeys containing this location. '2' = Origin. The easement applies to journeys from this origin. '3' = Destination. The easement applies to journeys to this destination. '4' = Via. The easement applies to journeys via this location. '5' = Exclude. The easement applies to journeys which exclude this location. '6' = Doubleback Point. This location is the station to which a doubleback is allowed for doubleback easements. NOTE: There will also be an easement location record with LOCATION_MODIFIER set to 4 (Via) for the same location (for backwards compatibility).

Example Easement records
L,000509,NRW,1
L,000509,BUC,3
L,000509,CNY,3
L,000509,LGD,2
L,000509,GYM,2

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6.10.4 Easement Details record

Key	Field	Field Name	Length	Description
Y	1	RECORD_TYPE	1	Value = 'D' (Easement Details).
Y	2	EASEMENT_REF	6	A unique identifier for this easement.
Y	3	DETAIL_TYPE	1	Indicates the type of detail for this easement, as follows. The type of code in the DETAIL_CODE field depends on the setting of this field. '1' = The easement applies when trains with this UID code are included in the journey. '2' = The easement applies to journeys using this TOC. '3' = The easement applies to tickets with this route. '4' = The easement applies to tickets with this ticket code.
Y	4	DETAIL_CODE	8	The value in this field depends on the value of the previous field. It may include a TOC code, Route code, Ticket code or Train UID.

Example Easement Detail records
D,000509,2,VT
D,000509,4,FOR
D,000509,4,FOS

6.10.5 Easement Exception record

Key	Field	Field Name	Length	Description
Y	1	RECORD_TYPE	1	Value = 'X' (Easement Exception).
Y	2	EASEMENT_REF	6	A unique identifier for this easement.
Y	3	EXCEPTION_TYPE	1	Indicates the type of exception for this easement, as follows. The type of code in the DETAIL_CODE field dictates the setting of this field. '1' = The easement does not apply when trains with this UID code are included in the journey. '2' = The easement does not apply to journeys using this TOC.
Y	4	EXCEPTION_CODE	8	The value in this field depends on the value of the previous field. It may include a TOC code or Train UID.

Example Easement Detail record
X,000509,2,SR

6.11   File: EASEMENT TOC

6.11.1   Description

6.11.1.1   This file contains all the easement texts with details of the TOC publishing the easement text.

6.11.2   Easement TOC record

Key	Field	Field Name	Length	Description
Y	1	TEXT_REF	6	A unique identifier for this easement.
Y	2	TOC	2	The TOC code of the TOC which has raised the easement. May be set to spaces if this information has not been recorded.

Example record
000027,WW

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6.12 File: ROUTES

6.12.1 Description

6.12.1.1   This file contains two record types.

6.12.1.2   The first indicates whether a particular route refers to London (either excludes or includes London). This information is required for cross-London processing to be handled correctly. There will always be a London Route record for routes which have route data records. There are no London Route records for those routes which do not have any Route Data (e.g. ANY PERMITTED).

6.12.1.3   The second record type contains details of the TOCs, modes of transport and locations included in the route descriptor. There is no Route Data record for those routes which do not include particular locations, TOCs or transport modes, e.g. DIRECT.

6.12.2 London Route record

Key	Field	Field Name	Length	Description
Y	1	ROUTE_CODE	5	A 5-digit route code which uniquely identifies this route.
Y	2	RECORD_TYPE	1	Value = 'L' (London Route).
	3	LONDON_MARKER	1	Indicates whether London is included in or excluded from the route. Values are: '0' = the route excludes London. '1' = the route MUST include London. '2' = the route MAY include London (i.e. the route descriptor contains two locations, e.g. STRATFORD/LONDON, indicating that the journey must pass through Stratford OR London to be valid). '3' = the route does not mention London (e.g. ROMFORD).

Example Route London records
Example London Route record
/ Route 00202 (WATFORD NOT LOND)
/ Route excludes London
00202,L,0

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6.12.3 Route Data record

Key	Field	Field Name	Length	Description
Y	1	ROUTE_CODE	5	A 5-digit route code which uniquely identifies this route.
Y	2	RECORD_TYPE	1	Value = 'D' (Route Data).
Y	3	ENTRY_TYPE	1	One of the following values: 'A' = used with CRS code to indicate that the route description contains a list of locations ALL of which must be included in the journey for any fare with this route code to be valid. 'I' = used with CRS code to indicate that the route description contains a list of locations ANY of which must be included in the journey for any fare with this route code to be valid. 'E' = used with CRS code to indicate that the route description contains a list of locations ALL of which must not be included in the journey for any fare with this route to be valid. 'T' = used with TOC ID to indicate that the route description contains a list of TOC codes, which indicate which TOCs' trains must be used on the journey for any fare with this route to be valid. 'X' = used with TOC ID to indicate that the route description contains a list of TOC codes, which indicate which TOCs' trains must NOT be used on the journey for any fare with this route to be valid. 'L' = Used with Mode Code to indicate that the route description contains a transport mode which must be used by one of the legs on the journey. 'N' = Used with Mode Code to indicate that the route description contains a transport mode which must NOT be used by any of the legs of the journey.
Y	4	CRS_CODE	3	A value will be specified for entry types 'A', 'I' and 'E'.
Y	5	GROUP_MKR	1	'Y' or 'N' to indicate whether the CRS code represents an individual location (Value='N'), or one station in a routeing guide group (Value= 'Y'). If 'Y', then the whole of the group is included in the route (i.e. the route must include one of the locations in the group (for 'A' or 'I' type entries) or must exclude all the locations in the group (for 'E' type entries)).
	6	MODE_CODE	3	One of the valid mode codes, i.e. '000' = train. '001' = walk. '002' = bus. '003' = ferry. '004' = London Underground. '005' = transfer. '006' = metro. '007' = tram '100' = hovercraft. '101' = jetfoil. The Mode Code must be specified where Entry Type is 'L' or 'N'.
	7	TOC_ID		A value will be specified for Entry Types 'T' and 'X'.

Example Route Data
/ Route 00461 (AP BHAM RUGBY)
/ Route includes Birmingham and Rugby. Birmingham is a routeing guide group.
00461,D,A,BHM,Y,,
00461,D,A,RUG,N,,

6.13 File: LONDON STATIONS

6.13.1 Description

6.13.1.1 This file contains a list of the London stations required for Cross London processing. Each station has markers to indicate whether it is a London terminal, and whether cross-London transfer is permissible from or to this station.

6.13.2 London Station Record

Key	Field	Field Name	Length	Description
Y	1	CRS_CODE	3	Station CRS code.
	2	LT_MARKER	1	'Y' or 'N' to indicate whether the station is a London Terminal.
	3	XLONDON_MARKER	1	'Y' or 'N' to indicate whether cross-London transfer is permissible from or to this station.

Example London Station record
/ London Blackfriars is a London terminal and also a location from/to which cross London
/ transfer is permitted.
BFR,Y,Y

6.14 File: NEW STATIONS

6.14.1 Description

6.14.1.1 This file is used to hold new stations that have been created since NFM64 and shows the NFM station code that should be used when obtaining fares for Routeing Guide Fare checking.

6.14.2 New Station Record

Key	Field	Field Name	Length	Description
Y	1	NFM64_STATION_CODE	3	The CRS code of the station for which fares exist in NFM64.
Y	2	NEW_STATION_CODE	3	The CRS code of the station for which fares did not exist in NFM64.
	3	START_DATE	8	The date from which this translation is effective, in the form ddmmyyyy.
	4	END_DATE	8	The date until which this translation is effective, in the form ddmmyyyy. If this field is set to a high date, 31122999, then this indicates that the record is effective until further notice.

Example New Stations data
/ new station code LTN is equivalent to LUT (when checking fares) from 31st Dec 99 until further notice.
LUT,LTN,31121999,31122999

6.15   File: LOCATIONS

6.15.1   Description

6.15.1.1   This file is used to hold cross reference details between CRS and NLC codes.

6.15.2   New Station record

Key	Field	Field Name	Length	Description
Y	1	UIC_CODE	3	Admin Area Code for the location.
Y	2	NLC_CODE	4	NLC code for location. Fares in NFM64 are specified using the NLC code of the fare origin and destination.
	3	GROUP_CODE	4	Fares group code, which may be the same as the NLC code.
	4	CRS_CODE	3	The CRS code of the location.
	5	COUNTY_CODE	2	County code of the location.
	6	ZONE_CODE	4	Zone code of the location.
	7	START_DATE	8	The date from which this record is effective, in the form ddmmyyyy.
	8	END_DATE	8	The date until which this record is effective, in the form ddmmyyyy. If this field is set to a high date, 31122999, then this indicates that the record is effective until further notice.

Example Locations data
/ Melton Mowbray is not in a fares group and has no zone code.
70 ,1851,1851,MMO,20,,01011999,31122999

6.16 File: EASEMENT TEXT

6.16.1 Description

6.16.1.1 This file contains all the easement descriptions. It is linked with the Easement Details File, which contains all other data required for the application of the easement to a journey.

6.16.2 Easement Text record

Key	Field	Field Name	Length	Description
Y	1	TEXT_REF	6	A reference number which uniquely identifies the easement.
	2	EASEMENT_TEXT	2000	This is free format text with a maximum length of 2,000 characters. Any commas embedded in this text are part of the text; they are not to be considered record separators.

Example Easement data
/ An example easement.
000001, Customers travelling from the Great Yarmouth to Norwich line (via ACLE) to the Lowestoft line may change at Norwich

6.17 File: ZONAL ROUTES

6.17.1 This file is no longer used and contains a header only.

6.18 File: ZONAL FARE LOCATIONS

6.18.1 This file is no longer used and contains a header only.

6.19 File: ZONAL SYSTEM LOCATIONS

6.19.1 This file is no longer used and contains a header only.

6.20 File: NRG Rules

6.20.1 This file describes the rules that are utilised in the National Routeing Guide.

6.20.2 This will be distributed as a Word file (RJRGRules-0005.doc). This can be obtained from RDG. Please email: dataservices@atoc.org [1].

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[1] No specific Rail Delivery Group email address has yet been set up.

Rail Delivery Group

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6.21   File: NFM64

6.21.1   This is a single file of fares data that makes up the National Fares Manual Issue 64. These Fares are used as a Baseline by the Routeing Guide process for the fare checking rules. This is not a complete fare set; only records with TICKET_CODE 'SOS', 'SDS', 'SVS' and 'CDS' are included, as these are the only relevant fares to be checked by a Routeing Guide application.

6.21.2   The file name is nfm64, and it is compressed. Its file size is around 220mb.

6.21.3   Note that the header and footer records contained in the Data Feed files described in Section 0 are not included in this file.

6.21.4   As this is a large and static file it will not form part of the normal Data Feed but only be provided as a one-off load to new customers or by special request to existing customers via the DTD.

6.21.5   Each record in the NFM files has been simplified to contain only the data necessary for Routeing Guide use. The fares contained in this file are used by the routeing guide to determine the appropriate routeing point(s).

NFM64 Fare Records:

Key	Field Name	Length	Description
Y	FROM_NLC_CODE	4	The NLC code of the fare origin.
Y	TO_NLC_CODE	4	The NLC code of the fare destination.
Y	ROUTE_CODE	5	The route code pertaining to the flow.
Y	TICKET_CODE	3	The ticket code of the fare.
	FARE_PRICE	6	Fare price in pence.

7.   Data feed service

7.1   Feed distribution

7.1.1   Data Recipients will receive ad hoc Routeing Guide Data Feeds, on days when the Routeing Guide service publishes a new version of the Routeing Guide Data.

7.1.2   New Recipients that begin the service will be provided with a one off full NFM64 file.

7.1.3   Fares data feeds are distributed to registered data recipients by the Data Transformation and Distribution Service (DTD). The DTD is a service owned by RDG. The service is built and supported by iBlocks.

7.1.4   The DTD provides the following delivery methods for Registered Data Feed Users to receive their feeds:

- SFTP Pull over the Internet from a publicly addressable and accessible iBlocks provided SFTP server with the domain dtd.atocrsp.org.
- SFTP Push over the Internet from the DTD's SFTP Client to the Data Recipient's SFTP Server
- FTP Push over the internet from the DTD's FTP Client to the Data Recipients FTP Server

7.2   Feed file

7.2.1   The NRG feed is provided as a compressed zip file in version 2.0 of the zip file format and is readable using common zip applications such as WINZIP and UNZIP.

7.2.2   The following sizes of Feed Files can be used as a guide for Data Recipients to plan their connectivity resources:

File Type	Typical size	Maximum Size
NRG File	1 – 2 MB	60 MB

7.2.3   The NRG Data Feed file (RJRG0nnn.Zip) is a manifest file for the feed and the Data Recipient should ensure that all files in the manifest file are present in the zip. The order of the files in the manifest file and in the zip file has no meaning and it is the Data Recipients responsibility to process the files according to their requirements.

7.3   Scheduling

7.3.1   The DTD receives NRG data from the Routeing Guide at around 7pm on an ad hoc basis and processes this data within one hour depending on the volume of NRG data received. On completion of the transformation process from XML to CSV, the DTD pushes the feed to Data Recipients or makes the data available for Data Recipients to pull.

7.4   Distribution configuration

7.4.1   Data Recipients can manage their FTP Server configuration details using the DTD Web Portal at dtdportal.atocrsp.org or by contacting the support email address: dtd.support@iblocks.co.uk .

7.4.2   Data Recipients that require a resilient service can set up two SFTP or FTP servers and the DTD will distribute Fares Data to both servers.

7.4.3   The DTD SFTP service is a resilient service. If the infrastructure on which the service fails, the DTD will automatically start up another SFTP server instance on an alternative server at the same domain and IP address.

7.4.4   Data Recipients should contact dtd.support@iblocks .co.uk for the IP address of the DTD SFTP Server, FTP Client or SFTP Client if firewall configuration is required.

End.