

OAG S

# FLIGHT INFO DIRECT

**Data Points Explained** 

# OAG

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\*Please note: Each view is sold separately. If you see a data point you are not currently subscribed to but are interested in receiving, please speak to your Account Manager. Views can be combined.



# Introduction

Below is the list of the data points available in the Flight Info Direct.

#### Notes

- For better understanding of the Flight Info Direct database, we have aggregated the data points into categories:
  - Schedules includes the essential information about a flight.
  - o Geography includes enhanced location information.
  - o Route includes everything related with the journey.
  - o Capacity is information related with passengers and cargo that the equipment can carry.
  - o Supplementary includes any non-essential flight information such as inflight services and facilities.
  - Metadata is OAG related information.
  - o Master data is fields that underpin Schedules, consisting of Carrier, Equipment & Location.
  - Connections data includes related information to connecting flights and connection types.
  - Emissions data consists of Emissions Schedules & Emissions Status.
- The order and categorisation of the data points may not be as shown in the product.

#### 1. Schedules View

#### 1.1 Schedules

#	Category	Field Name	Name in Database	Туре	Description
1	Schedules	Carrier Code	CARRIER	VARCHAR (3)	This field contains a carrier designator code assigned by either:  IATA (International Air Transport Association)  ICAO (International Civil Aviation Organization)  OAG (Controlled duplicate designators)
2	Schedules	Carrier Code ICAO	CARRIER_CD_ICAO	VARCHAR (3)	The carrier designator as assigned by ICAO.
3	Schedules	Service Number	FLTNO	INTEGER (4)	Up to 4 digit numeric representing the service number.
4	Schedules	Operational Suffix	FLTSUFFX	VARCHAR (1)	A code assigned by the administrating carrier for operational purposes.
5	Schedules	Stops	STOPS	NUMBER	This is the total number of stops on route.
6	Schedules	Flight Date	FLIGHT_DATE	DATE (10)	The date that the operation departs, in YYYY-MM-DD.
7	Schedules	Departure Time	DEPTIM	VARCHAR (4)	The local departure time in 24 hour format HHMM, e.g. 0925.
8	Schedules	Departure Port Code	DEPAPT	VARCHAR (3)	The departure port code as assigned by IATA e.g. JFK.
9	Schedules	Departure Port Code ICAO	DEP_PORT_CD_ICAO	VARCHAR (4)	The departure port code as assigned by ICAO e.g. KJFK.
10	Schedules	Departure Terminal	DEPTERM	VARCHAR (2)	Terminal of Departure at the departure port.
11	Schedules	Arrival Day	ARRDAY	VARCHAR (1)	The arrival day marker shows if the carrier arrives on a different day to when it departed. '1' = next day, '2' = 2 days later, 'P' = arrives on previous day.
12	Schedules	Arrival Time	ARRTIM	VARCHAR (4)	The arrival departure time in 24 hour format HHMM, e.g. 1430.
13	Schedules	Arrival Port Code	ARRAPT	VARCHAR (3)	The arrival port code as assigned by IATA e.g. LAX.



14	Schedules	Arrival Port Code ICAO	ARR_PORT_CD_ICAO	VARCHAR (4)	The arrival port code as assigned by ICAO e.g. KLAX.
15	Schedules	Arrival Terminal	ARRTERM	VARCHAR (2)	Terminal of Arrival at the arrival port.

# 1.2 Geography

#	Category	Field Name	Name in Database	Туре	Description
16	Geography	Departure City Code	DEPCITY	VARCHAR (3)	The departure city code as assigned by IATA. These are usually the same as the port code unless the port belongs to a multi port city e.g. LON is the city code for LHR, LGW, LCY, STN and LTN airports.
17	Geography	Departure Country Code	DEPCTRY	VARCHAR (2)	The departure country codes as per the country codes assigned by the ISO (International Standards Organisation) used by IATA.
18	Geography	Arrival City Code	ARRCITY	VARCHAR (3)	The arrival city code as assigned by IATA. These are usually the same as the port code unless the port belongs to a multi port city e.g. LON is the city code for LHR, LGW, LCY, STN and LTN airports.
19	Geography	Arrival Country Code	ARRCTRY	VARCHAR (2)	The arrival country codes as per the country codes assigned by the ISO (International Standards Organisation) used by IATA.

# 1.3 Route

#	Category	Field Name	Name in Database	Туре	Description
2	) Route	Full Routing	ROUTING	VARCHAR (12)	The full routing which the record belongs to. The ports are shown as 3 letter IATA codes.  The full routing is shown for each leg/sector of every operation. E.g. BA 009 full routing is  LHR BKK SYD MEL. This full routing will be shown as 'LHRBKKSYDMEL' on every record that makes up this operation.
2	Route	Distance	DISTANCE	INTEGER	The great circle distance expressed in statute miles between the Departure Port and Arrival Port.
2	2 Route	Longest Sector	LONGEST	VARCHAR (1)	Marker to show the operation that stops at all ports within the Full Routing.
2	Route	Intermediate Ports	INTAPT	VARCHAR (39)	The ports at which any stops occur. These are shown as 3 letter IATA port codes. If there are 2 stops on route at Hong Kong and Delhi it would be shown as HKGDEL. Up to 13 intermediate ports are shown in this field.

# 1.4 Equipment

#	Category	Field Name	Name in Database	Туре	Description
23	Equipment	General Equipment Type	GENACFT	VARCHAR (3)	General equipment type is the IATA generic equipment type code used to describe one or more equipment of a particular type. A 747 equipment type could describe a 747, 741, 742 or a 74R specific equipment type.
24	Equipment	Specific Equipment Type	INPACFT	VARCHAR (3)	Specific (or input) equipment type is the specific IATA equipment type code.
25	Equipment	Specific Equipment Type ICAO	EQUIPMENT_CD_ICAO	VARCHAR (4)	Specific equipment type as designated by ICAO.
26	Equipment	Equipment Change	ACFTCHANGE	VARCHAR (1)	Marker to show equipment change on route.
27	Equipment	Equipment Owner	ACFT_OWNER	VARCHAR (3)	The carrier that owns the equipment.





1.5 Supplementary

#	Category	Field Name	Name in Database	Туре	Description		
#	ļ				<u> </u>		
28	Supplementary	Elapsed Journey Time	ELPTIM	VARCHAR (5)	The elapsed journey time shown as HHHMM.  Indicates the utilisation of the equipment wheth	or naccongor corgo et	`
					IATA service type code & Description	Application	Type of operation
					F = Loose Loaded cargo and/or preloaded devices	Scheduled	Cargo/Mail
					M = Mail only	Scheduled	Cargo/Mail
					H = Cargo and/or Mail	Charter	Cargo/Mail
					V = Service operated by Surface Vehicle	Scheduled	Cargo/Mail
					A = Cargo/Mail	Additional Flights	Cargo/Mail
					W = Military	Others	Not specific
					E = Special (FAA/Government)	Others	Not specific
					D = General Aviation, non-commercial (e.g. school training) and empty flights	General Aviation	Not specific
	Supplementary	Service Type	SERVICE		N = Business Aviation/Air Taxi	Business Aviation	Not specific
					I = State/Diplomatic (Chapter 6 only)	Others	Not specific
29				VARCHAR (1)	X = Technical Stop (for Chapter 6 applications only)	Others Not spe	Not specific
					K = Crew training (other than GABA operators)	Others	Not specific
					T = Technical Test	Others	Not specific
					P = Non-revenue (Positioning/Ferry/Delivery/Demo)	Others	Not specific
					J = Normal Service	Scheduled	Passenger
					C = Passenger Only	Charter	Passenger
					B = Shuttle Mode	Additional Flights	Passenger
					G = Normal Service	Additional Flights	Passenger
					S = Shuttle Mode	Scheduled	Passenger
					U = Service operated by Surface Vehicle Chapter 6 only-Air Ambulance/Humanitarian	Scheduled	Passenger Non specific
					R = Passenger/Cargo in Cabin (mixed configuration aircraft)	Additional Flights	Passenger/Cargo
					Q = Passenger/Cargo in Cabin (mixed configuration aircraft)	Scheduled	Passenger/Cargo



					L = Passenger and Cargo and/or Mail	Charter	Passenger/Cargo/M
					O = Charter requiring special handling (e.g. Migrants/immigrant Flights)	Charter	Special Handling
30	Supplementary	Inflight Service	INFLTSERVICE	VARCHAR (42)	Denotes the use of in-flight services in relation string using the numeric representations below 1 = Movie 2 = Telephone 3 = Entertainment on demand 4 = Audio programming 5 = Live TV 6 = Reservation booking service 7 = Duty Free sales 8 = Smoking 9 = Non-smoking 10 = Short Feature Video 11 = No Duty-Free sales 12 = In-seat power source 13 = Internet access 14 = Currently unused 15 = In-seat Video Player/Library 16 = Lie-flat Seat 17 = Additional Services 18 = Wi-Fi 19 = Lie-flat Seat First 20 = Lie-flat Seat First 20 = Lie-flat Seat Premium Economy 22 = 110V AC Power Eusiness 25 = 110V AC Power Premium Economy 26 = 110V AC Power Premium Economy 27 = USB Power 28 = USB Power First 29 = USB Power Premium Economy 31 = USB Power Economy 31 = USB Power Economy 31 = USB Power Economy 39 = Amenities subject to change		nis is a "/" separated
31	Supplementary	Meals	MEALS	VARCHAR (23)	A field identifying the meal service codes (defin Economy/Economy cabins for the operation. Viseparated by a "/" character. A "-" (hyphen) ind compartment. Meals codes are as follows:  B = Breakfast C = Alcoholic Beverages—Complimentary D = Dinner F = Food for Purchase G = Food and Beverages for Purchase	ariations in meal service	by compartments are



	1				H = Hot Meal
					K = Continental Breakfast
					L = Lunch
					M = Meal (to be used as a generalization if no specific meal is intended)
					N = No Meal Service
					O = Cold Meal
					P = Alcoholic Beverages for Purchase
					R = Refreshments—Complimentary
					S = Snack or Brunch
					V = Refreshments for Purchase
					Details the DEI 010/050 value relating to Duplicate Leg Cross Reference:
					010 = Operating carrier.
		0 1010/050	0014140 50	) (A DOLLA D (O)	050 = Non-operating carrier.
32	Supplementary	Comment 010/050	COMM10_50	VARCHAR (3)	011 = Part of the stopping service has a comment 010.
					055 = Part of the stopping service has a comment 050.
					015 = Part of the stopping service has a comment 010 and another part has a comment 050.
					A marker to show if the carrier is operating or non-operating the operation when a code share
33	Supplementary	Operating/Non-Operating	OPERATING	VARCHAR (1)	relationship exists. For operations with no code share the entry will be blank.
55	Supplementary	Marker	OI ERATINO	VAICOLIAIC(1)	O = Operating
					N = Non-Operating
34	Supplementary	Ghost Flight	GHOST	VARCHAR (1)	A marker to show non-operating ghost/funnel flights.
					Every service number that duplicates with the operation. All are shown for the operating
					service and just the operating carrier for a non-operating service.
35	Supplementary	Duplicate Services	DUPCARFL	VARCHAR (160)	If the record is representing a stopping service with different code share service numbers on
					each leg the entry will be blank. The correct information will still be shown on the respective
-					non-stopping legs.
					Shows the carrier that operates the service in a shared airline agreement. Where an airline
36	Cupplementers	Shared Airline Designator Code	SAD	VARCHAR (3)	integrates their schedules with another airline and sometimes shares the airline code. In a typical case some or all the services operated by a commuter airline are identified with the
36	Supplementary	Shared Airline Designator Code	SAD	VARCHAR (3)	code of the airline with which it has a special agreement. In some cases both carriers will
					show a schedule for the operation.
37	Supplementary	Shared Airline Designator Name	SAD NAME	VARCHAR (63)	Represents the name of the Shared Airline Designator.
38	<del>                                     </del>	Restriction	RESTRICT	VARCHAR (1)	The restriction code that applies to traffic rights, stopovers or transfer connections.
	- speciments				The passenger status for Minimum Connection Times (MCT) for the purpose of building
39	Supplementary	Domestic/International MCT	DOMINT	VARCHAR (2)	connections. The first value is the arrival status and the second is the departure status. These
	o appromontary	Marker	20	· · · · · · · · · · · · · · · · · · ·	can be used with MCT information published.
40	Supplementary	Government Approval	GOVT_APP	VARCHAR (1)	Marker to show service is subject to government approval.
	•				This data element is present when there is a legal requirement to disclose full Secure Flight
14	Cupplementer	Sooura Eliabt	SECUREFLT	VADCHAD (1)	passenger data for flights that are operated by a carrier (operating and marketing) flying
41	Supplementary	Secure Flight	SECUREFLI	VARCHAR (1)	to/from/within/over the U.S.
					S indicates TSA regulations apply.

#### 1.6 Metadata

#	Category	Field Name	Name in Database	Туре	Description
42	Metadata	Schedule Fingerprint	OAG_SCHEDULE_FINGERPRINT	VARCHAR (64)	Available in preview, it is a unique key based on all of the fields except FILE_DATE. If two rows have the same schedule fingerprint then they are identical.
43	Metadata	File Date	FILE_DATE	DATE (10)	Represents the date on which that row of data was uploaded into the database e.g. YYYY-MM-DD.

# 2. Seats View

# 2.1 Capacity

#	Category	Field Name	Name in Database	Туре	Description
1	Capacity	Passenger Classes	PX	VARCHAR (52)	The passenger classes available on the operation.
2	Capacity	Freight Classes	FRTCLASS	VARCHAR (2)	The freight classes indicate the type of cargo that can be loaded onto the equipment.
3	Capacity	Freight Tons	TONS	NUMBER (6)	The maximum amount of freight tons that can be carried on the operation. Where specific freight data by carrier is not available equipment defaults are used. This is displayed as 0000.0.
4	Capacity	Available Total Seats	TOTAL_SEATS	NUMBER (4)	Available seats for the operation. The value is taken from information from the operating carrier where applicable. Where specific seats data by carrier is not available the value is calculated using a proprietary data model.
5	Capacity	Available First Class Seats	FIRST_CLASS_SEATS	NUMBER (4)	Available First Class seats for the operation. The value is taken from information from the operating carrier where applicable. Where specific seats data by carrier is not available the value is calculated using a proprietary data model.
6	Capacity	Available Business Class Seats	BUSINESS_CLASS_SEATS	NUMBER (4)	Available Business Class seats for the operation. The value is taken from information from the operating carrier where applicable. Where specific seats data by carrier is not available the value is calculated using a proprietary data model.
7	Capacity	Available Premium Economy Class Seats	PREMIUM_ECONOMY_CLASS_S EATS	NUMBER (4)	Available Premium Economy seats for the operation. The value is taken from information from the operating carrier where applicable. Where specific seats data by carrier is not available the value is calculated using a proprietary data model.
8	Capacity	Available Economy Class Plus Seats	ECONOMY_PLUS_CLASS_SEATS	NUMBER (4)	Available Economy Plus seats for the operation. The value is taken from information from the operating carrier where applicable. Where specific seats data by carrier is not available the value is calculated using a proprietary data model.
9	Capacity	Available Economy Class Seats	ECONOMY_CLASS_SEATS	NUMBER (4)	Available Economy seats for the operation. The value is taken from information from the operating carrier where applicable. Where specific seats data by carrier is not available the value is calculated using a proprietary data model.



# 3. Master Data View: Carrier

#### 3.1 Carrier

#	Category	Field Name	Name in Database	Туре	Description
1	Carrier	IATA Carrier Code	IATA_CARRIER_CODE	VARCHAR (16777216)	IATA (International Air Transport Association) a two-character code of the carrier
2	Carrier	ICAO Carrier Code	ICAO_CARRIER_CODE	VARCHAR (16777216)	ICAO (International Civil Aviation Organization) a three-character code of the carrier.
3	Carrier	Carrier Code	CARRIER_CODE	VARCHAR (16777216)	This field contains a carrier designator code assigned by either:  - IATA (International Air Transport Association)  - ICAO (International Civil Aviation Organization)  - OAG (Controlled duplicate designators)
4	Carrier	OAG Carrier Code	OAG_CARRIER_CODE	VARCHAR (16777216)	Represent OAG's best recommendation and can be either an IATA or ICAO code
5	Carrier	OAG Carrier Code Rank	OAG_CARRIER_CODE_RANK	NUMBER (38,0)	A number indicating the rank OAG's recommendation for the carrier code
6	Carrier	IATA Code Assignment Category	IATA_CODE_ASSIGNMENT_CATEGORY	VARCHAR (16777216)	IATA Code Assignment Category
7	Carrier	IATA Code Assignment Description	IATA_CODE_ASSIGNMENT_DESCRIPTION	VARCHAR (16777216)	Description of the IATA assignment code
8	Carrier	OAG Outbound Code	OAG_OUTBOUND_CODE	VARCHAR (16777216)	An in-house OAG carrier code used in place the an IATA code, or an ICAO code.
9	Carrier	Carrier Alliance	CARRIER_ALLIANCE	VARCHAR (16777216)	Alliance membership of the airline.
10	Carrier	IATA Carrier Name 1	IATA_CARRIER_NAME_1	VARCHAR (16777216)	IATA First carrier name for the airline e.g. Lulutai Airlines Limited
11	Carrier	IATA Carrier Name 2	IATA_CARRIER_NAME_2	VARCHAR (16777216)	IATA Second carrier name for Joint Venture and Leased Operations e.g. dba Lulutai Airlines
12	Carrier	Carrier Name	CARRIER_NAME	VARCHAR (16777216)	carrier name e.g. Lulutai Airlines Limited
13	Carrier	ICAO Carrier Name	ICAO_CARRIER_NAME	VARCHAR (16777216)	ICAO Carrier name
14	Carrier	OAG Carrier Name	OAG_CARRIER_NAME	VARCHAR (16777216)	OAG's best recommendation for carrier name
15	Carrier	ICAO Telephony Name	ICAO_TELEPHONY_NAME	VARCHAR (16777216)	ICAO Telephony Name
16	Carrier	IATA Accounting Prefix	IATA_ACCOUNTING_PREFIX	VARCHAR (16777216)	IATA Accounting Prefix
17	Carrier	Duplicate Carrier Code Flag	DUPLICATE_CARRIER_CODE_FLAG	BOOLEAN	Indicates whether the carrier code is has a duplicate. Can either be true or false
18	Carrier	IATA Airline Domicile City	IATA_AIRLINE_DOMICILE_CITY	VARCHAR (16777216)	The IATA domicile city of the carrier
19	Carrier	IATA Airline Domicile State	IATA_AIRLINE_DOMICILE_STATE	VARCHAR (16777216)	The IATA domicile state of the carrier
20	Carrier	IATA Airline Domicile Country	IATA_AIRLINE_DOMICILE_COUNTRY	VARCHAR (16777216)	The IATA domicile country of the carrier
21	Carrier	Airline Domicile State	AIRLINE_DOMICILE_STATE	VARCHAR (16777216)	The airline domicile state of the carrier
22	Carrier	Airline Domicile Country	AIRLINE_DOMICILE_COUNTRY	VARCHAR (16777216)	The airline domicile country of the carrier
23	Carrier	ICAO Airline Domicile Country	ICAO_AIRLINE_DOMICILE_COUNTRY	VARCHAR (16777216)	The ICAO domicile country of the carrier
24	Carrier	ICAO Airline Domicile Country Code	ICAO_AIRLINE_DOMICILE_COUNTRY_C ODE	VARCHAR (16777216)	The ICAO 3-character code for the domicile country of the carrier
25	Carrier	OAG Airline Domicile Country	OAG_AIRLINE_DOMICILE_COUNTRY	VARCHAR (16777216)	OAG's best recommendation for the domicile country of the carrier
26	Carrier	Domicile Region	DOMICILE_REGION	VARCHAR (16777216)	The domicile region of the carrier e.g. North America
27	Carrier	OAG Code Assignment Category	OAG_CODE_ASSIGNMENT_CATEGORY	VARCHAR (16777216)	The OAG recommendation for code assignment category
28	Carrier	Domicile Country Dot Code	DOMICILE_COUNTRY_DOT_CODE	VARCHAR (16777216)	The 3-figure US DOT code for the carrier domicile country
29	Carrier	Carrier PK	CARRIER_KEY	VARCHAR (16777216)	Unique combination of the IATA, ICAO, OAG carrier codes and Carrier Alliance



# 4. Master Data View: Location

#### 4.1 Location

#	Category	Field Name	Name in Database	Туре	Description
1	Location	Terminal IATA ICAO FAA Location PK	LOCATION_KEY	VARCHAR (16777216)	Unique combination of the IATA, ICAO, FAA, FAA location type and Terminal codes
2	Location	IATA Airport Code	IATA_AIRPORT_CODE	VARCHAR (16777216)	IATA (International Air Transport Association) a three-character code for the port or city code, e.g. LGW, STN or LON.
3	Location	Terminal Code	TERMINAL_CODE	VARCHAR (16777216)	Code for the airport terminal e.g. 'B'
4	Location	Terminal Name	TERMINAL_NAME	VARCHAR (16777216)	Name of the terminal e.g. 'Terminal B'
5	Location	ICAO Location Code	ICAO_LOCATION_CODE	VARCHAR (16777216)	4 letter ICAO Airport/City code. E.g. EBFS = florennes Air Base
6	Location	FAA Location Code	FAA_LOCATION_CODE	VARCHAR (16777216)	4 Character FAA Airport/City code. E.g.35IL = Clarion Field Airport
7	Location	IATA Location Type	IATA_LOCATION_TYPE	VARCHAR (16777216)	IATA location type e.g. Airport, Heliport
8	Location	FAA Location Type	FAA_LOCATION_TYPE	VARCHAR (16777216)	FAA location type e.g. Airport, Heliport
9	Location	OAG Location Type	OAG_LOCATION_TYPE	VARCHAR (16777216)	OAG recommendation for the location type e.g. Airport, Heliport
10	Location	IATA Airport Name	IATA_AIRPORT_NAME	VARCHAR (16777216)	IATA name for the port. E.g. London Gatwick.
11	Location	ICAO Airport Name	ICAO_AIRPORT_NAME	VARCHAR (16777216)	ICAO name for the port
12	Location	FAA Airport Name	FAA_AIRPORT_NAME	VARCHAR (16777216)	FAA name for the port e.g. Clarion Field Airport
13	Location	OAG Airport Name	OAG_AIRPORT_NAME	VARCHAR (16777216)	OAG recommended name for the port
14	Location	City State	CITY_STATE	VARIANT	Multiple values exist for this field, meaning that more than one value exist for the field e.g. ICAO Airport name: Yancheng "CITY_CODE": "YNZ", "CITY_NAME": "YANCHENG", "STATE CODE": ""
15	Location	FAA City Name	FAA_CITY_NAME	VARCHAR (16777216)	FAA city name. e.g. Newburyport
16	Location	FAA State	FAA_STATE	VARCHAR (16777216)	2 letter FAA designator for the state e.g. Newburyport = MA
17	Location	OAG City State	OAG_CITY_STATE	VARIANT	Multiple values exist for this field. OAG recommendation for city state
18	Location	IATA Country Code	IATA_COUNTRY_CODE	VARCHAR (16777216)	Country codes as per the country codes assigned by the ISO (International Standards Organisation) used by IATA.
19	Location	FAA Country Code	FAA_COUNTRY_CODE	VARCHAR (16777216)	Country codes as per the country codes assigned by the ISO
20	Location	OAG Country Code	OAG_COUNTRY_CODE	VARCHAR (16777216)	OAG recommendation for country code
21	Location	ICAO Country Name	ICAO_COUNTRY_NAME	VARCHAR (16777216)	ICAO country name
22	Location	OAG Country Name	OAG_COUNTRY_NAME	VARCHAR (16777216)	OAG recommendation for country name
23	Location	Time Zone Code	TIME_ZONE_CODE	VARCHAR (16777216)	Designator code for the time zone e.g. '01'
24	Location	Time Zone Info	TIME_ZONE_INFO	VARIANT	Multiple values exist for this field. Some countries, e.g. USA, Canada and Russia are split up into various time zones. E.g. China



					"DST_END_DATE": "",  "DST_END_TIME": "",  "DST_START_DATE": "",  "DST_START_TIME": "",  "DST_VARIATION": "",  "END_STATUS_MARKER": "",  "GMT_UTC_VARIATION": "+0800",  "SEQUENCE_NUMBER": "01",  "START_STATUS_MARKER": ""
25	Location	Latitude	LATITUDE	VARCHAR (16777216)	Latitude shown in degrees, minutes and seconds.
26	Location	ICAO Latitude	ICAO_LATITIUDE	VARCHAR (16777216)	ICAO Latitude shown in degrees, minutes and seconds.
27	Location	OAG Latitude	OAG_LATITUDE	VARCHAR (16777216)	OAG Latitude shown in degrees, minutes and seconds.
28	Location	Longitude	LONGITUDE	VARCHAR (16777216)	Longitude shown in degrees, minutes and seconds
29	Location	ICAO Longitude	ICAO_LONGITUDE	VARCHAR (16777216)	ICAO Longitude shown in degrees, minutes and seconds
30	Location	OAG Longitude	OAG_LONGITUDE	VARCHAR (16777216)	OAG Longitude shown in degrees, minutes and seconds

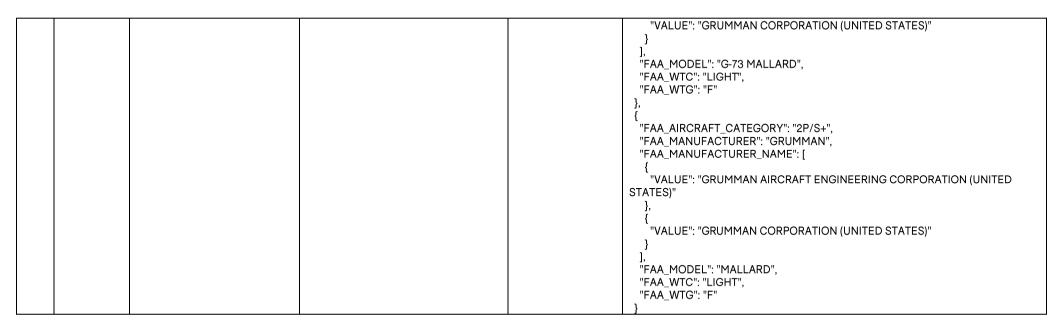
# 5. Master Data View: Equipment

# 5.1 Equipment

#	Category	Field Name	Name in Database	Туре	Description
1	Equipment	Aircraft key	AIRCRAFT_KEY	VARCHAR (16777216)	Unique combination of the IATA, ICAO AND FAA aircraft types
2	Equipment	IATA Aircraft Type	IATA_AIRCRAFT_TYPE	VARCHAR (16777216)	IATA 3-character designator for the aircraft/equipment type code. E.g. CR1
3	Equipment	ICAO Aircraft Type	ICAO_AIRCRAFT_TYPE	VARCHAR (16777216)	ICAO 4-charater designator for the aircraft/equipment type code. E.g. CRJ1. There are some exceptions where the code is three characters. denotes surface equipment for which ICAO will not assign codes *denotes multiple ICAO equipment types relating to one IATA code blank ICAO not yet assigned a code or it is a surface type for which ICAO doesn't assign codes.
4	Equipment	FAA Aircraft Type	FAA_AIRCRAFT_TYPE	VARCHAR (16777216)	FAA 4-charater designator for the aircraft/equipment type code. E.g. CRJ1
5	Equipment	OAG Aircraft Type	OAG_AIRCRAFT_TYPE	VARCHAR (16777216)	OAG recommendation for the aircraft/equipment type code
6	Equipment	IATA Manufacturer Name	IATA_MANUFACTURE_NAME	VARCHAR (16777216)	IATA name for the aircraft manufacturer e.g. Canadair (Bombardier)
7	Equipment	IATA Model Name	IATA_MODEL_NAME	VARCHAR (16777216)	IATA name for the aircraft model. E.g Regional Jet 100



	1				
8	Equipment	IATA Aircraft Group	IATA_AIRCRAFT_GROUP	VARCHAR (16777216)	IATA 3-character designator code for the aircraft/equipment group
9	Equipment	IATA Aircraft Category Code	IATA_AIRCRAFT_CATEGORY_CODE	VARCHAR (16777216)	IATA designator code that denotes the Aircraft Category
10	Equipment	IATA Aircraft Category Description	IATIA_AIRCRAFT_CATEGORY_DESCRI	VARCHAR (16777216)	Description of the aircraft/equipment category. E.g Turboprop-engined aircraft
11	Equipment	ICAO Aircraft Category Code	ICAO_AIRCRAFT_CATEGORY_CODE	VARCHAR (16777216)	ICAO designator code that denotes the Aircraft Category
12	Equipment	ICAO Engine Count	ICAO_ENGINE_COUNT	VARCHAR (16777216)	The number of engines of the aircraft
13	Equipment	ICAO Engine Type	ICAO_ENGINE_TYPE	VARCHAR (16777216)	The type of engine. E.g. Piston
14	Equipment	ICAO Aircraft Description	ICAO_AIRCRAFT_DESCRIPTION	VARCHAR (16777216)	A description of the aircraft/equipment. E.g. Landplane
15	Equipment	IATA Aircraft Body Code	IATA_AIRCRAFT_BODY_CODE	VARCHAR (16777216)	Denote the aircraft/equipment body type. E.g. N = Narrow-body and W = wide-body
16	Equipment	IATA Aircraft Body Description	IATA_AIRCRAFT_BODY_DESCRIPTION	VARCHAR (16777216)	Description for the aircraft/equipment body type. Narrow-body
17	Equipment	FAA Aircraft Category Class	FAA_AIRCRAFT_CATEGORY_CLASS	VARCHAR (16777216)	Denotes the aircraft/equipment category class e.g. Amphibian, fixed-wing,
18	Equipment	ICAO Aircraft Specification	ICAO_AIRCRAFT_SPECIFICATION	VARIANT	ICAO aircraft/equipment spec. Multiple values exist for this field. E.g.  [  "ICAO_MANUFACTURER": "AERO (2)",  "ICAO_MODEL_NAME": "DELFIN",  "ICAO_MODEL_NUMBER": "L-29",  "ICAO_WTC": "L",  "ICAO_WTG": "G"  },  {  "ICAO_MANUFACTURER": "AERO (2)",  "ICAO_MODEL_NAME": "DELFIN",  "ICAO_WTC": "L",  "ICAO_WTG": "G"  }
19	Equipment	FAA Aircraft Specification	FAA_AIRCRAFT_SPECIFICATION	VARIANT	FAA aircraft/equipment spec. Multiple values exist for this field. E.g  [  "FAA_AIRCRAFT_CATEGORY": "2P/S+",  "FAA_MANUFACTURER": "GRUMMAN",  "FAA_MANUFACTURER_NAME": [  {  "VALUE": "GRUMMAN AIRCRAFT ENGINEERING CORPORATION (UNITED STATES)"  },  {



#### 6. Connections View

#### 6.1 Connections

#	Category	Field Name	Name in Database	Туре	Description
1	Connections	Connection ID	CONNECTION_ID	NUMBER(38,0)	A unique connection/flight identifier can be used to identify the records from one connection.
2	Connections	Departure City Code	DEPARTURE_CITY_CODE	VARCHAR (16777216)	The departure city code as designated by IATA. These are usually the same as the airport code unless the airport belongs to a multi airport city, e.g. LON is the city code for LHR, LGW, LCY, STN and LTN airports.
3	Connections	Departure Port Code	DEPARTURE_PORT_CODE	VARCHAR (16777216)	The departure port code as designated by IATA.
4	Connections	Arrival City Code	ARRIVAL_CITY_CODE	VARCHAR (16777216)	The arrival city code as designated by IATA. These are usually the same as the airport code unless the airport belongs to a multi airport city, e.g. LON is the city code for LHR, LGW, LCY, STN and LTN airports.
5	Connections	Arrival Port Code	ARRIVAL_PORT_CODE	VARCHAR (16777216)	The arrival port code as designated by IATA.
6	Connections	Effective From Date	EFFECTIVE_FROM_DATE	Date	The local effective from date shown as "CCYYMMDD".
7	Connections	Effective To Date	EFFECTIVE_TO_DATE	Date	The local effective to date shown as "CCYYMMDD." If a schedule is effective beyond that of the period chosen the date will appear as 20380101



8	Connections	Operating Days of Week	OPERATING_DAYS_OF_WEEK	VARCHAR (16777216)	The local operating departure days of the week. 1 = Monday, 2 = Tuesday etc.
9	Connections	Arrival Day Marker	ARRIVAL_DAY_MARKER	NUMBER(38,0)	The arrival day marker shows if the connection arrives on a different day to when it departed e.g. '-1' = previous day,'0' = same day,'1' = next day, '2' = 2 days later etc.
10	Connections	Connection Elapsed Time	CONNECTION_ELAPSED_TIME	NUMBER(38,0)	The elapsed journey time of the connection in minutes.
11	Connections	QSI	QSI	VARCHAR (16777216)	The QSI value calculated for the connection. This will be the same on all legs related to the connection
12	Connections	Frequency	FREQUENCY	NUMBER(38,0)	Frequency for the connection.
13	Connections	Circuity	CIRCUITY	NUMBER(38,0)	The circuity for the connection, where a value of 100 equals a direct GCD between the origin and destination.
14	Connections	Self/Forced Connection	FORCED_CONNECTION_SELF_CONNECT	NUMBER(38,0)	Indicates if connection restrictions were ignored and the record is a forced connection which requires self-connecting by passengers.
15	Connections	Connection Type	CONNECTION_TYPE	VARCHAR (16777216)	Indicates if the connection is Online (O), Offline (N), or Interline (I).
16	Connections	Leg 1 Departure City Code	LEG_1_DEPARTURE_CITY_CODE	VARCHAR (16777216)	The departure city code of the leg as designated by IATA. These are usually the same as the airport code unless the airport belongs to a multi airport city, e.g. LON is the city code for LHR, LGW, LCY, STN and LTN airports.
17	Connections	Leg 1 Departure Port Code	LEG_1_DEPARTURE_PORT_CODE	VARCHAR (16777216)	The departure port code of the leg as designated by IATA.
18	Connections	Leg 1 Arrival City Code	LEG_1_ARRIVAL_CITY_CODE	VARCHAR (16777216)	The arrival city code of the leg as designated by IATA. These are usually the same as the airport code unless the airport belongs to a multi airport city, e.g. LON is the city code for LHR, LGW, LCY, STN and LTN airports.
19	Connections	Leg 1 Arrival Port Code	LEG_1_ARRIVAL_PORT_CODE	VARCHAR (16777216)	The arrival port code of the leg as designated by IATA.
20	Connections	Leg 1 Carrier Code	LEG_1_CARRIER_CODE	VARCHAR (16777216)	The airline designator code of the leg assigned by either:  IATA ICAO OAG (IATA Controlled duplicate designators with 7 prefix)
21	Connections	Leg 1 Flight Number	LEG_1_FLIGHT_NUMBER	NUMBER(38,0)	The four digit flight number of the leg
22	Connections	Leg 1 Effective From Date	LEG_1_EFFECTIVE_FROM_DATE	Date	The local effective from date of the leg shown as "CCYYMMDD".
23	Connections	Leg 1 Effective To Date	LEG_1_EFFECTIVE_TO_DATE	Date	The local effective to date of the leg shown as "CCYYMMDD." If a schedule is effective beyond that of the period chosen the date will appear as 20380101
24	Connections	Leg 1 Operating Days of Week	LEG_1_OPERATING_DAYS_OF_WEEK	VARCHAR (16777216)	The local operating departure days of the week of the leg. 1 = Monday, 2 = Tuesday etc.
25	Connections	Leg 1 Departure Time	LEG_1_DEPARTURE_TIME	VARCHAR (16777216)	The local departure time of the leg. The time is in 24 hour format expressed as hh:mm:ss.
26	Connections	Leg 1 Arrival Time	LEG_1_ARRIVAL_TIME	VARCHAR (16777216)	The local arrival time of the leg. The time is in 24 hour format expressed as hh:mm:ss
27	Connections	Leg 1 Arrival Day Marker	LEG_1_ARRIVAL_DAY_MARKER	NUMBER(38,0)	The arrival day marker shows if the leg arrives on a different day to when it departed e.g. '-1' = previous day,'0' = same day,'1' = next day, '2' = 2 days later etc.
28	Connections	Leg 1 Elapsed Time	LEG_1_ELAPSED_TIME	NUMBER(38,0)	The elapsed journey time of the leg in minutes.
29	Connections	Leg 1 Stops	LEG_1_STOPS	NUMBER(38,0)	The number of stops on the leg.
30	Connections	Leg 1 Equipment Code	LEG_1_EQUIPMENT_CODE	VARCHAR (16777216)	The IATA aircraft type code of the leg.



31	Connections	Leg 1 Non-Operating Code Share Flight Numbers	LEG_1_NON_OPERATING_CODE_SHARE_ FLIGHT_NUMBERS	VARCHAR (16777216)	If the flight has a DEI010, indicating this is the operating carrier, then the non- operating carrier and flight number that duplicates with the leg will appear here.
32	Connections	Leg 1 Operating Flight Number	LEG_1_OPERATING_FLIGHT_NUMBER	VARCHAR (16777216)	If the flight has a DEI050, indicating this is not the operating carrier, then the operating carrier and flight number that duplicates with the leg will appear here.
33	Connections	Leg 1 Distance	LEG_1_DISTANCE	NUMBER(38,0)	The great circle distance between the departure and arrival port on the leg expressed in statute miles.
34	Connections	Leg 1 Departure Country	LEG_1_DEPARTURE_COUNTRY	VARCHAR (16777216)	The departure country code of the leg assigned by the ISO and used by IATA.
35	Connections	Leg 1 Arrival Country	LEG_1_ARRIVAL_COUNTRY	VARCHAR (16777216)	The arrival country code of the leg assigned by the ISO and used by IATA.
36	Connections	Leg 1 Connection Time	LEG_1_CONNECTION_TIME	NUMBER(38,0)	The time in minutes to connect to the next flight leg in the record
37	Connections	Leg 1 Low Cost Indicator	LEG_1_LOW_COST_INDICATOR	NUMBER(38,0)	A value of 1 indicates that the specific flight leg is a low-cost carrier.
38	Connections	Leg 1 MCT Status	LEG_1_MCT_STATUS	VARCHAR (16777216)	Indicates the type of connection in terms of II (International-International), ID (International-Domestic), DI (Domestic-International) or DD (Domestic-Domestic).
39	Connections	Leg 1 Traffic Restriction	LEG_1_TRAFFIC_RESTRICTION	VARCHAR (16777216)	Indicates the traffic restriction code if any of the flight leg.
40	Connections	Leg 1 Domicile Flag	LEG_1_DOMICILE_FLAG	NUMBER(38,0)	Indicates if the carrier for the leg is domicile to the country of departure.
41	Connections	Leg 1 Alliance Flag	LEG_1_ALLIANCE_FLAG	NUMBER(38,0)	Indicates if the carrier for the leg has an alliance membership
42	Connections	Leg 1 Service Type	LEG_1_SERVICE_TYPE	VARCHAR (16777216)	Indicates the IATA service type code of the flight leg.
43	Connections	Leg 1 Equipment Type/Body	LEG_1_EQUIPMENT_TYPE_BODY	VARCHAR (16777216)	Shows the equipment body type for the flight leg.
44	Connections	Leg 2 Departure City Code	LEG_2_DEPARTURE_CITY_CODE	VARCHAR (16777216)	The departure city code of the leg as designated by IATA. These are usually the same as the airport code unless the airport belongs to a multi airport city, e.g. LON is the city code for LHR, LGW, LCY, STN and LTN airports.
45	Connections	Leg 2 Departure Port Code	LEG_2_DEPARTURE_PORT_CODE	VARCHAR (16777216)	The departure port code of the leg as designated by IATA.
46	Connections	Leg 2 Arrival City Code	LEG_2_ARRIVAL_CITY_CODE	VARCHAR (16777216)	The arrival city code of the leg as designated by IATA. These are usually the same as the airport code unless the airport belongs to a multi airport city, e.g. LON is the city code for LHR, LGW, LCY, STN and LTN airports.
47	Connections	Leg 2 Arrival Port Code	LEG_2_ARRIVAL_PORT_CODE	VARCHAR (16777216)	The arrival port code of the leg as designated by IATA.
48	Connections	Leg 2 Carrier Code	LEG_2_CARRIER_CODE	VARCHAR (16777216)	The airline designator code of the leg assigned by either:  IATA  ICAO  OAG (IATA Controlled duplicate designators with 7 prefix)
49	Connections	Leg 2 Flight Number	LEG_2_FLIGHT_NUMBER	NUMBER(38,0)	The four digit flight number of the leg.
50	Connections	Leg 2 Effective From Date	LEG_2_EFFECTIVE_FROM_DATE	Date	The local effective from date of the leg shown as "CCYYMMDD".
51	Connections	Leg 2 Effective To Date	LEG_2_EFFECTIVE_TO_DATE	Date	The local effective to date of the leg shown as "CCYYMMDD." If a schedule is effective beyond that of the period chosen the date will appear as 20380101
52	Connections	Leg 2 Operating Days of Week	LEG_2_OPERATING_DAYS_OF_WEEK	VARCHAR (16777216)	The local operating departure days of the week of the leg. 1 = Monday, 2 = Tuesday etc.
53	Connections	Leg 2 Departure Time	LEG_2_DEPARTURE_TIME	VARCHAR (16777216)	The local departure time of the leg. The time is in 24 hour format expressed as hh:mm:ss.



54	Connections	Leg 2 Arrival Time	LEG_2_ARRIVAL_TIME	VARCHAR (16777216)	The local departure time of the leg. The time is in 24 hour format expressed as hh:mm:ss
55	Connections	Leg 2 Arrival Day Marker	LEG_2_ARRIVAL_DAY_MARKER	NUMBER(38,0)	The arrival day marker shows if the leg arrives on a different day to when it departed e.g. '-1' = previous day,'0' = same day,'1' = next day, '2' = 2 days later etc.
56	Connections	Leg 2 Elapsed Time	LEG_2_ELAPSED_TIME	NUMBER(38,0)	The elapsed journey time of the leg in minutes.
57	Connections	Leg 2 Stops	LEG_2_STOPS	NUMBER(38,0)	The number of stops on the leg.
58	Connections	Leg 2 Equipment Code	LEG_2_EQUIPMENT_CODE	VARCHAR (16777216)	The IATA aircraft type code of the leg.
59	Connections	Leg 2 Non-Operating Code Share Flight Numbers	LEG_2_NON_OPERATING_CODE_SHARE_ FLIGHT_NUMBERS	VARCHAR (16777216)	If the flight has a DEI010, indicating this is the operating carrier, then the non- operating carrier and flight number that duplicates with the flight will appear here
60	Connections	Leg 2 Operating Flight Number	LEG_2_OPERATING_FLIGHT_NUMBER	VARCHAR (16777216)	If the flight has a DEI050, indicating this is not the operating carrier, then the operating carrier and flight number that duplicates with the flight will appear here.
61	Connections	Leg 2 Distance	LEG_2_DISTANCE	NUMBER(38,0)	The great circle distance between the departure and arrival port on the leg expressed in statute miles.
62	Connections	Leg 2 Departure Country	LEG_2_DEPARTURE_COUNTRY	VARCHAR (16777216)	The departure country code of the leg assigned by the ISO and used by IATA.
63	Connections	Leg 2 Arrival Country	LEG_2_ARRIVAL_COUNTRY	VARCHAR (16777216)	The arrival country code of the leg assigned by the ISO and used by IATA.
64	Connections	Leg 2 Low Cost Indicator	LEG_2_LOW_COST_INDICATOR	VARCHAR (16777216)	A value of 1 indicates that the specific flight leg is a low-cost carrier.
65	Connections	Leg 2 Traffic Restriction	LEG_2_TRAFFIC_RESTRICTION	VARCHAR (16777216)	Indicates the traffic restriction code if any of the flight leg
66	Connections	Leg 2 Domicile Flag	LEG_2_DOMICILE_FLAG	VARCHAR (16777216)	Indicates if the carrier for the leg is domicile to the country of departure.
67	Connections	Leg 2 Alliance	LEG_2_ALLIANCE	VARCHAR (16777216)	Indicates if the carrier for the leg has an alliance membership
68	Connections	Leg 2 Service Type	LEG_2_SERVICE_TYPE	VARCHAR (16777216)	Indicates the IATA service type code of the flight leg.
69	Connections	Leg 2 Equipment Type/Body	LEG_2_EQUIPMENT_TYPE_BODY	VARCHAR (16777216)	Shows the equipment body type for the flight leg.

# 7. Emissions Status View

#### 7.1 Emissions Status

#	Category	Field Name	Name in Database	Туре	Description
1	Emissions	Carrier Code	CARRIER_CODE	VARCHAR (16777216)	<ul> <li>This field contains a carrier designator code assigned by either:</li> <li>IATA (International Air Transport Association)</li> <li>ICAO (International Civil Aviation Organization)</li> <li>OAG (Controlled duplicate designators)</li> </ul>
2	Emissions	Service Suffix	SERVICE_SUFFIX	VARCHAR (16777216)	A code assigned by the administrating carrier for operational purposes.
3	Emissions	Flight Number	FLIGHT_NUMBER	VARCHAR (16777216)	The four-digit flight number of the leg.



4	Emissions	Departure Airport	DEPARTURE_AIRPORT	VARCHAR (16777216)	The departure port code as assigned by IATA e.g. JFK.
5	Emissions	Arrival Airport	ARRIVAL_AIRPORT	VARCHAR (16777216)	The arrival port code as assigned by IATA e.g. LAX.
6	Emissions	Schedule Departure Date	SCHEDULED_DEPARTURE_DATE	VARCHAR (16777216)	The schedule departure date that the operation departs in YYYY-MM-DD
7	Emissions	Aircraft Type	AIRCRAFT_TYPE	VARCHAR (16777216)	IATA 3-character designator for the aircraft/equipment type code. E.g. CR1
8	Emissions	Aircraft Registration Number	AIRCRAFT_REGISTRATION_NUMBER	VARCHAR (16777216)	The registration number of the aircraft e.g. N153PQ
9	Emissions	Estimated Fuel Burn Taxi Out Tonnes	ESTIMATED_FUEL_BURN_TAXI_OUT_TONNES	FLOAT	An estimation in of the amount of fuel consumed in tonnes when the aircraft is taxing out to the runway from the terminal
10	Emissions	Estimated Fuel Burn Takeoff Tonnes	ESTIMATED_FUEL_BURN_TAKEOFF_TONNES	FLOAT	An estimation of the amount of fuel consumed in tonnes when the aircraft is taking off from the runway
11	Emissions	Estimated Fuel Burn Climb Out Tonnes	ESTIMATED_FUEL_BURN_CLIMBOUT_TONNES	FLOAT	An estimation of the amount of fuel consumed in tonnes when the aircraft is climbing to cruising altitude after take-off
12	Emissions	Estimated Fuel Burn Cruise Tonnes	ESTIMATED_FUEL_BURN_CRUISE_TONNES	FLOAT	An estimation of the amount of fuel consumed in tonnes when the aircraft is at cruising altitude after climbing out
13	Emissions	Estimated Fuel Burn Approach Tonnes	ESTIMATED_FUEL_BURN_APPROACH_TONNES	FLOAT	An estimation of the amount of fuel consumed in tonnes when the aircraft is dropping from cruising altitude to landing
14	Emissions	Estimated Fuel Burn Taxi in Tonnes	ESTIMATED_FUEL_BURN_TAXI_IN_TONNES	FLOAT	An estimation of the amount of fuel consumed in tonnes when the aircraft is taxing in from the runway to the terminal
15	Emissions	Estimated Fuel Burn Total Tonnes	ESTIMATED_FUEL_BURN_TOTAL_TONNES	FLOAT	The total estimated fuel consumed in tonnes during the flight operation
16	Emissions	Estimated CO2 Taxi Out Tonnes	ESTIMATED_CO2_TAXI_OUT_TONNES	FLOAT	An estimation of the amount of CO2 in tonnes emitted when the aircraft is taxing out to the runway from the terminal
17	Emissions	Estimated CO2 Take Off Tonnes	ESTIMATED_CO2_TAKEOFF_TONNES	FLOAT	An estimation of the amount of CO2 in tonnes emitted when the aircraft is taking off from the runway
18	Emissions	Estimated CO2 Climb Out Tonnes	ESTIMATED_CO2_CLIMBOUT_TONNES	FLOAT	An estimation of the amount of CO2 in tonnes emitted when the aircraft is climbing to cruising altitude after take-off
19	Emissions	Estimated CO2 Cruise Tonnes	ESTIMATED_CO2_CRUISE_TONNE	FLOAT	An estimation of the amount of CO2 in tonnes emitted when the aircraft is at cruising altitude after climbing out
20	Emissions	Estimated CO2 Approach Tonnes	ESTIMATED_CO2_APPROACH_TONNES	FLOAT	An estimation of the amount of CO2 in tonnes emitted when the aircraft is dropping from cruising altitude to landing
21	Emissions	Estimated CO2 Taxi in Tonnes	ESTIMATED_CO2_TAXI_IN_TONNE	FLOAT	An estimation of the amount of CO2 in tonnes emitted when the aircraft is taxing in from the runway to the terminal
22	Emissions	Estimated CO2 Total Tonnes	ESTIMATED_CO2_TOTAL_TONNES	FLOAT	The total estimated CO2 emitted in tonnes during the flight operation
23	Emissions	Missing Reference Flight Times	MISSING_REFERENCE_FLIGHT_TIMES	BOOLEAN	Indicates when the flight instance is missing the historic flight times on this route needed for the fuel burn consumption and CO2 emission calculation.



# 8. Emissions Schedules View

#### 8.1 Emissions Schedules

#	Category	Field Name	Name in Database	Туре	Description
1	Emissions	Scheduled Flight Leg PK	SCHEDULED_FLIGHT_LEG_PK	VARCHAR (16777216)	Unique combination of the FLIGHT_DESIGNATOR, FLIGHT_NUMBER, SERVICE_SUFFIX, SEQUENCE_NUMBER, PERIOD_OF_OPERATION_START_DATE, PERIOD_OF_OPERATION_END_DATE, DAYS_OF_OPERATION, OUTBOUND_CODE, STOPS, RELEASE_SELL_DATE
2	Emissions	Carrier Code	CARRIER_CODE	VARCHAR (16777216)	<ul> <li>This field contains a carrier designator code assigned by either:</li> <li>IATA (International Air Transport Association)</li> <li>ICAO (International Civil Aviation Organization)</li> <li>OAG (Controlled duplicate designators)</li> </ul>
3	Emissions	Outbound Code	OUTBOUND_CODE	VARCHAR (16777216)	An in-house OAG code to differentiate between duplicate codes issued by IATA to Passenger and Cargo carriers, (e.g. 7C)
4	Emissions	Service Suffix	SERVICE_SUFFIX	VARCHAR (16777216)	A code assigned by the administrating carrier for operational purposes.
5	Emissions	Flight Number	FLIGHT_NUMBER	VARCHAR (16777216)	The four digit flight number of the leg.
6	Emissions	Departure Airport	DEPARTURE_AIRPORT	VARCHAR (16777216)	The departure port code as assigned by IATA e.g. JFK.
7	Emissions	Arrival Airport	ARRIVAL_AIRPORT	VARCHAR (16777216)	The arrival port code as assigned by IATA e.g. LAX.
8	Emissions	Schedule Departure Date	SCHEDULED_DEPARTURE_DATE	VARCHAR (16777216)	The schedule departure date that the operation departs in YYYY-MM-DD
9	Emissions	Aircraft Type	AIRCRAFT_TYPE	VARCHAR (16777216)	IATA 3-character designator for the aircraft/equipment type code. E.g. CR1
10	Emissions	Seats	SEATS	NUMBER(38,0)	Available seats for the operation. The value is taken from information from the operating carrier where applicable. Where specific seats data by carrier is not available the value is calculated using a proprietary data model.
11	Emissions	Estimated Fuel Burn Taxi Out Tonnes	ESTIMATED_FUEL_BURN_TAXI_OUT_TON NES	FLOAT	An estimation in of the amount of fuel consumed in tonnes when the aircraft is taxing out to the runway from the terminal
12	Emissions	Estimated Fuel Burn Takeoff Tonnes	ESTIMATED_FUEL_BURN_TAKEOFF_TON NES	FLOAT	An estimation of the amount of fuel consumed in tonnes when the aircraft is taking off from the runway
13	Emissions	Estimated Fuel Burn Climb Out Tonnes	ESTIMATED_FUEL_BURN_CLIMBOUT_TO NNES	FLOAT	An estimation of the amount of fuel consumed in tonnes when the aircraft is climbing to cruising altitude after take-off
14	Emissions	Estimated Fuel Burn Cruise Tonnes	ESTIMATED_FUEL_BURN_CRUISE_TONN ES	FLOAT	An estimation of the amount of fuel consumed in tonnes when the aircraft is at cruising altitude after climbing out
15	Emissions	Estimated Fuel Burn Approach Tonnes	ESTIMATED_FUEL_BURN_APPROACH_TO NNES	FLOAT	An estimation of the amount of fuel consumed in tonnes when the aircraft is dropping from cruising altitude to landing
16	Emissions	Estimated Fuel Burn Taxi in Tonnes	ESTIMATED_FUEL_BURN_TAXI_IN_TONN ES	FLOAT	An estimation of the amount of fuel consumed in tonnes when the aircraft is taxing in from the runway to the terminal



17	Emissions	Estimated Fuel Burn Total Tonnes	ESTIMATED_FUEL_BURN_TOTAL_TONNE S	FLOAT	The total estimated fuel consumed in tonnes during the flight operation
18	Emissions	Estimated CO2 Taxi Out Tonnes	ESTIMATED_CO2_TAXI_OUT_TONNES	FLOAT	An estimation of the amount of CO2 in tonnes emitted when the aircraft is taxing out to the runway from the terminal
19	Emissions	Estimated CO2 Take Off Tonnes	ESTIMATED_CO2_TAKEOFF_TONNES	FLOAT	An estimation of the amount of CO2 in tonnes emitted when the aircraft is taking off from the runway
20	Emissions	Estimated CO2 Climb Out Tonnes	ESTIMATED_CO2_CLIMBOUT_TONNES	FLOAT	An estimation of the amount of CO2 in tonnes emitted when the aircraft is climbing to cruising altitude after take-off
21	Emissions	Estimated CO2 Cruise Tonnes	ESTIMATED_CO2_CRUISE_TONNE	FLOAT	An estimation of the amount of CO2 in tonnes emitted when the aircraft is at cruising altitude after climbing out
22	Emissions	Estimated CO2 Approach Tonnes	ESTIMATED_CO2_APPROACH_TONNES	FLOAT	An estimation of the amount of CO2 in tonnes emitted when the aircraft is dropping from cruising altitude to landing
23	Emissions	Estimated CO2 Taxi in Tonnes	ESTIMATED_CO2_TAXI_IN_TONNE	FLOAT	An estimation of the amount of CO2 in tonnes emitted when the aircraft is taxing in from the runway to the terminal
24	Emissions	Estimated CO2 Total Tonnes	ESTIMATED_CO2_TOTAL_TONNES	FLOAT	The total estimated CO2 emitted in tonnes during the flight operation
25	Emissions	Missing Reference Flight Times	MISSING_REFERENCE_FLIGHT_TIMES	BOOLEAN	Indicates when the flight instance is missing the historic flight times on this route needed for the fuel burn consumption and CO2 emission calculation.

# 9. Additional Definitions

Below is the list of some useful definitions that can help you better understand the data points.

#### 9.1 Segments vs Legs

Flight segment is a flight with a single flight designator (airline code and flight number) between the point where passengers first board an aircraft and the passengers' final destination. A flight segment can include any number of stops where passengers board and deplane the same aircraft operated by a single airline.

Flight legs is the operation of an aircraft from one scheduled departure station to its next scheduled arrival station with no stopover or intermediate stop. A flight segment can include one or more legs operated by a single aircraft with the same flight designator.

Example: A single flight number and the same aircraft from  $A \rightarrow D$  with stopovers in B and C.

Flight segments would be: Flight Legs would be the

$A \rightarrow C$	$A \rightarrow B$
$A \rightarrow D$	$B \rightarrow C$
$B \rightarrow D$	$C \rightarrow D$

#### 9.2 Marketing vs operating flights

A flight from London Heathrow (LHR) to John F. Kennedy International Airport (JFK) can be operated by British Airways (BA) meaning BA is responsible for the crew and owns the aircraft, but because BA has a code sharing agreement with American Airlines (AA), the flight ticket can be sold by AA with their own flight number. This means that the marketing flight is from AA, but the operating flight is from BA.

#### 9.3 Metropolitan areas

In addition to airport codes, IATA has assigned "metropolitan area codes" which represent the airports serving a metropolitan area. e.g. LON includes the following airports

- London Biggin Hill (BQH)
- London City (LCY)
- London Gatwick (LGW)
- London Luton (LTN)
- London Heathrow (LHR)
- London Southend (SEN)
- London Stansted (STN)

Note: There are some airports that may not be recognised by IATA in a metropolitan area although they are physically located there.

#### 9.4 OAG Seats data

The new model combines schedules, historical status and fleet data and applies both Machine Learning (ML) and our Flight AI Framework (FLAI) which enable us to use variants in the Aircraft fleet owner's flight history and other fields in the schedule leg to determine most likely aircraft

variant and from there predict the most accurate total flight seats as well as seats at cabin level i.e. First Class, Business, Premium Economy, Economy Plus and Economy.

#### 9.5 OAG Schedule Fingerprint

Currently the OAG Fingerprint has been released as a "preview" with the current version of the Direct product. The next release of Direct will include more historical data, some performance improvements, and the full implementation of the fingerprint.

Until then, customers should expect this data point to be intermittent and subject to change across different file dates.