FLIGHT INFORMATION – DATA SPECIFICATIONS

Data specifications for operational data at Amsterdam Airport Schiphol

Abstract

This document details the data requirements described in the Schiphol regulations and the Schiphol Charges and Conditions. It aims to clarify the data needed by Schiphol Nederland BV and to minimize the efforts needed to provide this data.

1 FOREWORD

This document contains the functional data-specification of all data that is required of airlines operating at Amsterdam Airport Schiphol, to ensure the correct daily operation of the airport and calculate the correct airport charges to the operating airline. Functional in the sense that only the business aspects of the data-items are listed and defined.

This document can be used as the business-reference in all communication concerning the data required.

This document intends to provide clarification of the data requirements in the Schiphol Regulations [AMS REG] and Schiphol Charges and Conditions [AMS CHGS] (for explanation of these references, see Referenced documents).

1.1 APPLICABILITY

This document is applicable to the automated and non-automated data-delivery activities between operating airlines and the operational departments of Amsterdam Airport Schiphol concerning flight information.

1.2 DOCUMENT OWNERSHIP

This document is owned and maintained by Process Development and Capacity Management of Airport Operations, Amsterdam Airport Schiphol.

1.3 REFERENCED DOCUMENTS

[IATA PSCRM] IATA Passenger Services Conference Resolutions Manual, 32nd edition.

[IATA AHM] IATA Airport Handling Manual, 33rd edition.

[IATA SSIM] IATA Standard Schedules Information Manual, issue March 2017.

[AMS CHGS] Schiphol Charges and Conditions, 1 April 2018

[AMS REG] Schiphol Regulations, version 26, effective 1 November 2017

1.4 CONTENTS

2 INTRODUCTION

2.1 RATIONALE

As per Schiphol Regulations [AMS REG] and Schiphol Charges and Conditions [AMS CHGS], all airlines operating at Amsterdam Airport Schiphol shall provide data concerning their operational flights to Amsterdam Airport Schiphol for

1. Communication of correct and pertinent flight information to passengers and operational personnel, and
2. Forecasting, planning and allocation of airport infrastructure (gates, stands, check-in area's etc. etc.), and
3. Calculating airport charges and levies.

For all data-exchange to be efficient and error-free, this data specification defines which data is required for above purposes, and provides guidance as to the data quality required.

2.2 DATA USE

Amsterdam Airport Schiphol will use supplied data to:

1. forecast and plan flight, passenger and baggage flows at the airport and allocate resources accordingly
2. create a daily operational flight schedule for airport operations and publication to the public
3. calculate airport charges and levies
4. assess schedule/slot congruity

2.3 CONTEXT

Data provisioning to Amsterdam Airport Schiphol involves multiple data categories, as shown in the schematic below.

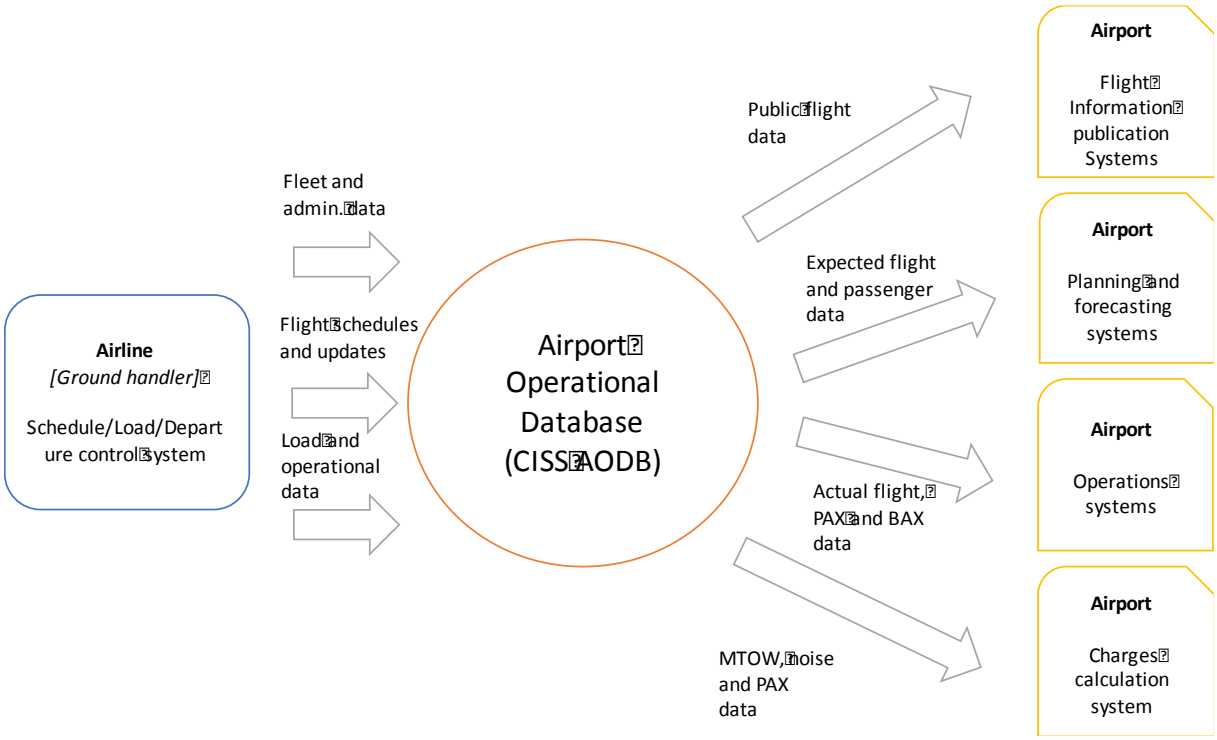

Figure 1: Amsterdam Airport Schiphol AODB-context

3 DATA SPECIFICATIONS

Three types of data are required for planning/forecasting, operations and billing. These are:

- Airline fleet and administrative data, including aircraft registrations, noise certificate values and aircraft configurations, MTOWs, needed for operations and billing purposes.
- Flight schedules (standard and ad-hoc), needed for forecasting and planning purposes
- Load and operational data, e.g. passengers and baggage on board, cargo weights, needed for planning, operation and billing purposes.

These data types are described in the following paragraphs.

3.1 AIRLINE FLEET AND ADMINISTRATIVE DATA

The following data shall be delivered to Amsterdam Airport Schiphol prior to the first operational flight, and in case of amendments/modifications prior to the operation of each changed flight.

1. Airline contact list containing telephone numbers and e-mail addresses of all relevant contacts
2. List of all aircraft with which you intend to fly at AMS containing aircraft registrations, aircraft type, aircraft configuration
3. Copies of the noise certificates for each aircraft with which you intend to fly at AMS.

3.2 FLIGHT SCHEDULES

Airlines shall supply their flight schedules in IATA SSIM Standard Schedules Message (SSM) format compliant with [IATA SSIM] chapters 4 and 7.

For ad-hoc and incidental flights, data shall be sent by means of IATA SSIM Ad-hoc Schedules Message (ASM) format compliant with [IATA SSIM] chapters 5 and 7

Modifications to these schedules shall be sent as soon as data is available, and no later than 1200 hours local AMS time on the day before operation of a modified flight.

SSM Schedules for each season shall be sent prior to the start of the IATA season at the latest 3 working days after Historic Baseline Date (Summer: 31st January, Winter: 31st August). Updates to these schedules shall be sent on a weekly basis. Any update to a standard schedule received after 1200 hours AMS local on the day before operation of a flight will be ignored and the standard schedule will be used.

ASM Schedules shall be sent as soon as data is available, and no later than 6 weeks before operation of the flight.

SSM and ASM messages shall contain at least the following data items:

Data item	Description	Note
Aircraft configuration	The cabin type and number of seats	Mandatory if PRBD is not supplied
Aircraft type	The IATA Group code for the aircraft	

Data item	Description	Note
Airline disclosure – Code share		
Airline disclosure – Joint operation		
Arrival flight designator	The flight identification, consisting of • IATA or ICAO Airline code • Flight number • Flight suffix (optional)	
Arrival time	Scheduled time of arrival. Only applies if arriving flight is given.	
Days of operation	The operating days of the week, represented in a 7-digit number, where each position and number indicates operation on the day of the week: 1 for Monday to 7 for Sunday; 0 indicating no operation on that day.	
Departure flight designator	See Arriving flight ID	
Departure time	Scheduled time of departure. Only applies if departing flight is given.	
Destination airport	IATA code for the destination airport	
Frequency rate	Indicates how often the operation is repeated. If this is not included it is understood that the operation is carried out weekly. A 2 indicates that the operation is carried out once every two weeks. No other values are accepted	
Next stopover airport	IATA code for the next airport in which the flight will make a stopover. Optional if this is the same as the destination airport	
Origin airport	The IATA code for the originating airport	
Overnight indicator	Number expressing the number of days after the arrival that the departure flight will take place. Only the values 1 and 2 are accepted. If the departure is on the same day as the arrival, this is omitted	
Passenger Reservations Boarding Designator	The standard PRBD	Mandatory if Aircraft configuration is not supplied

Data item	Description	Note
Period of operation	The start and end date of the operation	
Previous stopover airport	The IATA code for the previous stopover airport.	
Service code	IATA Service type code for the operation	

3.3 LOAD AND OPERATIONAL DATA

Airlines operating at Amsterdam Airport Schiphol shall supply the airport with the data described in this chapter

- At least 6 weeks before operation of a flight *with estimated load data items, updated daily*
- no later than 1200 hours local AMS time on the day before operation of a flight *with expected load data items and updated when changed*
- No later than 0930 hours local AMS time on the day after operation *with updated actual load data*

Load and operational data is:

1. Flight data, see section 3.3.1
2. Passenger data, see section 0
3. Baggage data, see section 0

3.3.1 FLIGHT DATA

Load and operational flight data shall be sent using the following messages:

- IATA LDM [IATA AHM] AHM 583
- IATA EDP Loadsheet [IATA AHM] AHM 517
- IATA SLS [IATA AHM] AHM 588
- IATA MVT [IATA AHM] AHM 780

Data will be expected to comply with above message standards, and contain at least the following data items:

Data item	Description	Notes
Actual baggage items on board	The number of actual baggage items on board, divided into: ○ Local/Terminating baggage items ○ Transfer baggage items	
Actual baggage weight	The expected total weight of baggage on board	
Actual passengers on board	The number of actual passengers on board, divided into ○ Local departing/arriving ○ Transfer ○ Transito Passenger counts shall also indicate the number of ○ Infants ○ Dead-headed crew ○ State seats	A positive integer per passenger type

Data item	Description	Notes
Aircraft configuration	The IATA Seat configuration element, listing available seats for each compartment type or cabin class code.	Compliant with IATA RP 1707b, section 2.12.3 [IATA PSCRM]
Aircraft registration	The registered civil aircraft registration code.	Compliant with ICAO regulations. All aircraft must be registered with a national aviation authority
Aircraft type	The IATA and ICAO Aircraft type designators	IATA Aircraft Type code and Group code ICAO Document 8643 Aircraft Type Designators
Code shared flights	The flight numbers of code-shared flights with which this flight is operated	Valid flight number
Delay codes	Any delay codes applied to the operation of the flight including the number of delay minutes	IATA AHM 730 [IATA AHM] compliant
Expected baggage items	The number of expected baggage items on board, divided into: ○ Local/Terminating baggage items ○ Transfer baggage items	
Expected baggage weight	The expected total weight of baggage on board	
Expected passengers on board	The number of expected passengers on board, divided into ○ Local departing/arriving ○ Transfer ○ Transito Passenger counts shall also indicate the number of ○ Infants ○ Dead-headed crew ○ State seats	A positive integer per passenger type
Flight direction	The direction of the flight, i.e. arrival or departure.	Arrival or Departure
Flight identification	The IATA Flight ID consisting of the Flight/Carrier prefix and the Flight number.	Carrier prefix shall be IATA 2-character code or ICAO 3-character code compliant

Data item	Description	Notes
Flight remarks		
Flight route	The IATA abbreviation of the origin or the destination airport of the flight	Compliant with the IATA Airport/Town tables
Flight service type	The IATA service type of the flight	Compliant with IATA service types
Ground handler	The (passenger and baggage) ground handling company that will handle the flight at the airport	
Scheduled In-blocks time	The date and time that an aircraft is scheduled to arrive at its parking position	Valid date and time, in Zulu
Scheduled Off-block time	The date and time that an aircraft is scheduled to depart from its parking position	Valid date and time, Zulu
Seats	The total number of seats on the aircraft. If not provided, this number will be calculated from the Aircraft configuration.	A positive integer
Weight of cargo & mail	The weight in tons of cargo and mail on board	

3.3.2 PASSENGER DATA

Passenger load and operational data shall be sent using the following messages:

- IATA PNL [IATA PSCRM] RP 1708
- IATA PRL [IATA PSCRM] RP 1719b
- IATA PTM [IATA PSCRM] RP 1718
- IATA PAL/CAL [IATA PSCRM] RP 1708a
- IATA PSM [IATA PSCRM] RP 1715

Data will be expected to comply with above message standards and IATA DED [IATA PSCRM] RP 1707b, and contain at least the following data items:

Data item	Description	Notes
Actual passengers on board	The number of actual passengers on board, divided into ○ Local departing/arriving ○ Transfer ○ Transito Passenger counts shall also indicate the number of ○ Online check-in ○ Infants ○ Dead-headed crew ○ State seats	This is the number of passengers that are actually on board
Baggage tag details	TH baggage tag details of all tagged (hold) baggage items on board	
Code shared flights	The flight numbers of code-shared flights with which this flight is operated	Valid flight number
Estimated passengers on board	The estimated number of passengers on board, divided into ○ Local departing/arriving ○ Transfer ○ Transito Passenger counts shall also indicate the number of ○ Infants ○ Dead-headed crew ○ State seats	This is the number of passengers that are estimated to be on board a flight, as known 6 weeks before flight operation
Expected passengers on board	The number of expected passengers on board, divided into	This is the number of passengers that are expected to be on board a flight,

Data item	Description	Notes
	○ Local departing/arriving ○ Transfer ○ Transito Passenger counts shall also indicate the number of ○ Online check-in ○ Infants ○ Dead-headed crew ○ State seats	as known 1200 hours local AMS time on the day before flight operation
Flight direction	The direction of the flight, i.e. arrival or departure.	Arrival or Departure
Flight identification	The IATA Flight ID consisting of the Flight/Carrier prefix and the Flight number.	Carrier prefix shall be IATA 2-character code or ICAO 3-character code compliant
Flight route	The IATA abbreviation of the origin or the destination airport of the flight	Compliant with the IATA Airport/Town tables
Ground handler	The (passenger and baggage) ground handling company that will handle the flight at the airport	
PRM Name and service requirements	The name and special services required for each PRM	
Seat configuration	The IATA Seat configuration element, listing available seats for each compartment type or cabin class code.	Compliant with IATA RP 1707b, section 2.12.3 [IATA PSCRM]
Total PRM by origination/destination	The total number of passengers requiring assistance per origin/destination	
Transfer passenger data	The number of passengers per onward destination, per cabin class	

3.3.3 BAGGAGE DATA

Baggage load and operational data shall be sent using the following messages:

- IATA BSM [IATA PSCRM] RP 1745
- IATA BMM [IATA PSCRM] RP 1745

This applies to all baggage routings through Amsterdam Airport Schiphol, e.g. local departing baggage items, transfer baggage items and local terminating baggage items.

BSM's shall be sent no later than 40 minutes before flight operation.

BMMs shall be sent no later than 1 minute after they have been created within the DCS of the baggage tag issuer.

Data will be expected to comply with above message standards, and contain at least the following data items:

Data item	Description	Notes
Change of status indicator	See [IATA PSCRM] RP 1745	
Version and supplementary data	See [IATA PSCRM] RP 1745	
Outbound flight information	See [IATA PSCRM] RP 1745	Flight numbers must match those given in other messages
Inbound flight information	See [IATA PSCRM] RP 1745	Flight numbers must match those given in other messages
Onward flight information	See [IATA PSCRM] RP 1745	Flight numbers must match those given in other messages
Baggage tag details	See [IATA PSCRM] RP 1745	
Check-in location information	See [IATA PSCRM] RP 1745	
Reconciliation data	See [IATA PSCRM] RP 1745	
Handling location	See [IATA PSCRM] RP 1745	
Pieces weight, dimension and type data	See [IATA PSCRM] RP 1745	
Passenger name	See [IATA PSCRM] RP 1745	
Ground transport	See [IATA PSCRM] RP 1745	
Frequent traveller number	See [IATA PSCRM] RP 1745	

Data item	Description	Notes
Corporate or group name	See [IATA PSCRM] RP 1745	
Baggage tag printer ID	See [IATA PSCRM] RP 1745	
Baggage exception data	See [IATA PSCRM] RP 1745	
Internal airline data	See [IATA PSCRM] RP 1745	
Baggage security screening	See [IATA PSCRM] RP 1745	
Change of status indicator	See [IATA PSCRM] RP 1745	
Version and supplementary data	See [IATA PSCRM] RP 1745	

3.4 ADDITIONAL DATA REQUIREMENTS

In addition to the data required as specified in the sections above, Amsterdam Airport Schiphol requests any special information pertaining to the flight to be sent no later than 1200 hours local AMS time on the day before operation of the flight. This information may be:

- Indication of and information concerning hazardous materials on board;
- Special circumstances applying to the flight.

4 DATA QUALITY

To ensure the correct use of all data supplied, airlines shall ensure that the data supplied is of sufficient quality. In order to assess the quality of the data supplied, Amsterdam airport Schiphol will monitor the following:

1. Timely delivery of data required
2. Compliance with the IATA specifications listed in this document
3. Using the same flight number element and flight number element format in all messages
4. Passenger counts within bounds (95 %) of aircraft configuration data
5. Schedule data in compliance with coordinated slot information
6. Actual equipment use in compliance with supplied flight data

Amsterdam Airport Schiphol will endeavour inform all parties concerned of data-quality issues perceived in a timely manner. However, quality of the data supplied remains the responsibility of the supplier.

5 METHODS OF DATA DELIVERY

Amsterdam Airport Schiphol facilitates various methods to deliver required pre- and post-flight information. Reference is made to the technical documentation describing the information technology requirements for certain delivery methods.

Due to the dynamic nature of data delivery mechanisms, all address and mechanisms for data delivery can be requested at data@schiphol.nl. At a later stage, these mechanisms and addresses will be made available by Amsterdam Airport Schiphol online.

6 CHANGE HISTORY

Date	Version	Author	Reason
28-2-1017	1.0	MvG	Final first release.
1-6-2017	2.0	MvG	Full rewrite, Specification of IATA standard messages.
8-6-2017	2.1	MvG	Minor changes and clean-up for pre-consultation
18-8-2017	2.2	MvG	Prep for consultation
21-8-2017	2.3	MvG	Minor corrections to timeliness requirements
11-9-2017	2.4	MvG	Minor changes
12-9-2017	2.5	WCV	Change to schedule delivery timeline