

title Data Scope Document

subject **Skyguide as Data Provide for EAD**

version/lang. 2.0 E

status Released

date of issue 2015-08-12

effective date

contact/title Wolfgang Graf / ONDS

doc. owner/title Dominik Guler / OND

location only the current electronic version on the intranet is valid

file 58097850

pages 15

classification Public

for action As contract and WI Annex EAD Operation.

for information Skyguide and Group EAD

annexes None

abstract *This document describes the data scope which has to be fulfilled for EAD Operation inside Sky guide OADS unit.*

legal notice The entire content of this publication is protected by copyright. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any electronic, mechanical, photocopying and recording means or otherwise, without the prior written permission of Skyguide.

Contents

1	History of changes	3
2	References	4
3	Introduction	5
4	Area of Responsibility	6
4.1	General	6
4.2	Exceptions	6
5	Entity and Attribute List	7
5.1	Aerodrome Data	7
5.2	Airspaces	9
5.2.1	General	9
5.2.2	Exceptions	9
5.2.3	Airspace Data	9
5.3	Navaid Data	11
5.4	Route Data	12
5.5	Special Date Data	14
6	Data Not to be Maintained by Skyguide	15

1 History of changes

Changes				
Version	Status	Date of issue	Author	Details
0.1	Draft	2014-10-02	Wolfgang Graf	Initial Version
0.2	Draft	2014-10-31	Wolfgang Graf	Update
1.0	Released	2014-01-12	AIM Services	
1.1	Draft	2015-08-12	Wolfgang Graf	Aerodromes/RWYs extended
2.0	Released	2015-08-12	AIM Services	See Draft.

2 References

Following documents have been taken into consideration for the elaboration or have been used as source of the present content:

- Minimum SDO Document EAD
- SIGMA Rules EAD

3 Introduction

This document describes the scope of data from the time when Skyguide becomes accountable for providing data from Switzerland and Principality of Liechtenstein into EAD on own discretion by EAD Pro PC. This document is applicable when the existing Dataset for Switzerland and the Principality of Liechtenstein in EAD was approved by Skyguide and the accountability of operation is transferred from Group EAD to Skyguide.

This document is part of the EAD Agreement between Skyguide and Eurocontrol.

4 Area of Responsibility

4.1 General

The area of responsibility will be inside the country border of Switzerland and the Principality of Liechtenstein including a buffer zone of 5NM outside.

All Features in Delegated Airspaces have to be maintained by the owner of the territory.

Special regulations are stated in Chapter 2.2 "Exceptions".

4.2 Exceptions

When Airspaces or Routes are overlapping to another neighborhood country, it is at Skyguide and the appropriate country to clarify the responsibility of this explicit item. As for the initial beginning, Skyguide will accept the situation as it was before between Group EAD and the appropriate countries.

- **TMA/CTR Bâle:**
 - Responsibility is at France for data entry.
- **TMA Milano**
 - Responsibility is at Italy for data entry.
- **TMA Zurich**
 - Responsibility is at Switzerland for data entry.
- **TMA/CTR Geneva**
 - Responsibility is at Switzerland for data entry.

5 Entity and Attribute List

5.1 Aerodrome Data

Skyguide provides only aerodromes inside the country border of Switzerland and the Principality of Liechtenstein.

Following attributes according to Table 1 "Aerodrome Data" of EAD MIN SDO will be maintained, when data is available for Skyguide:

- AD_HP (Aerodrome / Heliport)
 - CODE_ID (Identification)
 - TXT_NAME (Name)
 - CODE_ICAO (ICAO Code)
 - CODE_IATA (IATA Code)
 - CODE_TYPE (Type)
 - GEO_LAT (Latitude)
 - GEO_LONG (Longitude)
 - CODE_DATUM (Datum)
 - TXT_NAME_CITY_SER (Served city)
 - TXT_SITE_DESCRIPTION
 - TXT_NAME_AD_ADMINISTRATION
 - TXT_REFERENCE_POINT_DESCRIPTION
 - VAL_REF_T
 - UOM_REF_T
 - VAL_MAG_VAR
 - DATE_MAG_VAR
 - VAL_MAG_VAR_CHG
 - VAL_TRANSITION_ALT
 - UOM_TRANSITION_ALT
 - TXT_ALTIMETER_CHECK_LOCATION
 - AD_HP_COLLOCATION (CODE_ID of host)
 - VAL_ELEV
 - UOM_DIST_VER
- AD_HP_ADDRESS
 - CODE_TYPE
 - TXT_ADDRESS
- RWY
 - TXT_DESIG (Designator)
 - VAL_LEN
 - UOM_DIM_RWY
 - VAL_WID
 - UOM_DIM_RWY
 - VAL_LEN_STRIP
 - UOM_DIM_STRIP
 - VAL_WID_STRIP
 - UOM_DIM_STRIP
 - SURFACE_CHARACTERISTICS
 - VAL_PCN_CLASS
 - CODE_PCN_MAX_TIRE_PRESSURE
 - CODE_PCN_PAVEMENT_TPYE

- CODE_PCN_PAVEMENT_SUBGRADE
- RWY_DIRECTION (RWY direction)
 - TXT_DESIG (Designator)
 - VAL_TRUE_BRG
 - VAL_MAG_BRG
- RWY_CLINE_POINT
 - CODE_DATUM
 - GEO_LAT
 - GEO_LONG
 - VAL_ELEV
 - UOM_DIST_VER
- AD_HP_USAGE (Flight Class Entity)
- CODE_USAGE_LIMITATION (Permission records)
- CODE_RULE (IFR, VFR, Both)
- CODE_ORIGIN (NTL, INTL, ANY)
- CODE_PURPOSE (Scheduled, Non Sch, Priv)
- CODE_MIL (Mil, CIV, Private)

5.2 Airspaces

5.2.1 General

Skyguide provides only airspace data inside the country border of Switzerland and Principality of Liechtenstein.

5.2.2 Exceptions

Skyguide does not provide any data of airspace type "FIR", "CTR" and "Radar Sectors" as they will be maintained by Group EAD.

5.2.3 Airspace Data

5.2.3.1 Attributes

- AIRSPACE (Airspace)
 - CODE_TYPE (Type)
 - CODE_ID (Coded identifier)
 - TXT_NAME (Name)
 - CODE_LOC_IND (Location indicator (ICAO Doc. 7910))
 - VAL_DIST_VER_UPPER (Upper Limit)
 - UOM_DIST_VER_UPPER (Unit of measurement (upper limit))
 - CODE_DIST_VER_UPPER (Reference for upper limit)
 - VAL_DIST_VER_LOWER (lower limit)
 - UOM_DIST_VER_LOWER (Unit of measurement (lower limit))
 - CODE_DIST_VER_LOWER (Reference for lower limit)
- AIRSPACE_VERTEX (Airspace vertex)
 - NO_SEQ (Sequence number)
 - GEO_LAT (Latitude)
 - GEO_LONG (Longitude)
 - CODE_DATUM (Datum)
 - GEO_LAT_ARC (Latitude for arc)
 - GEO_LONG_ARC (Longitude for arc)
 - VAL_RADIUS_ARC (Radius of arc)
 - UOM_RADIUS_ARC (Unit of measurement (arc, circle radius))
 - TXT_RMK (Remark)
- TIMETABLE (Timetable)
 - CODE_WORK_HR (Working hours)
 - TXT_RMK_WORK_HR (Remark to working hours)
- TIMESHEET (Timesheet)
 - TIME_HR (time reference system)
 - DATE_VALID_WEF (Yearly start date)
 - DATE_VALID_TIL (Yearly end date)
 - CODE_DAY (Affected day or start of affected period)
 - CODE_DAY_TIL (End of affected period)
 - TIME_WEF (Start - Time)
 - CODE_EVENT_WEF (Start - Event)
 - TIME_REL_EVENT_WEF (Start - Relative to event)
 - CODE_COMB_WEF (Start - Interpretation)
 - TIME_TIL (End - Time)
 - CODE_EVENT_TIL (End - Event)
 - TIME_REL_EVENT_TIL (End - Relative to event)

- CODE_COMB_TIL (End - Interpretation)

5.2.3.2 Airspace types

Following Airspace Types will be maintained by Skyguide when data is available and airspace type is existing:

- P (Prohibited Area)
- D (Danger Area)
- R (Restricted Area)
- TMA (Terminal Control Area)
- TMA-P (Part of TMA)
- PART (Part of an airspace (used in airspace association of type BOM))
- CBA (Cross Border Area (FUA))
- D-AMC (AMC Manageable Danger Area))
- R-AMC (AMC Manageable Restricted Area))
- RCA (Reduced Co-ordination Area (FUA))
- TRA (Temporary Reserved Area (FUA))
- TSA (Temporary Segregated Area (FUA))

5.3 Navaid Data

Skyguide provides only NAVAIDs inside the country border of Switzerland and the Principality of Liechtenstein.

Following attributes according to Table 4 "Navaid Data" of EAD MIN SDO will be maintained, when data is available for Skyguide:

- VOR
 - CODE_ID (Identification)
 - GEO_LAT (Latitude)
 - GEO_LONG (Longitude)
 - TXT_Name (Name)
 - CODE_Type (Type)
 - VAL_FREQ (Frequency)
 - UOM_FREQ (Unit of measurement (frequency))
 - CODE_TYPE_NORTH (North reference)
 - CODE_DATUM (Datum)
- NDB
 - CODE_ID (Identification)
 - GEO_LAT (Latitude)
 - GEO_LONG (Longitude)
 - TXT_NAME (Name)
 - VAL_FREQ (Frequency)
 - UOM_FREQ (Unit of measurement (frequency))
 - CODE_CLASS (Classification)
 - CODE_DATUM (Datum)
- DME
 - CODE_ID (Identification)
 - GEO_LAT (Latitude)
 - GEO_LONG (Longitude)
 - TXT_NAME (Name)
 - CODE_CHANNEL (Channel)
 - CODE_DATUM (Datum)
 - Associated <VOR>TXT_NAME (Related VOR)
- TACAN
 - CODE_ID (Identification)
 - GEO_LAT (Latitude)
 - GEO_LONG (Longitude)
 - TXT_NAME (Name)
 - CODE_CHANNEL (Channel)
 - CODE_DATUM (Datum)
 - Associated <VOR>TXT_NAME (Name)

5.4 Route Data

Skyguide provides only Route data inside the country border of Switzerland and the Principality of Liechtenstein.

Following attributes according to Table 5 "Route Data" of EAD MIN SDO will be maintained, when data is available for Skyguide:

- EN_ROUTE -RTE (En -route route)
 - TXT_DESIG (Designator)
 - TXT_LOC_DESIG (Area designator)
- RTE_SEG (Route segment)
 - CODE_TYPE (Type)
 - START-ID (Segment Start)
 - END-ID (Segment End)
 - CODE_LVL (Level)
 - VAL_DIST_VER_UPPER
 - UOM_DIST_VER_UPPER
 - VAL_DIST_VER_LOWER
 - UOM_DIST_VER_LOWER
 - CODE_DIST_VER_LOWER
 - CODE_DIST_VER_UPPER
 - CODE_INTL (Route classification)
 - CODE_REP_ATC_START (ATC report at start point)
 - CODE_REP_ATC_END (ATC report at end point)
 - VAL_LEN (Length)
 - UOM_DIST (Unit of measurement (horizontal distance))
 - VAL_TRUE_TRACK (Initial true track)
 - VAL_MAG_TRACK (Initial magnetic track)
 - VAL_REVERS_TRUE_TRACK (Reverse initial true track)
 - VAL_REVERS_MAG_TRACK (Reverse initial magnetic track)
 - TXT_RMK (Remark)
- RTE_SEG_USE (Route segment)
 - CODE_RTE_AVBAL
 - NO_SEQ
 - CODE_DIR
 - TXT_RMK (Remark)
- RTE_SEG_USE_LVL
 - VAL_DIST_VER_UPPER
 - UOM_DIST_VER_UPPER
 - VAL_DIST_VER_LOWER
 - UOM_DIST_VER_LOWER
- TIMETABLE (Timetable)
 - CODE_WORK_HR (Working hours)
 - TXT_RMK_WORK_HR (Remark to working hours)
- TIMESHEET (Timesheet)
 - CODE_TIME_REF (Time reference system)
 - DATE_VALID_WEF (Yearly start date)
 - DATE_VALID_TIL (Yearly end date)
 - CODE_DAY (Affected day or start of affected period)
 - CODE_DAY_TIL (End of affected period)
 - TIME_WEF (Start - Time)

- CODE_EVENT_WEF (Start - Event)
- TIME_REL_EVENT_WEF (Start - Relative to event)
- CODE_COM_WEF (Start - Interpretation)
- TIME_TIL (End - Time)
- CODE_EVENT_TIL (End - Event)
- TIME_REL_EVENT_TIL (End - Relative to event)
- CODE_COM_TIL (End - Interpretation)
- DESIGNATED POINT (Designated point)
 - CODE_TYPE (Type)
 - CODE_ID (Identification)
 - GEO_LAT (Latitude)
 - GEO_LONG (Longitude)
 - CODE_DATUM (Datum)
 - TXT_NAME (Name)
 - TXT_REMK (Remark)

5.5 Special Date Data

Skyguide provides only Special Date Data inside the country border of Switzerland and the Principality of Liechtenstein.

Following attributes according to Table 6 "Special Date Data" of EAD MIN SDO will be maintained, when data is available for Skyguide:

- CODE_TYPE
- DATE_DAY
- DATE_YEAR

6 Data Not to be Maintained by Skyguide

Geographical State borders have to be maintained by Group EAD and are not part of Skyguide's area of responsibility.

Organisations have to be maintained by Group EAD and are not part of Skyguide's data set.

Dynamic Data (temporary changes due to NOTAM) is not part of scope. Skyguide will only implement static data.