

## Sources, definitions and deviations from AIP and / or LVR:

The sources for the coordinates of the provided airspace files are the regulation "LVR rules of the air 2014"

[www.ris.bka.gv.at/Bundesrecht/](http://www.ris.bka.gv.at/Bundesrecht/) "LVR 2014"

in addition, the Austrian. AIP <http://eaip.austrocontrol.at/>

Coordinates from following AIP parts are included and converted to the OpenAir format:

LO\_ENR\_2\_1\_en

LO\_ENR\_2\_2\_en

LO\_ENR\_5\_1\_en

LO\_ENR\_5\_2\_en

LO\_ENR\_5\_5\_en

LO\_AD\_2\_LOXA\_en

LO\_AD\_2\_LOXN\_en

LO\_AD\_2\_LOXT\_en

LO\_AD\_2\_LOXZ\_en

LO\_AD\_2\_LOWG\_en

LO\_AD\_2\_LOWI\_en

LO\_AD\_2\_LOWK\_en

LO\_AD\_2\_LOWL\_en

LO\_AD\_2\_LOWS\_en

LO\_AD\_2\_LOWW\_en

- According to AIP ENR 2.1 the lower limit of FIR Vienna LOVV is "ground", there is no defined airspace class. In the file available here, the lower limit of the FIR was defined with FL 125 and coded as airspace class G. This will provide a simpler representation of the airspace structure, and exclude airspace warnings for the FIR only.

- The official Austrian state boundary is defined with more than 100,000 coordinates. Austro Control and Eurocontrol are using a boundary defined by approximately 10,000 coordinates. For this file the state boundary has been simplified to approximately 600 coordinates, with the aim to not overwhelm the processing power of moving map systems. This simplified boundary definition can lead to a deviation of the actual state boundary, but is usually less than 0.5 NM.

- With AIP ENR 2.2 Transponder Mandatory Zones TMZ and Radio Mandatory Zones RMZ are defined. In the Austrian AIP TMZs and RMZs have no assigned airspace class.

In this file the TMZs LOWI E, LOWI W, LOWW, the RMZs VOESLAU, WIENER NEUSTADT are encoded with airspace class D to trigger airspace warnings.

This solution is a temporary solution until the new air spaces are implemented by the software manufacturers. Until the new edition of the airspace in the year 2016, the manufacturers of navigational software are encouraged to implement the new classification RMZ and TMZ in their products to ensure an appropriate display in the programs.

- All TRAs (Temporary Reserved Airspace) within the FIR Vienna (Austrian territory) are included in the main file. With the temporary activation of TRAs a part of airspace class C or D can be separated. The Airspace class changes with the activation to class G. All TRAs included in this file are encoded with class G.

The TRAs Pöls (Poels) Bruck, Graden, Hochalm are in part within the MTCR Zeltweg, partly outside. Those TRAs have been divided in two parts to allow a precise coding of the lower airspace limit.

- Hang glider, paraglider areas, parachute areas according to AIP ENR 5.5 do not change the airspace class. Those areas are not included in the main file, but they may be provided with a separate file.

- If an airspace can be clearly assigned to a radio frequency, a short form of the station name and the frequency were attached to the air space name in the file. Example display for moving map systems: TMA LOWI 2 INNS RAD 119.275.

The validity period or effective date of the airspace file is included in the file name. For example 02042015-29042015. Until further notice UFN means that the expiration date at the time of publication is not yet known 30042015-UFN.

- The CTR St .Gallen is only partly within the FIR Vienna, is only partly published in the Austrian AIP. This file contains the entire CTR is St. Gallen.

- MTAs are military areas mostly within civilian airspace class C or D. With the activation of an MTA this airspace is temporarily under military control and ATC, but it keeps the same airspace class.

The inclusion of these high MTAs above FL125 in the main file would possibly lead to airspace confusion. Therefore these high MTAs are provided with a separate file.

In LO AIP ENR 5.2 no airspace classes are defined for MTAs, they take over the class of the surrounding airspace. In the MTA File, the high MTAs are coded class R restricted.

- According to Austrian law LVR § 44 (1) the activation of Military Training Areas (MTA) does not change the class of the airspace. This means that the lower parts of the MTAs

- Hochschwab (E from 10500ft to FL125)
  - Schober Nord (E from 10500ft to FL125)
  - Zeltweg 1 (E from FL95 to FL125)
- remain Airspace class E or G near the ground

These low MTAs in the airspace class E are therefore part of the main file and encoded as class E.

- The current files with the mentioned additions and changes are provided under [www.aeroclub.at/luftraum](http://www.aeroclub.at/luftraum)

- For the Austrian Championship SIS-AT the file provided on the website of the national AeroClub is used.

- The same source data is available on the Austro Control Website <http://eaip.austrocontrol.at/kml.php> , but without the mentioned additions and changes.

Thanks to Peter Platzer and Stephan Haupt for their competence and commitment.

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