

# Enroute Chart Layout 2.0 - Notes

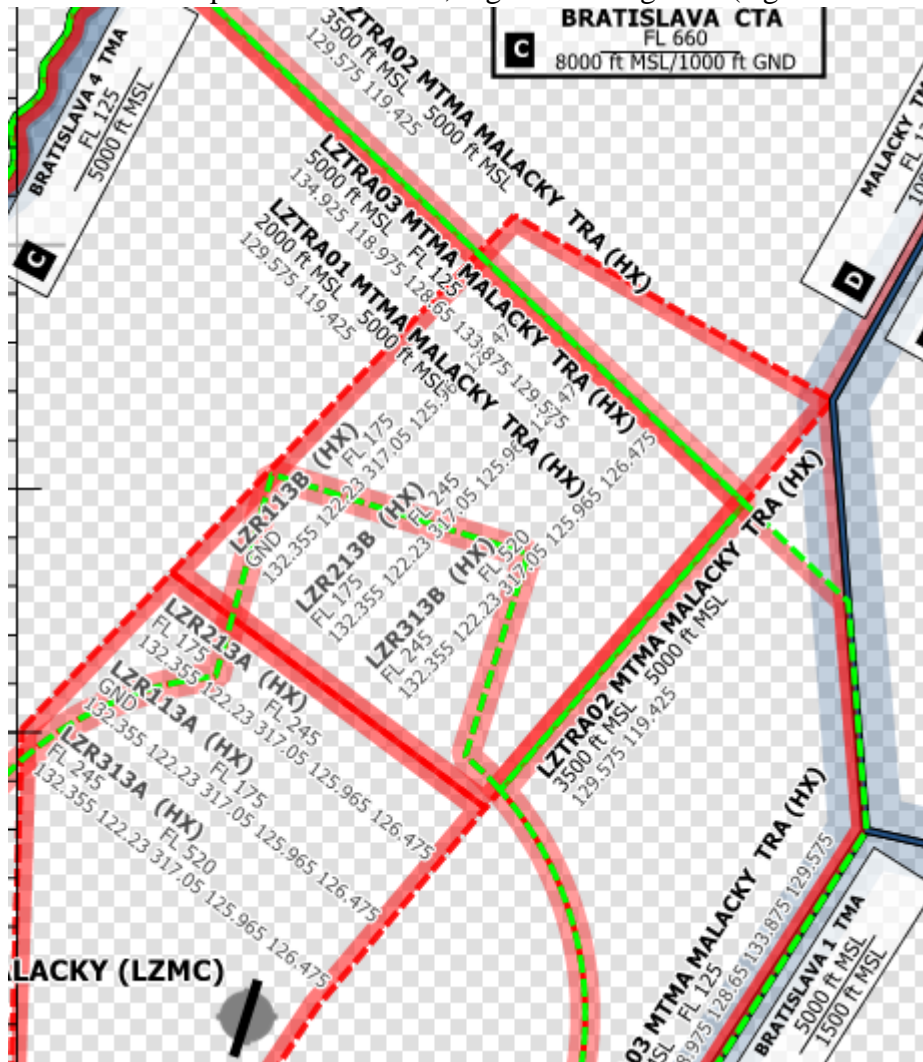
*The most of the following suggestions will be implemented. Some amendments will require a global repositioning of labels, others can be done quickly. In this regard implementation will be executed in two levels:*

*Level 1: implementation of changes with no effect to labelpositions*

*Level 2: all other changes, which will require repositioning and regional dependencies.*

## Level 1 changes

1. Don't show frequencies for TRAs, it gets too congested (e.g. around Bratislava)



2. For restricted, danger and prohibited airspaces, omit the long names (e.g., “LOR-1 Seibersdorf” should only be shown as “LOR-1”). Full names with controlling agency, frequency and hours of activity are shown in table on the map’s edge.

*This can be achieved by using the “Abbreviations” Field – so this is a call to action to contributors to change such airspaces.*

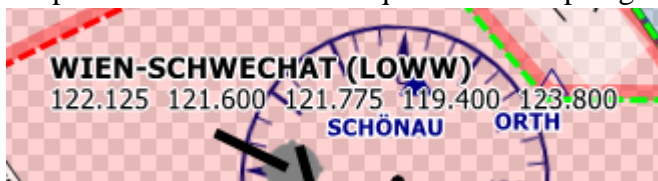
3. Show shaded airspaces for those that reach all the way to the ground and are continuously in effect (similar to CTRs), such as, e.g. LOR-16 (Neusiedler See).
4. Generate a compound label for stacked airspaces with the same lateral limits (similar to LOVV).

*This change can be achieved by inputting airspaces as class layers (provided they have identical lateral boundaries)*

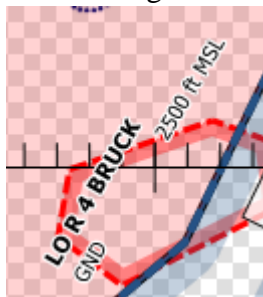
5. Make airspace labels the same color as boundary outline (e.g., Marchfeld TRA could be green).
6. Make label for CTRs so that vertical extension is centered left instead block justified and don't show so many frequencies since it is unclear what they are anyway. maybe only show APP (and if not available then TWR) frequency. Full list of CTRs with all frequencies in table at the map edge.  
Also, omit “GND” for CTRs since they always reach down to the ground.



7. For airports, only show one frequency (TWR or INFO). If ATIS is available then show ATIS, too, with a label (ATIS 123.8). Remember, APP is already shown in the CTR airspace label. Full list of frequencies at map edge.






8. Use left aligned text for vertical extents of special airspace to save space:





9. ~~Sometimes frequencies are with decimal points (e.g. CTR Wien) and other times with decimal comma (e.g., as used with airports) Use commas throughout, since this is used in most European countries.~~

**This issue is solved already!**

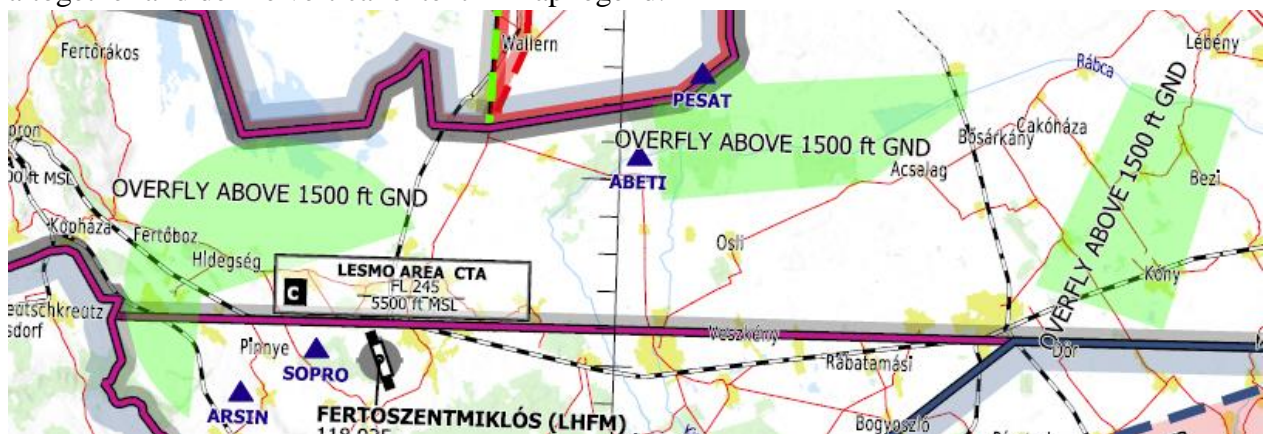
10. When specifying altitudes, omit “ft” and only use MSL or GND to save space.
11. UL- and Gliderports which don’t have an ICAO ID should show their name only (omit the GPS label).  
“TOKORCS (LHTOKO)” should only be “TOKORCS”.
12. For airports, change the style to encode more information visually (refer to US Sectional Carts for reference and ideas):  
grass or asphalt/concrete runway  
Runways greater than 500 m length, runways greater than 2.500 m length  
Military vs. civil use airports  
Abandoned airports  
Fuel availability  
INFO/TWR/ATIS frequencies  
Elevation  
Controlled vs. uncontrolled airport (i.e., radio contact required or not)
13. Here are some suggestions on how to further evolve icons for airports to connote more information and reduce textual clutter.

	Closed airport
	Heliport
 <b>FERTÖSZENTMIKLÓS (LHFM)</b> 118,925 <u>440</u> L3200	Non-ppr airport with hard-top runway and fuel

 <p><b>BUDAÖRS (LHBS)</b> 124,500 <u>413</u> L3200</p>	PPR-airport with grass runways and fuel
 <p><b>JAKABSZÁLLÁS (LHJK)</b> 125,200 <u>364</u> L3280</p>	PPR-airport with grass runway and no fuel

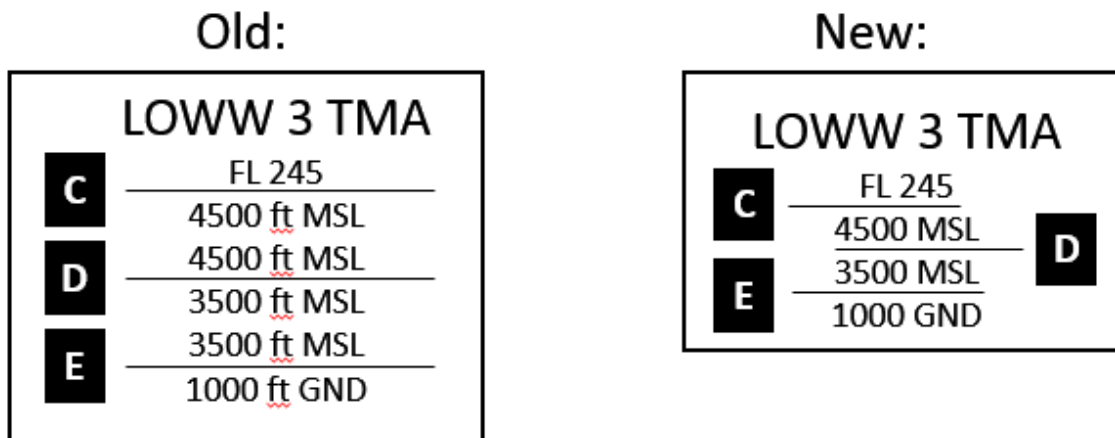
14. Reduce size of ticks on lat/lon grid.

15. LOVV (possibly other FIRs, too): Shorten label for nature reserves. Currently “OVERFLY ABOVE 1500 ft GND” is longer than many such areas are on the map. Use “1500 GND” as label and define airspace as “Natural Reserve” in the legend of the map. Alternatively, since all such areas extend up to 1500 GND, simply omit the label altogether and define vertical extent in map legend.

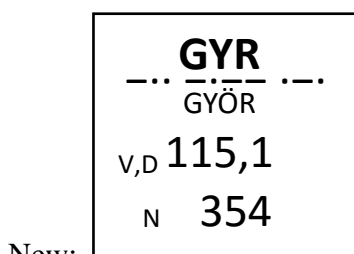
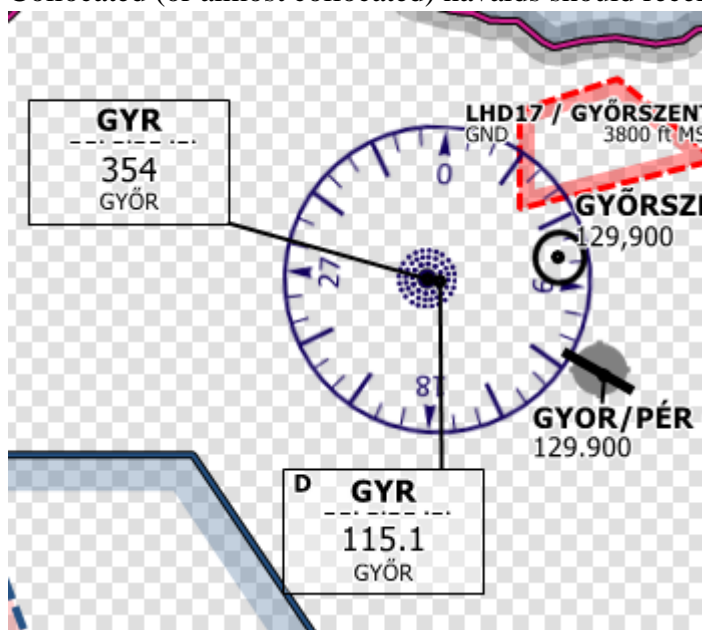


## Level 2 Implementation

16. When labeling stacked airspaces use this format (omitting ft and repeated altitudes):



17. Collocated (or almost collocated) navaids should receive a compound label:



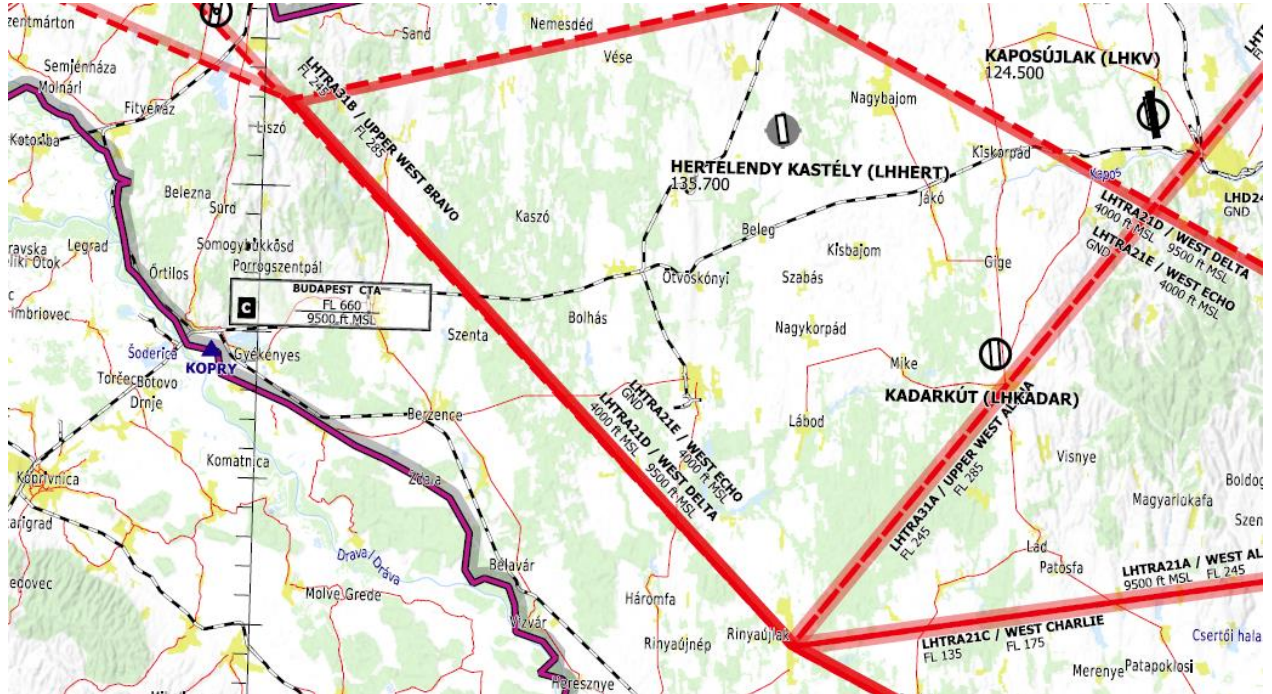
New:

V=VOR, D=DME, N=NDB.

*Since this particular case is of rare occurrence, we might postpone the implementation or omit it completely.*



18. Whenever multiple TRA boundaries coincide, the line gets confusing. In the example below, I can discern four different line styles, even though there is only a single type of airspace (TRA).

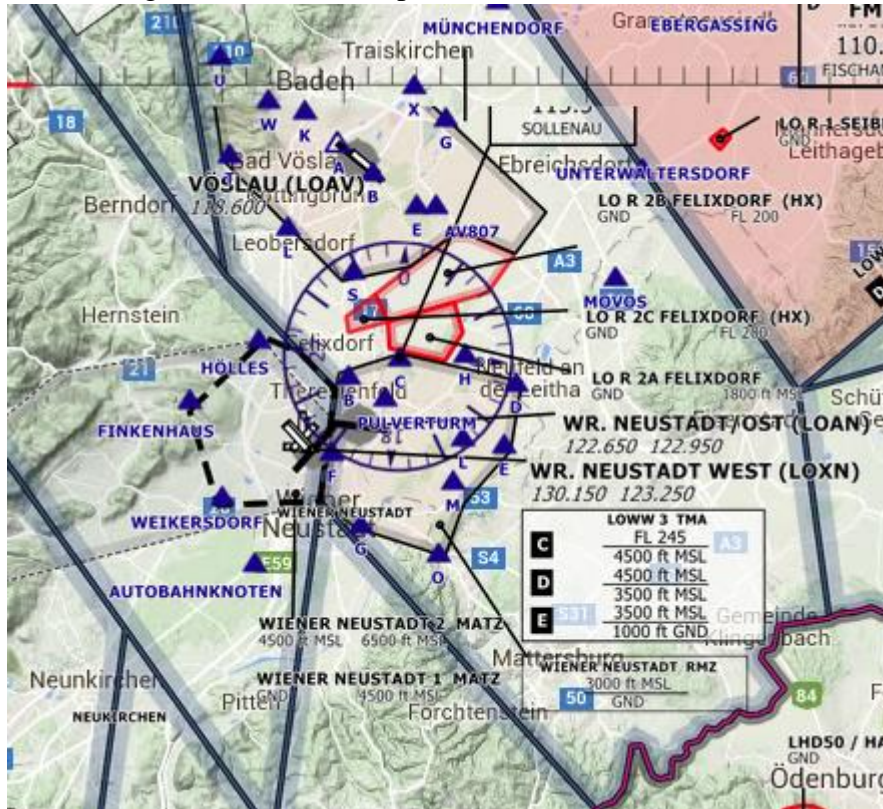


**This issue has been solved already!**

19. Show important elevations on background map. Currently, there is no elevation shown at all. Alternatively, include maximum grid elevation figures.

**This issue has been solved already**

20. Guiding lines between airspaces and their annotations tend to confuse the picture.



Optimize label placement and reduce weight of guiding lines. Also, sometimes there is a large gap between the line and its annotation.