

**Twenty-third Session  
Vienna, 28 March – 4 April 2006**

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**Item 18 of the Provisional Agenda:  
Other toponymic issues**

**Transposition of the Austrian Maps into the UTM-System**

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Geschäftszahl: -

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Bearbeiter:

Zierhut

## Transposition of the Austrian Maps into the UTM-System

### The Guidelines

Within the frame of the Partnership for Peace Austria is obliged to make its national maps compatible and interoperable with those of NATO relating to reference system, projection, scale, sheet lines and so on, and thus to facilitate the use by the armies of the NATO states as well as by civilian and humanitarian organisations.

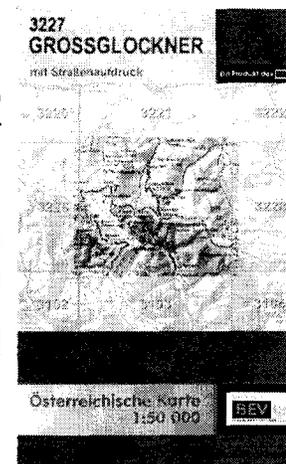
### The Implementation

The BEV has decided to take the following steps to harmonise the official topographic maps and their geodetic bases.

The national topographic maps in the scales 1:50.000 and 1:200.000 will be transposed from the Austrian surveying system (MGI, Bessel-Ellipsoid, Gauß-Krüger-Grid ) into the internationally standardised 'Universal Transverse Mercator (UTM) System'.

Furthermore the sheet lines of both maps will be transposed.

As the transition to the international reference system and the new sheet lines can only be done step by step to assure the continuity of the quality, we are continuously substituting the up-dated areas by new map-sheets in the UTM-system.



The sheet line system of the new Austrian Map 1:50.000 is 20'x12' (Figure 1.) and is bounded by gridlines in integer geographic minutes. The average area covered by such a sheet is 560km<sup>2</sup>. To cover all of Austria we will need 191 map sheets.

### Die Blattstellung der ÖK50 im UTM-System

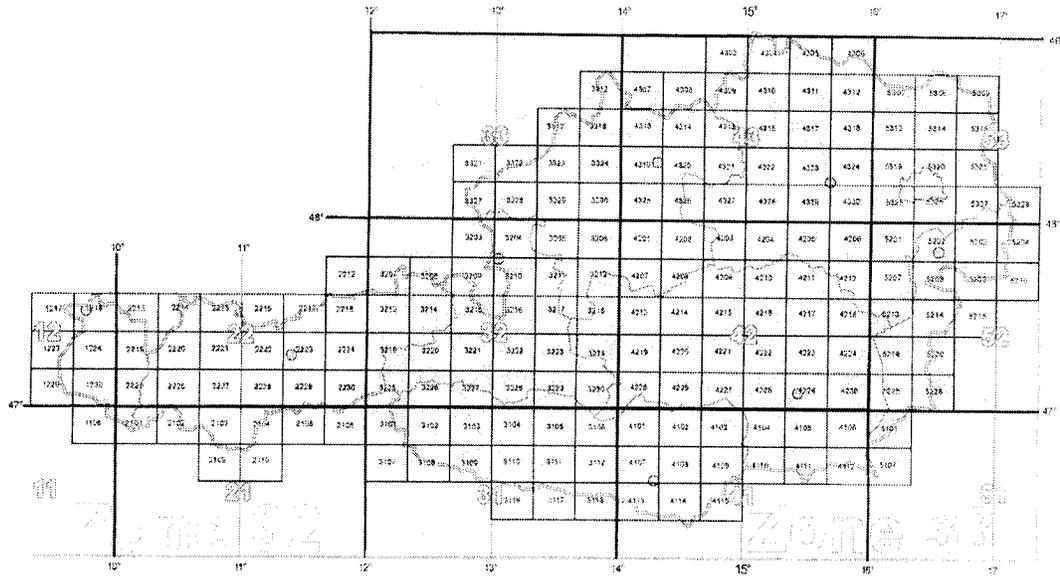


Figure 1. New map-sheets in the UTM-system

The Austrian Map 1:200.000 covers one Federal Province per sheet (Figure 2.), thus the sheet lines are adjusted to the size of the respective Province. To cover all of Austria we need 8 sheets (Federal State and capital Vienna is included in the Austrian Map 1:200.000 of Niederösterreich).

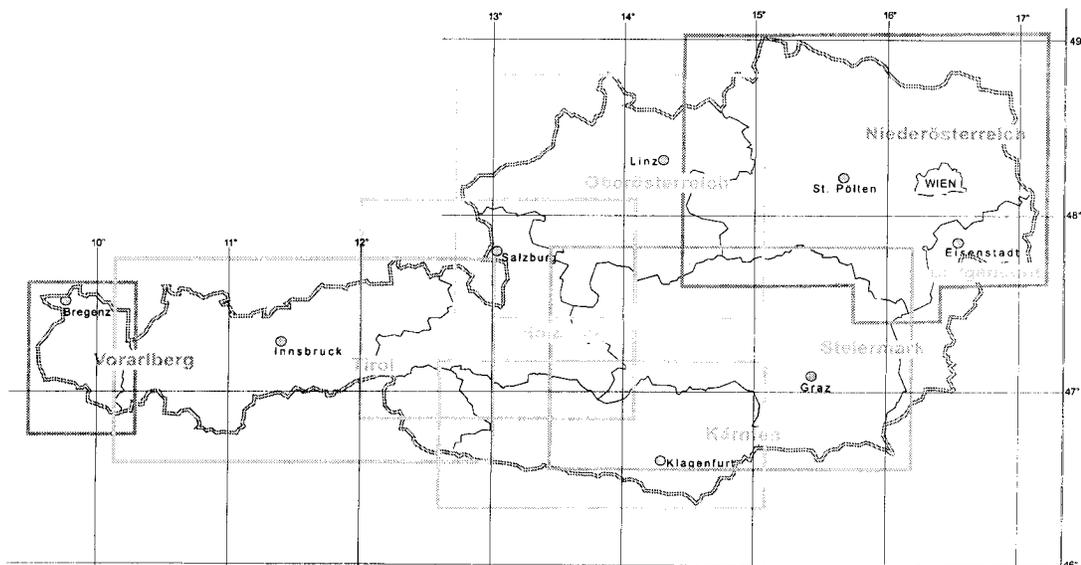


Figure 2. Sheet lines of the Austrian Map 1:200.000

The mapface that is defined by the neatlines (sheet lines) of the new Austrian Map 1:50.000, has an extrusion on all four sides by a strip of about one kilometre, to make it easier to read a map sheet together with the adjoining (neighbouring) sheets.

The area of the Austrian Map 1:200.000 is calculated in such a way that the depicted Federal Province is shown together with the neighbouring areas.

Marginal Information of the Austrian Map 1:50.000 comprises on a side panel the title page with an overview of the area in the scale 1:400.000, the legend, a cartogram of the political districts and communities in the scale of 1:250.000, an index diagram of all the 191 sheets, a Grid box for point location, a declination diagram and further information of importance for the user.

The overedge of the Austrian Map 1:200.000 contains the title page with colour photo, the legend, a cartogram of the political districts of the Federal Province and other information of interest for the user.

The sheet numbering of the Austrian Map 1:50.000 consists of four digits. The first two digits describe an area of  $2^{\circ} \times 1^{\circ}$ , the other two define the location of the sheet within this area. The numbering is consecutively from 1 to 30 and from the top on the left side to the bottom on the right side.

The Austrian Map 1:200.000 is not numbered. It is addressed by the name of the Federal Province.

The sheet name of the Austrian Map 1:50.000 indicates the geographic position of the map sheet. In general we choose the name of a prominent settlement or of an important geographic site.

The Austrian Map 1:200.000 is addressed by the name of the Federal Province.

### The Availability

The Austrian Map 1:50.000-UTM will be available until the end of 2009 covering all of Austria. At present 40% of the 191 map sheets have been published.

The Austrian Map 1:200.000-UTM is already available for the entire area of Austria.