EXAMPLES OF MAPS SINCE 1947

This page of the Atlas shows, with a few examples, the diversity, character and aim of various cartographic and photographic documents produced by official Belgian institutions and organisations.

In 1947, the Military Cartographic Institute was renamed Military Geographical Institute (I.G.M.), but in 1976, it became the National Geographical Institute (I.G.N.). To conform with international agreements on standardisation, was one of the first tasks falling to the Military Geographical Institute to bring out a new topographic map of Belgium on the scale of $1: 25\ 000\ (Plate\ 3)$. This map is called « basic » not only because of the multi-disciplinary usage and interest it evokes, but also because it is the most detailed and thus is often used to produce other maps by enlargement or simplification. It is constructed by the most modern methods in geodesy, photogrammetry and cartography. Originals produced on half plates to a scale of $1: 15\ 000$ are then reduced to the scale of $1: 25\ 000$; one of the advantages of this process is to improve both the accuracy and the graphic quality of the final product. Started in 1955, the publication of the 238 sheets of the basic map in six colours was finished in 1970. A second edition is in production, involving the updating of the first edition sheets. In addition, a standard representation of topographic details and uniform procedures of cartographic editing will give the map a homogeneous style.

The 1: 10 000 scale map (*Plate 1*) derives from the preceding one by photographic enlargement of the original documents to 1: 15 000; for this reason it shows no extra details beyond those on the basic map. Produced initially in monochrome (*light brown*), it has been published since 1966 in four colours and comprises 455 sheets.

The 1: 50 000 topographic map (*Plate 5*) follows the proper criteria of generalisation while showing a relatively detailed classification of the road network. It derives from the 1: 25 000 map, each sheet covering the same area as four sheets of the basic map. Begun in 1970, it will eventually comprise 74 sheets produced in eight colours. There is also an oro-hydrography version (*Plate 6*), as well as a full version in monochrome (*light* brown). It should be noted that the country is covered by a 1: 50 000 scale map called type R that was produced between 1952 and 1954. This map underwent partial updating until 1964. It was made by using, as a base, the framework of the old 1: 40 000 map updated by a rapid revision (on the ground) and by limited use of aerial photographs.

The National Geographical Institute also has a topographic map on the scale of 1: 100 000 (*Plate 9*). This was produced between 1955 and 1957 reducing and generalising the 1: 50 000 type R. This map, in seven colours and 24 sheets, has not been brought up to date since 1965.

A topographic map on the scale of 1 : 250 000 covering Belgium and parts of the neighbouring countries is published by the National Geographical Institute in two versions, differentiated by an overprinting of either touristic information (*Plate 10*) or aeronautic details. The road system follows national and/or European systems of numbering, as well as giving distances between important population centres. Relief is shown by contours at intervals of forty metres and by shading. Periodically updated since 1964, this map in seven colours is available, printed on both sides, folded or flat, in two sheets, North and South.

Two types of map on the scale of $1:300\ 000$ are also published by the National Geographical Institute. The first shows communications; the corresponding map has three versions differentiated by colours according to provinces, by layer colouring (*Plate 11*), or by the absence of these colours; a table shows the distances in kilometres between the sixty principal agglomerations of the country. The other type is an administrative map (*Plate 12*) which shows the boundaries and names of Belgian communes. This map includes an alphabetical list of the names of each commune, accompanied by the sheet reference number of the $1:10\ 000\ scale\ map\ on\ which\ the\ centre\ of\ the\ commune\ is to be found. The example shown is a provisional edition resulting from the « Arrêté Royal » of 17th September 1975 which brought about the fusion of communes and the modification of their boundaries.$

An extract of aerial photography (*Plate 4*) reproduced on the original scale, shows the type of material used for photogrammetric reconstitutions at the National Geographical Institute. This is, among others, the type of photograph used to up date the basic map represented in plate 3. The other document (*Plate 2*) is an extract from an orthophotomap produced at the National Geographical Institute on the scale of $1:10\,000$. While the preceding document has no precise value for exact measurement, the orthophotomap is the result of the rectification of aerial photographic negatives and thus resembles a topographic map. In addition to contour lines, there is another special feature - a grid system tied to the cartographic projection.

The topographic and photogrammetric service of the Ministry of Works publishes, for the principal agglomerations and for coastal areas, a polychrome map on the scale $1:5\,000$ (*Plate 7*) obtained by a photogrammetric reconstitution to a scale of $1:3\,000$. The object of this map is to show in a relatively detailed way the most important aspects of land utilisation for use in land planning.

A cadastral plan (*Plate 8*) is a cartographic document on a large scale - normally 1:1000, 1:1250, 1:2000 or 1:2500. It has a legal value; its aim being to show boundaries of plots, built up or otherwise, public or private, and to show by an appropriate sign (a line or a dotted line) the taxable or non-taxable nature of the properties. In addition, all underground constructions are marked by a cross. Each plot is identified by a number which refers to a division or a section of a commune, even on several sheets. This makes reference possible to a « Cadastral Matrix » or Land Register which contains precise qualitative and quantitative facts annually updated and satisfying the demands and requirements of the Ministry of Finance, of which the Cadastral Survey is a part. The cadastral plans do not generally have any precise value. However, the recent use of modern techniques does in fact allow precise measurement on the newly reproduced maps. The example shown here on the scale of 1:1000 was obtained by photogrammetric survey in 1968.