

HMK – Swedish Handbook in Surveying and Mapping

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SUMMARY

The aim of the Swedish handbook in surveying and mapping is to contribute to an efficient and standardized handling of survey and mapping issues in Sweden. The objective is to provide guidelines and to support different user groups in the field of surveying and other types of geodata capture. Lantmateriet, the Swedish mapping, cadastral and land registration authority, has a long tradition of supporting the Swedish surveying and mapping community. The same type of guidelines was written about 20 years ago and is widely spread within Sweden. New techniques and new working methods have increased the demands for an updated handbook. A common situation today is that a geodata capture project is ordered by procurement and then performed by some surveying company. The new working methods need a new structure of the supporting handbook, it needs to support both the procurement process and the actual geodata capture procedure. The handbook covers most of the field of surveying and mapping and is now divided into two main parts, geodesy and geodata capture. The part of geodata capture includes several different sections, aerial photography, photogrammetric surveying, laser scanning, orthophoto and digital elevation models. This presentation will however focus on the geodetic part. This part is divided into three sections. The first section is a knowledge base with information about the geodetic infrastructure in Sweden - such as reference systems and frames, map projections and geodetic surveying in general. The second section contains practical guidelines for different surveying techniques, such as GNSS and terrestrial techniques. For example, the GNSS section includes RTK, network RTK and static GNSS surveying. While the last section contain tables to help the reader to choose a suitable surveying method from the ones described in the second section. The main idea is that the geodetic part of the handbook would be possible to read both as an educational book, from top to bottom, and as support in procurement, from bottom and up. The handbook is written mainly by Lantmateriet in collaboration with the stakeholders and will be published in digital form continuously as the different parts are completed. The first completed documents were published in 2013 and the following documents will be published during 2014-2015. The handbook will in the future be updated with new versions to keep up with new demands.