

# Innholdsfortegnelse

**Basic data**

Coordinate Systems

Map data

Map Data Requirements

Right of use

Source reference

Landline networks and survey data

1

1

1

2

2

3



## Basic data

Grunnlagsdata er samlebetegnelse på alle typer grunnlagsdata som kan være aktuelt å bygge opp grunnlagsmodeller fra.

## Coordinate Systems

An important factor in establishing multidisciplinary drawings and models is that the different subjects and input data fit together. It is therefore important to agree on a common horizontal and vertical coordinate system, so that all subjects project their elements correctly in relation to each other. The project must decide at an early stage which coordinate system to use. If you need to convert data from one coordinate system to another, this must be documented and displayed in the quality document. As a horizontal coordinate system, EUREF89 / NTM Zone 5-18 and secondary EUREF89 / UTM Zone 32-33 must be used. As a vertical coordinate system, it must be used primarily NN2000 and secondary NN1954. The choice of coordinate system shall be made in consultation with Bane NOR's specialist resources in geodata.

## Map data

The basis for the design is geographical data, geodata, of different types and origins which together describe the physical conditions in the area where it is to be designed. The project must decide which parts of the public map database (DOK) should be the basis for the design: [The public map database](#) Map data produced by public authorities is available to Bane NOR through the Norway Digital collaboration, which coordinates mapping and management of produced map data. When ordering data, one must take into account the subsequent planning phase and define the requirements based on the needs that will come in this planning phase.

## Map Data Requirements

Basic data should be adapted to the project's needs and complexity. Special requirements may be set for the collection of basic data in various projects. The data will be used to establish both terrain models and various objects in connection with the existing situation. It must therefore be clarified as early as possible what the project's needs are and how detailed this data should be in order to be able to obtain sufficient and data with good enough quality as a basis for the design. It is therefore necessary that the data is adapted to this through quality, formats, design and layer structures. All data in the situation map must be delivered in the SOSI format. The latest version of the standard should be used. Laser data should be provided in the LAS format and should be classified with separate classes for terrain surface. It is important to be aware that the quality of a terrain model depends not only on the accuracy of, but also on the number and location of the points. Higher dot density gives more detailed models.

*If data in addition to what is specified is desired to be delivered in other formats, this must be agreed specifically in the individual projects. Various rights are attached to geodata used in the design. The name of the data owner (licensee) must be clearly stated on all drawings and on the model. Those who design must be familiar with the rights and requirements on which the geodata is used. Deliveries of basic data should be regulated through an agreement / contract adapted to the*

*individual project.*

## Right of use

Bane NOR has the right to use a number of municipal, county, regional and national map data through participation in the Norway digital collaboration - a national collaboration between large users and / or producers of map data. The right of use is defined in: Instructions for using map data in Bane NOR.

Screenshots (or equivalent) from public companies' map display solutions on the Internet can be used, as these companies (mainly) are participants in the Norway digital collaboration. No screenshot (or equivalent) from commercial companies' map display solutions on the Internet, e.g. Yellow pages, Finn, Atlas and Google Maps, as this can lead to claims for financial compensation / compensation.

## Source reference

The name of the map data owner / licensee (source reference) must always be given. This applies to all analogue and digital map images / products that Bane NOR prepares for itself or that an external consultancy prepares for Bane NOR.

### Location

- In text documents, the source reference should be provided just below the individual map image
- in drawings / illustrations, the source reference must be given in connection with the title field (or equivalent)
- In digital models, the source reference should preferably be visible at all times, but at least it should be displayed at model startup
- In model-based films, the source reference should preferably be visible all the time, but at least it should be displayed at the start or end of the film

### Design

- on a map image / product that has been compiled based on digital map data from one or more participants in Norway's digital collaboration, the source reference must be stated as follows: «Kilde: <owner / licensee>», eg. «Kilde: Geovekst», «Source: Oslo kommune», «Kilde: Kartverket» and «Kilde: NVE».
- on a map image / product that has been compiled based on a screenshot (or equivalent) of map data from Bane NOR's internal map display solution Path map, the source reference must be stated as follows: «Kilde: Bane NOR - Banekart».
- On a map image / product that has been compiled based on a screenshot (or equivalent) of map data from public companies' map display solutions on the Internet, the source reference should be stated as follows: «Kilde: <source owner - source name>», eg. «Kilde: Miljødirektoratet - Naturbase» and «Kilde: NGU - Granada».

## Landline networks and survey data

Part of the design basis requires a high quality of site design for the project to be feasible. This applies to e.g. in the transition between existing facilities and projected area. In addition, many of the current facilities are not located sufficiently to use them in the design. In the master plan phase, a measurement of the critical elements should be performed. In the detailed and building plan, measurements shall be made of the affected objects that are critical for the implementation of the project. The measurements must be made on the basis of a defined fixed marking network that should cover the entire projected area. The location determination must coincide with the other geodata to be used in the project and be connected to the Norwegian Mapping Authority's overall network. The fixed marking network shall be established in accordance with Bane NOR's Tekniske regelverk and the fixed markings shall be placed as far as possible so that they are not damaged by the construction work. The same fixed marking network shall be used for all protrusion of reference lines / points that are made during the construction phase.

From:

<https://proing.banenor.no/wiki/> - **Prosjekteringsveileder**

Permanent link:

<https://proing.banenor.no/wiki/digitalplan-en/basicdata-en>

Last update: **2022/01/18 08:32**