Statsbygg has laid the foundations for better and more efficient building processes and the management of buildings by using and making BIM technology suitable for the building industry.

The future lies in using BIM. This is how the building, construction and property industry of the future will work. Statsbygg has laid the foundations for better and more efficient building processes and the management of buildings by using and helping make BIM technology suitable for the building industry.

Statsbygg’s BIM commitment has been one of the organisation’s greatest ever technological and organisational research and development (R&D) investments, and one of the most important innovations in the building industry during the last decade. Statsbygg’s BIM development has enabled the organisation to become involved in the development and use of a new industry standard.

Statsbygg is interested in making contact with anyone in the industry with ideas about BIM who would like to exchange practical experience or has any questions that could be discussed in greater detail. Please start by sending an e-mail to Statsbygg’s BIM project office at: bim@statsbygg.no

Please also take a look at wiki.buildingsmart.no for BIM material and industry discussions.
BIM - opening the doors for new ways of cooperating

BIM is opening the doors for new ways of cooperating in the building industry. The principle assumes that all the parties involved will communicate building-related information in a common exchange format, regardless of their software and preferably into a common building information model (BIM).

The more information we have about a building and its individual parts, their properties and how they relate to each other, the better we will be able to analyse and predict the future performance of the building in question.

In order to ensure that everyone who participates in the building process will be able to understand the information that has been entered in the model, it is important that it is saved in a common terminology. By using an IFC (Industry Foundation Classes) open international communications standard, all computer programs used in the building industry can communicate with each other and everyone can retrieve the information they need from the model. This is conditional on support having been implemented in the computer programs in order to read and write from/to this standard.

**BIM - a smart way of building**

Statsbygg uses BIM for all its new building projects. This technology is employed as soon as the requirements are specified for a project along with its content and frameworks.

The building’s room function program is formulated and digitised in “kravBIM” (requirements BIM), and the first unique ID numbers that will follow the various parts of the building right up until it is demolished are established. “kravBIM” is Statsbygg’s database for maintaining and updating all requirements specified for the building.

“KravBIM” initially constitutes the basis for the pilot project phase. The architect can import the room function program directly into his CAD programs in order to develop the first draft “løsningsBIM” (solution BIM). This is how the link between what is programmed and what is planned is established. We can now continuously compare “kravBIM” and “løsningsBIM” and see how they differ.

This is an invaluable tool for maintaining control over a project throughout its planning and construction phases. During the operational phase the information contained in “kravBIM” will be valuable documentation that can be used in the management of the building.

**BIM - throughout the life of a building**

Statsbygg is keen to engage in smart building in respect of all its buildings and building processes and will use BIM throughout the life of its buildings.

When advertising the international architectural competition for the design of Norway’s new National Museum at Vestbanen, models were required, for the first time, to be submitted electronically and on the basis of open standards. For Statsbygg, such requirements will be standard for all building processes and at all stages of the process. Contractors will be required to continue using BIM both during the actual building process and for submitting documentation in digital format in an “as built BIM” once the building has been completed.

Statsbygg’s use of BIM sets standards for the entire Norwegian building, construction and property industry. BIM will be extremely helpful in connection with all daily practical work. When everyone involved works with the same information in one model there will be less likelihood of misinterpretation and it will be possible to use the interplay between the different parts of the model for automated quality controls, simulations, checks on availability requirements and energy consumption tests during the early stages of a project. There will also be a multitude of possibilities that we have not yet explored. The development of this tool has tremendous potential.

This is how BIM will improve the efficiency of building processes. It will enable tasks to be performed more efficiently and there will be fewer errors. The benefits are obvious: cheaper and better buildings.