

## **MAKING LAWS FOR 3D CADASTRE IN NORWAY**

**HELGE ONSRUD**

Statens kartverk  
Norway

### **ABSTRACT**

A pending proposal for a new Law on the Cadastre in Norway includes for the first time regulations for establishing and registering properties under and above the surface. The new regulations shall typically cover for registration of parking garages in the underground, or for registration of building/constructions on pillars above the surface, as separate properties. It is assumed that the law will be adopted by the Parliament in 2002.

The proposed regulations consider 3 D properties to be subdivided and registered largely in line with establishing parcels on the surface. The Law Committee saw no major problems in making neighbouring properties vertically "above each other", than dividing properties horizontally, making neighbours "next to each other". The proposal refers to 3 D properties as "Construction properties", proposing that such properties should only be registered when it is needed for realisation of a specific construction. An important issue is to ensure a distinction between "construction properties" and condominiums.

### **THE CURRENT LEGAL AND PRACTICAL SITUATION**

The basic concept in Norwegian land law is that ownership to real property (in physical terms) is defined by the boundaries on the surface and extend vertically downwards and upwards as far as private ownership has any economic interest to the owner of the surface property. (The term "surface property" is used in this report for "regular" properties or parcels). The

physical extension is however not positively stated in current legislation, but accepted as a legal fact over time. The current cadastre law has no references other than to land and related boundaries on the surface. The possibility of making properties in strata is not discussed in the law or in related literature. The question has never been tested by the courts, but it is my opinion that the result of a court case would have been that making properties in strata is currently not allowed. This opinion is however not shared by all, and some municipalities have accepted to register volumes in the underground as separate property in the Cadastre, and this has also been accepted by the Land Book offices as well. A particular case was the construction of a big ice hockey rink for the Lillehammer winter olympics in 1994 inside a mountain. The Ministry of Environment, being in charge of the Cadastre has not actively argued against the evolving practises, and rather moved towards changing the law to reflect the de facto situation. Lately the municipal practises have been extended to include registering as well constructions above the ground as separate real property, for example a building constructed on a platform across a road.

The development of practises outside the regulations should be understood from the way cadastral works are organised in Norway, i.e that the municipalities are responsible both for maintaining the Cadastre database and maps, as well as for cadastral surveying. The municipalities are also responsible for issuing permits for subdivision in accordance with the planning and building act. So far the unregulated creation and registration of properties in strata have caused no significant problems to the private sector or to the authorities.

However tunnels, storage halls or other underground constructions are in most cases made without subdivision and formal registration in the Cadastre and in the Land Book. In most cases underground constructions have been considered extensions of the adjacent land on the surface, that be land for a hydroelectric power plant or surface land occupied for the entrance to a tunnel. In very few cases investors have needed the particular underground construction for collateral.

In addition, the understanding of the vertical limitation of private ownership defined by the economic value to the surface property, has implicated that tunnels for roads, trains, water and other usage largely has been drilled without considering the private ownership, only paying compensation if the surface property has been damaged in any way. It has been proposed by a law committee to formally regulate that the State should own all resources below a certain level, but the proposal has been shelved in the Ministry of Justice for years, and is likely not to surface. Contrary, the general

development seems to be in favour of protecting the rights of the owners of surface properties, downwards and upwards.

In relation to the issue of property in strata, it should be mentioned that the law on condominiums allows apartments and sections of buildings for other usage, i.e space for offices, shops, etc, to be registered as separate real property. A condominium should always include the land parcel on which the related building(s) is erected. The ownership to a single apartment or section of a condominium therefore always includes a share in the related land parcel. Contrary to this a strata property should in legal terms be completely separated from the surface land parcel(s), as we understand it in Norway.

## **NEW LEGISLATION FOR PROPERTY I STRATA**

### **Background**

Increased demand for building sites in urban areas, higher land prices, but just as much new building techniques, trends in architecture, and improved and much cheaper methods for drilling or shooting volumes in rocks, have made constructions below or above the surface much more interesting to investors. This has a secondary effect created a demand from the market for making it possible to make financial transactions in such constructions, i.e selling, buying, mortgaging, leasing, etc. As referred above, the municipalities have responded to the demand from the market to facilitate such constructions being established as registered property.

The above demands from the market is also relevant for constructions at sea or in fresh water areas, that be on the water floor in private ownership or outside private ownership, i.e on state "land". For constructions at sea it is important to distinguish between permanent constructions with a fixed position (artificial islands, off shore harbour constructions, etc), and movable constructions, such as platforms for oil production or constructions for fish farming. I think it is generally accepted that only constructions with a permanent position should be registered in the Cadastre and the Land Book, however that can in principle be debated.

As a consequence of the demands from the market, and of the on going practises, making appropriate provisions for 3D property were listed as an important issue for the improvement of the cadastral legislation, when a committee to revise the law on the cadastre was appointed by the Government in 1995. At the outset, the Committee, chaired by the author of this report, did not question the need to facilitate legal and financial transactions in such constructions, but accepted that a given fact. It was also

demonstrated over a period of some years that making formal property in strata does not create major legal or technical problems to the private parties involved, to the building and planning authorities, or to other public or private interests. It remained however still a number of important legal matters for the Committee to look into, and find appropriate solutions for.

From the outset the Committee found it mainly relevant to facilitate three types of 3D property:

- volumes below the surface of the earth, such as underground garages, underground shopping areas and underground storage halls, tunnels etc
- buildings and other constructions erected on pillars or by other means realised above the original surface of the earth, frequently across roads or railways
- constructions on pillars at sea or in fresh water

### **3D Property secondary to surface property**

Regular surface property, visible on the surface of the earth and “extending vertically from heaven to hell” will for any foreseeable future be the far most common type of registered real property (excluding apartments). The Committee found it beneficial to base the new law on this fact, underlining that the surface property should remain to encompass all that is contained in the “volume” (from heaven to hell), except what is positively “taken out”. This principle means that a 3D property physically does not extend beyond the limitations positively registered in the Cadastre, whilst the vertical extension of surface properties (upwards and downwards) are regulated by general law. (A 3D property may however extend from a specified level and as far into the ground or upwards into the air as private ownership extends, as far as this is positively stated for the concrete case)

### **Strata titles based on use rights or subdivided property**

Norwegian legislation facilitates transactions in *use rights* (in servitudes) to real property. Under certain circumstances a registered use right may be sold or used as collateral. It was therefore an option to introduce strata titles based on a concept of use rights related to the surface property, rather than on individual ownership to property formally subdivided from the surface property. Establishing strata titles based on a concept of use right would however be more in line with the legal tradition. The difference to the parties of applying the one or other concept, could be very small and more of a psychological nature than based on reality. It seems however that investors prefer investing in registered ownership before in registered use rights, and that the choice of legal framework can have an effect on prices

and interest rates. The Committee saw no major obstacle to applying the concept of ownership, and anticipated that ownership would be preferred by the market. In addition, the requirements for documentation and registration in the Cadastre and in the Land Book respectively, would be identical for both alternatives.

### **Who should carry the risks**

Identifying the public interests, the interests of third parties not directly involved in the transaction, and the interests of the parties directly involved, are important issues when developing the legal framework for strata titles. The question is how detailed regulations are needed, and what can be left to the parties to agree between themselves. This question is answered differently in different jurisdictions. It is definitely an issue to protect the public interests and the interest of third parties not directly involved in the transactions. That has to do with issues like city development, neighbours rights, safety, and the viability of the land and credit markets. It is however a different issue how much the government should regulate the relationship between the directly involved parties, i.e by imposing specific requirements to the contracts between the sellers and buyers of 3 D properties. I think it merits to limit such requirements as much as possible. Unless the public interests and the interests of third parties are directly violated, the directly involved parties should enjoy maximum contractual freedom, and carry the risk themselves of making bad arrangements.

The above policy for limiting public interference through general legislation or in the individual case, should also apply to regulations concerning surveying and mapping. The mandatory requirements should not be made more strict than what is clearly needed by the public sector, i.e for general land administration, city management, taxation etc. Any detailed surveying beyond that should be at the discretion of the parties directly involved and paying for the service, i.e if they are ready to take the risk of not having a very precise documentation of the physical location of the 3D property, then that should be their choice.

### **When should 3D properties be accepted**

In Norway subdivision is strictly regulated by the planning and building act, managed by the municipal authorities. In general a new parcel can only be established if:

- The planned use of the parcel is in accordance with the zoning regulations
- If the parcel has a size and shape appropriate for the planned use of it

– If access to road, water and sewage is ensured  
Consequently a municipality will not issue a subdivision permit unless it is likely that they also will approve the subsequent construction on the parcel. Specific regulations are applied for agricultural land and forest, which I will not go into here. The legal regime for establishing parcels shall prevent establishing parcels, which will remain unused, which evidently has an effect on the general economy and on the land market. A secondary effect is that the potential for speculation in land is reduced.

The Committee unanimously agreed that the principles referred above, also should be applied for 3D properties, particularly to avoid speculation if lots of vacant “land” suddenly were made available to the market, i.e all underground space and air space not currently in “use”. However the Committee found it appropriate to strengthen the conditionalities so that a 3D property can only be established when the subsequent construction prospect is *finally* approved by the authorities. The permit to realise the construction (building permit) must be tabled simultaneously with the permit to subdivide, at the latest, or the relevant construction must already exist.

The bottom line is that we want to avoid having 3D properties, which consist of for the black rocks or the open air only. An application to establish a 3D property should only be approved when it is needed to support a particular and approved construction. To underline this principle the word “construction property” is invented for 3D properties. Further to this principle, it is proposed that in case the construction is completely demolished, and reconstruction is not started within three years, the 3D property will be removed from the register.

It should be underlined that it is not proposed to make it mandatory to establish 3D properties for cases where it legally can be done. That is left open to the parties to decide.

### **Surface property or 3D property**

In Norwegian law a surface property includes all things permanently attached to the land. Buildings can generally not be established as separate property. It is important not to undermine this principle by facilitating separation of buildings and land through a provision for 3D properties. It is therefore proposed a condition that: “Construction property can only be established when the surface (of the earth) still can be used for a relevant purpose as part of the property from which the construction property will be subdivided.” A building standing directly on the ground cannot be established as a 3D property; it must be erected on pillars or realised by other means, which allow the original surface still to be used separately.

It should be mentioned that it is proposed that 3D properties also can be realised at sea or in fresh water areas.

### **Condominium or 3D property**

An important feature of any condominium law is to regulate the relationship between the individual owners of the shares, their duties and responsibilities, as well as the operation of the jointly owned parts. This is important when the individual parts are closely interrelated, as apartments in a block of flats indeed are.

Contrary to a condominium the concept of 3D property is founded on the principle that a 3D property should have no more extensive relationship to the neighbouring (adjacent horizontally or vertically) properties than is normally the situation for neighbouring surface properties. It is therefore of vital importance to ensure that the above objectives contained in condominium law are not undermined by opening for 3D property.

In practise it is difficult to make tight regulations for this: We have always accepted that boundaries between surface properties are in vertical walls of adjacent buildings; i.e it is generally accepted that separate buildings have common vertical walls. More seldom it is accepted that individual buildings are separated by a horizontal "floor or roof" (if the floor or roof is solid enough to be the foundation for a building on top of another building). In cases when the vertical or horizontal separating constructions are of the above kinds, they should also be accepted as boundaries for 3D property. The problem is to distinguish between what are separate buildings and what are parts of one common building. In the first case the buildings (if not occupying the surface) can be established as 3D property, in the latter case it should be arranged as a condominium.

As mention, it is difficult to make regulations for this which are 100 % tight, and that may not be needed. (Perhaps the parties should have the choice when they are operating in the grey zone). In any case the following are proposed:

- 3D property can not be established for parts of building
- 3 D property can not be established for building or constriction which more appropriately can be established as condominium (in cases where a condominium consist of several buildings).

## **No technical problems**

The Committee felt no need to go into specifications for surveying or solutions for the cadastre database to handle 3D properties, anticipating that these issues are technical issues which will be solved, and not in any case should prevent us from responding to the demands from the market. For many years ahead I am convinced that the users of the Cadastre will accept rather simple solutions, such as visualising the projection of the 3D property on the surface only, referring to more detailed information contained in the particular case documents, if needed. In most cases I think that the construction drawings should be sufficient documentation of the limitations (boundaries), not requiring additional cadastral surveying. I should be mention that we will apply the standard cadastral numbers also for 3D property, reflecting the principle that the identifier should contain no information about the kind of property (or other information).

## **IMPLEMENTATION OF THE NEW LAW**

The proposal to facilitate 3D properties has received general appreciation. The Ministry of Environment is currently preparing the final draft for the Parliament. It is anticipated that the Parliament will handle the draft next spring, and that the new law will come into effect from 2004. The Mapping Authority has already started the design of the new cadastre database to be ready at the same time.

The other main elements of the new law are:

- The establishment of a national cadastral database, including a cadastral map and public restrictions on land
- Introducing private licensed surveyors to replace the current municipal monopoly



**ABOUT THE AUTHOR**

*Helge Onsrud* graduated as land surveyor from the Agricultural University of Norway in 1970. He is a Senior Advisor in cadastre and land registration at Statens kartverk. He is chairman of the Committee for revision the law on the cadastre. Furthermore he is former chairman of FIG Commission 3 and former chairman of the UN ECE Working Party on Land Administration (MOLA). He participated in several cadastre and land registration projects abroad.

**CONTACT ADDRESS**

Name: Helge Onsrud  
Institute: Norwegian Mapping Authority (Statens kartverk)  
Office address: P.O.Box 8120  
Dep 0032 Oslo  
Norway  
Telephone: +47 22991036  
Fax: +47 22991011  
E-mail: helge.onsrud@statkart.no