

# Privatising Cadastral Surveying in Norway

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## ABSTRACT

Currently it is a municipal monopoly on undertaking cadastral surveying in Norway. A committee appointed by the Government to draft a new law on the cadastre has proposed to remove the municipal monopoly in favour of private licensed surveyors. The author, who chaired the law committee, will discuss the pros and cons of privatising cadastral surveying.

A key issue is to understand and design the appropriate role of a private surveyor in a modern, market based, economy. At least in the Norwegian context, he or she should be an advisor on land and property matters, acting in a much wider role than producing coordinates and maps. Following up on this, it is important to distinguish between the *services* to be provided by the private professionals, and *authority* which should remain with the public sector. Ensuring quality of services in a competitive environment, inter alia through providing adequate education and post graduate training, as well as arrangements for licensing and liabilities, is an important matter.

The paper will particularly discuss the transition from the current public sector monopoly to private licensed professionals. This includes measures to ensure continuous services to the public as well as facilitating post graduate training for surveyors moving from public to private sector.

It is expected that the draft law on the cadastre will be presented to the Parliament early 2002, and come into force from 2004.

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## 1. BACKGROUND FOR THE LEGAL REFORM

### 1.1 The current situation

Norway has a cadastral system largely in line other West-European countries. The municipalities have however a much stronger role than in most other countries. Norwegian municipalities:

- issue land sub division permits as required in the Planning and Building act
- undertake cadastral surveying, using their own staff or contracting a private company
- update the cadastral register and cadastral map

In legal terms, and as prescribed in the current law, cadastral surveying is execution of public authority. That means, inter alia, that (i) complaints from clients are dealt with as for appealing other municipal decisions, (ii) the fees to be paid by the clients are standard fees as decided in the municipal regulations, and do not reflect the amount work actually provided in the individual case. The principle of cadastral surveying being execution of public authority applies even if the municipality contract a private company to make the field survey. The work executed by a contracted private engineer is in legal terms the same as if it was undertaken by a regular municipal staff member. It should be underlined that if surveying is out-sourced, the municipality and not the individual client, is the contracting party.

About 40.000 cadastral surveys in made Norway in a year. On average it is executed one cadastral survey per 100 inhabitants in a year. There are 434 municipalities in Norway, half of them have less than 5000 inhabitants, and consequently half of the municipalities execute less than 50 surveys in a year, many of them far less. The fact that the current law on the cadastre does not fix a particular level of competence for municipal surveyors is only a response to the current organisational set up. In only 12 municipalities the surveying activity is supervised by an “academic” – 5 year degree surveyor. The majority of the municipalities have employed surveyors with a 2-3 year degree, but in many municipalities the work is headed and executed by building engineers with some surveying skills. There are also no particular requirements for competence to private companies making cadastral surveying.

It is not possible to state that the limited use of well educated cadastral surveyors has created major problems. The big amount of boundary disputes in rural areas in Norway stems from previous times (until 1980), when the (verbal only) describing and monumenting of new boundaries were undertaken by lay men. However, cadastral surveying is regarded mainly a technical matter, fixing the position of corner points. This is generally done with acceptable quality. Legal issues related to sub-division and creation of new parcels, have largely been left to the parties themselves to sort out and register (in the land registry). Hence, land owners in need of advice on legal and planning matters, are forced to turn to other experts than a surveyor. The result is however in most cases that legal matters are poorly dealt with. The

majority of future problems, some resulting in court cases, will not be boundary disputes, but disputes related to other issues, such a right of way, fencing, water right, etc.

In addition to the above mentioned lack of recourses for advice to the clients on legal and planning matters, the major problems concerning the current municipal monopoly are:

- Long waiting times, in some municipalities 3-5 months
- Large variations in fees, because it is up to the individual municipality to fix the regulations for fees within an upper limit of average cost recovery
- The standard fees does not reflect the costs in each individual case
- Little encouragement to improve the services, implement new surveying methods etc, as it will not enhance the income to the municipality

It should however be underlined that a main driver behind removing the municipal monopoly is the general trend in modernising public sector and in reducing public bureaucracy. In addition, municipalities are faced with increasing problems in recruiting surveyors, and in keeping pace with the technical developments in surveying and mapping.

Norway has a well functioning land market. It is not possible to conclude that the market is severely hampered by the current level of cadastral services. Concerning access to information, the market is supported by a well functioning land information system consisting of two separate registers; The Cadastre and the Land Book. Both are in digital form, and the two registers are made available for users through an integrated on-line service covering the whole country. At present the national cadastral database contains only alphanumeric information. Cadastral maps are kept at local level. The maps are not generally available in digital form, but a number of municipalities have converted their analogue maps to digital form. A key issue in modernising the land information system is to ensure integrated access to information about public restrictions on land (and on the use of buildings as well), resulting from planning and other similar restrictions issued by the municipalities and other public agencies. Implementing a digital map as a part of the national cadastre database, is also an important issue for the reform.

## **2. INTRODUCING PRIVATE LICENSED SURVEYORS**

### **2.1 The expertise of a private surveyor for the 21<sup>st</sup> century**

The committee on the reform of the cadastral law found that introducing private licensed surveyors, to be contracted directly by the clients, would be the best response to the current problems and the continuously changing technical and social/political environment. Other alternatives, i.e to improve the situation in the municipalities or to establish a new state service, were both were found unrealistic.

In designing a private surveyor for the 21<sup>st</sup> century, it was important to agree on what type of expert he or she should be. It was found most beneficial to the clients and to society in general to make the surveyor a specialist in legal and in land planning matters related to the creation of new parcels, combined with technical skills needed for setting out and measuring

boundaries and for mapping and GIS. The surveyor is expected to be able to draft legal documents for relevant servitudes and easements, and for transfer of ownership. He or she should also be able to assist land owners in writing necessary applications for subdivision, and to prepare land use plans or amendments to existing plans needed in the particular case. The draft law sees the surveyor being more of a “terrain going” lawyer, than a geodetic engineer. However, he or she must possess the geodetic skills needed for the cadastral measuring and updating of records and maps. However, observing the rapid development in surveying techniques, the law committee agreed that competence in geodetic surveying will be less critical than before.

It is expected that companies licensed to undertake cadastral works, will develop different profiles. Only very few companies can survive on cadastral surveying alone. Specialities can be in areas of land use planning, land development and land management, surveying, mapping and GIS.

In the current system, the municipal engineer is a civil servant acting with public authority. This means that he/she can take certain decisions on behalf of the municipal government, right on the spot. In setting out new boundaries he or she can for example accept minor changes to the approved parcel plan. He/she has however no power to settle disputes. Disputes are normally referred to the Land Consolidation Court, which are specialised courts for disputes concerning boundaries and other rights to land. The judges in these courts are land surveyors.

The law committee discussed if the private licensed surveyor should have authoritative power, which is currently the case for the municipal engineer. On this issue it was decided to make a clear cut: The new surveyor should be a consultant only, and all authoritative powers should remain with the government. In reality this may not have a significant effect on the execution of surveys. A good surveyor will always find a smooth way to work with the government in trust, and at the same time maintain the necessary flexibility towards the needs of the clients. In a longer perspective the issue of authority (on behalf of the government) may change. It has for example been mentioned that boundary disputes should start with a private surveyor as the first instance, which is the system in Denmark.

Making the surveyor a consultant has certain consequences; Competition, no regulated fees, few regulations for work procedures, but for the result, complaints are treated as consumer complaints. The surveyor is expected to work within agreed standards and ethical guidelines. He/she should not only serve the clients. The surveyor shall also, on a neutral basis, respect the interests of neighbours, as well as public interests in land, as this is spelt out in zoning plans and in general policies for land and the environment.

## **2.2 Licensing**

The draft law introduces basically a system of licensing surveying *companies*, much in line with the existing system for licensing companies in the building industry. However, it is a fundamental requirement to a company license, that the cadastral works of the company are headed by a so called “responsible” surveyor. Indirectly, the law therefore also introduces licensing of individuals. If a company is located to several places, each “regional” office

should have a responsible surveyor. Cadastral activities may be done by a branch or division of a larger company dealing with works not related to cadastral surveying or to surveying at all. It is, however, expected that most companies seeking license will be small or medium size companies, well distributed throughout the country. It is proposed that licenses, both to companies and to individuals, are issued by the national cadastral authority, which will be the existing national mapping authority.

It is indeed my hope that the Government will go for licensing regulations which require a five-year degree and some practise, as is proposed by the law committee. To make this level a condition for license, is perhaps the most critical issue during the parliamentary handling of the law proposal. It may be difficult for politicians, in a country where the land market in fact operates very well, to understand and support a radical shift from practically no requirements for competence, to requiring an academic level. Politicians may be tempted to lower the formal requirements, and leave it to the market to judge. In that case it will become a major challenge to the surveyors organisation to establish a private regime of quality assurance. Only surveyors possessing the level of competence decided by the organisation itself, should be allowed membership, and hence be entitled to use the membership in marketing.

The level of competence is critical to the establishment of a new liberal profession. If the level is fixed too low, and the profession initially are established with many less qualified surveyors, it may harm the standing of the profession for a long time. Hopefully it will help in the coming lobbying in the Parliament that neighbouring countries all require an academic level.

A relevant surveyor's curriculum should contain three basic pillars: (i) Land law, (ii) land use planning, management and development, (iii) geodetic surveying and mapping. This can largely be based on the existing curriculum for "property" surveyors (qualified to be a land consolidation court judge) at the University of Agriculture, but the capacity to train and re-train surveyors must be greatly improved. The market for licensed individuals are probably in the range of 200 to 300. To cover jobs outside the profession as well, it is anticipated a need to train 500 surveyors within the first ten years after the law is implemented, of which 200 should be new graduates, and 300 existing surveyors who want to qualify themselves by post graduate courses.

It should be underlined that the academic surveyor normally should be a *manager*, leading other employees, and trained accordingly. The need for the responsible surveyor to actually meet the parties in the field, or take part in the technical surveying, depends on the complexity of the individual case. Carrying the formal responsibility means however that the leading surveyor will be economically liable, and carries the risk of losing the license.

### **3. TRANSITION MEASURES**

It is totally impossible to move from the current municipal monopoly to a privatised system "over night". It will take several years to establish the private service in all parts of the country.

The following are therefore proposed:

- to enforce, from day one, that the new procedures for execution of cadastral surveys, i.e. regulations concerning documentation, registration of relevant rights, etc, shall be applied in all cases
- to implement, from day one, the client's free choice of contracting a private surveyor, or the municipality
- to allow municipalities to execute cadastral surveys for a period of ten years without having a "company" license and a responsible surveyor. The individual municipality may however at any time decide to terminate their surveying service, if and when a satisfactory private service is established in the region.

Surveys undertaken by municipalities continue, in legal terms, to be execution of public authority. This has an effect on appeals procedures and on fees structure, but more important that a municipal surveyor can continue also to do the registration into the cadastral database, i.e. to act as the local cadastral authority. Hence the municipalities do not have to make an organisational separation of surveying and registration, which would otherwise be practically impossible in the many small Norwegian municipalities.

It will not be fully fair competition during the ten year period. Municipalities may fix lower fees than a private surveyor can survive on. However, the municipalities will generally not be able to offer extended advisory services, which is a key element in the private service. Many clients will probably value rapid execution and enhanced services from a private company, more than a potentially lower fee to the municipality. A likely scenario is that many municipalities will wish to terminate their service as soon as possible, and therefore stimulate the growth in private sector. It can be imagined that a number of new companies will be established by engineers leaving the municipal sector, and even be stimulated economically by their employer to take that step.

As mentioned above for licensing requirements, some special arrangements must be made for the transition period before recruitment can be fully based on graduates with the "ideal" education. A practical approach is needed for the acceptance of earlier education and in appreciating years of practise. It is important to find a proper balance between supporting the necessary number of surveyors to build a private service in time, and at the same time not damaging the image of the profession by accepting people with too little knowledge.

Making an appropriate organisation for the surveyors can and will play an important role in building the emerging liberal profession. In fact it may be of crucial importance. It is a big challenge for the existing surveyors' organisation, the current Norwegian FIG member, to establish an appropriate capacity to support the development of the new profession. It is furthermore a policy of the existing surveyors' organisation to ensure that this capacity is established under it's umbrella, and not outside.

Key issues for the organisation to engage in are:

- Providing a forum for the emerging private surveyors to jointly develop policies and strategies on important issues, such as regulations for licensing, education and post graduate training, conditions for becoming a member of the organisation, etc
- Representing the private sector interests versus the Ministry and the Parliament in their final deliberations on the draft law
- Talking the interests of the private sector in the subsequent development of detailed regulations for licensing, technical standards, etc
- Develop and execute a common information and marketing campaign of the new liberal profession (advertising, pamphlets, common graphical design, etc)
- Develop ethical standards
- Develop internal rules and procedures for client's complaints
- Develop common forms, journals, etc
- Assist in establishing private companies (technical and administrative manuals and guidelines, insurance scheme, etc)
- Develop and execute internal training courses

I am convinced that the emerging private cadastral companies and licensed individuals will largely vitalise the whole surveying and mapping community in Norway. It will make the profession more attractive to young people, who these days seem to be more oriented towards a future in private sector than in public sector. I am convinced that introducing private licensed surveyors it is the single most important measure for turning the sinking interest for studying surveying, which we have observed over the last decade or so.

Finally, introducing private surveyors will help in the on-going modernising of public sector, providing a possibility to outsource, not only cadastral surveying, but surveying and mapping at large. As underlined in this report "surveying" also includes competence to deal with land management, land development, land related environmental issues and land use planning. Both the public and the civil society will benefit of having access to a community of professional private surveyors to help in these matters.

## REFERENCES

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## BIOGRAPHICAL NOTES

**Helge Onsrud** is currently Senior Advisor in Statens kartverk (the National Mapping Authority)

He was chairperson of the law committee on the reform of the cadastral legislation 1995-99

He was chairperson of FIG Commission 3 1994-98

He was chairperson of UN ECE Working Party on Land Administration (former MOLA) 1996-2000

He has been working, and continues work, with cadastral projects in Norway and abroad