Status of Coordinates in Norwegian Cadastre

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SUMMARY

The paper focuses on the status of coordinates in the Norwegian cadastre, compared to other European countries. Both the legal status and the accuracy and reliability of the coordinates are investigated.

To clarify the legal status of the coordinates, the paper discusses the historical reasons for introducing coordinates in the cadaster, and also discusses whether coordinates are put emphasis on, directly or indirectly, by courts when settling boundary disputes.

It is found that the introduction of coordinates is strongly connected to the development of surveying methods. In Norway, the coordinates seems to have been regarded mainly as a tool to maintain the cadastral map, and not as a mean of defining a boundary. But this is somehow inconsistent with todays practice when boundaries are reconstructed from coordinates by municipal cadastral surveyors.

Further, it is discussed how accurate the coordinates in the cadastre are, and the practical consequences of eventual inaccuracy, both for the landowners and the public authorities. To answer this, the cadastral maps of some selected Norwegian municipalities are analyzed, and the registered accuracy is visualized using GIS-software. It is found that the accuracy of the registered boundaries in many cases is too low to be regarded as "fit for purpose". This applies both to the landowner who has a need to know where the boundary lies, and also to the public sector which needs to know where the boundary lies in connection with planning and permissions.

The described status of the Norwegian cadaster is compared to some other European countries.

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