Restauration of Property Boundaries in Sweden's Largest Forest Fire Area

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SUMMARY

Modern forestry requires accurate and clear property boundaries in order to enable felling all around the year. Between 31 July and 4 August 2014, Sweden experienced the largest forest fire of recent times. Around 13,000 hectares of forest land were affected, leaving some 130 property owners with their trees and various facilities in ashes.

The forest fire area stretches into four municipalities' administrative districts. For those municipalities, the cadastral services are managed by the State through Lantmäteriet (the Swedish mapping, cadastral and land registration authority). In December 2014 the Swedish Parliament decided to provide SEK 18 million to Lantmäteriet, to subsidize the costs for the property owners concerned who need their boundaries restored on the ground through cadastral procedure. For Lantmäteriet, carrying out field work in such a severely burned forest area implies new challenges, in particular with regard to risk management and the fact that most physical evidence of the legal boundaries has been consumed by fire. In addition, almost all of the damaged trees have now been felled, which makes it even more difficult to see the previous types of land use (clumps, roads etc.). Hence, the cadastral work needs thorough planning and preparation in order to be handled in a smooth and systematic way.

This paper presents the practical considerations, economic limitations, planned actions, and cadastral issues (legal and technical) that Lantmäteriet are facing – both internally and in collaboration with other authorities and stakeholder organisations involved in the boundary restauration activities. To give a broader picture of Lantmäteriet's role, especially concerning collection and dissemination of geodata during and after the fire, the paper also describes actions taken with regard to aerial photography, laser scanning, IR photography of "hot spots", and provision of maps for all involved. Issues of preparing the cadastral surveyors for communicating

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with people in crisis or post-traumatic stress are also touched upon.	
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