

# Twist and Tango – Mines moving cities in Arctic Sweden

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## SUMMARY

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The two cities Kiruna and Malmberget was formed in northern Sweden in the late 19th century, as a result of the establishment of iron ore mines in the same locations. Today the Kirunavaara and Malmberget mines have turned into the worlds two largest underground iron ore mines, proceeding deeper under the urban areas above and making the very ground that the cities stand on collapse.

The mines and the cities are mutually dependent, remotely located in a desolate arctic landscape, and they cannot resonably function without each other. For this reason, the mining company LKAB and the municipalities of Kiruna and Gällivare (where Malmberget is located) have had to form partnerships in order to relocate the affected urban areas, including i.e. residential properties, infrastructure and – in the case of Kiruna – the very commercial centre of the city. The result of the resettlement is that the urban areas transforms into new shapes, avoiding other areas of interest for mining purposes, indiginous land and other areas of national interest, while building sustainable living environments. This is a delicate dance of balancing different land use claims and other interests.

The work being undertaken rasies questions regarding urban and infrastructure planning, social, economical and environmental sustainability and, not least, issues regarding voluntary and compulsory aquisition of property with related compensatory challenges.

The first objective of this paper is to briefly describe the proceedings regarding the city of Kiruna – as a case study – and the legal framwork applicable in the relocating process. A second objectivte is to apply the method of Tagliarino to assess whether national laws of compulsory aquisition for

mining operations comply with international standards on expropriation, compensation and resettlement (the VGGTs).

The assessment indicates that the applicable legal framework was not necessarily designed with the current situation in mind. In the light of the economic interests concerned and the number of actors involved, additional reform in the domain of compulsory acquisition might be appropriate.

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