

ANALYTICS URBAN TRANSFORMATION

Space Innovation Forum on 29 September

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Background LKAB

Why is technology important for
LKAB

Use Case, Urban Transformation

EUROPE'S LEADING MINING AND MINERALS GROUP

EUROPE

LKAB is the EU's largest iron ore producer and mines around 80 percent of all iron ore within the EU

30

More than 30 industrial minerals in the portfolio

2

LKAB is the world's second-largest supplier of iron ore pellets on the seaborne market

31.3

Net sales of SEK 31.3 billion in 2019

4,300

average number of employees

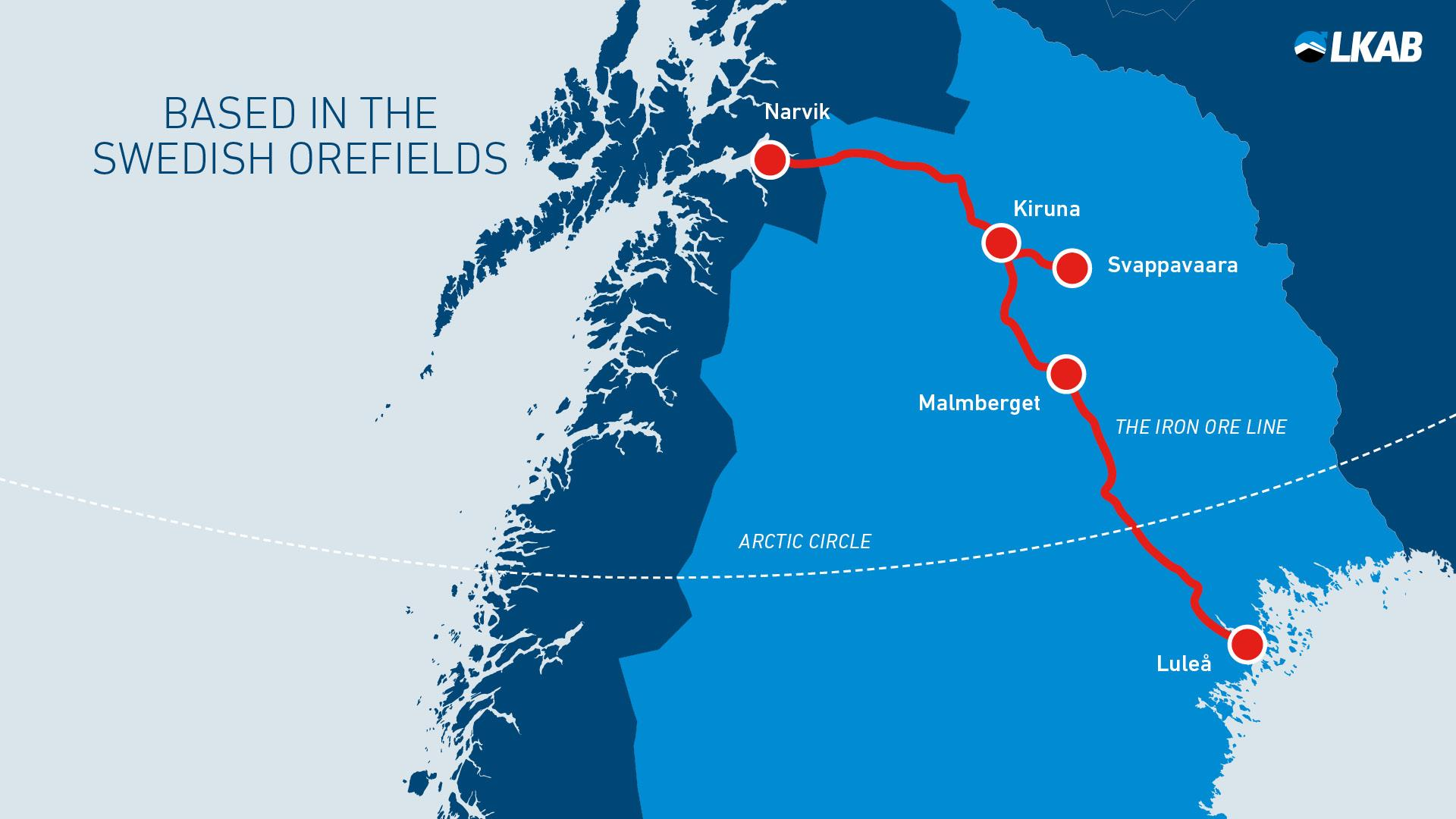
LKAB is one of Sweden's oldest industrial companies and is owned by the Swedish state

12

The Group is present in 12 countries

1890

BASED IN THE
SWEDISH OREFIELDS



Narvik

Kiruna

Svappavaara

Malmberget

THE IRON ORE LINE

ARCTIC CIRCLE

Luleå

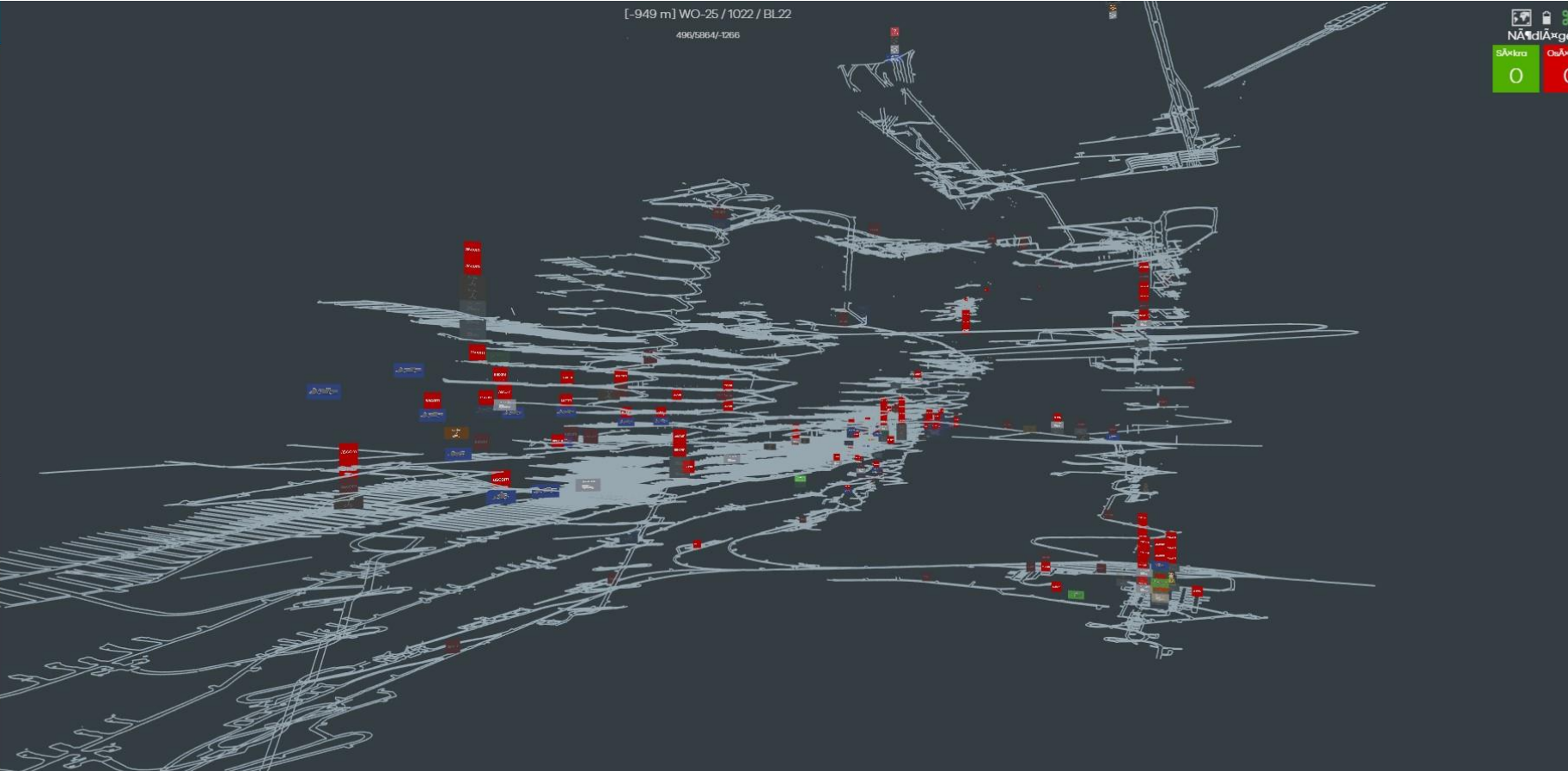




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NÄDLÅNGE

SÄKRA	ÖSÄKRA
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The background of the slide is a photograph of a long, narrow underground mine tunnel. The tunnel is dimly lit with several overhead lights. The walls are rough and rocky, and the floor is covered with tracks and various pieces of equipment. The perspective is from the end of the tunnel, looking down its length.

Increase underground scale
Automation and new technology
Keys to be competitive

Community and mine together

Moving two communities. This is the challenge facing LKAB and Malmfälten.

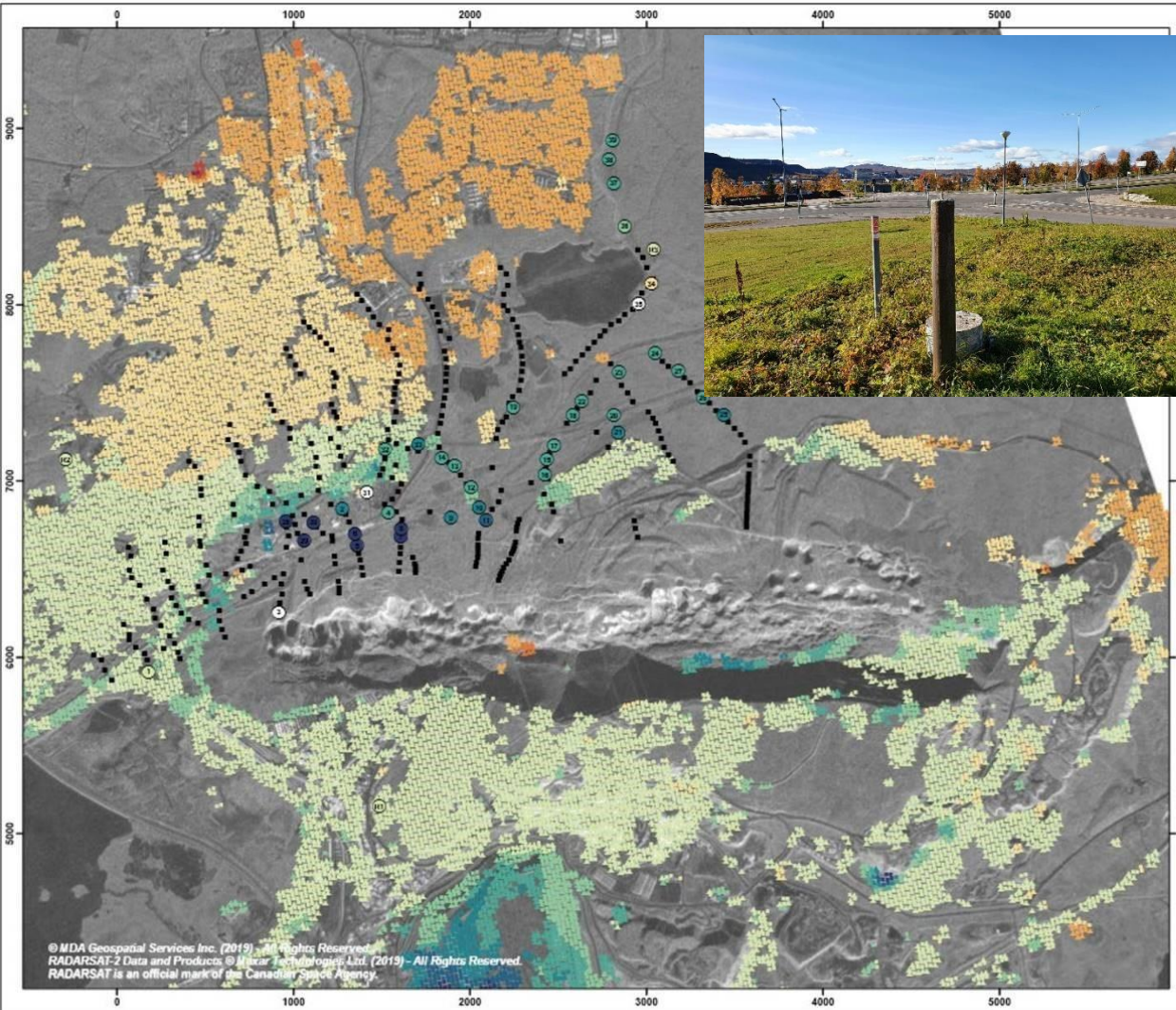
[Read more about the urban transformation](#)



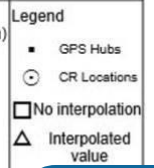


Synthetic-
aperture radar
(SAR)



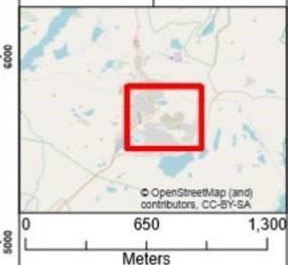


LKAB Kiruna:
InSAR CR-CTM
Vertical Deformation:



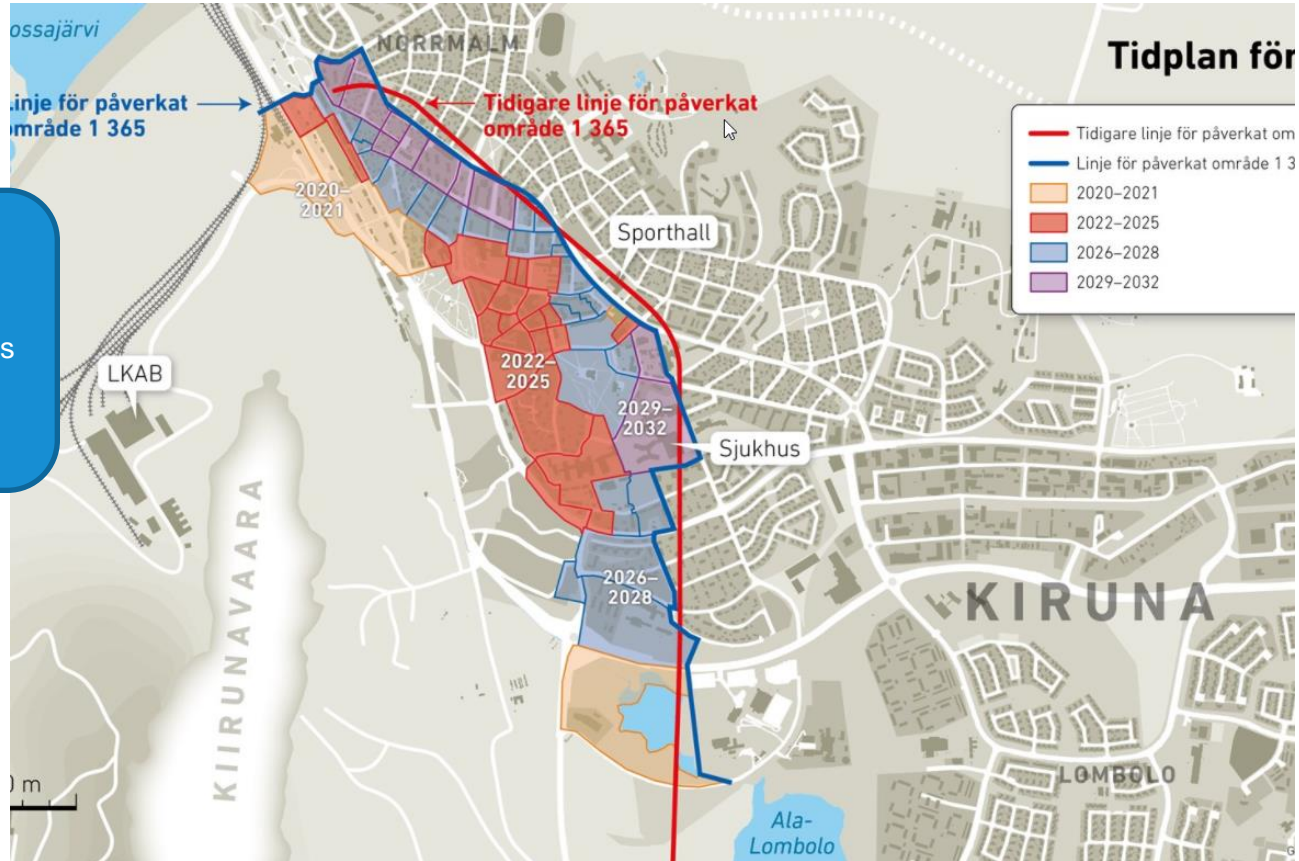
Problems

- Ice, water, snow
- Stealth
- Not close to real time



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Correlation with mine production plan

And we have a prognosis map

SOLVING ENTERPRISE ANALYTICS

Know the Use Case

- Is it changing the WoW?
- Simplifying WoW is creating value

Use case for enterprises need to be hybrid in many cases

- Backend integration

Near Realtime Analytics is important

- Data driven real time decision making
 - Automated decision making
 - One truth

Underground high speed navigation

Fun fact



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“Probably two of the biggest and most advanced underground mines in the world”

