



NORTHBASE

Finnish Space Strategy in theory and practice – user's point of view

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Finland 2025

The world's most attractive and agile space business environment which benefits all companies operating here

 Ministry of Economic Affairs and Employment of Finland

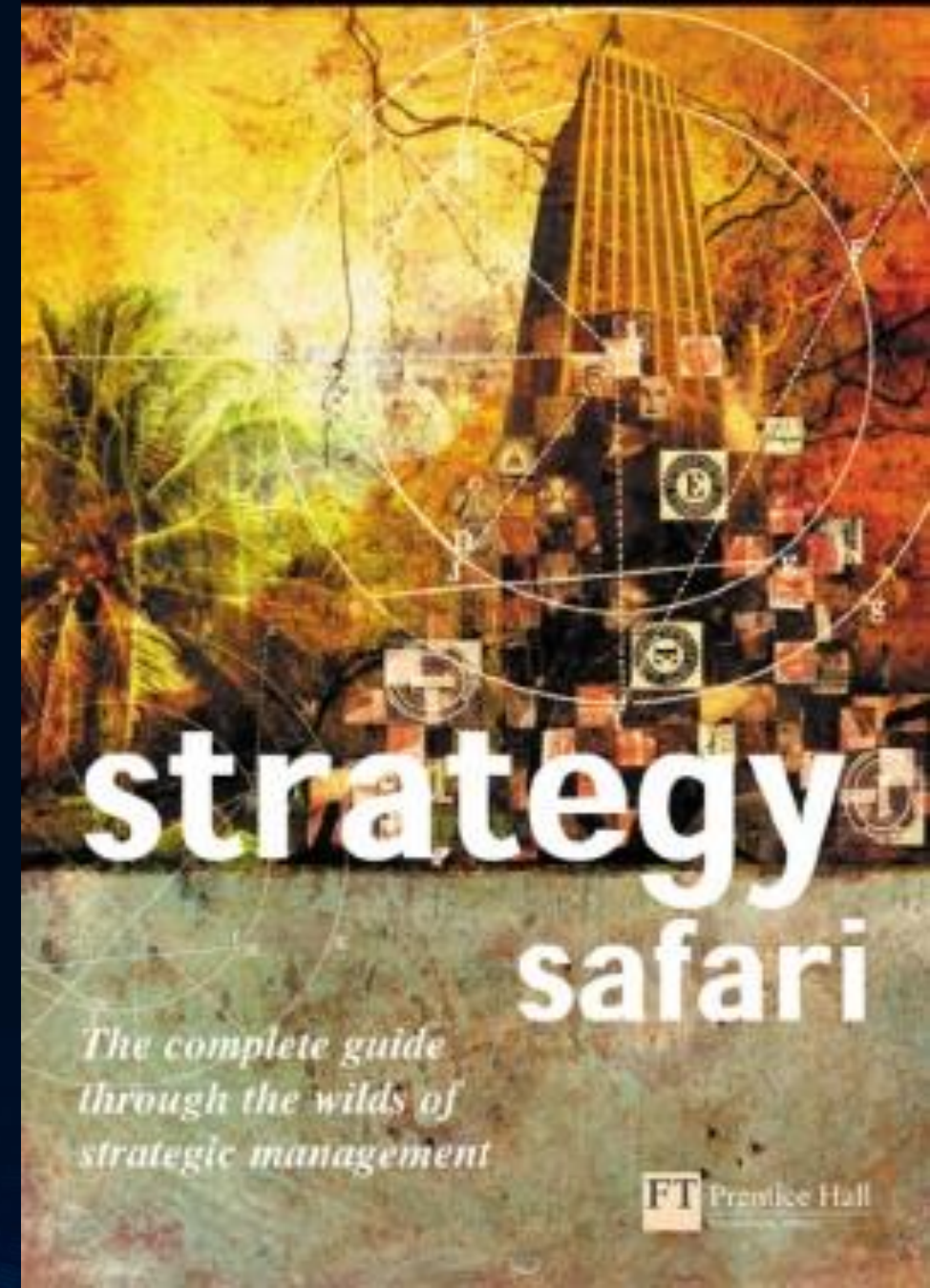
 **LVV** MINISTRY OF TRANSPORT AND COMMUNICATIONS

What
has
happened
since
2018?

What shape, size and colour is your strategy?

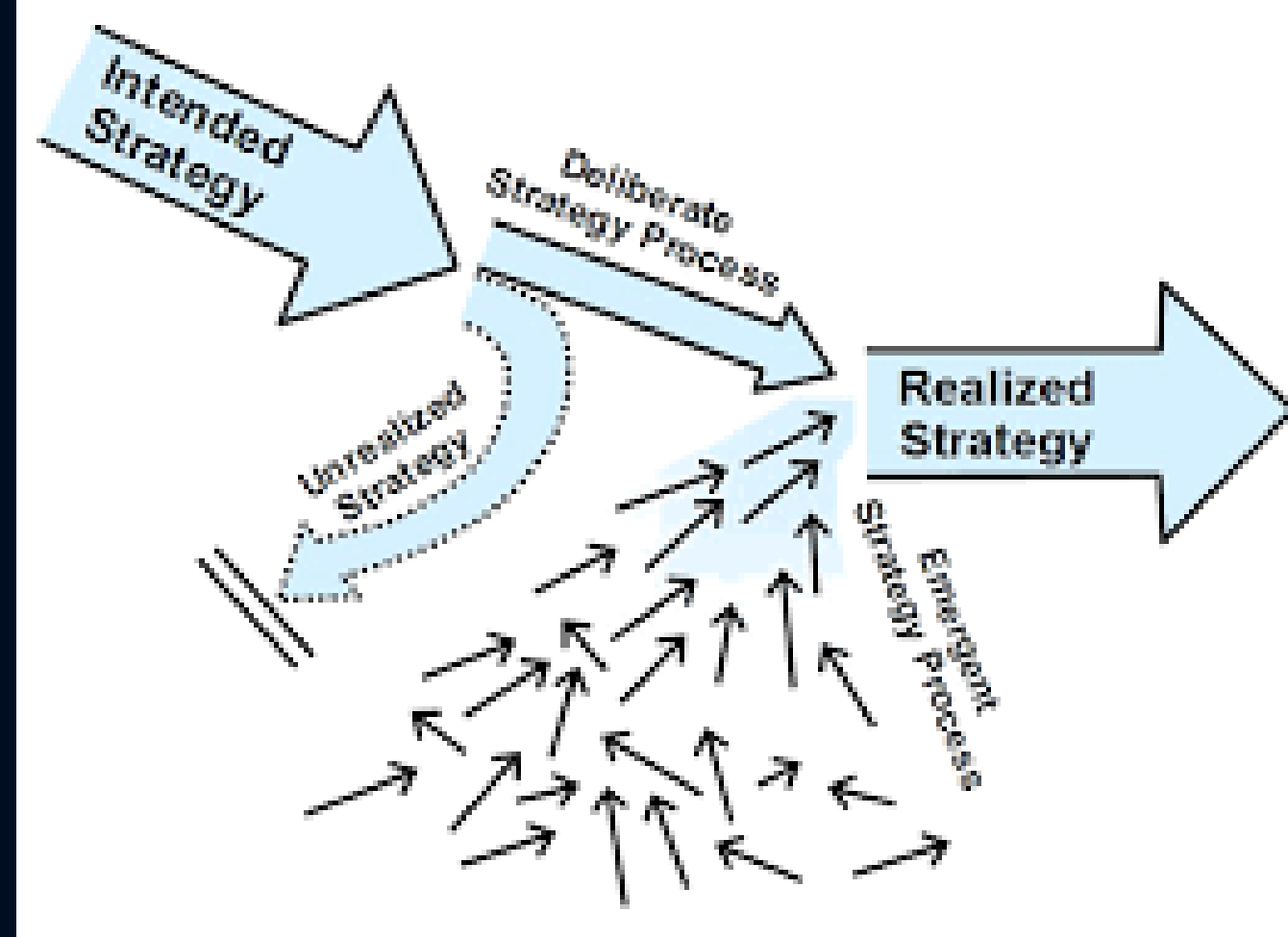
- Strategy is a very multi-faceted thing
 - "Strategy safari" introduces ten major schools
 - TLDR: "The red thread of company operations"
 - The strategy is never 100% correct when made
 - You are shooting at a moving target with long time span
 - Most important thing is to MAKE a strategy
 - Without starting the journey one gets nowhere
 - Finnish proverb: "We didn't get a jacket but pants"
 - Still, pants are ok and you can make jacket next

MINTZBERG · AHLSTRAND · LAMPEL



Intended and emergent strategy by Mintzberg

- You will not go where you aim for, and that's ok:
 - Some things work out
 - Some do not work out
 - Some things you missed
 - New things come up
- Perseverance + Agility = Successful Strategy





NORTHBASE

68° Northern
Latitude



Arctica and Antarctica





Ireland

Sweden

Finland

Alaska
with SSA

Oman
with OGS

Seoul

Busan

Jeju
with
OGS/SSA



Jeju

Malaysia

Australia

South Africa

Chile
with SSA

Excerpts of the Space Strategy 2025

- By 2025 “the turnover of enterprises producing satellite technology (upstream) **has grown 25-fold** (current estimate EUR 20 million). The turnover of enterprises applying space technology and space data (downstream) **has grown 10-fold** (current estimate EUR 300 million)”

Regulatory environment as an enabler:

- “**Authorities ensure that the national legislation supports business and does not unnecessarily limit it and that the permit processes related to space activities work smoothly (authorisation for space activities, export licences, radio licences).**
- The authorities involved, together with the security authorities, form a common opinion on **ground station investments** and implement the necessary amendments in legislation in consideration of national security.”



KSAT
KONGSBERG
KONGSBERG SATELLITE SERVICES



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2025 - 2110	JORDUTFORSKNING VIA SATELLIT (JORD->RYMD) (RYMD<->RYMD)	Rymdfarkostkontroll	2025 - 2110		Upplänk Satellit-satellit
5.392	FAST RADIO MOBIL RADIO 5.391 RYMDFARKOST-KONTROLL (JORD->RYMD) (RYMD<->RYMD) RYMDFORSKNING (JORD->RYMD) (RYMD<->RYMD)	Militär användning	2025 - 2110		



2025 - 2070 MHz FIXED	2025 - 2070 MHz (45 MHz) Military use		Transmitting earth station to be used for remote sensing satellite services in the frequency band 2036.25 MHz in Kirkkonummi. Transmitting earth station in the 2025-2070 MHz frequency range in Sodankylä.
2070 - 2110 MHz FIXED	2070 - 2110 MHz (40 MHz) Wireless cameras		Wireless cameras, for events only. Standard EN 302 064. ERC Recommendation ERC/REC 25-10.
SPACE OPERATION (EARTH-TO-SPACE, SPACE-TO-SPACE)	2070 - 2110 MHz (40 MHz) Space operation	Earth station (TT) TX Space station (ET) RX 2245 - 2290 MHz Space station (ET) TX Space station (ET) RX	
EARTH EXPLORATION-SATELLITE (EARTH-TO-SPACE, SPACE-TO-SPACE)	2070 - 2110 MHz (40 MHz) Earth exploration satellite	Earth station (TW) TX Space station (EW) RX Space station (EW) TX Earth station (TW) RX	



2025 - 2110 MHz (5.392 | ECA16A | ECA36)
 EARTH EXPLORATION-SATELLITE (EARTH-TO-SPACE) (SPACE-TO-SPACE) | FIXED | MOBILE (5.391) | SPACE OPERATION (EARTH-TO-SPACE) (SPACE-TO-SPACE) | SPACE RESEARCH (EARTH-TO-SPACE) (SPACE-TO-SPACE)
 Aeronautical military systems | Fixed | Land military systems | Maritime military systems | PMSE | Space research | Telemetry/Telecommand (military)

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Norway explores Space Collaboration with ISRO

Home /

June 07, 2023

Norwegian Ambassador, H.E. Mr. Hans Jacob Frydenlund, paid a visit to the Chairman, ISRO, Shri Somanath S, a

The Chairman welcomed the visitors and appreciated Norway's technical support to the Indian Space programme. He

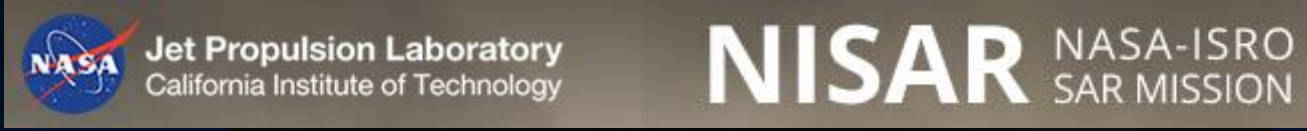
The Norwegian Ambassador acknowledged the numerous commonalities between India and Norway, including their

Ms Indregard, Chief Commercial Officer of KSAT, expressed the company's cooperation and the plan from



104 MNOK (18,5 MUSD) satellite contract

Kongsberg Satellite Services (KSAT) is awarded a contract to provide ground station services to Indian Space Research Organization (ISRO) of Bangalore India.



NASA-ISRO Radar Mission to Provide Dynamic View of Forests, Wetlands

NISAR will help researchers explore how changes in Earth's forest and wetland ecosystems are affecting the global carbon cycle and influencing climate change.



Cornerstones of a successful strategy process – 1 of 3:

Participation

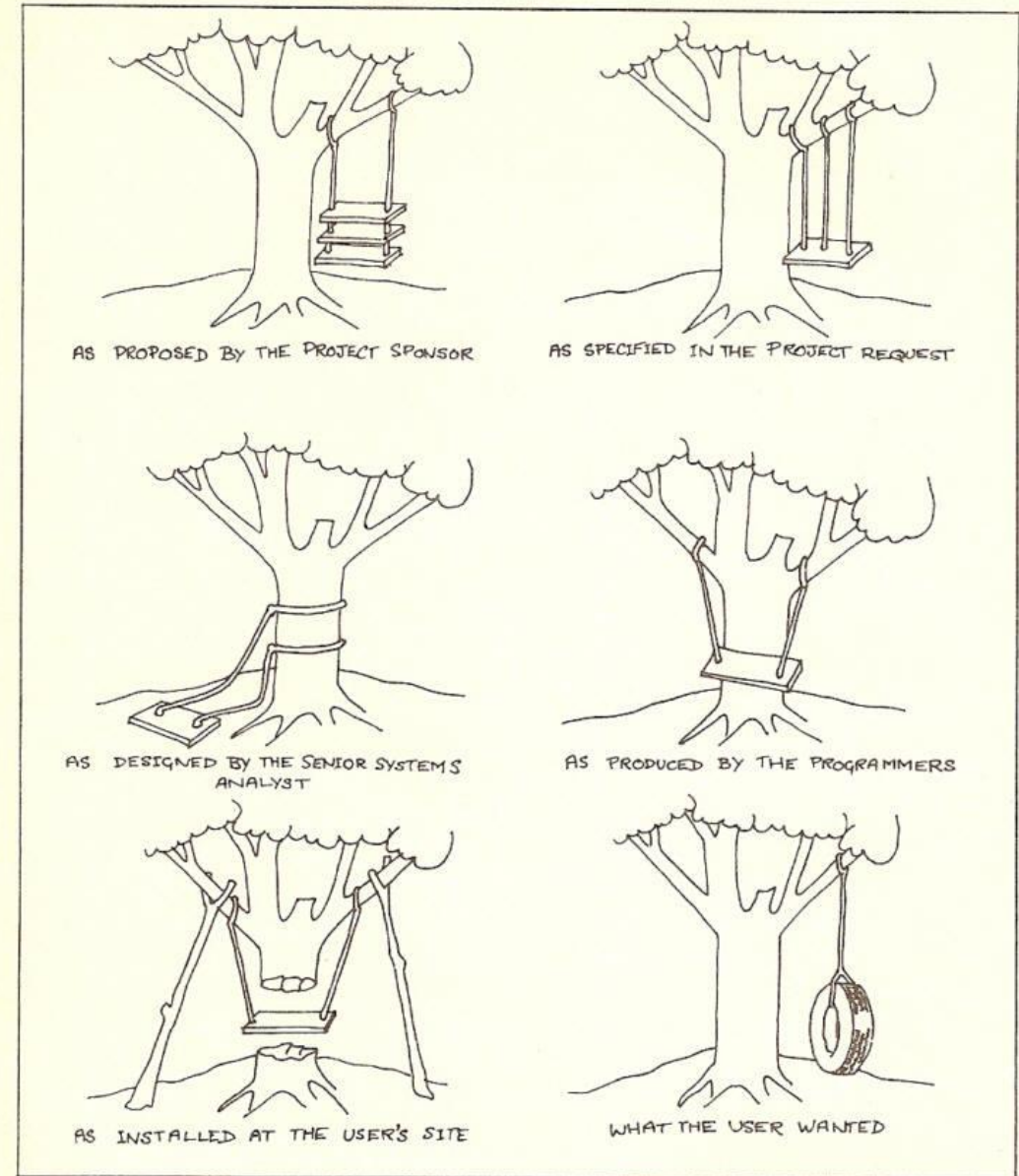
- Make everybody participate
 - Wide collaboration brings more aspects
 - Try to find weak signals from wide audience
 - Listen to people from other industries, too
- Participation creates commitment
 - Everybody owns the strategy
 - Brings support and robustness
 - Essential in implementing emergent strategies



Cornerstones of a successful strategy process – 2 of 3:

Flexibility

- Strategy has to live through its life cycle
 - Operational environment constantly changing
 - Strategy may be adjusted or changed
 - Still: Strategy is the red thread of action



Cornerstones of a successful strategy process – 3 of 3:

Resourcing

- Need to resource in admin and in the field
 - Public and private sector together – makers and enablers
 - National and international co-operation

NOTES:

- Finnish Space Strategy is a powerful manifest as itself
 - Let us all make it public and visible - Let's make this happen!
- No comments on actual content of the new strategy...
 - ...but a Space Office would be nice to have





Blue

Sky

Strategy



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