



Kartverket

Geografisk infrastruktur 2.0

- Med ITS som driver..

Fagdirektør Fou & Innovasjon, Reidun Kittelsrud



Foto: Mostphotos

Handwritten notes on lined paper, including names like "Brodal", "1954", "1953", and "1912".

1954
1953
1912

Brodal
1954
1953
1912

Handwritten notes on lined paper, including names like "Skiste", "1912", and "1953".

Skiste
1912
1953

Handwritten notes on lined paper, including names like "1954", "1953", and "1912".

1954
1953
1912



Foto: Finn Johannessen



Kommunal- og
moderniseringsdepartementet

Strategi

En digital offentlig sektor

Digitaliseringsstrategi for offentlig sektor 2019–2025



Kommunal- og
moderniseringsdepartementet

Strategi

Alt skjer et sted

Nasjonal geodatastrategi fram mot 2025





UN-GGIM

UNITED NATIONS INITIATIVE ON
GLOBAL GEOSPATIAL
INFORMATION MANAGEMENT

Future trends in geospatial information management: the five to ten year vision



- Digital Twins directly linked to multiple data sources
- Geospatial technologies enables ITS
 - How will this development change the mapping requirements?
 - How can geospatial technologies enable ITS?
 - How can the geospatial industry consume and use the data that is collected by ITS?

Datakilder



Samle og prosessere

Dynamiske data



Nasjonal Geografisk Infrastruktur

«Digital twin»

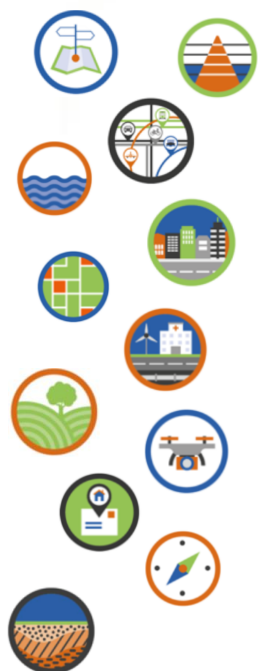
Dynamiske data

Enkel tilgang



Videre utvikling av geografisk infrastruktur

ver. 1.0 -----1.x-----> ver. 2.0
2020



Konvergens

Rikere datainnhold – åpne data

Arkitektur - 3D, 4D, BIM ...

Nye brukerbehov

Nye datakilder og grensesnitt

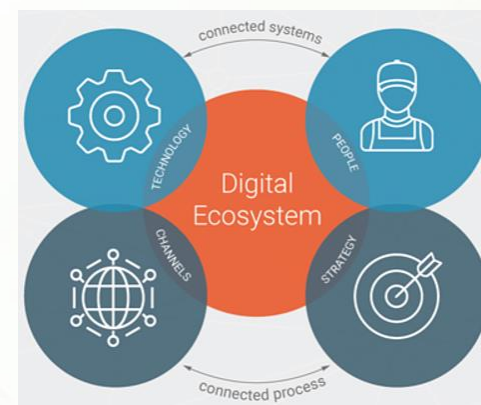
Flere domener

Nye forretningsmodeller

Finansiering og politikk

Kunnskap og Innovasjon

Økosystem som støtter nye bruksområder innenfor alle sektorer



 **GEONORGE**
Datadistribusjon



buildingSMART
International



European GNSS Agency



ISO/TC 211



International
Telecommunication
Union



Open Geospatial
Consortium



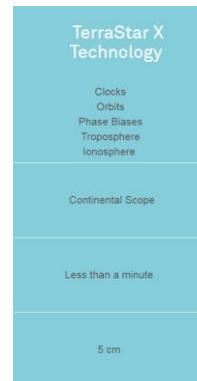
United Nations Statistics
Division



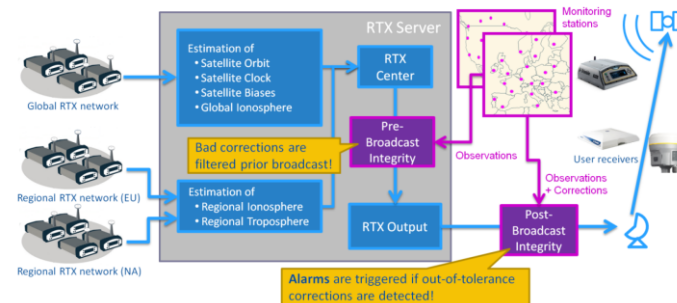
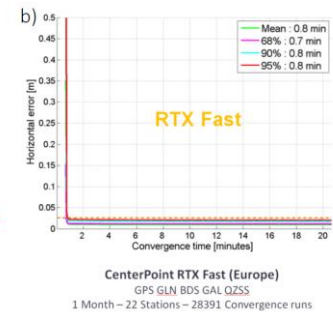
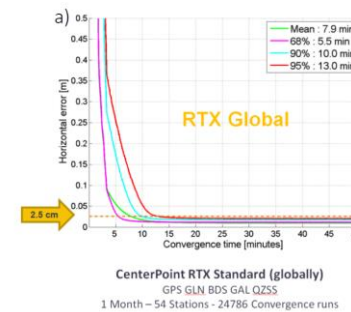
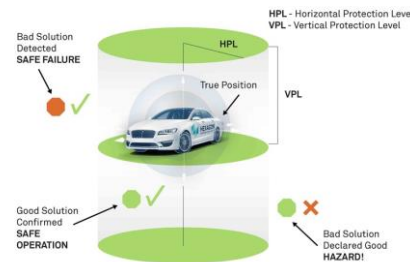
World Federation of
Engineering
Organizations

 **GEONORGE**
Nasjonal plattform

Kart og posisjon i samme språk?



Premium+ Service	<ul style="list-style-type: none"> Life-critical Applications Decimeter in seconds Continental coverage Integrity message Functional safety
Premium Service	<ul style="list-style-type: none"> Business-critical Applications Decimeter in seconds Continental coverage
Basic Service	<ul style="list-style-type: none"> Consumer-grade Sub-meter in seconds Global coverage (incl. continental)

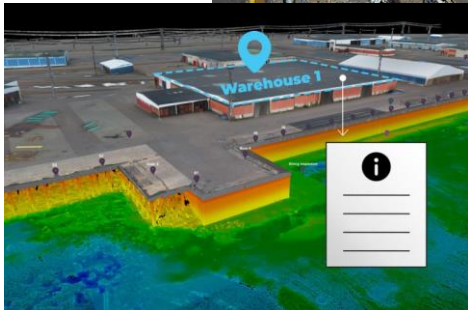




Kartverket



Hva gjør vi i dag?



- **TEAPOT** - Technology for advanced positioning within the transport system
- **NSIA** – Navigation System Integrity Assurance for Safety-critical autonomus operations
- **Havnedata**
- **GeoE3**
Geospatially Enabled Ecosystem
- **NDR**
Nordic Dynamic Road Cloud

BÆREKRAFTIG UTVIKLING AV GEOGRAFISK INFRASTRUKTUR

