

Sikkerhet som muliggjørere



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Digital Transformation Initiative

In collaboration with Accenture

Unlocking \$100 Trillion
for Business and Society
from Digital Transformation

EXECUTIVE SUMMARY
JANUARY 2017

HEALTHCARE: BUILDING THE HEALTHCARE SYSTEM OF THE FUTURE



Today's model of healthcare provision is increasingly unsustainable. To deliver continued improvements to the world's health, it will need to be transformed, with digital playing a central role.

[Click to download White Paper](#)

<p>Continuous Monitoring</p> <p>Continuous monitoring of health vitals with intelligent analytics to notify a member of LifeCare network when needed</p>	<p>Retail Clinics</p> <p>Provide people with convenient access to routine care with information connected and synchronized across the ecosystem</p>	<p>Connected Home</p> <p>Access to my health information enriched with insights to help simplify decisions and actions</p>	<p>Seamless Financing</p> <p>Health finances are paid seamlessly behind the scenes and ongoing care is coordinated</p>
<p>Auto Patient Access</p> <p>Intelligent personal devices become an extension of the patient, facilitating automated access and information sharing</p>	<p>Virtual Care Circles</p> <p>People receive real-time information and notifications that allow for more meaningful and productive interactions with doctors</p>	<p>Omnichannel Experience</p> <p>Personalized digital health hub supports people in improvement and maintenance of health seamlessly across interactions to make healthcare simple</p>	<p>Augmented Wayfinding</p> <p>Intelligent machines on people and facilities communicate to provide smart assistance in physical clinical settings</p>
<p>Intelligent Treatments</p> <p>Treatment plans are customized based on people's personas and continuously learn based on individual actions</p>	<p>Me and My Data</p> <p>Intelligent personal devices become the centre to help people improve and maintain their health throughout their life</p>	<p>Virtual Care Team</p> <p>First point of contact to coordinate care and support for people in times of need. Simple, secure access to care in real time with reliable healthcare professional</p>	<p>Intelligent Machines</p> <p>Transparent, real-time updates on people's relevant data allow virtual care teams to refine treatment and improve outcomes for their patients</p>
<p>Coordinated Ecosystem</p> <p>Healthcare ecosystem will be extended for a seamless people-centred experience</p>		<p>Connected Care</p> <p>Information is coordinated and synchronized across new ecosystem of virtual networks from home care to retail clinics to hospitals</p>	

Source: World Economic Forum/Accenture analysis

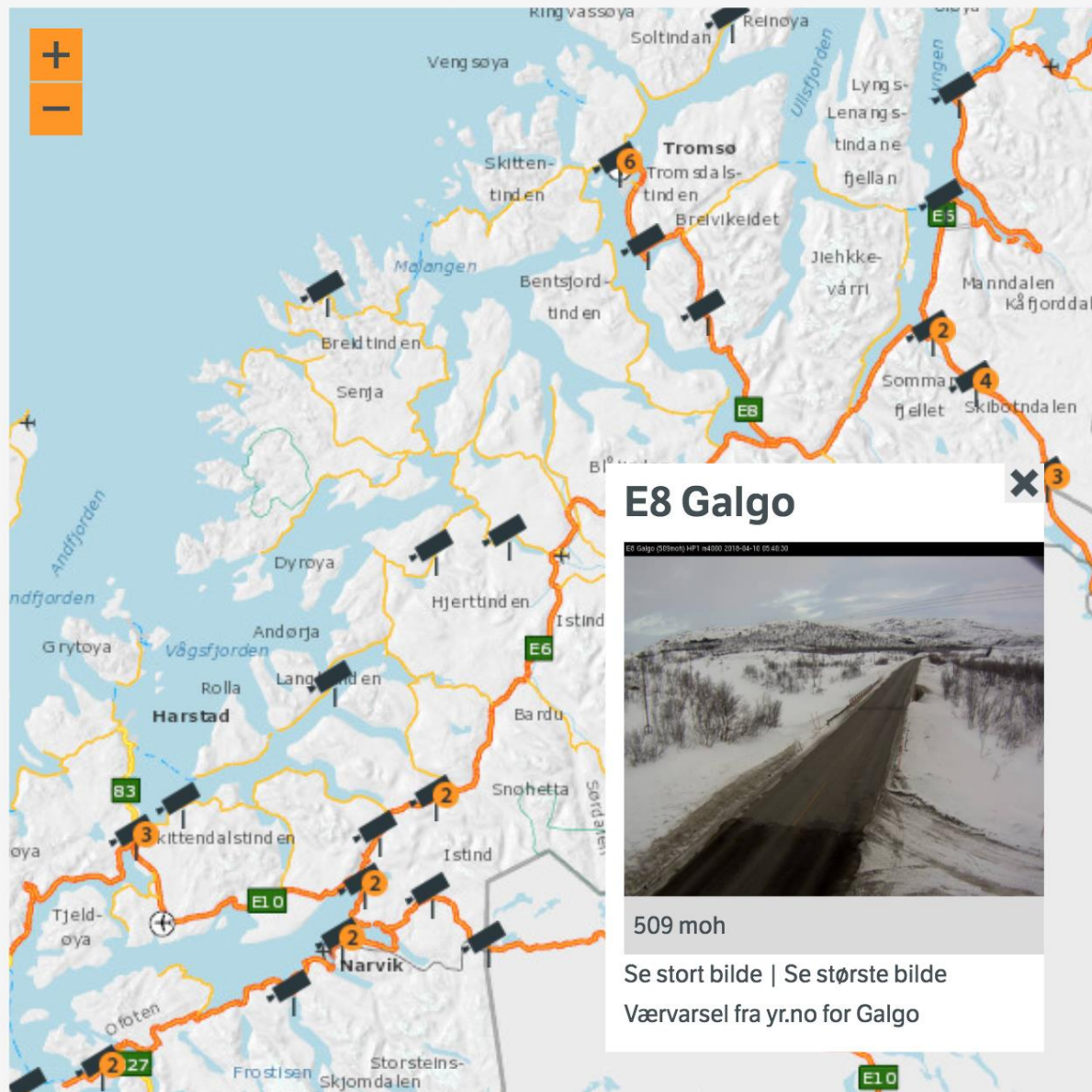
To find out more about the DTI project, visit <http://reports.weforum.org/digital-transformation>

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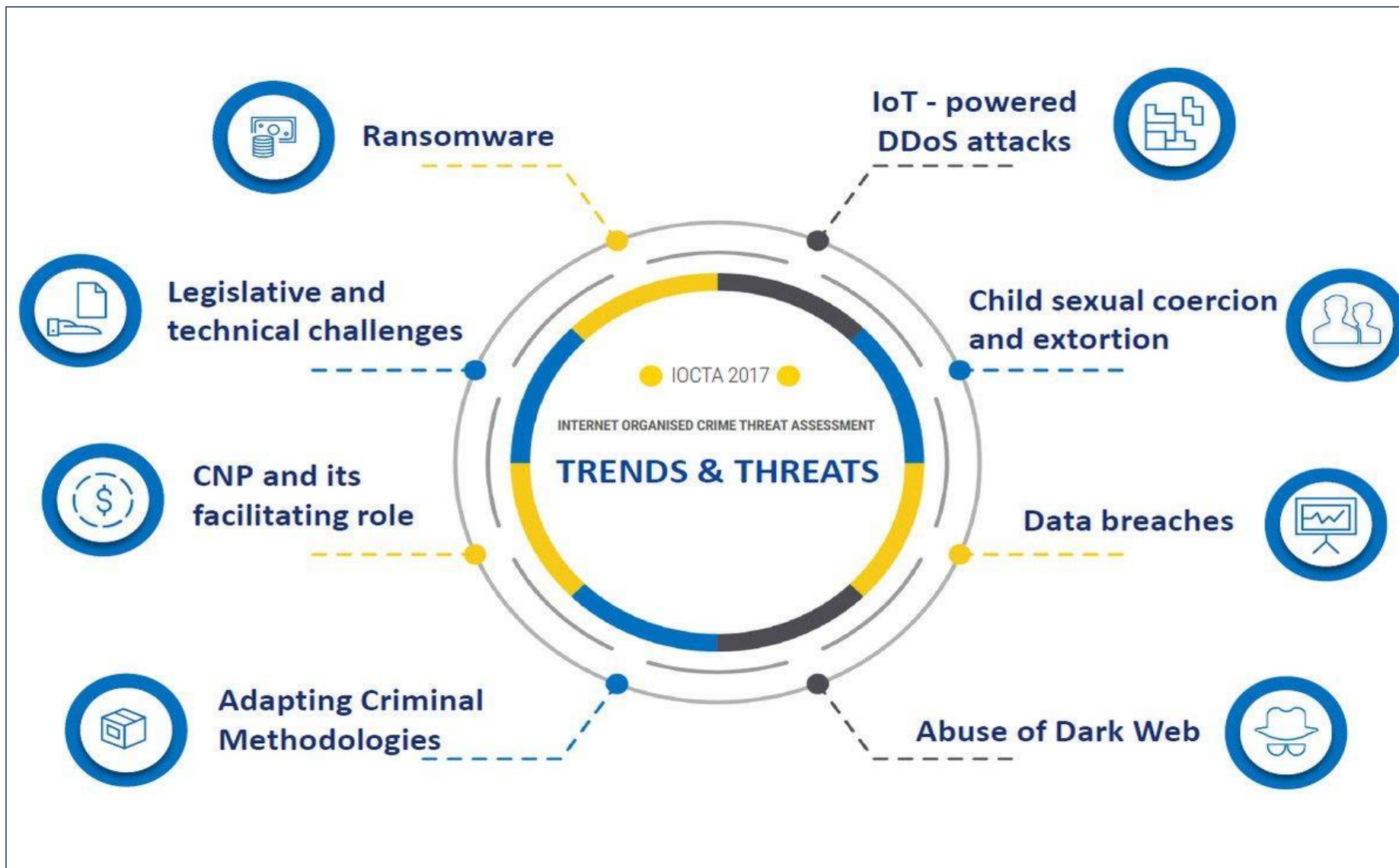
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Statens vegvesen







NATO: Stort behov for økt kompetanse og kapasitet

Operativ evne



- 10 % økning i digitalisering gir 0.75% økning i BNP¹⁾



- Kostnader som følge av cyberkriminalitet: 0.64% av BNP²⁾

24.000.000.000 NOK/år

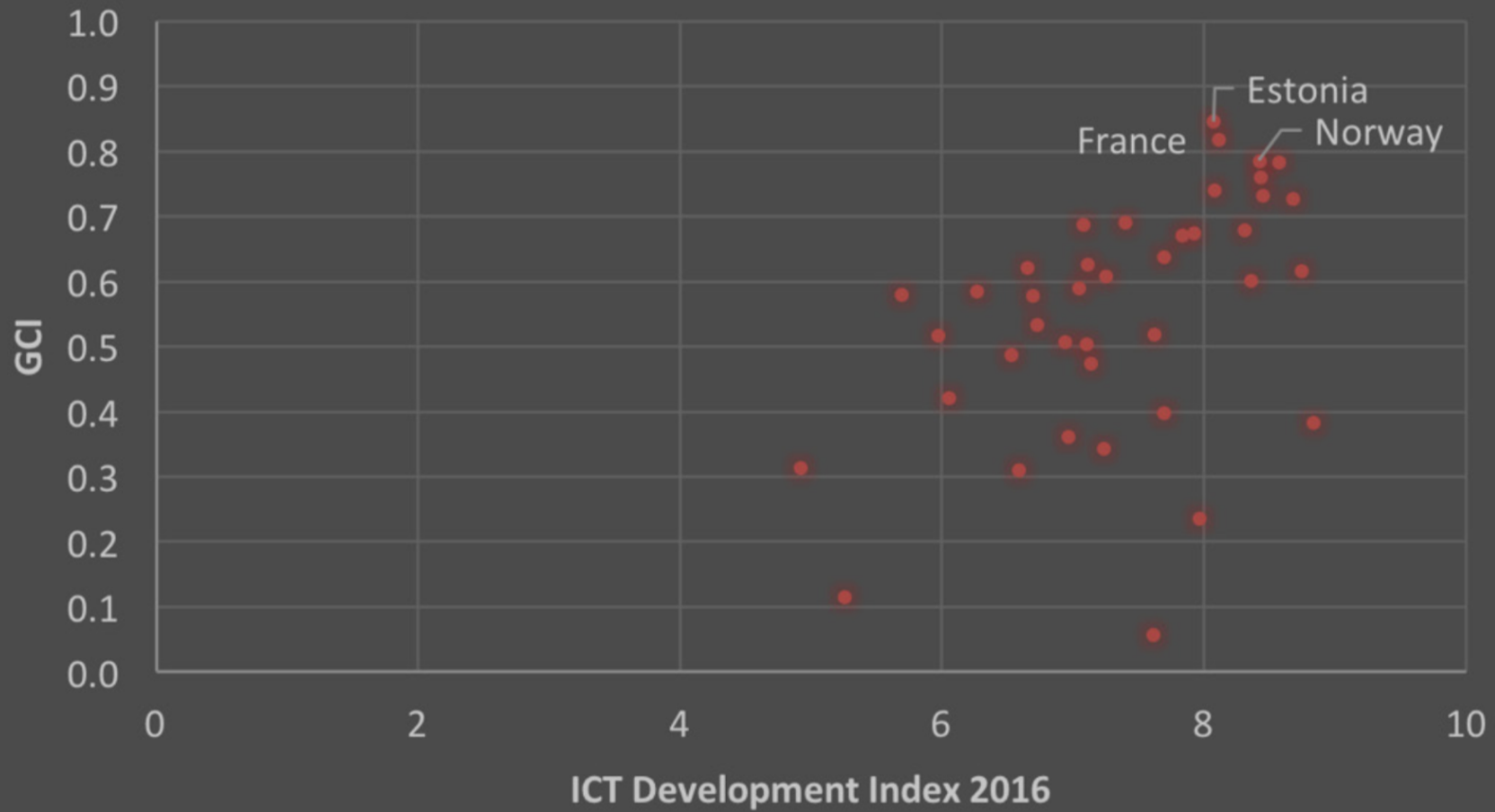
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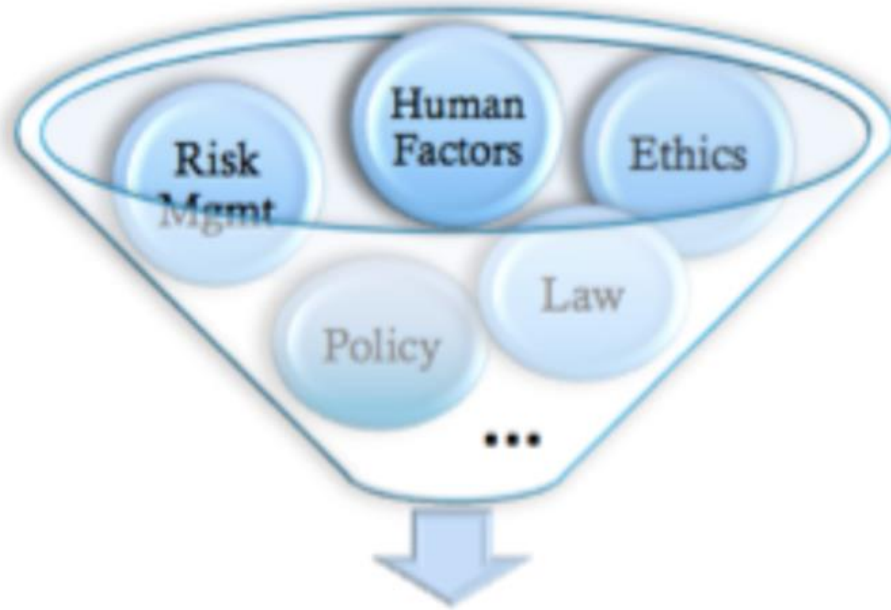
19.000.000.000 NOK/år

1) World Economic Forum: The Global Information Technology Report 2013 (http://www3.weforum.org/docs/WEF_GITR_Report_2013.pdf)

2) https://csis-prod.s3.amazonaws.com/s3fs-public/legacy_files/files/attachments/140609_rp_economic_impact_cybercrime_report.pdf

Europe region - IDI 2016

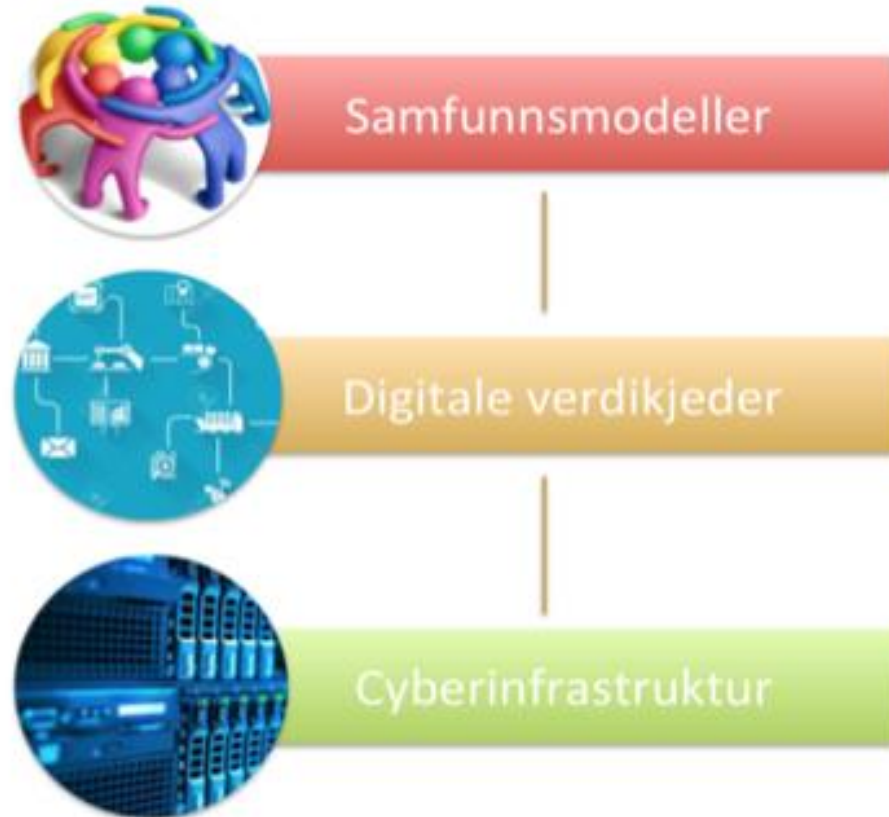
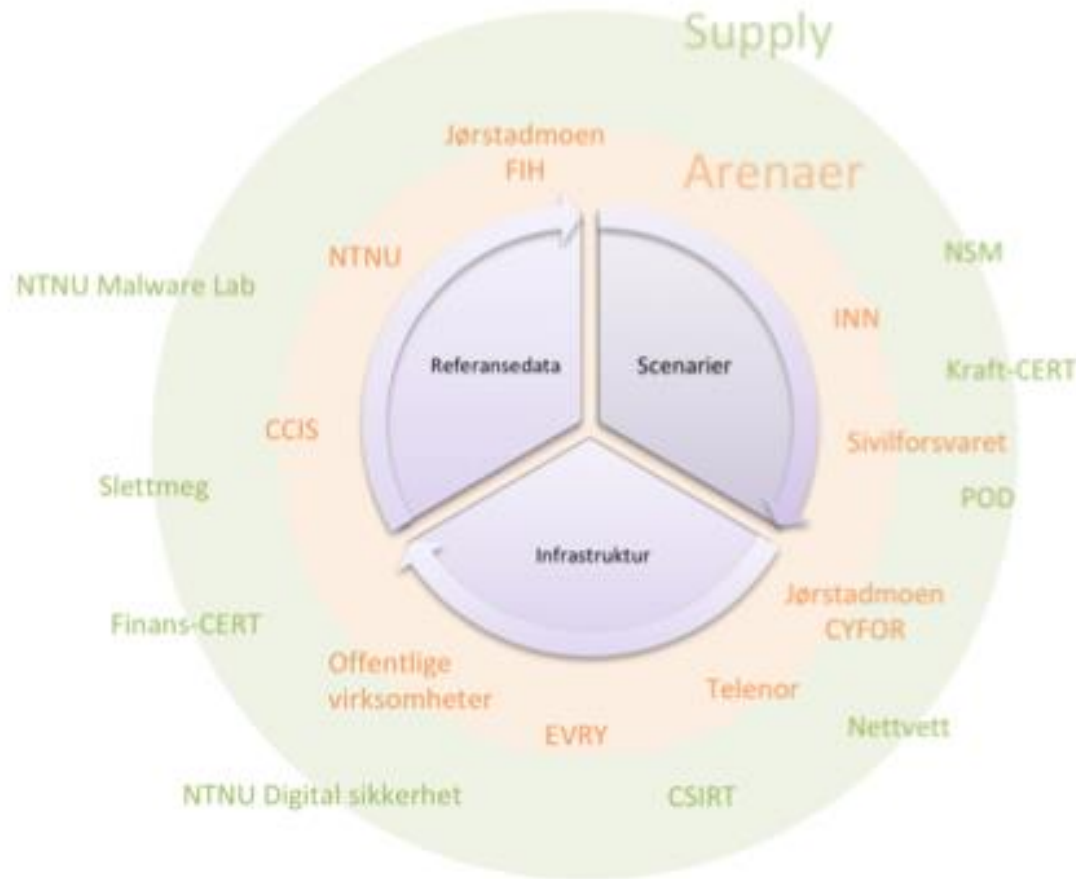




Interdisciplinary
Content

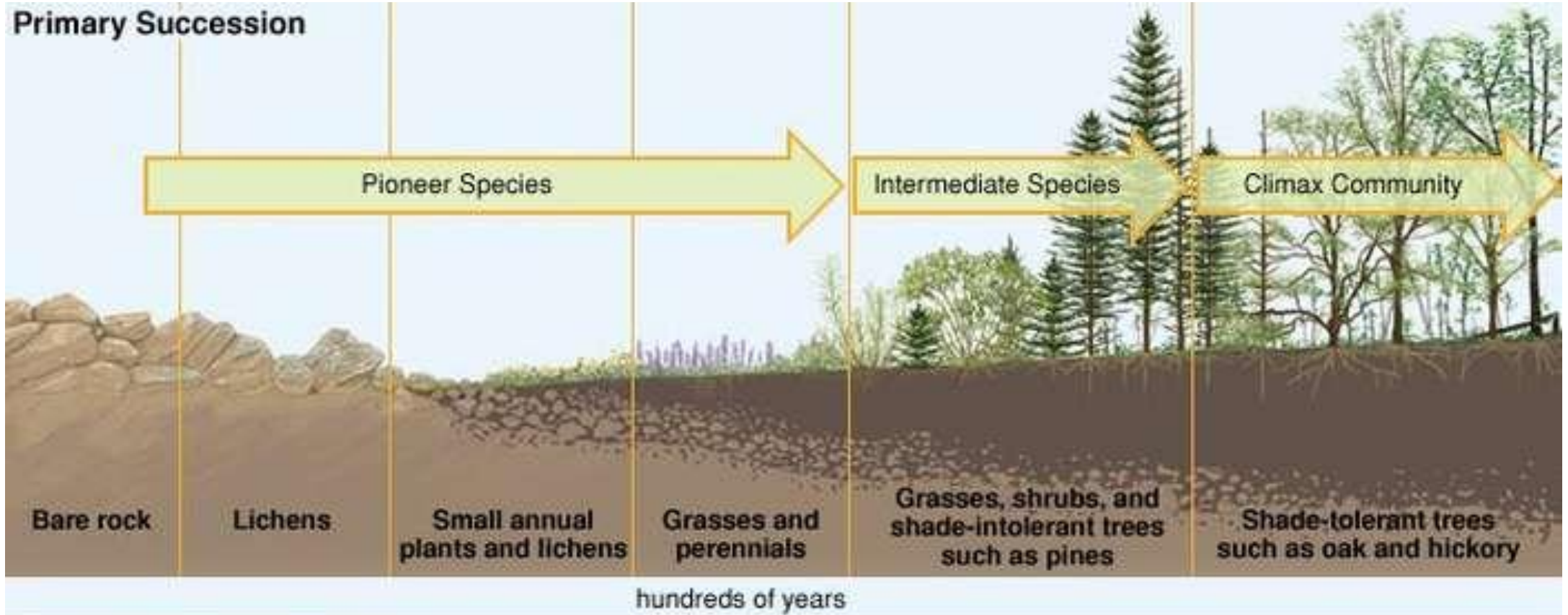
- **Confidentiality.** Rules that limit access to system information to authorized persons.
- **Integrity.** Assurance that information is accurate and trustworthy.
- **Availability.** Information is accessible.
- **Risk.** Potential for gain or loss.
- **Adversarial Thinking.** A thinking process that considers the potential actions of the opposing force working against the desired result.
- **Systems Thinking.** A thinking process that considers the interplay between social and technical constraints to enable assured operations.





En nasjonal cyber range for testing, trening, øving, utdanning og forskning innen cyber- og informasjonssikkerhet

Primary Succession



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Pioner fase -> Konsolideringsfase -> Klimaks





<https://youtu.be/FVae2NZ4UwE>

➤ Norwegian Cyber Security Challenge

NM I CYBERSIKKERHET

Norwegian Cyber Security Challenge 2018

Digitaliseringen av samfunnet driver frem et stort behov for IKT kompetanse generelt og kompetanse til å beskytte infrastrukturen, informasjonen og systemene som avhenger av informasjonen spesielt. Norwegian Cyber Security Challenge 2018 (NCSC18) har som målsetning å finne unge talenter (i aldersgruppen 16 - 25 år) innen cybersikkerhet og motivere disse til å utvikle seg videre.

Deltagerne i NCSC får sikkerhetsutfordringer knyttet til områder som web, mobil, HW, RF og IoT i tillegg til kryptonøtter, reverse engineering og forensics, og vil bli vurdert ut fra hvor lang tid de bruker på å løse de ulike oppgavene.

I tillegg til å være et NM i cybersikkerhet danner også NCSC18 grunnlag for uttak av deltagere til laget som skal representere Norge under European Cyber Security Challenge 2018 i London. Innledende kvalifiseringsrunder blir fra 7-15. april 2018 og finalen 16.juni 2018.

Innledende runde er åpen 7. til 15. April 2018.

[Registrer lag](#)

Siste påmeldingsfrist til innledende runde er 13. april 2018 kl. 12:00.

Nasjonal finale er 16. Juni 2018 på NTNU Campus Gjøvik.

European Cyber Security Challenge 2018 (ECSC18) går i London 14. til 18. Oktober 2018.

Partnere

The Department of Information Security and Communication Technology

- 80 employees in Gjøvik and Trondheim
- Research in areas of biometrics, cyber defence, critical infrastructure protection, cryptography, digital forensics, e-health and well being, intelligent transportation systems, internet of things, information security management, malware, quantitative modelling of dependability and performance
- 1 bachelor (90), 2 master (100 + 25), 1 siv.ing (45) and 2 PhD educations
Offer flexible and part time study programs
- Forskningsprosjekter: EU H2020 (5), EU FP7 (4), EU Cost (1), EDA (1), IARPA Odin Thor (1), NFR FME (1), NFR IKT+ (4), NFR ENERGIX (1), NFR BIA (2), NFR Forskerskole (1), NFR NæringsPhD (1), RFF (4)
Totally 40 MNOK in 2017 (45% of the department budget)
- Public private partnership: NTNU Center for Cyber and Information Security
- Innovation platform: Norwegian Cyber Range