



FORSVARSMATERIELL

Vi utruster

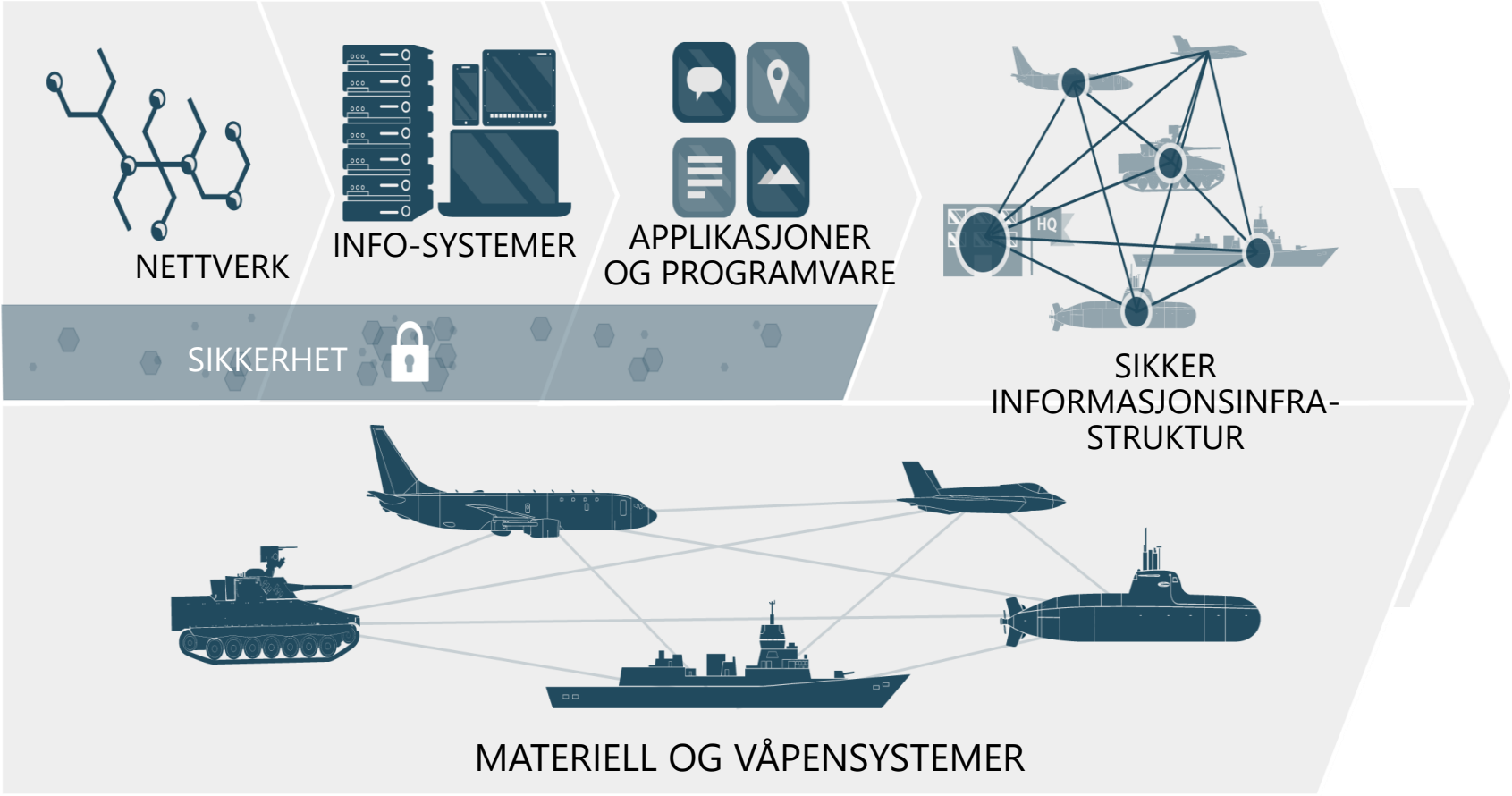
Forsvaret

IKT-kapasiteter

Programkonferanse INI

04 juni 2019

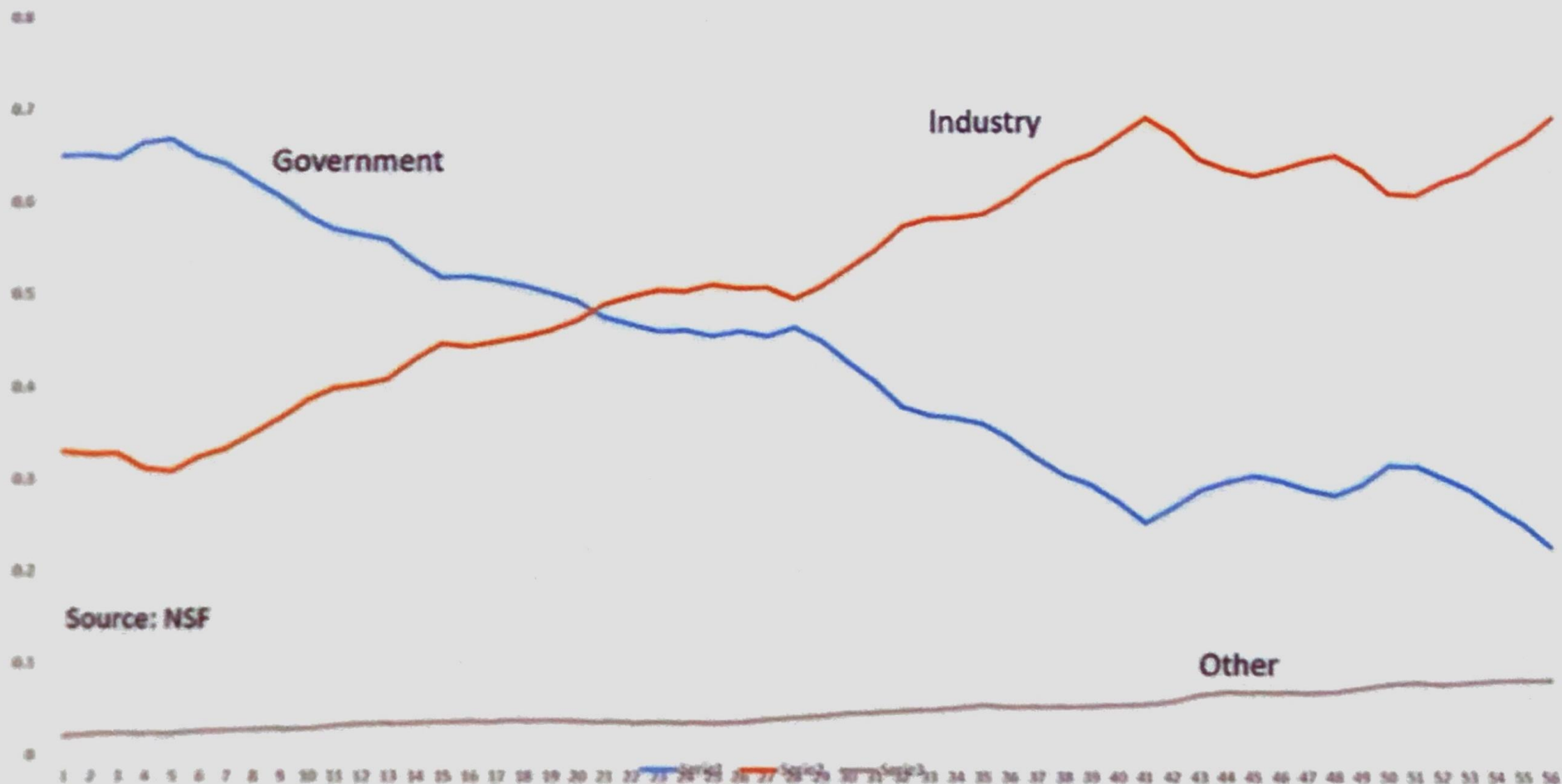
Overordnet arkitektur for ytelse



VI UTRUSTER FORSVARET

Who's Funding R&D in America?

R&D Funding 1960 - 2015



Source: NSF

Two investment programs for Digitization

▪ MAST

- Aim is to deliver ICT platforms on all security classifications
- Getting us to into cloud
- Security solutions for secure transfer of data
- Partnership with industry

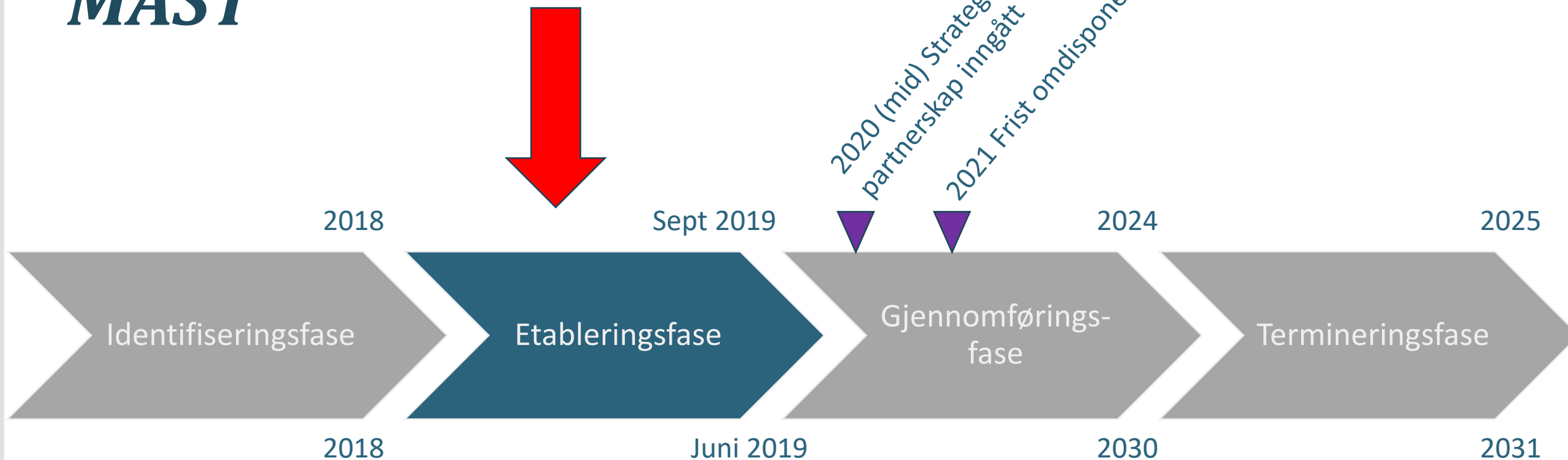


▪ MIME

- Provide the Norwegian Armed Forces with «integrated digital services»
- MIME's main effort is to optimise the «operational effects» of tactical formations.



MAST



Mime





FORSVARSMATERIELL

Program Mime

Kampnær IKT

Morten Gjellerud

Programdirektør Mime



Foto: Morten Opedal / Forsvaret



Visjon

Optimal operativ effekt i
Forsvaret med helhetlig
implementering av relevante
digitale tjenester

**Det operative benet i
Forsvarssjefens
Digitaliseringsstrategi**





Grunnlag

Mime vil bidra til å realisere grenenes sambandskonsept på kort sikt

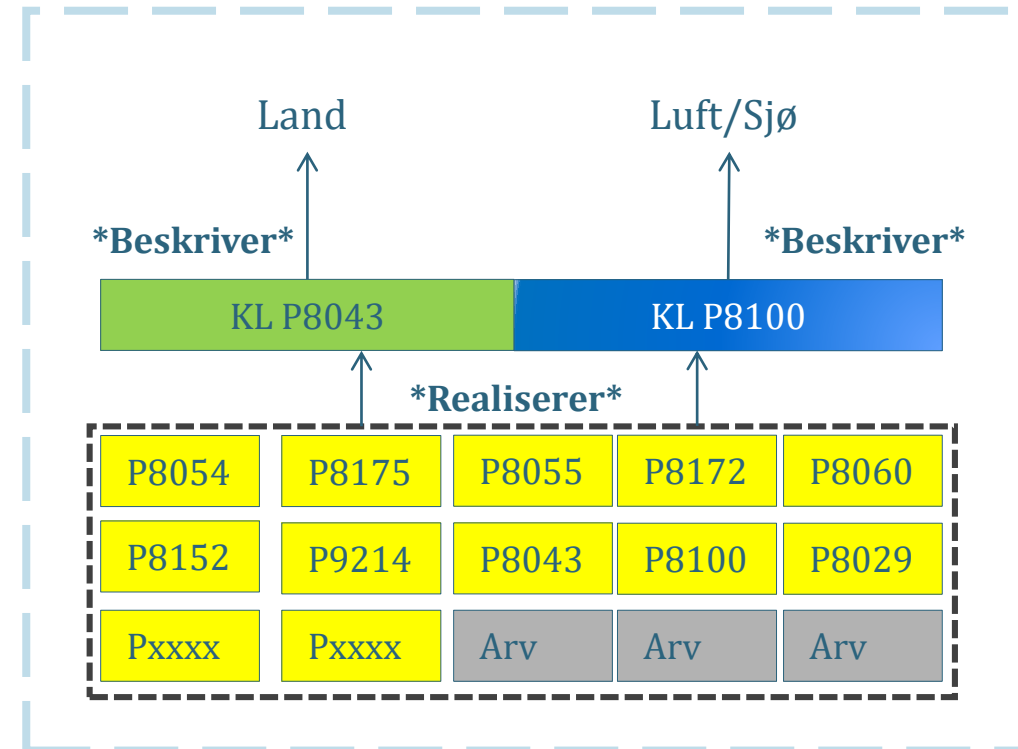
Omfattende investeringer til Forsvaret innenfor taktisk IKT som del av program Mime frem mot 2030

Helhetlig land-sjø-luft, med allierte og totalforsvaret

P8043 *Taktisk ledelsessystem for landdomenet*

P8100 *K2IS til kampplattformer*

Mime





Kontinuerlighet

2019 – 2020

2020 – 2021

2021 – 2022

2022 – 2023

Gjennomføre
leveransebølge 1

Erfare
leveransebølge 1

Planlegge
leveransebølge 2

Gjennomføre
leveransebølge 2

Erfare
leveransebølge 2

Identifisere
leveransebølge 3

Planlegge
leveransebølge 3

Gjennomføre
leveransebølge 3

Erfare
leveransebølge 3

Identifisere
leveransebølge 4

Planlegge
leveransebølge 4

Gjennomføre
leveransebølge 4

Identifisere
leveransebølge 5

Planlegge
leveransebølge 5

-> 2030



Programmet skal...

Leveransebølge # 1 – X
(2019 – 2030)

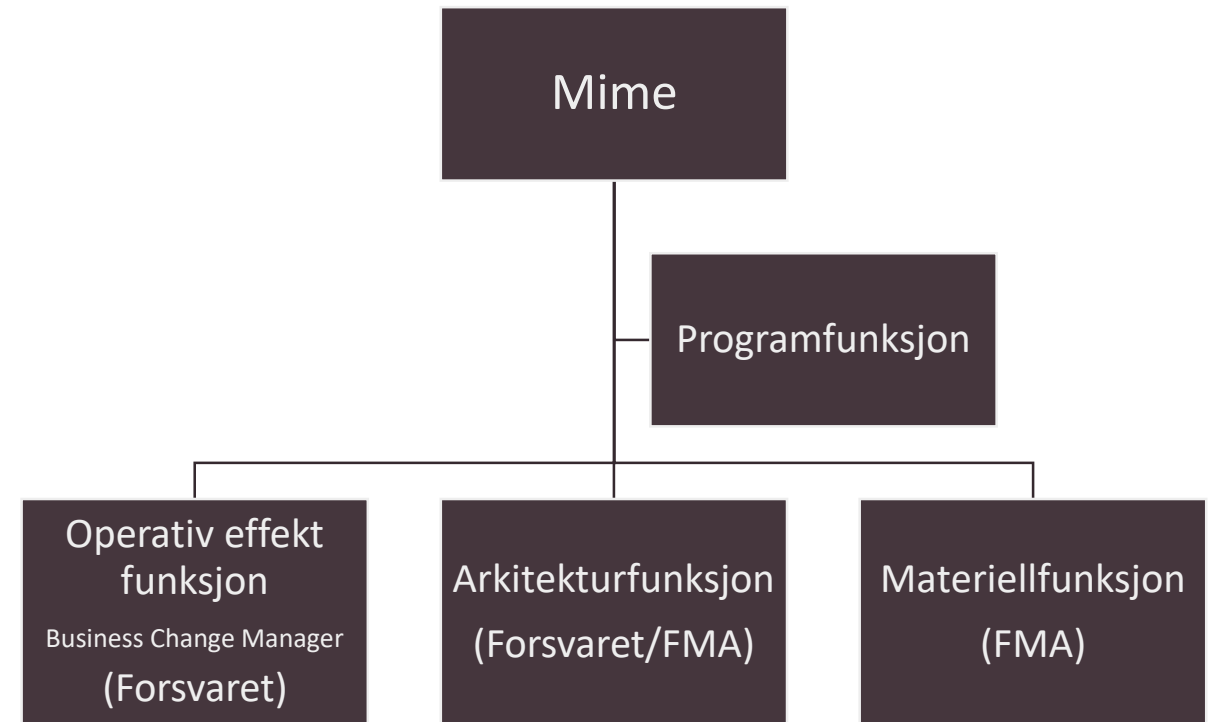
Materiell-tiltak
(Prosjekter)

DOTMLPFI

Bruker-tiltak
(Forsvaret)

DOTMLPFI

Tiltak for senere bølger
(Eks. FFI)



Få til å skje

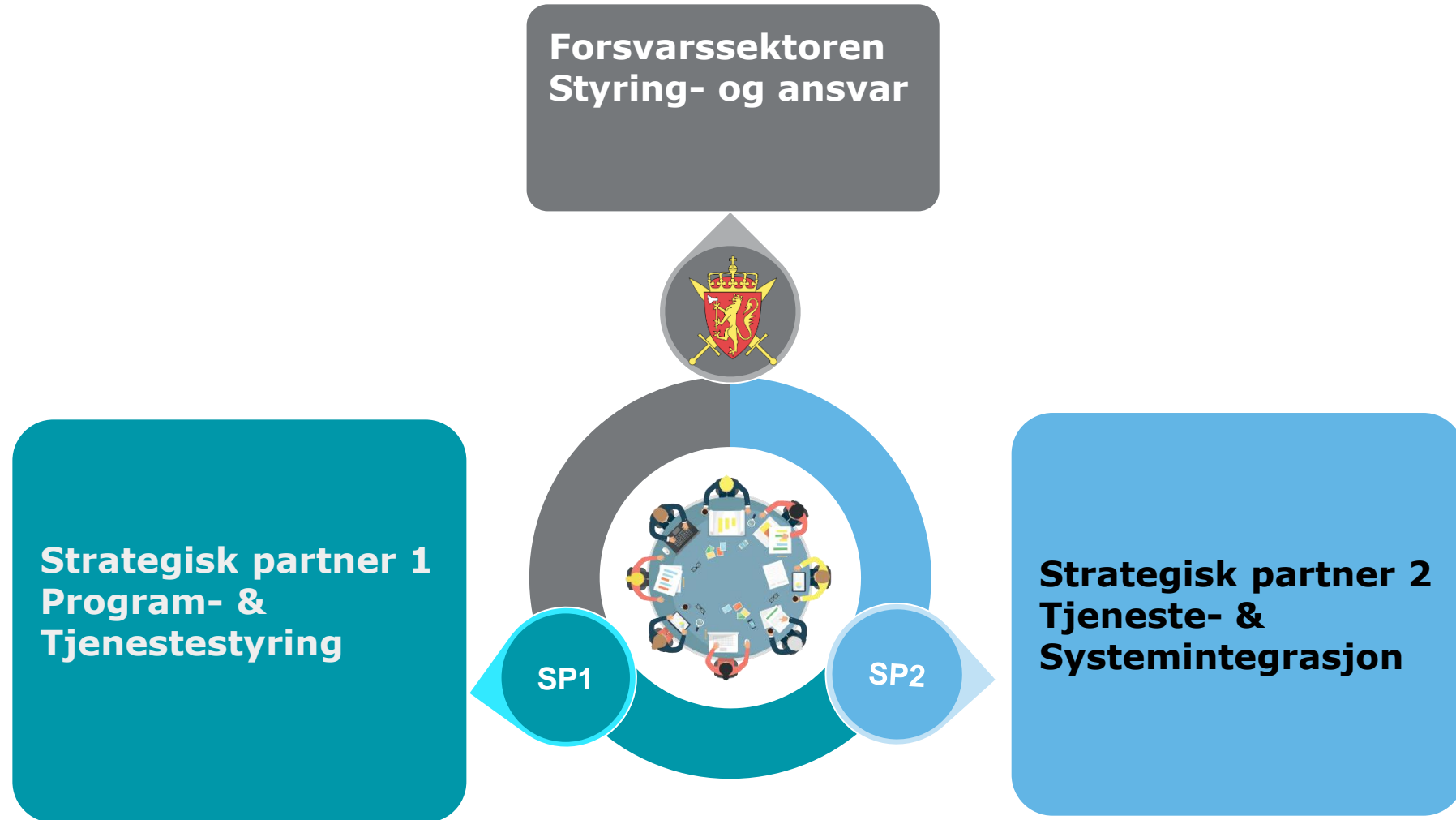


Status

- Leveranser med operativ effekt
- Svare ut etableringsfasen i juni
 - Virksomhetsbeskrivelse
 - Programdesign
 - Leveranseplan
 - Effekt(gevinst)realiseringsplan
- Etablere organisasjon
- Grunnlag for strategisk samarbeid



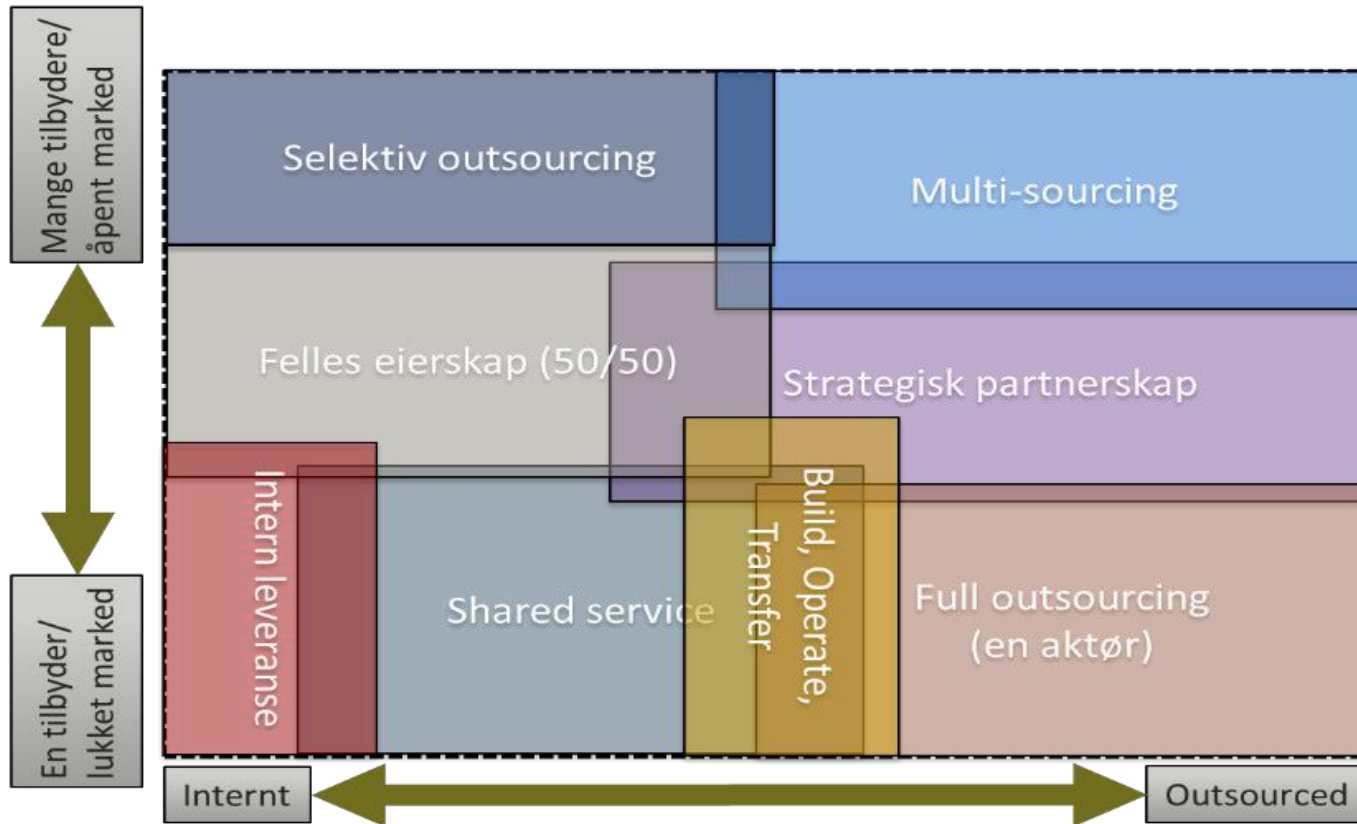
Strategisk partnerskap Mime



*Forsvarssektorens
forventninger til
strategiske
samarbeidspartnere fra
næringslivet*



Bakgrunn



(Kilde: Utredning fra FD om sourcingstrategier, 2017)

Rapport

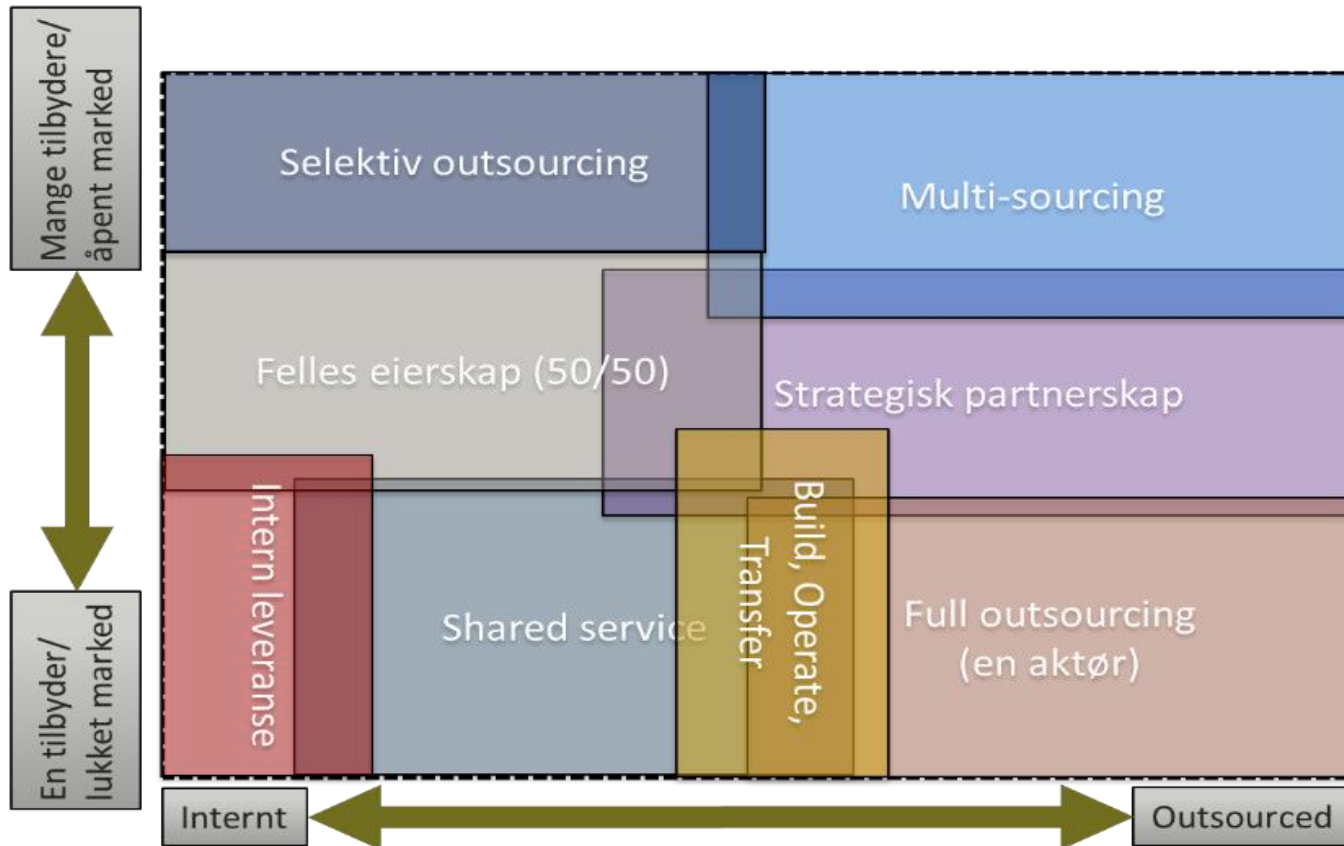
Arbeidspakke 1.2 – Sourcing strategier

Innspill till utredning om videreutvikling av cyber og IKT-områdene i forsvarssektoren



Endringslogg	v. 1.0
Gradering:	Uoff. jf. offentleglova §14.1
Godkjent (dato/signatur)	27. april 2017 Roar Smedsrød

Bakgrunn





FORSVARSMATERIELL

MAST-programmet

Program for militær anvendelse av skytjenester



«Cloud»

ID G00338239

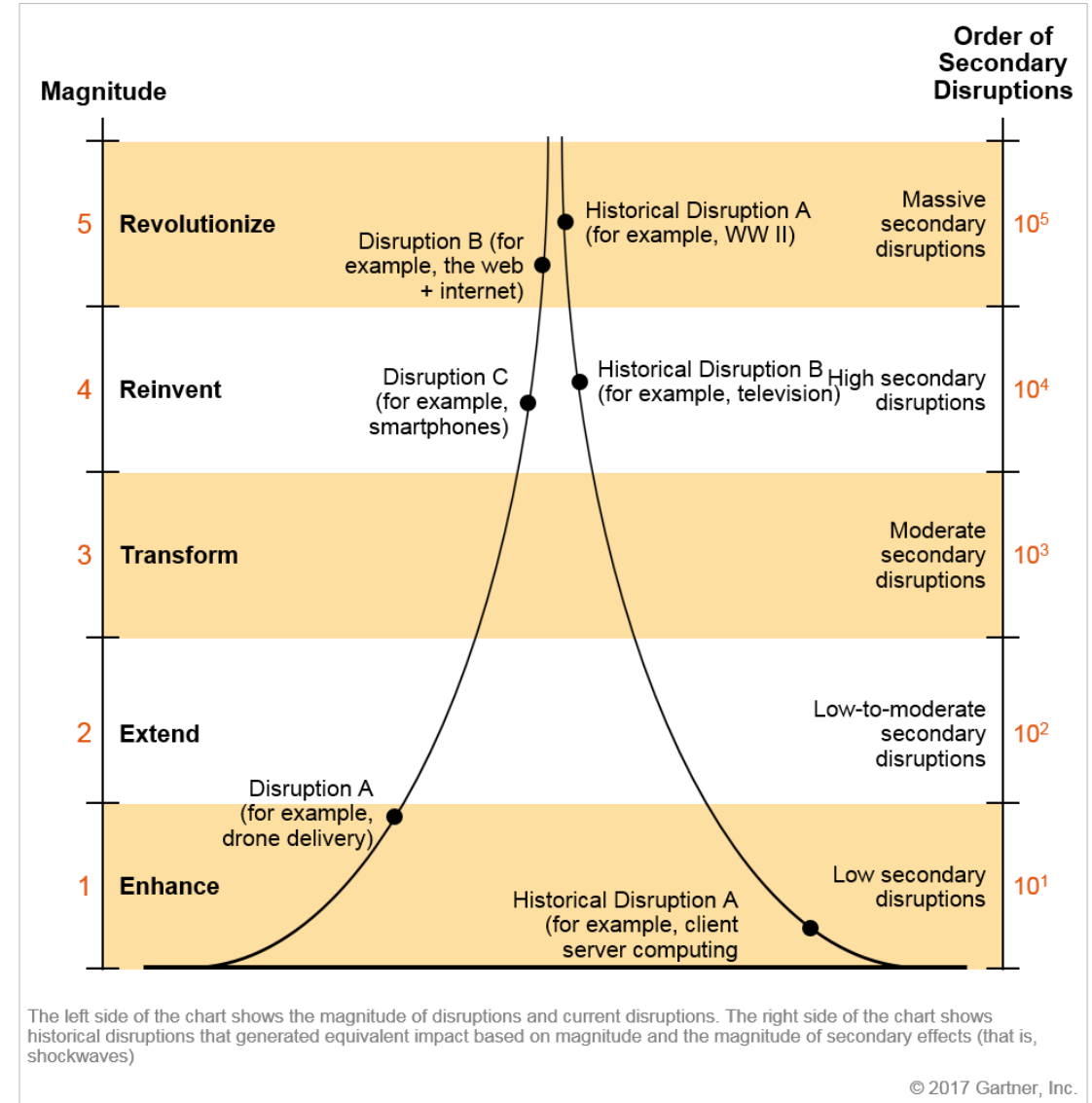
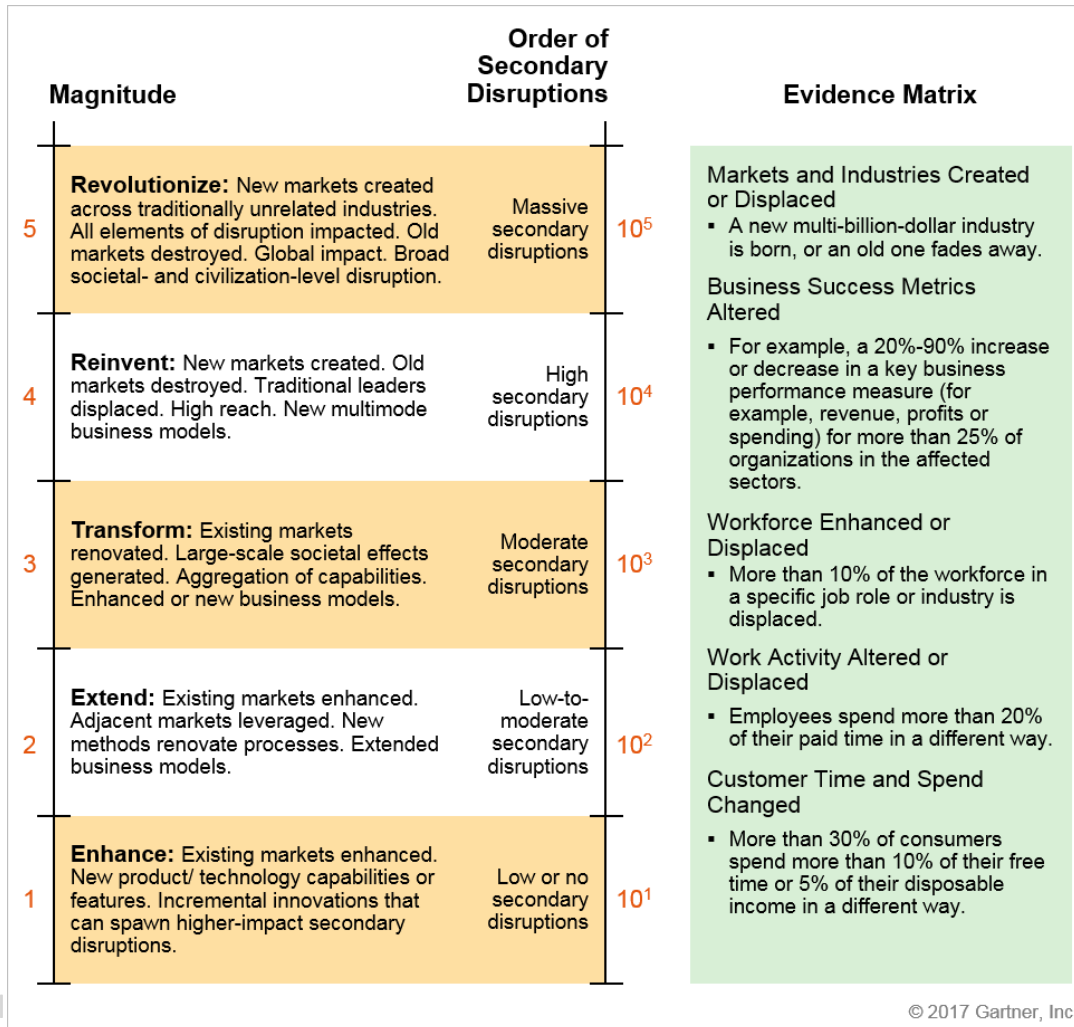
Gartner: “Cloud computing is a style of computing in which scalable and elastic IT-enabled capabilities are delivered as a service using internet technologies.”

NIST: “Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. This cloud model is composed of five essential characteristics, three service models, and four deployment models.”



«Digital Disruption»

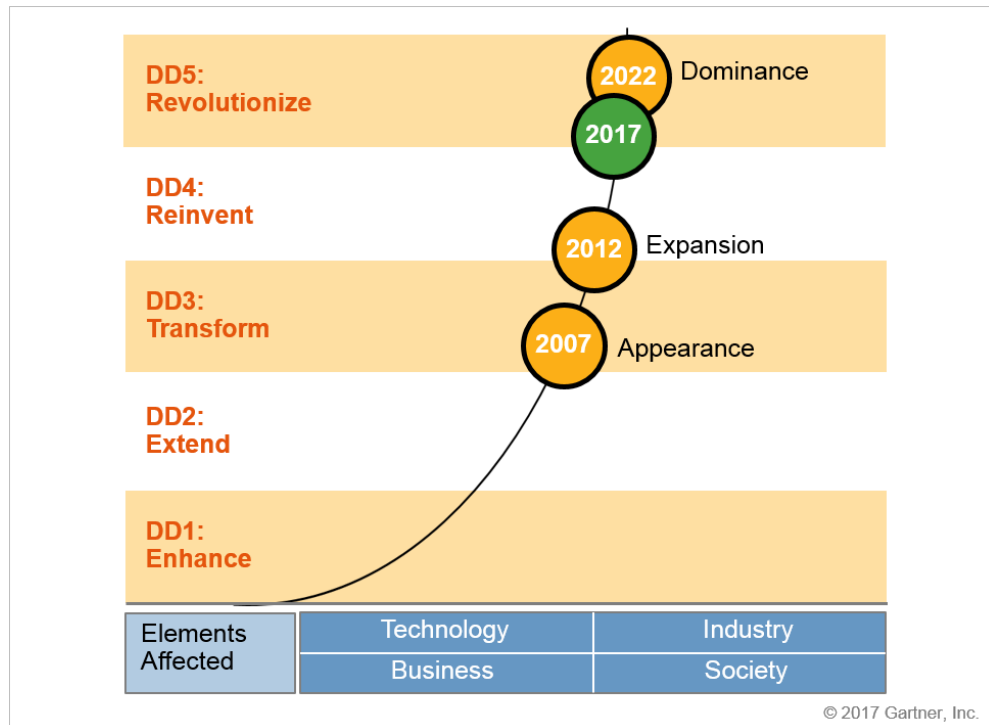
ID G00327584





How disruptive is the cloud?

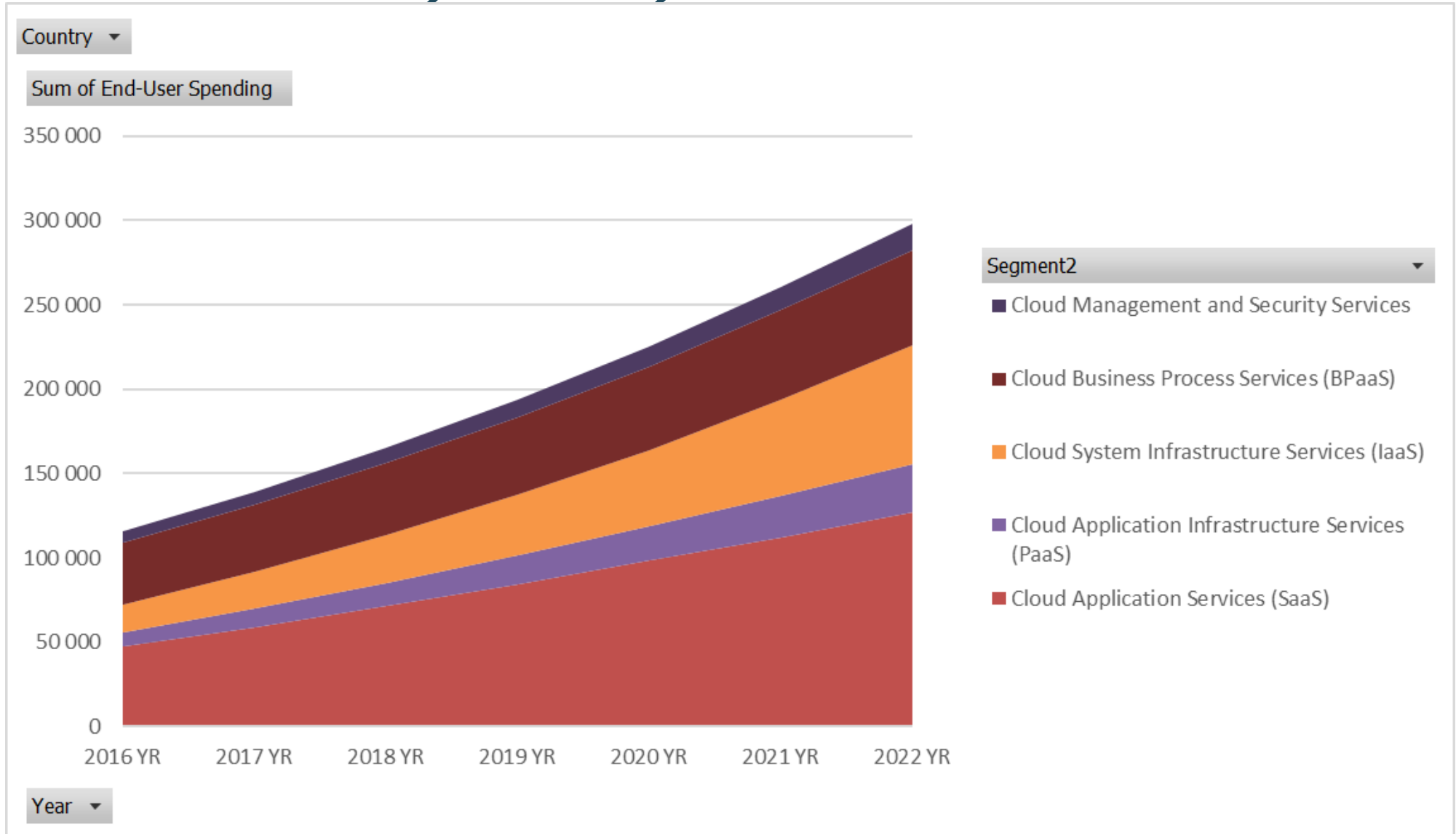
- Cloud computing is approaching DD5, the most disruptive level on Gartner's DD Scale.
- Cloud computing has disrupted existing IT markets, IT job skills mix and IT decision making.
- Cloud has been a major disruptor, and it continues to disrupt markets by itself and increasingly, as a necessary enabler for future disruptions.



- Industry: Cloud availability has enabled startups and other organizations to do things not possible without it (for example, scalability and ability to start without significant capital outlays).
- Society: Cloud has become a mainstream social phenomenon. Movies have been made about it. Individual consumers talk about it as if they understand it.



SaaS, PaaS, IaaS share



When is it happening?

- Strategic Planning Assumption: By 2021, over 75% of midsize and large organizations will have adopted a multicloud and/or hybrid IT strategy.
- Strategic Planning Assumption: By 2022, public cloud services will be essential for 90% of business innovation.
 - Modern business depends on technology for its competitive operations and customer experiences; and most technology innovation has firmly shifted to the cloud. Few, if any, organizations will be able to implement new business models or ecosystem relationships without relying on cloud services.

Amazon and Microsoft Are 2 Finalists for \$10 Billion Pentagon Contract

By [Karen Weise](#)

April 10, 2019



The Pentagon said Wednesday that Amazon and Microsoft were the final candidates for a hotly contested \$10 billion contract to bring modern cloud computing to the Defense Department.

IBM and Oracle had also bid for the project, known as the joint enterprise defense infrastructure, or JEDI. But the Defense Department concluded that they did not meet the minimum requirements for the program.

JEDI contract

When the JEDI contract was first announced, AWS, IBM, Microsoft and Oracle were considered front runners though at the time, AWS was the only company with government approval to handle secret and even top secret data.

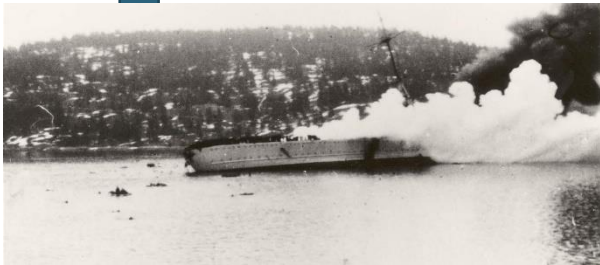
Due to the size and complexity of the deal, the earliest a contract will be awarded is likely in mid-July.



Our three scenarios

Under attack

- Timing out of control
- Total confusion
- Infrastructure not available
- What we have is what we have
- First hours crucial



Missions:

- Planned, and limited extent
- Well prepared
- Low bandwidth
- Coalition/cooperation
- Credible technology edge

Peace:

- Up-to-date services
- Digitalization
- CAPEX/OPEX-focus
- Use the market
- Our needs are like most others

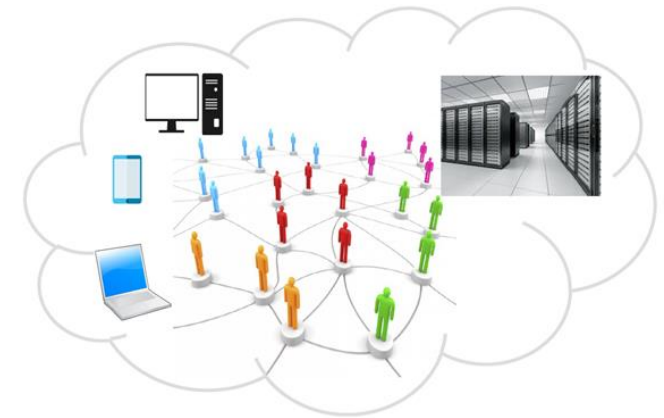
The Challenges for Government Private Cloud to Deliver Value

Key Challenges

- Despite the acknowledged superior security of hyperscale public cloud, governments maintain their risk-averse, on-premises approach to cloud adoption. They actually increase risks by attempting to build their own internal private clouds with initial investments that are often little more than data center upgrades.
- Government agencies, while desperately in need of innovative services, are unable to secure adequate funding to match the capabilities and speed of delivery of new functionality and features of public cloud providers, thereby leaving their users at a disadvantage.
- Government agency IT departments implementing an internal private cloud strategy struggle to meet the demands of more knowledgeable end users for a fully functioning cloud platform in a timely manner, thus shadow IT and SaaS continue to grow rapidly.

Visjon

- Ved avslutning av MAST-programmet i 2025 skal Forsvaret i samarbeid med øvrige del av sektoren gjennomføre fellesoperasjoner nasjonalt og i samvirke med NATO og allierte, samt på tvers av sektorer og i totalforsvars-rammen understøttet av en moderne informasjonsinfrastruktur.
- Som fundament for å drive digitaliseringen av Forsvaret, skal programmet levere evner i organisasjonen og en moderne sikker plattform med tjenester og verktøy og slik bidra til å understøtte og sikre operativ evne, raske beslutningsprosesser og intern effektivitet.
- Programmet skal utnytte markedet slik at sektorens egne ansatte i større grad kan fokuseres inn mot oppgaver som bare kan løses av dem.
- Informasjonsinfrastrukturen skal inneha funksjonalitet som sikrer vesentlig økt tilgjengelighet, handlingsrom og samhandling, sett i forhold til situasjonen for 2018.



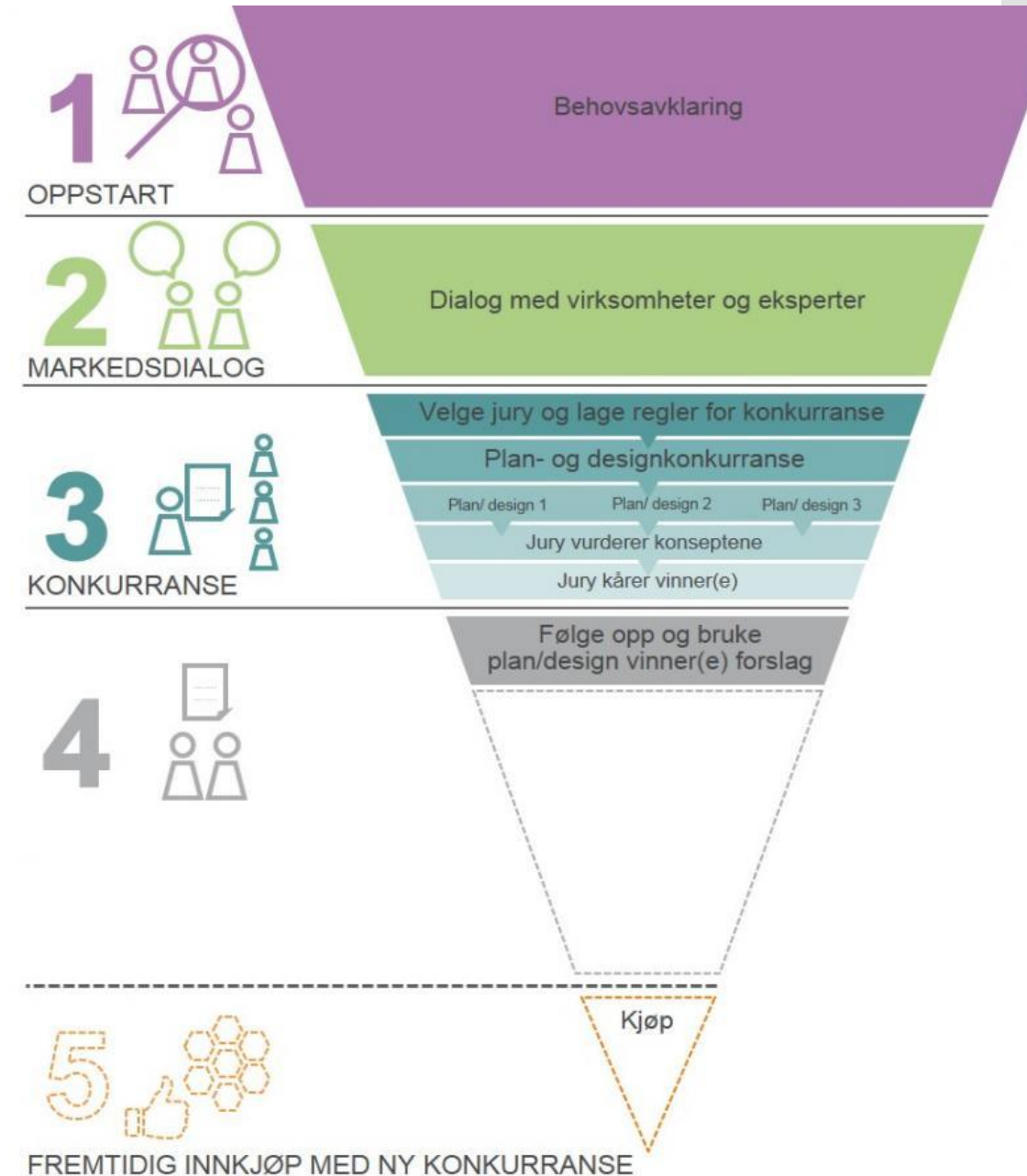
Plan og designkonkurranse

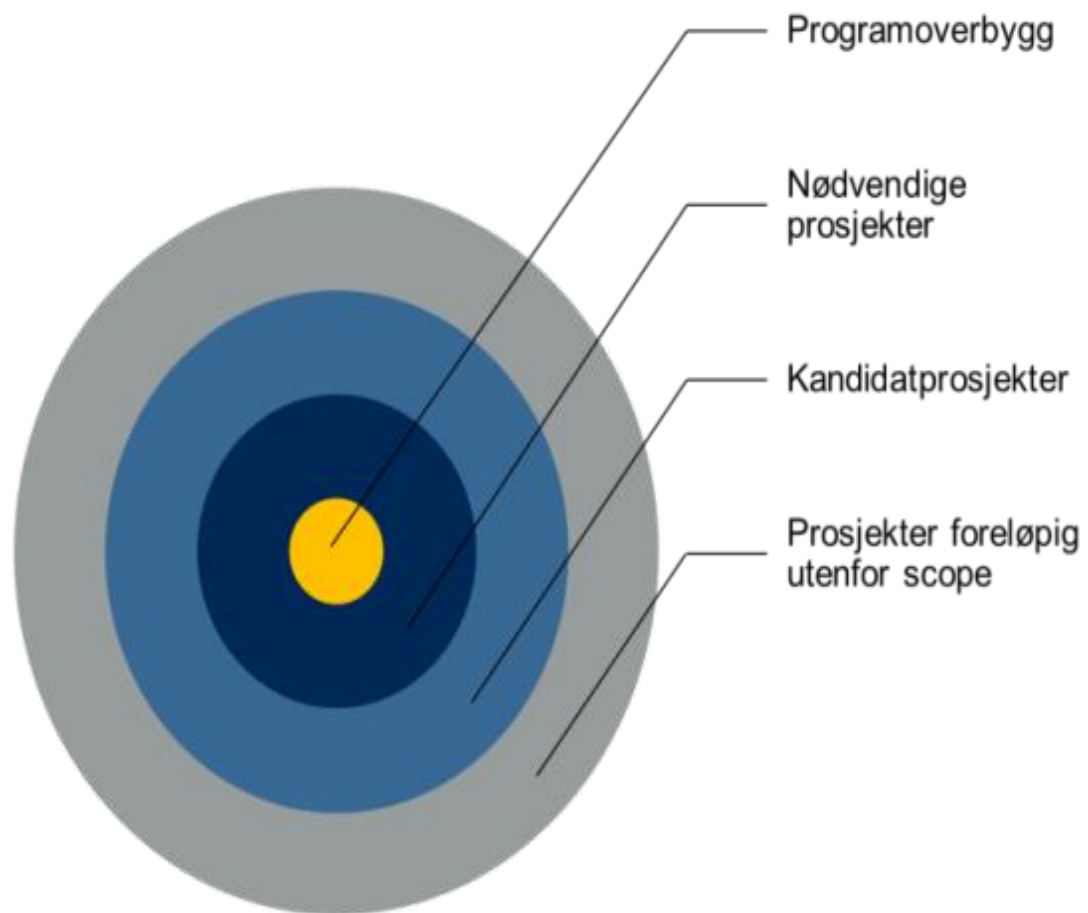
- Plan og designkonkurranse, norsk industri inviteres til å bidra med arkitektur, avtalestruktur og leveransemodell for forsvarssektoren.
- Omfanget er kommando og kontroll, forvaltning, ERP, kontorstøtte, samhandling og digitalisering. Dette er større enn MAST, siden vi ønsker å se løsningene i stort.
- Juryen bedømmer anonymiserte bidrag, kårer vinner.
- Oscar-seremoni med presentasjon av de tre beste, så bekjentgjøring av vinner.

Strategisk partnerskap

- Videre arbeid med etablering av partnerskap starter umiddelbart over sommeren.
- Partnerskap søkes inngått til sommeren 2020.
- Programmet transformerer hele FSP innen 2025

FORSVARSMATERIELL





- I opprinnelig mandat

- P8185
- P8171
- P8052/P8053
- P8179 (?)

- Legges til

- P1041
- P8154
- P8031 (deler)
- P8182

Questions?

