

Future acquisitions For the Norwegian Armed Forces 2014-2022

March 2014



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1. Introduction

The long term planning process outlines the continuous development of the Norwegian Armed Forces with respect to organisation, infrastructure (garrisons and bases), personnel (numbers, composition and qualifications) and materiel (existing equipment and new acquisitions). This process is carried out under the direction of the Royal Norwegian Ministry of Defence. The Long Term Plan – Materiel forms the basis for all materiel procurements in the short term (4-5 years), the medium term (5-10 years) and the long term perspectives (10-20 years). It is updated annually to reflect updates stemming from changing requirements, available resources and progress in on going acquisitions.

The Government recognises the vital role that the defence industry plays in support of the armed forces' capabilities. This role ranges from the provision and maintenance of military equipment to the delivery of a wide range of support services. The government's policies are laid down in a report to Parliament (*St.mld. nr. 38 (2006-2007) Forsvaret og industrien – strategiske partnere*) which outlines the guidelines for developing the strategic partnership between industry and the Armed Forces.

The overarching principle is that the cooperation must accommodate the Armed Forces' requirements. Once this condition is met, the Armed Forces' materiel acquisitions and use of support services shall provide opportunities for Norwegian industry to remain competitive in an imperfect market place (where normal competition does not exist). This will contribute to national value creation and highly skilled employment opportunities, while at the same time ensuring access to critical knowledge, expertise, materiel and services. Interaction between the Armed Forces and industry will also strengthen research and development at government and private institutions.

One of the main elements in the strategy is an early dialogue between the Armed Forces and industry, including communication of short term and long term materiel requirements. In the report to Parliament, it is clearly stated that the MoD will work towards ensuring that the Armed Forces and the industry share information about industrial opportunities related to the Armed Forces' planned acquisitions at the earliest possible time. The cooperation shall be based on existing materiel plans.

A central feature in the annual updating of the Long Term Plan – Materiel is the preparation and publication of an unclassified overview of long term materiel requirements. This publication does not examine each planned project in detail but is intended to create opportunities for in depth discussions between the Armed Forces and industry. In this way industry can get an early insight into potential materiel investments. The aim is to maintain highly skilled companies that individually or in cooperation with others, are able to support the needs of the Armed Forces. Having a

proven and highly skilled industry is also fundamental for being able to compete in the international defence market that in many ways remains a closed one.

The Armed Forces' materiel investment projects are subject to decisions and approval either by the MoD, or the Parliament for projects exceeding NOK 500 million.

The projects listed in this publication are not formally approved for implementation. It is emphasised that any project not yet formally approved may subsequently be terminated or changed without any further explanation or liability.

Details relating to a small number of classified and sensitive projects are being withheld.

Approved projects will not be addressed in this publication. Information about major projects in this category can be found, among other places, on the home page of the Norwegian Defence Logistics Organisation (NDLO).

This document features on the Armed Forces' section of the website <http://www.regjeringen.no> as an electronic document and will not be published in paper format. In light of the statutory objectives and principles of procurement regulations, regarding competition and equal treatment, it was also decided to prepare an English version.

2. Investments in the Defence Sector

The Defence Sector is made up of the Royal Norwegian Ministry of Defence and its subordinate bodies; the Norwegian Armed Forces, the Norwegian National Security Authority, the Norwegian Defence Estates Agency and the Norwegian Defence Research Establishment. All materiel investments in the Defence Sector are decided by the MoD, and subordinate bodies execute the planning and procurements according to existing procedures. An important tool is the PRINSIX project model that describes phases, decision points and roles/responsibilities. This project model ensures a uniform execution of materiel procurements. The MoD has established several investment programmes to oversee and provide guidance through all the phases related to materiel procurements.

Projects are typically conceived in two ways. One is the top down approach which to a large extent deals with the major weapon systems resulting from strategic planning processes. The second is the bottom up approach which to a large extent deals with smaller requirements typically initiated by the services and users. At the early stage, the proposals are known as Project Ideas which are assessed by the relevant investment programme. If the investment programme finds the Project Idea to have merit, it is subsequently recommended to the MoD and further pursued and developed into a Tentative Project. This is the first formal decision point. Depending on the scope of the project, a conceptual study may be launched at this stage. In practice, smaller projects go directly to the next phase that is described below.

In a conceptual study alternative concepts are assessed with respect to how capability requirements can be resolved in conceptually different ways. The outcome of a conceptual study is submitted in a document referred to as a Conceptual Solution. This document forms the basis for the decisions that will be made at the end of this phase. In addition to being a central decision-making document, the document is also pivotal to the mandatory external quality assurance in accordance with guidelines from the Royal Norwegian Ministry of Finance for projects exceeding NOK 750 million.

Once the Conceptual Solution is approved, the project moves into the next phase which is the detailed planning process leading up to the approval of the acquisition of the materiel in question. During this phase the project is referred to as a Planned Project. Important outcomes of this planning phase are scope, procurement strategy, timelines and contractual provisions.

Major materiel acquisitions with a scope exceeding NOK 500 million require approval from Parliament. Projects with a lower scope are approved by the MoD.

Once a project has been approved for implementation, MoD sends out an Implementation Order, normally to the Norwegian Defence Logistics Organisation. A project in this phase is referred to as an Approved Project.

3. Main focus areas

3.1 Materiel acquisitions during the period 2014-2017

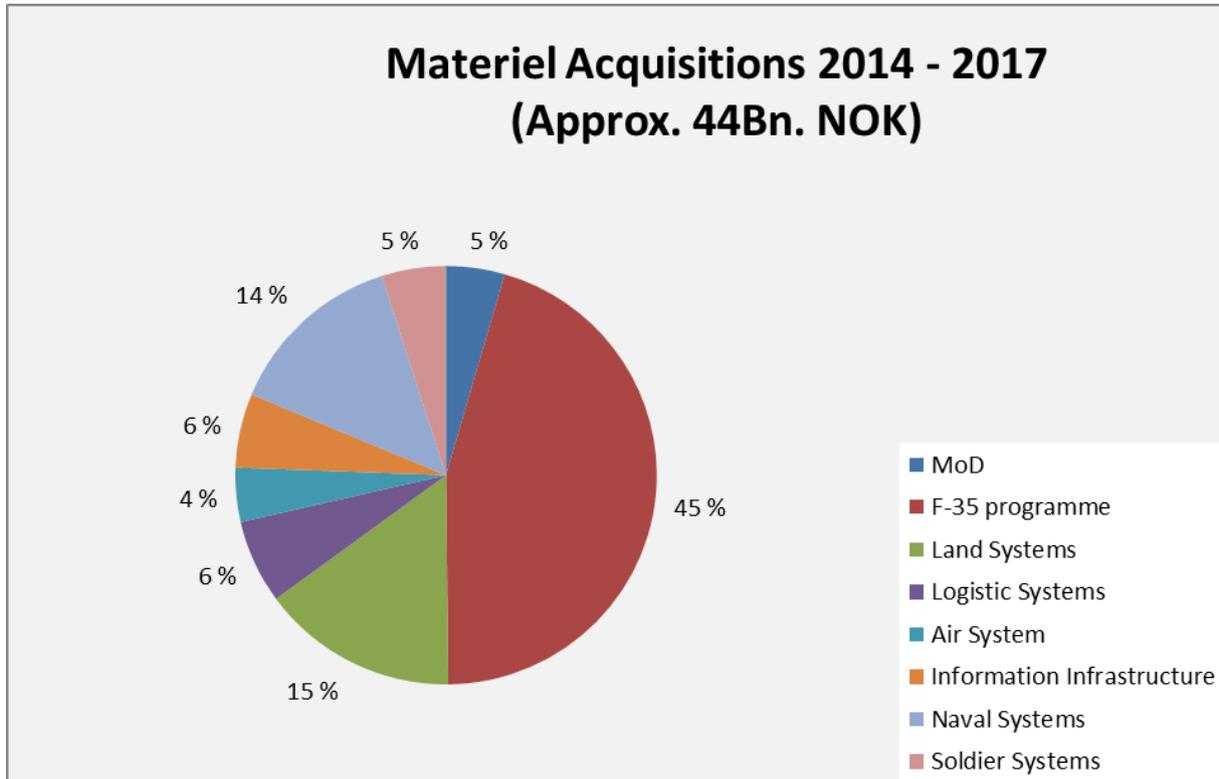


Figure 1- Acquisitions broken down by programme during the period 2014-2017. The MoD allocates funds for preliminary project work, R&D and other supporting activities.

The period 2014-2017 is dominated by the on-going F-35 acquisition, investments in Land systems and Naval systems. Four F-35 aircrafts will be delivered for training Norwegian pilots in USA. Within Land system the main investments are within the mechanized units, new combat vehicles (CV90) and upgrades of existing combat vehicles (CV90 and M113). Within Naval systems the main investment is a new ocean going Cost Guard vessel. The new maritime helicopter (NH90) will be delivered within this timeframe.

3.2 Main focus areas for the period 2018-2022

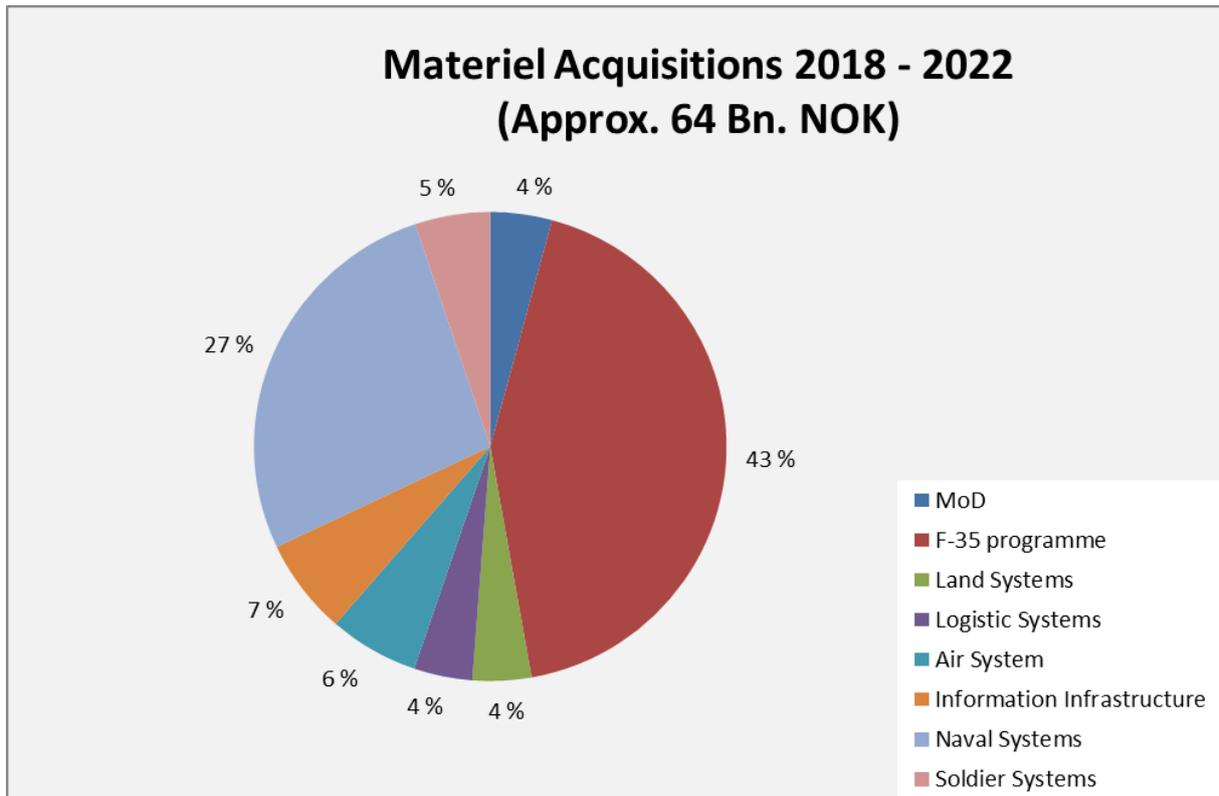


Figure 2- Acquisitions broken down by programme during the period 2018-2022. The MoD allocates funds for preliminary project work, R&D and other supporting activities.

The bulk of the investment activity during the period 2018-2022 will be in the F-35 program and Naval systems. The main delivery of the F-35 aircrafts will start in 2017 and continue beyond 2022. Within Naval systems the main investment is two more vessels of the new ocean going Cost Guard vessel class and investments in the project “Submarine capability beyond 2020”.



3.3 Land Systems

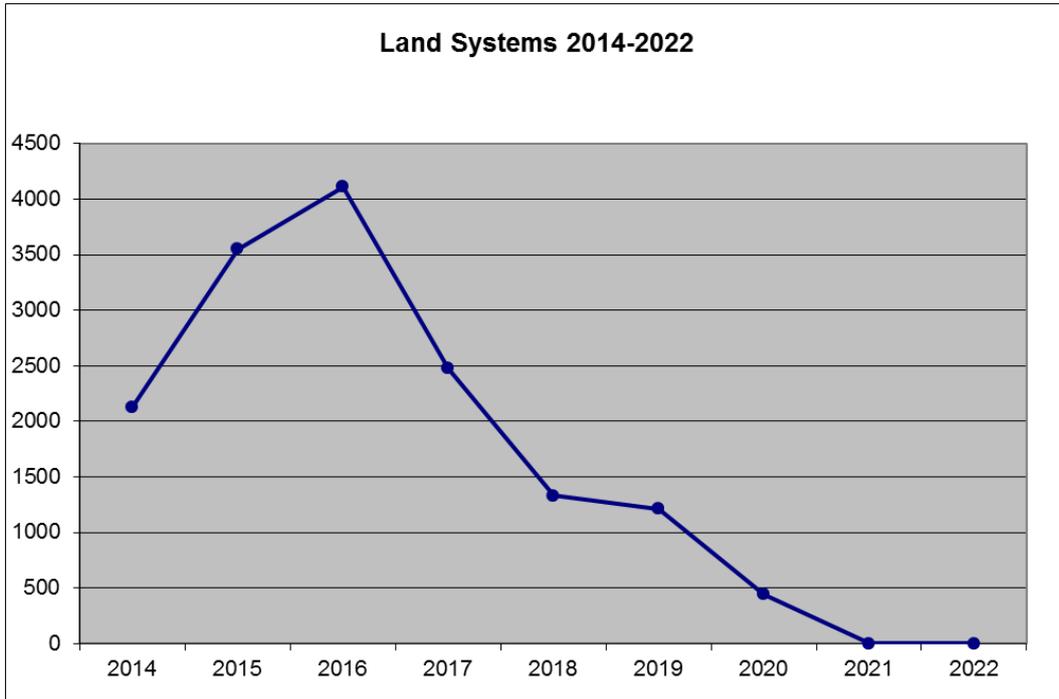


Figure 3- Annual allocation of funds (NOK mill.)

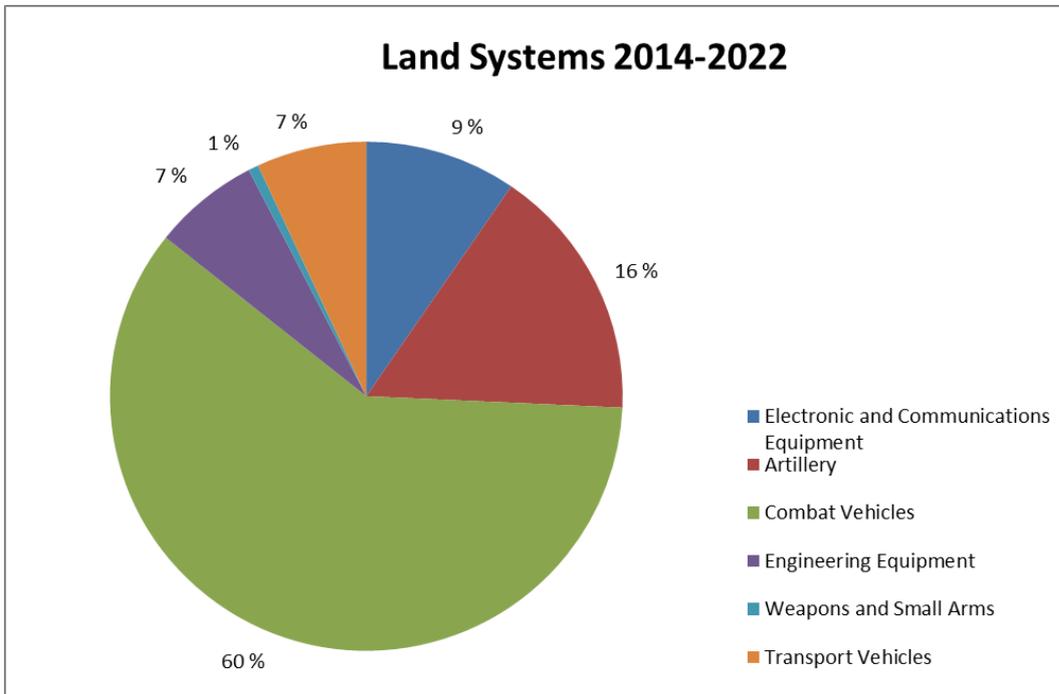


Figure 4- Allocation of funds per main category.



The bulk of the investments within the Land Systems Programme are:

- Combat vehicles and artillery (medium-weight, standard armoured vehicles CV90, armoured reconnaissance systems (CV90)).
- Life extension program on the Main Battle Tank Leopard 2A4 and new Combat Service vehicles on Leopard 2 chassis (Recovery-, Bridge layers and Engineer vehicles)
- Other investments include M-113s, various types of remotely operated weapon stations for vehicles, MLU SISU plus a number of smaller investments.



3.4 Naval Systems

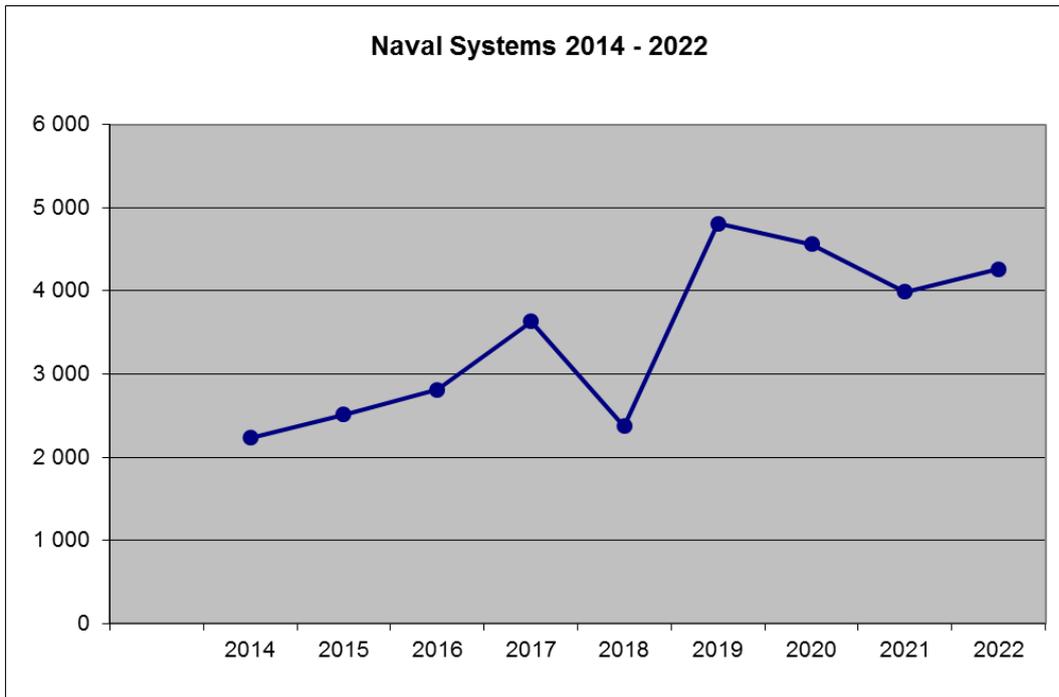


Figure 5- Annual allocation of funds (NOK mill.)

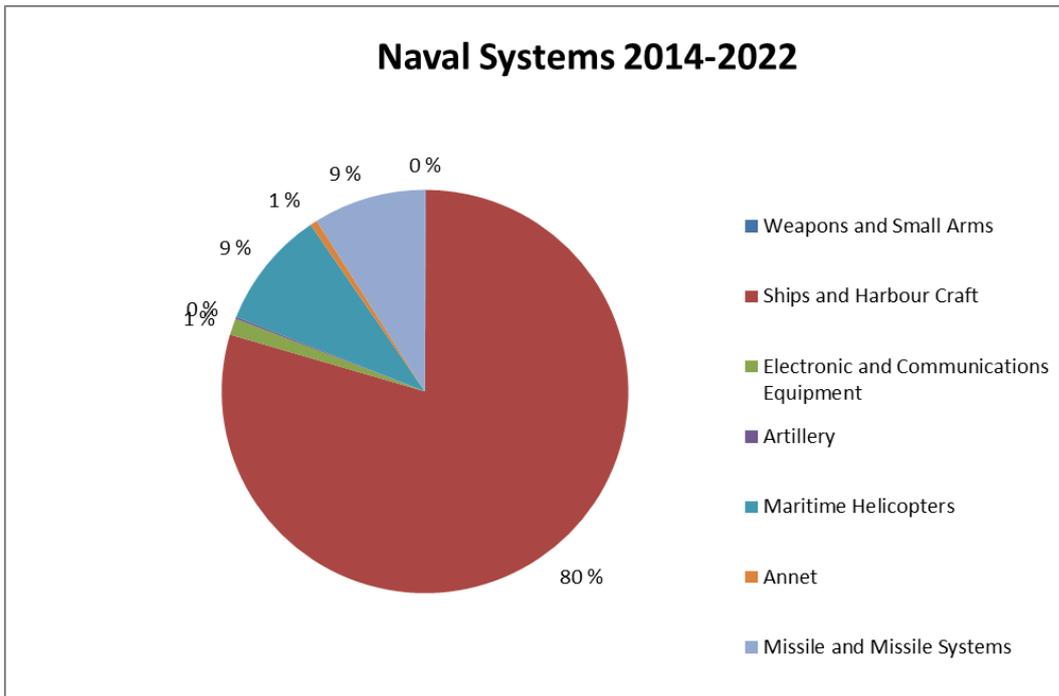


Figure 6- Allocation of funds per main category.

The bulk of the investments within the Naval Systems Programme are related to the completion of the acquisition programmes of new capital ships and related weapon systems. In addition, existing systems are undergoing significant upgrades:

- Naval Strike Missile (NSM)
- Deliveries of NH90 maritime helicopters for the frigates and the Coast Guard.
- New lightweight torpedoes for frigates, helicopters and maritime patrol aircraft.
- Upgrades of Air Defence missiles
- The Ula-class submarines will be undergoing upgrades throughout the period.
- Submarine Capability post 2020
- Procurement of Ocean going Coast Guard Vessels
- Evolved Sea Sparrow Missile Block II

3.5 Air Systems

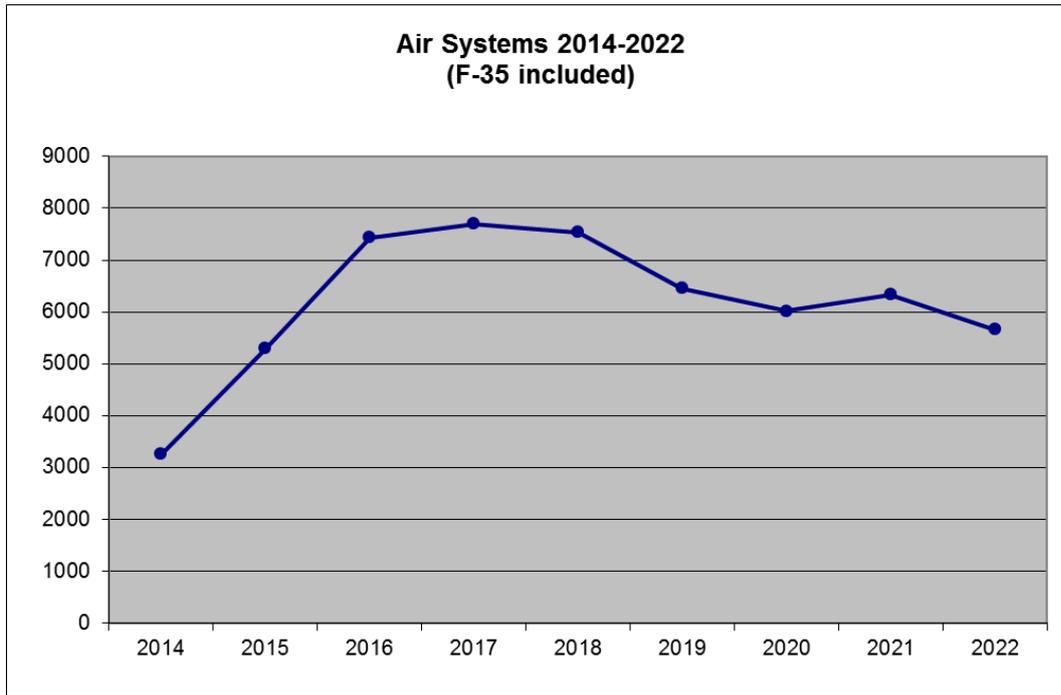


Figure 7- Annual allocation of funds (NOK mill.)

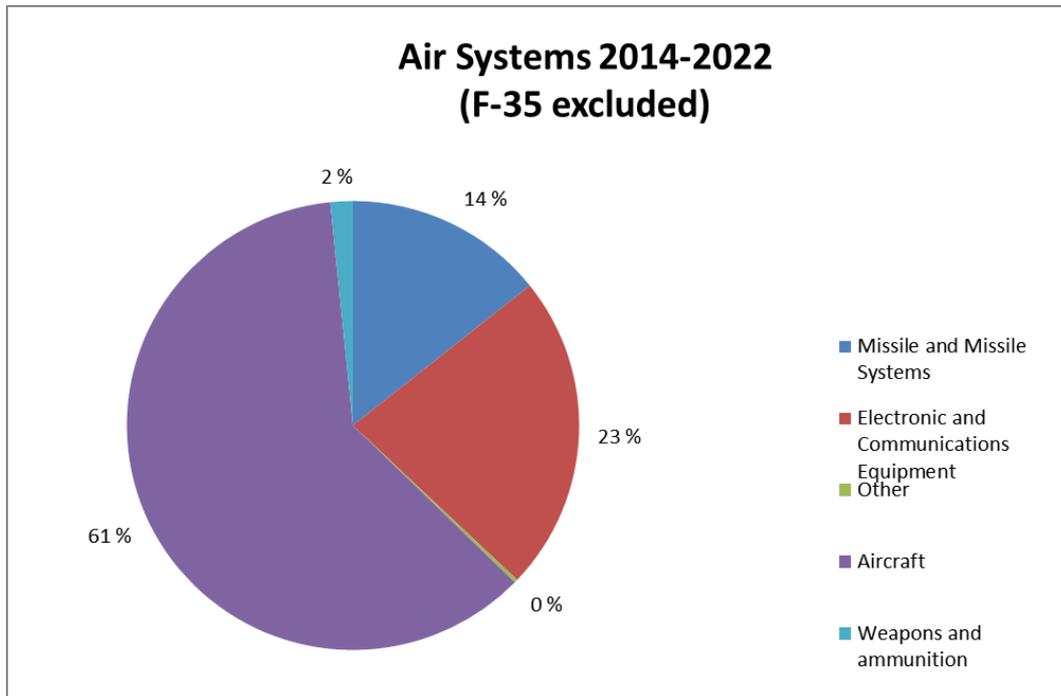


Figure 8- Allocation of funds per main category.

The bulk of the investments within the Air Systems Programme are:

- Maintaining the F-16 as a first line combat aircraft until it is phased out towards the end of the decade. In order to ensure that the capabilities are maintained, there are a number of projects related to upgrades of the aircraft systems, capability improvements and airframe upgrades. Preparations for the acquisition of the F-35 combat aircraft are in progress. According to the current plan an initial delivery of training aircraft will take place in 2015, followed by the main deliveries during the period 2017-2024.
- Replacement of air surveillance radars and required contributions to NATO Airborne Early Warning and Control Force (NAEW&C Force)
- Participation in the acquisition of a NATO owned and operated airborne ground surveillance capability – Alliance Ground Surveillance (AGS).

3.6 Soldier Systems

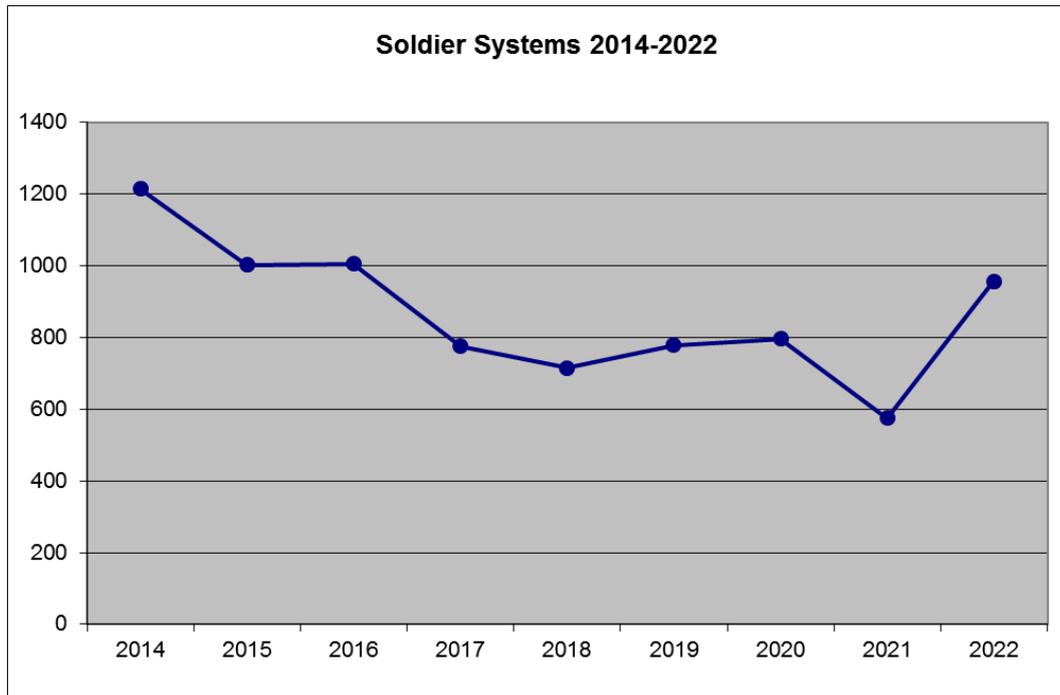


Figure 9- Annual allocation of funds (NOK mill.)

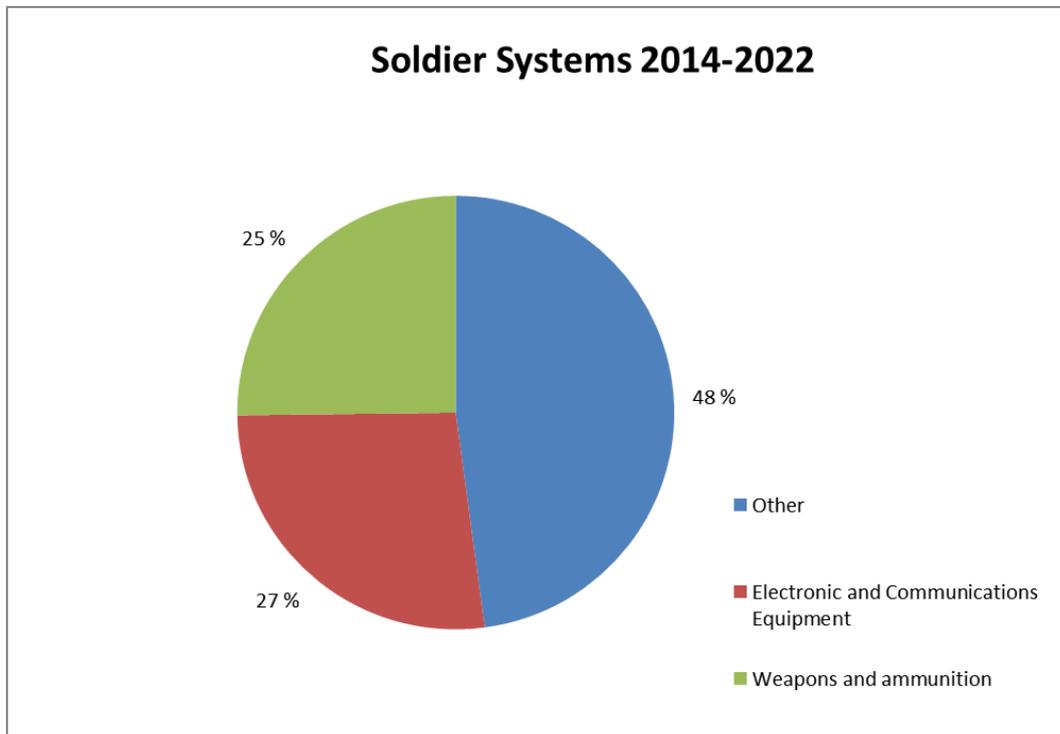


Figure 10- Allocation of funds per main category.

The Soldier Systems Programme is planning the acquisition of a number of individual items within a wide range of projects.

The majority of the planned acquisitions in the long term period concern a modernisation of the equipment for the dismounted soldier. This includes personal equipment in protection, clothing, mobility and endurance. Furthermore the soldier's C2I-systems need modernisation. The Programme plans for a continuing modernisation of the soldier equipment, hence; new projects are planned within the core functions lethality, protection, mobility, sustainability, C2I and logistics.

This programme also conduct acquisitions for the Special Forces, but these acquisitions are for sensitivity reasons not presented in this document.

3.7 Information Infrastructure

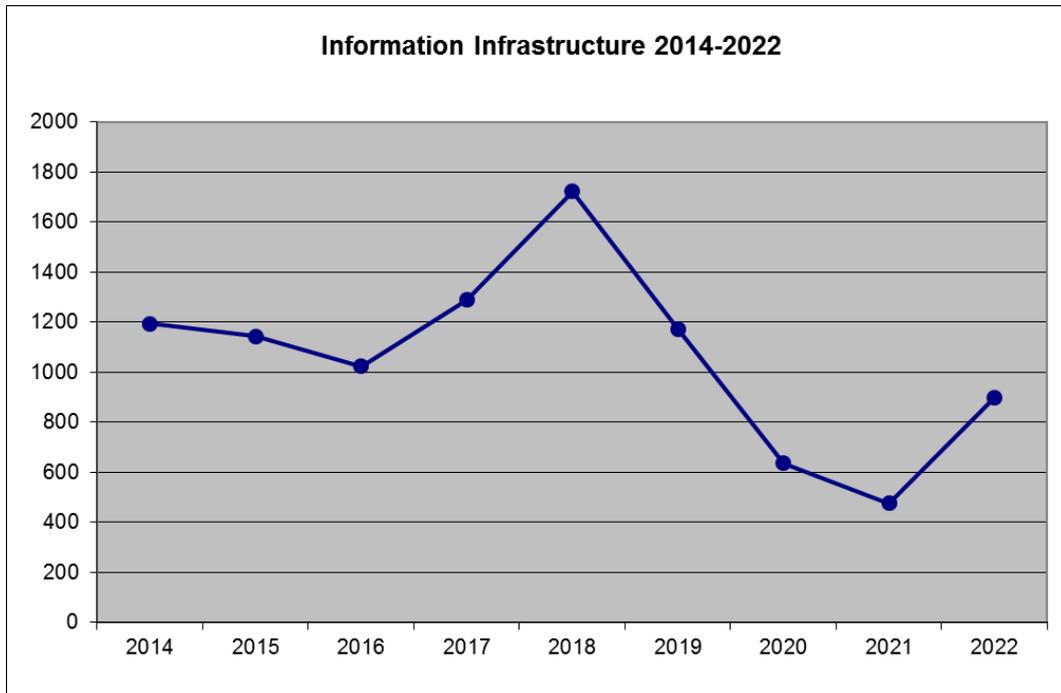


Figure 11- Annual allocation of funds (NOK mill.)

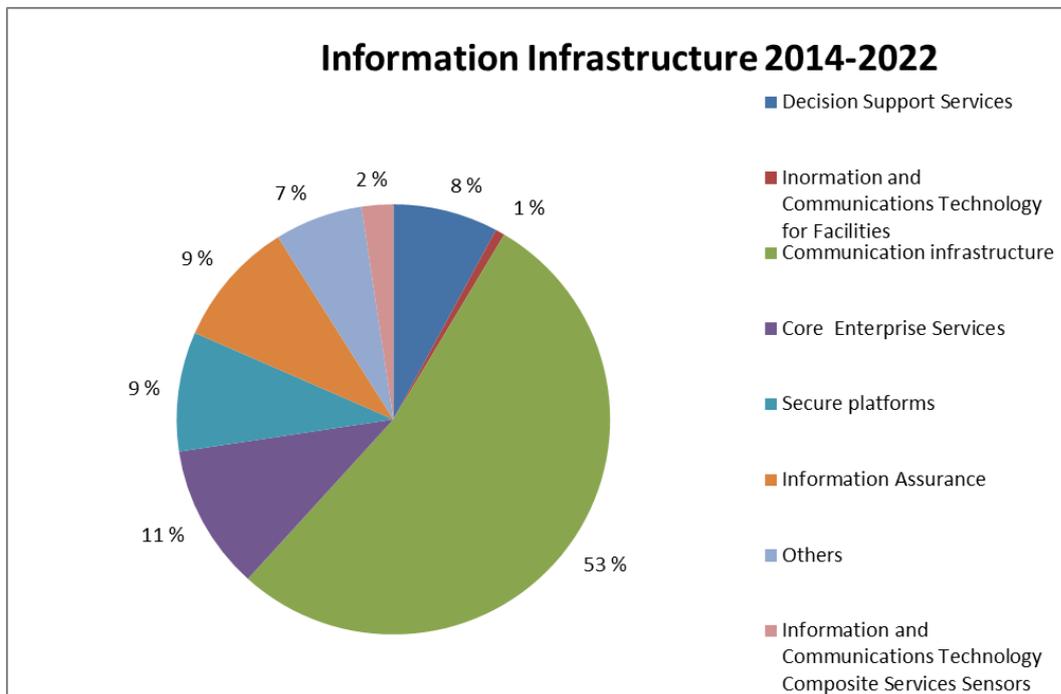


Figure 12- Allocation of funds per main category.

The Network Based Defence Programme is by nature a very complex programme that is divided into eight main parts –

- Decision Support Services
- Information and Communications Technology for Facilities
- Communication Infrastructure
- Core Enterprise Services
- Secure Platforms
- Information Assurance
- Information and Communications Technology Composite Services Sensors

The most significant acquisitions are related to:

- Tactical radio systems (HF, VHF and Multiband)
- Satellite communications
- Decision support services.
- Network nodes for the tactical level.
- Modernization of core enterprise services
- Systems for Information Security and Computer Network Defence
- Optimization of stationary communications infrastructure

3.8 Logistics Systems

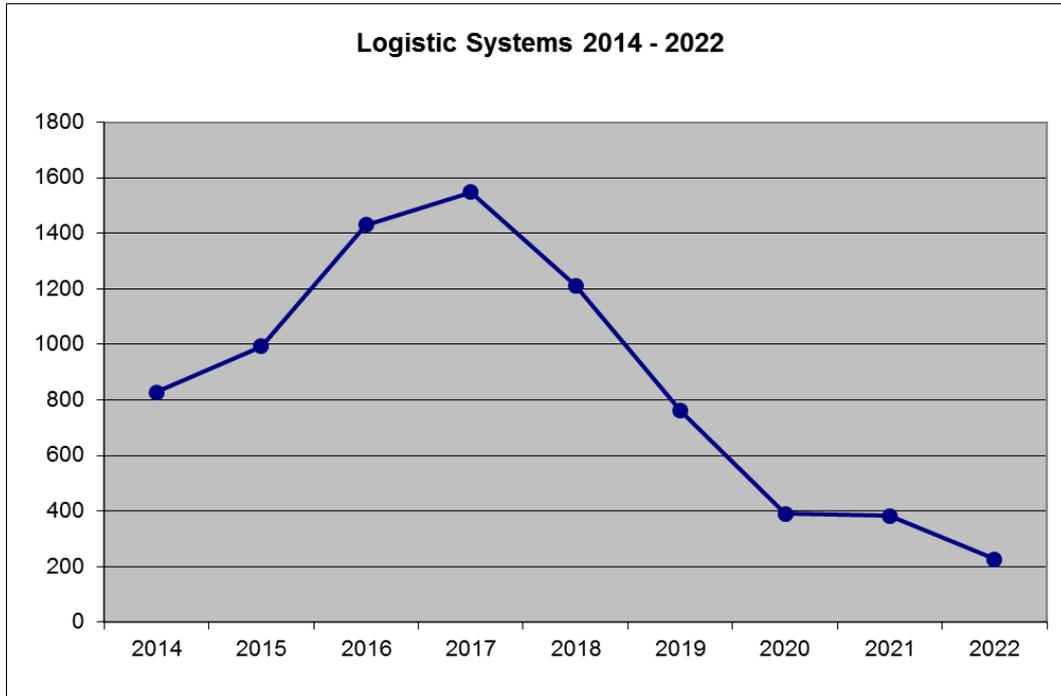


Figure 13- Annual allocation of funds (NOK mill.)

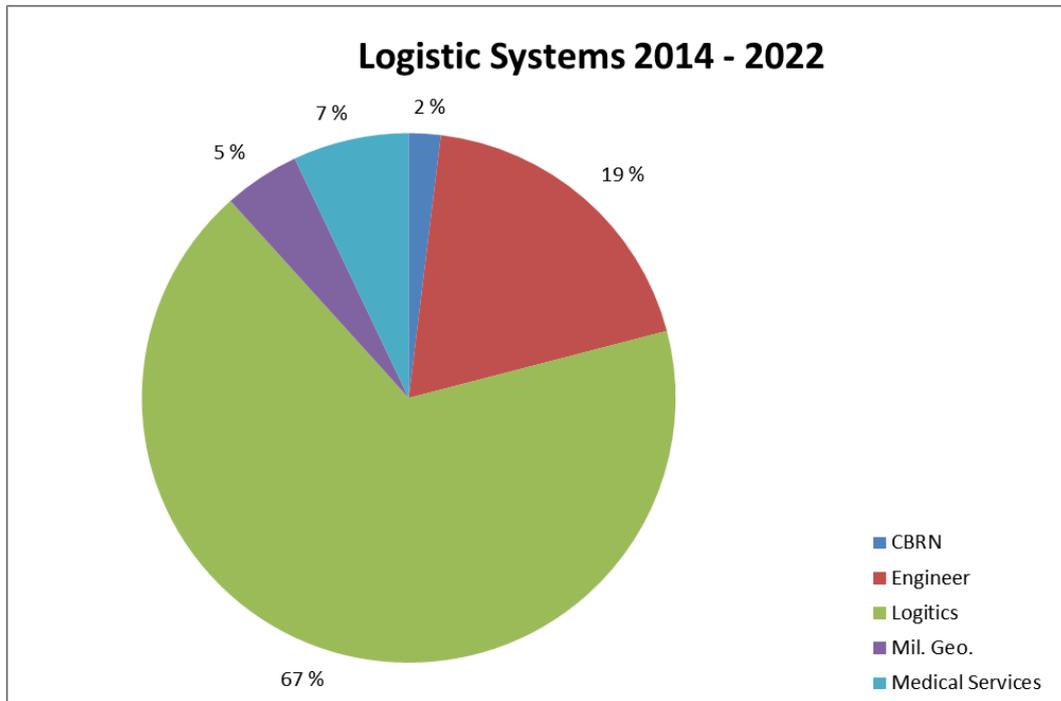


Figure 14- Allocation of funds per main category.

The logistic programme consists of a wide range of projects within five main subject areas:

- CBRN-protection (Chemical / Biological / Radiological / Nuclear)
- Engineering
- Logistics
- Medical Service
- Military Geography (Maps and geographical information)

4. Project overview by programme



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LAND SYSTEMS

Point of Contact:

Programme Manager Land Systems

Ministry of Defence

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P 5001 – Artillery ammunition

Background and overall objective:

Procurement of 155 mm ammunition for the Brigade's artillery battalion.

Scope:

A number of high explosive-, smoke- and illumination grenades.

Milestones:

Approved project:	2014
Contract:	2014-2015
Delivery completed:	2018

Cost estimate:

NOK 100 - 500 million

Point of Contact:

Programme Manager Land Systems – Senior Adviser Bjørn Ryen

P 5007 – Series Acquisition of Artillery Locating Radar

Background and overall objective:

A prototype of an upgraded artillery location radar is ongoing in a separate project. Following a successful evaluation of the prototype, a series acquisition is planned.

Scope:

The scope of the project is a limited number of radars according to the future artillery structure.

Milestones:

Approved project:	2015/2016
Contract:	2016/2017
Delivery completed:	2021

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Programme Manager Land Systems – Senior Adviser Bjørn Ryen

P 5044 – Light utility vehicles (Home Guard)

Background and overall objective:

The aim of the project is to procure a number of light utility vehicles for the Home Guard to improve their flexibility and mobility.

Scope:

The scope of the project will be decided later.

Milestones:

Approved project:	2014
Contract:	2014
Delivery completed:	2018

Cost estimate:

NOK 300 - 400 million

Point of Contact:

Programme Manager Land Systems – Senior Adviser Bjørn Ryen

P 5045 – Armoured bridge layers Leopard 2

Background and overall objective:

The purpose of this project is to replace the existing Leopard 1 vehicles with new vehicles based on the Leopard 2 chassis.

Scope:

5 – 8 vehicles.

Milestones:

Approved project:	2014/2015
Contract:	2014/2015
Delivery completed:	2020

Cost estimate:

NOK 300 - 500 million

Point of Contact:

Programme Manager Land Systems – Senior Adviser Bjørn Ryen

P 5049 – Armoured engineer vehicles Leopard 2

Background and overall objective:

The purpose of this project is to replace the existing Leopard 1 vehicles with new vehicles based on the Leopard 2 chassis.

Scope:

5-8 vehicles.

Milestones:

Approved project:	2014/2015
Contract:	2014/2015
Delivery completed:	2020

Cost estimate:

NOK 300 - 500 million

Point of Contact:

Programme Manager Land Systems – Senior Adviser Bjørn Ryen

P 5050 – Main Battle Tank Leopard 2 upgrade

Background and overall objective:

The purpose of the project is to upgrade the existing fleet of Leopard 2 Main Battle Tanks. The upgrade includes amongst others improved protection, new thermal sights, air condition, etc.

Scope:

Upgrade of 46 vehicles. The number may, however, be reduced.

Milestones:

Approved project:	2015
Contract:	2016
Delivery completed:	2021

Cost estimate:

NOK 1000 - 2000 million

Point of Contact:

Programme Manager Land Systems – Senior Adviser Bjørn Ryen

P 5086 – Upgrade of tracked vehicle BV-206

Background and overall objective:

Existing tracked vehicles BV-206 is to be upgraded in order to extend the vehicles service life and meet requirements for personnel health, working environment and safety.

Scope:

The number of vehicles will be clarified later.

Milestones:

Approved project:	2015
Contract:	2016
Delivery completed:	2021

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Programme Manager Land Systems – Senior Adviser Bjørn Ryen

P 5240 – Ammunition 81mm mortar

Background and overall objective:

The project will procure new 81 mm ammunition for existing mortar units, and revision of existing ammunition.

Scope:

A number of explosive-, smoke- and illumination grenades.

Milestones:

Approved project:	2014
Contract:	2015
Delivery completed:	2019

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Programme Manager Land Systems – Senior Adviser Bjørn Ryen

P 5475 – Electronic countermeasures

Background and overall objective:

Service life extension program for the existing ECM system, or procurement of a totally new system.

Scope:

The number of existing systems is not be changed.

Milestones:

Approved project:	2015/2016
Contract:	2016/2017
Delivery completed:	2021

Cost estimate:

NOK 300 - 500 million

Point of Contact:

Programme Manager Land Systems – Senior Adviser Bjørn Ryen

P 8308 – Target Materiel for Shooting Ranges – Part 2

Background and overall objective:

The aim of the project is to procure target equipment for shooting ranges.

Scope:

The procurement shall cover the needs for electronic target systems for a variety of types of shooting ranges. The scope of the project may include target materiel for all Home Guard Districts.

Milestones:

Approved project:	2014
Contract:	2014 or later
Delivery completed:	2019

Cost estimate:

NOK 0 - 100 million

Point of Contact:

Programme Manager Land Systems – Senior Adviser Bjørn Ryen

NAVAL SYSTEMS

Point of Contact:

Programme manager Naval Systems

Ministry of Defence

Telephone 23 09 80 00



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P 3049 – Replacement of the Nordkapp-class Coast Guard Vessel

Background and overall objective:

Nordkapp-class were commissioned in 1980-82, as the first arctic offshore patrol vessel which embarked helicopter, for the Norwegian Coast Guard.

The new vessels will have the same capabilities and operational requirements as the Nordkapp-class, and will operate in the same environment..

Scope:

One or two vessels.

Milestones:

Approved project:	2015
Contract:	2016
Delivery completed:	2023 or later

Cost estimate:

NOK 3000 - 5000 million

Point of Contact:

Programme Manager Naval Systems – Lieutenant Colonel Inger Birgitte Kvale
Sørvåg

P 6003 – Boats for tactical operations in internal waters

Background and overall objective:

The new boats are replacing Stridsbåt 90. There is an ongoing study of the future concept of tactical operations in internal waters, and thereof requirements for the new boats.

Scope:

Number of boats is not yet decided.

Milestones:

Approved project:	2017
Contract:	2018
Delivery completed:	2025

Cost estimate:

NOK 300 - 500 million

Point of Contact:

Lieutenant Colonel Jon Peder Engan - Naval Systems Programme

P6004 – IFF for Naval Surface Ships

Background and overall objective:

The project shall procure new and upgrade existing IFF Systems to ensure interoperability according to NATO STANAGS.

Scope:

The scope of the project includes software and hardware solutions necessary to upgrade existing systems and to install IFF Systems on selected ships not yet equipped.

Milestones:

Approved project:	2014
Contract:	2015
Delivery completed:	2019

Cost estimate:

NOK 50 - 300 million

Point of Contact:

Senior Adviser Christina Brouwers - Naval Systems Programme

P 6097 – Acquisition of a second Launcher VLS MK 41 for the Nansen-class Frigate

Background and overall objective:

The acquisition is intended to create redundancy and improve the self-defence capabilities.

Scope:

Five launchers, one for each ship.

Milestones:

Approved project:	2015
Contract:	2016
Delivery completed:	2023

Cost estimate:

NOK 300 - 500 million

Point of Contact:

Lieutenant Colonel Jon Peder Engan - Naval Systems Programme

P 6346 – Submarine Capability post 2020

Background and overall objective:

The aim of the project is to maintain a submarine capability beyond 2020 as the current fleet of submarines reach the end of its technical and operational capability.

Scope:

The scope of the programme is not decided. Current evaluation of possible alternatives discusses a major refit of the Ula-class or the acquisition of a new class of submarines.

Milestones:

Approved project:	2017
Contract:	2018
Delivery completed:	2030

Cost estimate:

Under consideration

Point of Contact:

Programme Manager Naval Systems – Lieutenant Colonel Inger Birgitte Kvale Sørvalg

P 6353 – Motor Upgrades of MCM Vessels

Background and overall objective:

The project shall provide engine components for the MCM vessels in order to support and maintain their operational capabilities.

Scope:

The scope of the project will be determined following a technical review of the vessels. It is expected that it will be necessary to acquire four complete power trains, including main engines and fan lifting engines. Auxiliary engines and some electronic materiel will supplement the upgrades.

Milestones:

Approved project:	2014
Contract:	2015
Delivery completed:	2018

Cost estimate:

NOK 10 - 100 million

Point of Contact:

Lieutenant Colonel Jon Peder Engan - Naval Systems Programme

P 6355 – Upgrade of the AGATE Consoles for the Alta-class Minesweeper

Background and overall objective:

The aim of the project is a hardware and software upgrade the acoustic minesweeping capability of the vessels.

Scope:

Under evaluation.

Milestones:

Approved project:	2017
Contract:	2018
Delivery completed:	2021

Cost estimate:

NOK 10 - 100 million

Point of Contact:

Lieutenant Colonel Jon Peder Engan - Naval Systems Programme

P 6360 – IR Decoys for the Skjold-class

Background and overall objective:

The aim of the project is an upgrade of the self-defence capabilities of the Skjold-class.

Scope:

Under evaluation.

Milestones:

Approved project:	2017
Contract:	2018
Delivery completed:	2021

Cost estimate:

NOK 10 - 100 million

Point of Contact:

Lieutenant Colonel Jon Peder Engan - Naval Systems Programme

P 6371 – Electronic logbook for marine vessels

Background and overall objective:

The project will replace today's paper based logbook with an electronic logbook system according to international and national maritime legislation.

Scope:

All navy vessels.

Milestones:

Approved project:	2016
Contract:	2016
Delivery completed:	2019

Cost estimate:

NOK 10 - 100 million

Point of Contact:

Programme Manager Naval Systems – Lieutenant Colonel Inger Birgitte Kvale
Sørvåg

P 6372 – Cooling capacity on the Fridthjof Nansen-class

Background and overall objective:

There is a need for increasing the cooling capacity for the technical systems on-board, in order to operate in tropical environments.

Scope:

1-5 vessels.

Milestones:

Approved project:	2015
Contract:	2016
Delivery completed:	2018

Cost estimate:

NOK 10 - 100 million

Point of Contact:

Lieutenant Colonel Jon Peder Engan - Naval Systems Programme

P 6393 – Laser based anemometry

Background and overall objective:

The project shall procure laser based anemometry systems for naval vessels.

Scope:

Naval vessel with helicopters embarked (Nansen class frigates and Cost Guards vessels) and other vessels that requires improved metrological data.

Milestones:

Approved project:	2015
Contract:	2016
Delivery completed:	2020

Cost estimate:

NOK 10 - 100 million

Point of Contact:

Lieutenant Colonel Jon Peder Engan - Naval Systems Programme

P 6532 – Remotely operated vehicle (ROV) for deep waters

Background and overall objective:

The system will be a mobile system that can be operated from several types of vessels. The system will consist of a ROV, launch and catch system, and an operating control system.

The need is a remotely operated underwater vehicle for operating in ocean more than 1000 meter deep waters

Scope:

A small number of systems will be procured.

Milestones:

Approved project:	2014
Contract:	2015
Delivery completed:	2018

Cost estimate:

NOK 10 - 50 million

Point of Contact:

Senior Adviser Christina Brouwers - Naval Systems Programme

P 6607 – Life Extension Programme MCM Vessels

Background and overall objective:

This project is not defined with respect to content and scope. The age of the MCM vessels will be such that a life extension programme most likely will be necessary. Contents and scope will be determined based on technical reviews of the vessels and their equipment.

Scope:

Under evaluation

Milestones:

Approved project:	Under evaluation
Contract:	Under evaluation
Delivery completed:	Under evaluation

Cost estimate:

NOK 300 – 500 million

Point of Contact:

Senior Adviser Christina Brouwers - Naval Systems Programme

P 6608 – Mid-life Update Svalbard-class Coast Guard Ship

Background and overall objective:

This project is not defined with respect to content and scope. The age of the ship is such that a significant upgrade most likely will be necessary. Contents and scope will be determined based on technical reviews of the vessel and her equipment.

Scope:

Under evaluation

Milestones:

Approved project:	Under evaluation
Contract:	Under evaluation
Delivery completed:	Under evaluation

Cost estimate:

NOK 100 – 300 million

Point of Contact:

Programme Manager Naval Systems – Lieutenant Colonel Inger Birgitte Kvale
Sørvåg

P 6618 – Mid-life Update Coast Guard Ship Harstad

Background and overall objective:

The aim of the project is to identify and carry out necessary upgrades to ensure that the operational capability remains relevant.

Scope:

Under evaluation

Milestones:

Approved project: Under evaluation

Contract: Under evaluation

Delivery completed: Under evaluation

Cost estimate:

NOK 0 - 100 million

Point of Contact:

Programme Manager Naval Systems – Lieutenant Colonel Inger Birgitte Kvale Sørvalg

P 8165 – Upgrade of Communication Equipment MCM Vessels

Background and overall objective:

The aim of the project is to make necessary upgrades of the communication equipment aboard MCM vessels.

Scope:

Under consideration.

Milestones:

Approved project:	2014
Contract:	2014
Delivery completed:	2018

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Lieutenant Colonel Jon Peder Engan - Naval Systems Programme



P 8916 – Rigid-hulled inflatable boats (RHIB)

Background and overall objective:

The project shall procure RHIBs for the Home Guard. The boats will be used for Naval Force Protection and administrative and logistic support.

Scope:

Under consideration.

Milestones:

Approved project:	2014
Contract:	2015
Delivery completed:	2019

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Senior Adviser Christina Brouwers - Naval Systems Programme



AIR SYSTEMS

Point of Contact:

Programme Manager Air Systems

Ministry of Defence

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P 2078 - Air Surveillance Radars

Background and overall objective:

The aim of the project is to acquire air surveillance radars in order to maintain early warning and air command and control capabilities. The new radar system will gradually replace existing radars as they become obsolete.

Scope:

The scope of the project is a gradual replacement of air surveillance radars. It is intended to maintain or improve current coverage

Milestones:

Approved project:	2015
Contract:	2016
Delivery completed:	2027

Cost estimate:

NOK 2000 - 4000 million

Point of Contact:

Programme Manager Air Systems – Senior Adviser Jan Ronny Fagereng

P 2080 – Upgrade IFF systems to Mode 5

Background and overall objective:

Procure new or upgrade existing Identification Friend or Foe (IFF) systems for different platforms (radar systems, helicopters or aircrafts) in the Air Force. IFF systems shall operate according to current and future NATO IFF requirements.

Scope:

Necessary Software and Hardware.

Milestones:

Approved project:	2014
Contract:	2015
Delivery completed:	2019

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Programme Manager Air Systems – Senior Adviser Jan Ronny Fagereng

P 7210 – Future “Open Skies” platform

Background and overall objective:

The purpose of the project is to develop a solution for a cost-effective Open Skies platform.

Scope:

Under consideration

Milestones:

Approved project:	2014
Contract:	2015
Delivery completed:	2018

Cost estimate:

NOK 0 - 50 million

Point of Contact:

Programme Manager Air Systems – Senior Adviser Jan Ronny Fagereng

P 7211 – SAAB Safari - Communications and Flight Instruments

Background and overall objective:

SAAB Safari is a prop-powered basic trainer aircraft procured in 1981. The purpose of the project is to improve the communications systems and flight instruments to increase Flight Safety and reduce maintenance costs.

Scope:

1 – 16 aircrafts

Milestones:

Approved project:	2014
Contract:	2015
Delivery completed:	2017

Cost estimate:

NOK 0 - 50 million

Point of Contact:

Programme Manager Air Systems – Senior Adviser Jan Ronny Fagereng

P 7644 – Upgrade of the DA-20 Jet Falcon

Background and overall objective:

The aim of the project is to upgrade several of the systems on the aircraft in order to maintain the operational capabilities of the aircraft.

Scope:

Some of the systems that are to be upgraded include intercom, SATCOM and the ESM-system.

Milestones:

Approved project:	2014
Contract:	2015
Delivery completed:	2019

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Programme Manager Air Systems – Senior Adviser Jan Ronny Fagereng

SOLDIER SYSTEMS

Point of Contact:

Programme Manager Soldier Systems

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Overview Soldier Systems

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P 4003 – Digitalization 2

Background and overall objective:

The project is intended to further develop the capabilities of the C2I equipment for the dismounted soldier acquired earlier. Operational experiences and technological development will determine the contents of the project..

Scope:

The procurement shall cover the requirements of all services.

Milestones:

Approved project:	2017
Contract:	2018
Delivery completed:	2024

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Programme Manager Soldier Systems – Lieutenant Colonel Terje Ågren

P 4018 – Mid-life update of Small Arms

Background and overall objective:

The project is intended to conduct a mid-life update of small arms in the Armed Forces. The need for updates will be based on experiences with small arms already in use. The project covers all small arms ranging from pistols to light and heavy machine guns, and includes sights and accessories.

Scope:

The procurement shall cover the requirements of all services.

Milestones:

Approved project:	2017
Contract:	2017
Delivery completed:	2023

Cost estimate:

NOK 300 - 500 million

Point of Contact:

Programme Manager Soldier Systems – Lieutenant Colonel Terje Ågren

P 4023 – Digitalization 3

Background and overall objective:

The project is intended to procure a variety of equipment necessary to maintain and further develop existing capabilities. The rapid technical development and the relatively short lifespan of this kind of equipment, makes it necessary to look into replacing the capabilities previously acquired. The acquired equipment shall be integrated into the Armed Forces' C2IS.

Scope:

The acquisition shall cover the requirements of all services.

Milestones:

Approved project:	2021
Contract:	2022
Delivery completed:	2027

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Programme Manager Soldier Systems – Lieutenant Colonel Terje Ågren

P 4038 – Soldier Equipment – Personal Clothing and Protection

Background and overall objective:

The project is intended to replace the individual body armour and ballistic helmets for the Armed Forces. This type of equipment is always asked for in conflicts, both domestically and internationally, and it will be used both in training and during operations.

Scope:

The procurement shall cover the requirements of all services.

Milestones:

Approved project:	2016
Contract:	2018
Delivery completed:	2023

Cost estimate:

NOK 300 - 500 million

Point of Contact:

Programme Manager Soldier Systems – Lieutenant Colonel Terje Ågren

P 4042 – New Types of Ammunition

Background and overall objective:

The project is to keep abreast of the technological developments and evaluate new types of ammunition for use by the armed forces.

Scope:

The scope of the project covers calibres up to 12.7 mm. However, other types of calibres like the M-72 Anti-tank Weapon may be included.

Milestones:

Approved project:	2018
Contract:	2019
Delivery completed:	2022

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Programme Manager Soldier Systems – Lieutenant Colonel Terje Ågren

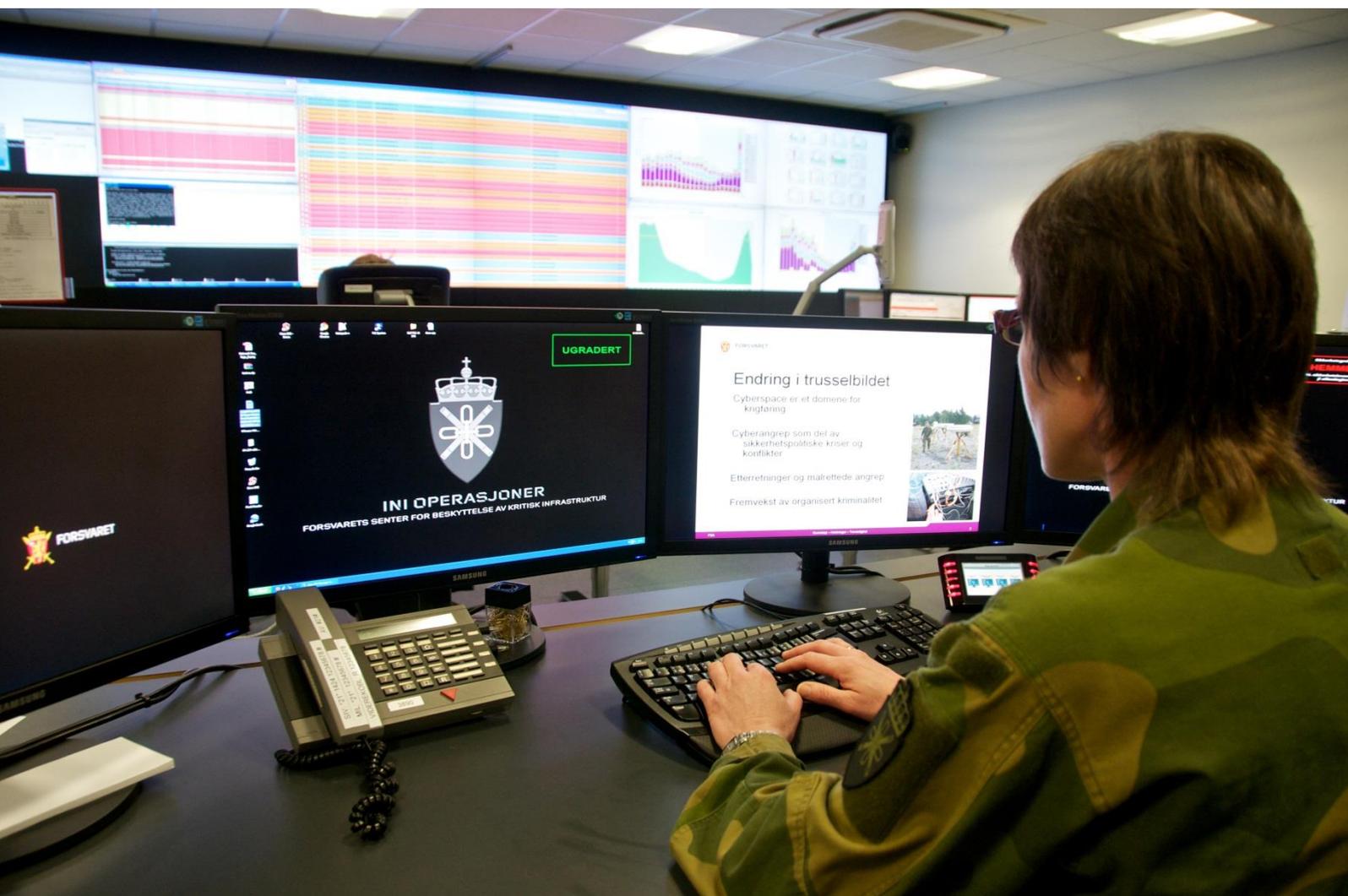
INFORMATION INFRASTRUCTURE

Point of Contact:

Programme Manager Information Infrastructure

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P 8021 – Modernisation of Voice Services

Background and overall objective:

Current secure voice systems are approaching end of life and the underlying technology of circuit switched services will be taken out of service. The aim of the project is to establish secure voice communication using modern technology.

Scope:

Under consideration

Milestones:

Approved project:	2016
Contract:	2016
Delivery completed:	2020

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Programme Manager Information Infrastructure – Lieutenant Colonel Tom Haldor Juliussen

P 8041 – Renewal of Stationary Maritime Radio Systems

Background and overall objective:

The project is to modernise and renew the national core HF radio structure

Scope:

Under consideration.

Milestones:

Approved project:	2015
Contract:	2016
Delivery completed:	2020

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Programme Manager Information Infrastructure – Lieutenant Colonel Tom Haldor Juliussen

P 8043 – Tactical C2IS for the Land Domain

Background and overall objective:

Current C2IS consist of components procured through different projects over the last 10-15 years . The overall objective is to renew all or parts of the tactical C2IS, including tactical radio systems.

Scope:

Under consideration.

Milestones:

Approved project:	2019
Contract:	2020
Delivery completed:	2026

Cost estimate:

NOK 1500 - 3500 million

Point of Contact:

Programme Manager Information Infrastructure – Lieutenant Colonel Tom Haldor Juliussen

P 8044 – Modernisation of Core Enterprise Services

Background and overall objective:

The aim of the project is to ensure that the core enterprise services are modernised.

Scope:

Under consideration.

Milestones:

Approved project:	2016
Contract:	2017
Delivery completed:	2022

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Programme Manager Information Infrastructure – Lieutenant Colonel Tom Haldor Juliussen

P 8045 – Modernisation of Decision Support Systems

Background and overall objective:

The aim of the project is to ensure a continuous modernisation of decision support systems.

Scope:

Under consideration.

Milestones:

Approved project:	2017
Contract:	2018
Delivery completed:	2021

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Programme Manager Information Infrastructure – Lieutenant Colonel Tom Haldor Juliussen

P 8051 – Upgrade of VLF-station Novik

Background and overall objective:

VLF-station Novik is based on old technology which is approaching end of life. The overall objective is to ensure a modern and reliable VLF capability beyond year 2020 to support submarine communications.

Scope:

Under consideration.

Milestones:

Approved project:	2015
Contract:	2016
Delivery completed:	2021

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Programme Manager Information Infrastructure – Lieutenant Colonel Tom Haldor Juliussen

P 8152 - Mobile SATCOM Terminals

Background and overall objective:

The project shall acquire the necessary components necessary to adapt and modernise existing and planned communications infrastructures to broadband SATCOM.

Scope:

The project is to procure a number of SATCOM terminals and adapt the communications infrastructure.

Milestones:

Approved project:	2015
Contract:	2016
Delivery completed:	2022

Cost estimate:

NOK 300 - 500 million

Point of Contact:

Programme Manager Information Infrastructure – Lieutenant Colonel Tom Haldor Juliussen

P 8153 – Link System Development

Background and overall objective:

The aim of the project is to ensure a continuous modernisation of link systems.

Scope:

Under consideration.

Milestones:

Approved project:	2016
Contract:	2017
Delivery completed:	2021

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Programme Manager Information Infrastructure – Lieutenant Colonel Tom Haldor Juliussen

P 8154 - Flexible Solutions for Secure Information Exchange

Background and overall objective:

The overall objective is to implement flexible solutions for secure information exchange, including solutions for information exchange across different secure domains.

Scope:

Under consideration.

Milestones:

Approved project:	2015
Contract:	2016
Delivery completed:	2021

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Programme Manager Information Infrastructure – Lieutenant Colonel Tom Haldor Juliussen

P 8155- National use of NATO Functional Area Services

Background and overall objective:

The overall objective is to reuse and implement NATO Functional Area Services for national use.

Scope:

Primarily software.

Milestones:

Approved project: 2015

Contract: 2016

Delivery completed: 2020

Cost estimate:

NOK 50 - 300 million

Point of Contact:

Programme Manager Information Infrastructure – Lieutenant Colonel Tom Haldor Juliussen

P 8156 - Network Enabling of Sensors

Background and overall objective:

Sensors are traditionally providing data only to the system they are part of and the data are normally not easily distributed to other user/systems. The overall objective is to make information and sensor data available to operational decision makers. This will be based on the principles of a Service Oriented Architecture (SOA).

Scope:

Establish the necessary missing infrastructure for sharing, as well as adapting the interfaces of existing sensors and information sources to enable sharing.

Milestones:

Approved project:	2015
Contract:	2016
Delivery completed:	2020

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Programme Manager Information Infrastructure – Lieutenant Colonel Tom Haldor Juliussen

P 8158 – Integration of the F-35 into the National Information Infrastructure

Background and overall objective:

The overall objective is to make necessary adaptations to the national Information Infrastructure to enable integration of F-35.

Scope:

Under consideration.

Milestones:

Approved project:	2016
Contract:	2017
Delivery completed:	2020

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Programme Manager Information Infrastructure – Lieutenant Colonel Tom Haldor Juliussen

P 8160 – Secure Platforms

Background and overall objective:

The overall objective is to ensure a continuous modernisation of secure platforms.

Scope:

Under consideration.

Milestones:

Approved project:	2017
Contract:	2018
Delivery completed:	2022

Cost estimate:

NOK 0 - 100 million

Point of Contact:

Programme Manager Information Infrastructure – Lieutenant Colonel Tom Haldor Juliussen

P 8162 – Upgrade of the Armed Forces' Satellite Ground Station

Background and overall objective:

The aim of the project is to upgrade the satellite ground station at Eggemoen and to establish an alternative “anchor” station.

Scope:

Under consideration.

Milestones:

Approved project:	2015
Contract:	2016
Delivery completed:	2019

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Programme Manager Information Infrastructure – Lieutenant Colonel Tom Haldor Juliussen

P 9245 - ACCS National Infrastructure

Background and overall objective:

The overall objective is to acquire the equipment necessary to implement the national parts of NATO Air Command and Control System.

Scope:

Under consideration

Milestones:

Approved project:	2015
Contract:	2015
Delivery completed:	2019

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Programme Manager Information Infrastructure – Lieutenant Colonel Tom Haldor Juliussen

LOGISTICS SYSTEMS

Point of Contact:
Programme Manager Logistics Systems
Ministry of Defence
Telephone 23 09 80 00



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P 2504 – Medical Evacuation System

Background and overall objective:

Acquire wheeled, non-armoured ambulances for the Norwegian Armed Forces.

Scope:

Under consideration

Milestones:

Approved project: 2014

Contract: 2015

Delivery completed: 2020

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Lieutenant Colonel Arild Andersen – Logistics Systems Programme

P 2528 - New Assault Boats

Background and overall objective:

The project is to acquire new assault boats in order to maintain the operational capabilities in areas where water impedes movement.

Scope:

The scope of the project is to acquire a limited number of assault boats.

Milestones:

Approved project:	2014
Contract:	2016
Delivery completed:	2018

Cost estimate:

NOK 0 - 100 million

Point of Contact:

Lieutenant Colonel Tor Are Harvey – Logistics Systems Programme.

P 2568 - Route Clearance and Counter IED Equipment

Background and overall objective:

The project is to acquire vehicles for route clearance and materiel to supplement existing Counter-IED capabilities as the threats and the technological countermeasures evolve.

Scope:

Under evaluation

Milestones:

Approved project:	2016
Contract:	2017
Delivery completed:	2024

Cost estimate:

NOK 300 - 500 million

Point of Contact:

Lieutenant Colonel Tor Are Harvey –Logistics Systems Programme.

P 2573 – Labelling of Weapons and Ammunition

Background and overall objective:

The project shall procure a system for unique labelling of weapons and ammunition which can be read by machines.

Scope:

Under consideration.

Milestones:

Approved project:	2015
Contract:	2016
Delivery completed:	2019

Cost estimate:

NOK 0 - 100 million

Point of Contact:

Lieutenant Colonel Tor Are Harvey –Logistics Systems Programme.

P 2574 – Securing and Tracking of Weapons and Ammunition during Transport

Background and overall objective:

The project shall improve the system for securing and tracking of weapons and ammunition during transport.

Scope:

Under consideration.

Milestones:

Approved project:	2016
Contract:	2017
Delivery completed:	2019

Cost estimate:

NOK 0 - 100 million

Point of Contact:

Lieutenant Colonel Tor Are Harvey –Logistics Systems Programme.

P 2576 – Phase 1 Construction Equipment

Background and overall objective:

Phase 1 in operations abroad is defined to be the first two months after the initial deployment. During phase 1 the Armed Forces needs equipment to establish an initial camp with housing, sanitary installations, accommodations and provisions.

Scope:

The procurement can include equipment as tents, field kitchens, power generators, showers/toilets, A/C units, water storages, fuel storages, firefighting equipment and waste disposal equipment.

Milestones:

Approved project:	2015
Contract:	2016
Delivery completed:	2019

Cost estimate:

NOK 0 - 100 million

Point of Contact:

Lieutenant Colonel Tor Are Harvey –Logistics Systems Programme.

P 2577 – Fuel card for the Norwegian Armed Forces

Background and overall objective:

Establish a fuel management system utilizing a fuel card to register necessary transaction parameters during refuelling vehicles and other equipment in service by the Norwegian Armed Forces.

Scope:

The fuel management system will be applied on both stationary- and mobile stations, and it should also be possible to use the system during operations abroad.

Milestones:

Approved project:	2016
Contract:	2017
Delivery completed:	2019

Cost estimate:

NOK 0 - 100 million

Point of Contact:

Lieutenant Colonel Tor Are Harvey – Logistics Systems Programme.

P 2578 – Armoured Transport Vehicle

Background and overall objective:

Obtain armoured transport vehicles which are capable of transporting supplies in the terrain to support mechanised and engineering units.

Scope:

Under consideration, but approximately 20 – 50 vehicles based on the M113/M548-chassis.

Milestones:

Approved project:	2014
Contract:	2015
Delivery completed:	2021

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Lieutenant Colonel Tor Are Harvey –Logistics Systems Programme.

P 2579 – Armoured Repair-team Vehicle

Background and overall objective:

Armoured repair-team vehicles with mobility, ballistic protection and cargo capacity making them able to support mechanised units.

Scope:

Under consideration, but approximately 20 – 50 vehicles based on the M113-chassis.

Milestones:

Approved project:	2014
Contract:	2015
Delivery completed:	2021

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Lieutenant Colonel Tor Are Harvey –Logistics Systems Programme.

P 2580 – Materiel Handling Equipment

Background and overall objective:

The overall objective is to obtain new equipment for handling materiel within the storage facilities of the Norwegian Defence Logistic Organization (NDLO).

Scope:

The procurement can include for instance forklifts, shelves and cranes.

Milestones:

Approved project:	2014
Contract:	2015
Delivery completed:	2020

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Higher Executive Officer Arne Omdahl –Logistics Systems Programme.

P 2581 – Air Navigation Support System

Background and overall objective:

Replace existing Tactical Air Navigation System (TACAN) capability with new modern solutions.

Scope:

Under consideration.

Milestones:

Approved project:	2016
Contract:	2016
Delivery completed:	2019

Cost estimate:

NOK 0 - 100 million

Point of Contact:

Lieutenant Colonel Tor Are Harvey –Logistics Systems Programme.

P 2582 – Mobile and Deployable Shelters

Background and overall objective:

Acquire mobile and deployable shelters for parking of aircrafts. The shelters are planned to be used on airports both nationally and during international operations.

Scope:

The plan is to purchase up to 7 mobile shelters that are able to put up with relevant climatic conditions. The shelters should have an area of approximately 550 m².

Milestones:

Approved project:	2014
Contract:	2014
Delivery completed:	2015

Cost estimate:

NOK 0 - 100 million

Point of Contact:

Higher Executive Officer Arne Omdahl –Logistics Systems Programme.

P 2583 – EOD Robot Systems

Background and overall objective:

Acquire Explosive Ordnance Disposal (EOD) materiel in order to maintain and strengthen the EOD-capacity of the Norwegian Defence Forces.

Scope:

Replace existing EOD robot systems with new robot systems with an improved capacity.

Milestones:

Approved project:	2015
Contract:	2016
Delivery completed:	2021

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Lieutenant Colonel Tor Are Harvey –Logistics Systems Programme

P 2584 – Tactical Bridge

Background and overall objective:

The goal for the new bridge system is to support tactical land operations. The new bridge system shall replace the existing Bailey bridges in the Norwegian Army.

Scope:

Under consideration

Milestones:

Approved project:	2015
Contract:	2016
Delivery completed:	2019

Cost estimate:

NOK 50 - 200 million

Point of Contact:

Lieutenant Colonel Arild Andersen –Logistics Systems Programme

P 2586 – Geographical Information in Support of Armed Forces

Background and overall objective:

The project will procure Geographical information for use from tactical to strategic level within the armed forces.

Scope:

Under consideration

Milestones:

Approved project:	2014
Contract:	2015
Delivery completed:	2020

Cost estimate:

NOK 100 - 300 million

Point of Contact:

Lieutenant Colonel Tor Are Harvey –Logistics Systems Programme.

P 4390 - Modernization of Military Geo Capabilities

Background and overall objective:

The project is intended to enhance the existing capabilities with respect to geographical information support of operations and the management of the geographical information held by the Armed Forces.

Scope:

Under evaluation

Milestones:

Approved project:	2014
Contract:	2015
Delivery completed:	2020

Cost estimate:

NOK 0 - 100 million

Point of Contact:

Lieutenant Colonel Tor Are Harvey –Logistics Systems Programme.

P 5834 – Physical Protection of Bases and Camps

Background and overall objective:

The project shall procure equipment for protection of bases and camps, particularly during international operations

Scope:

The scope of the project includes materiel for securing the perimeter of bases and camps. Additionally it is planned to purchase a variety of protective gear and equipment.

Milestones:

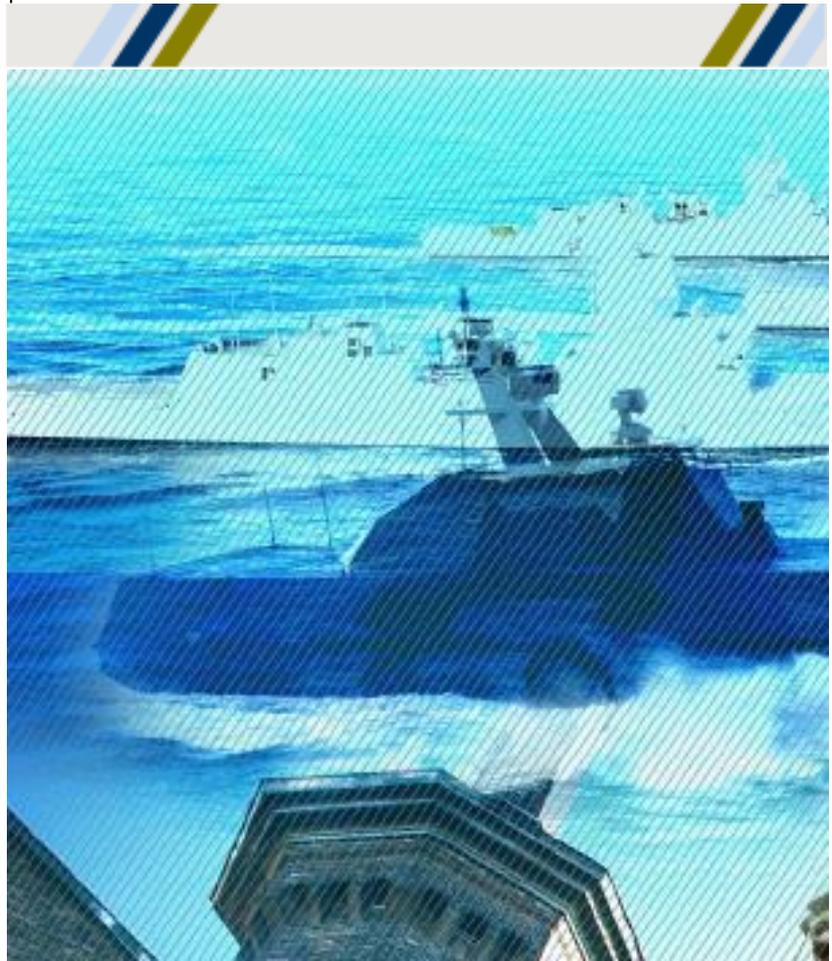
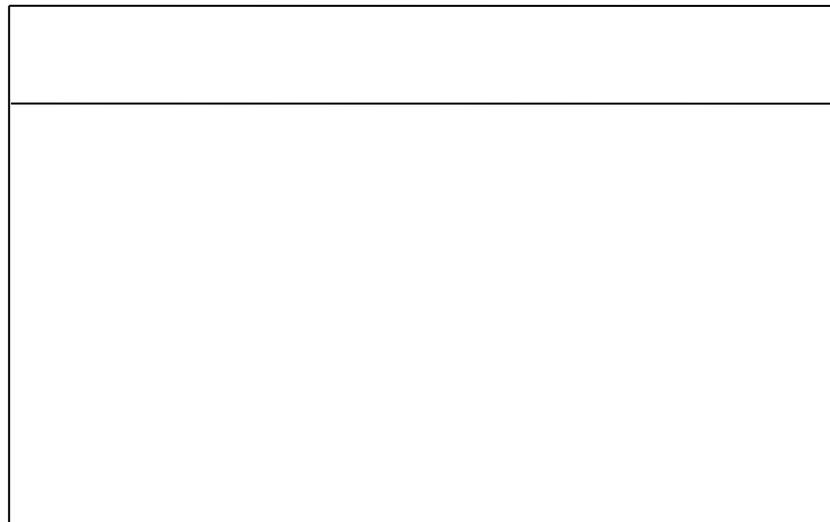
Approved project:	2014
Contract:	2015
Delivery completed:	2020

Cost estimate:

NOK 100 - 200 million

Point of Contact:

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