



# Norwegian upgrade program for Leopard 2, MBT, CV90 and M-113

Armoured Vehicles Northern Europe  
28 – 30 April 2014

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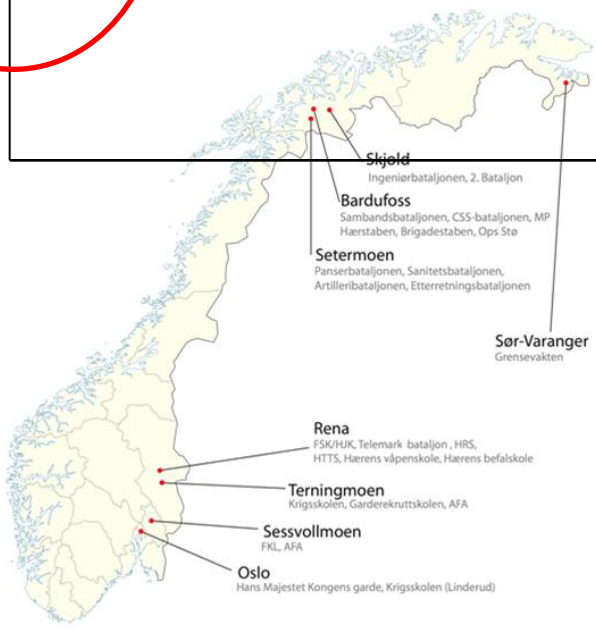
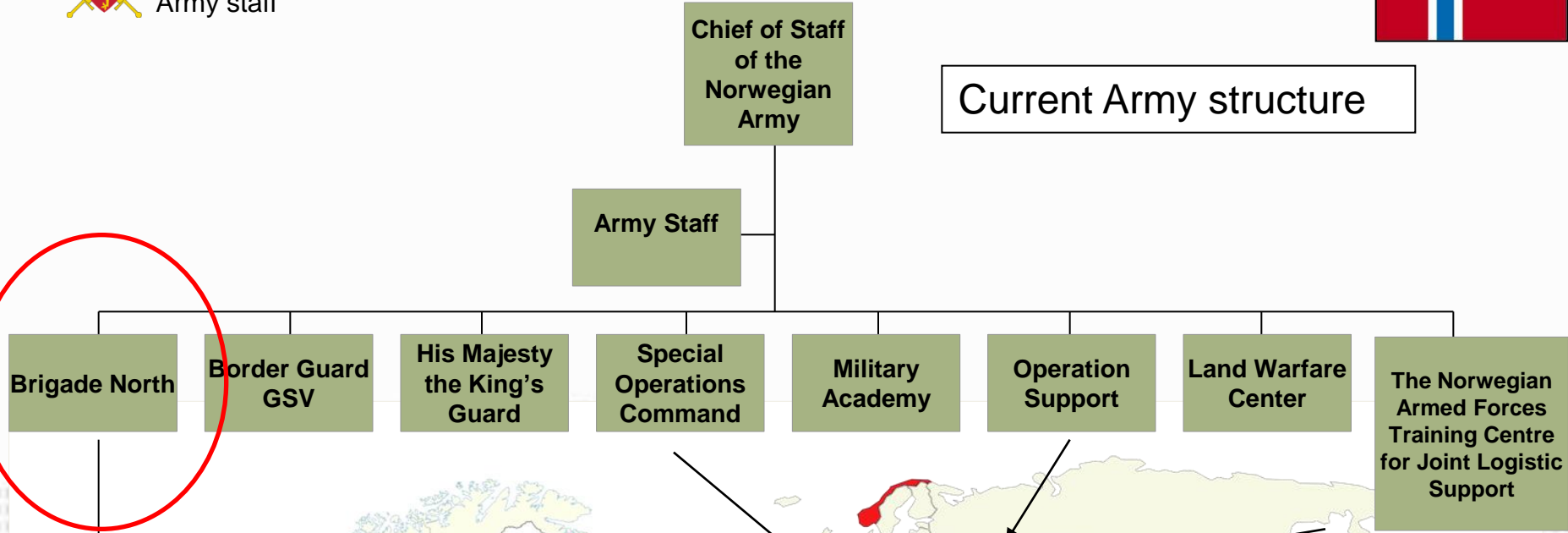
# Topic

Norwegian upgrade program for LEO 2 MBT fleet, CV90 fleet and M-113 fleet with the purpose to:

- Optimize crew and vehicle protection
- Optimize life cycle cost



Current Army structure

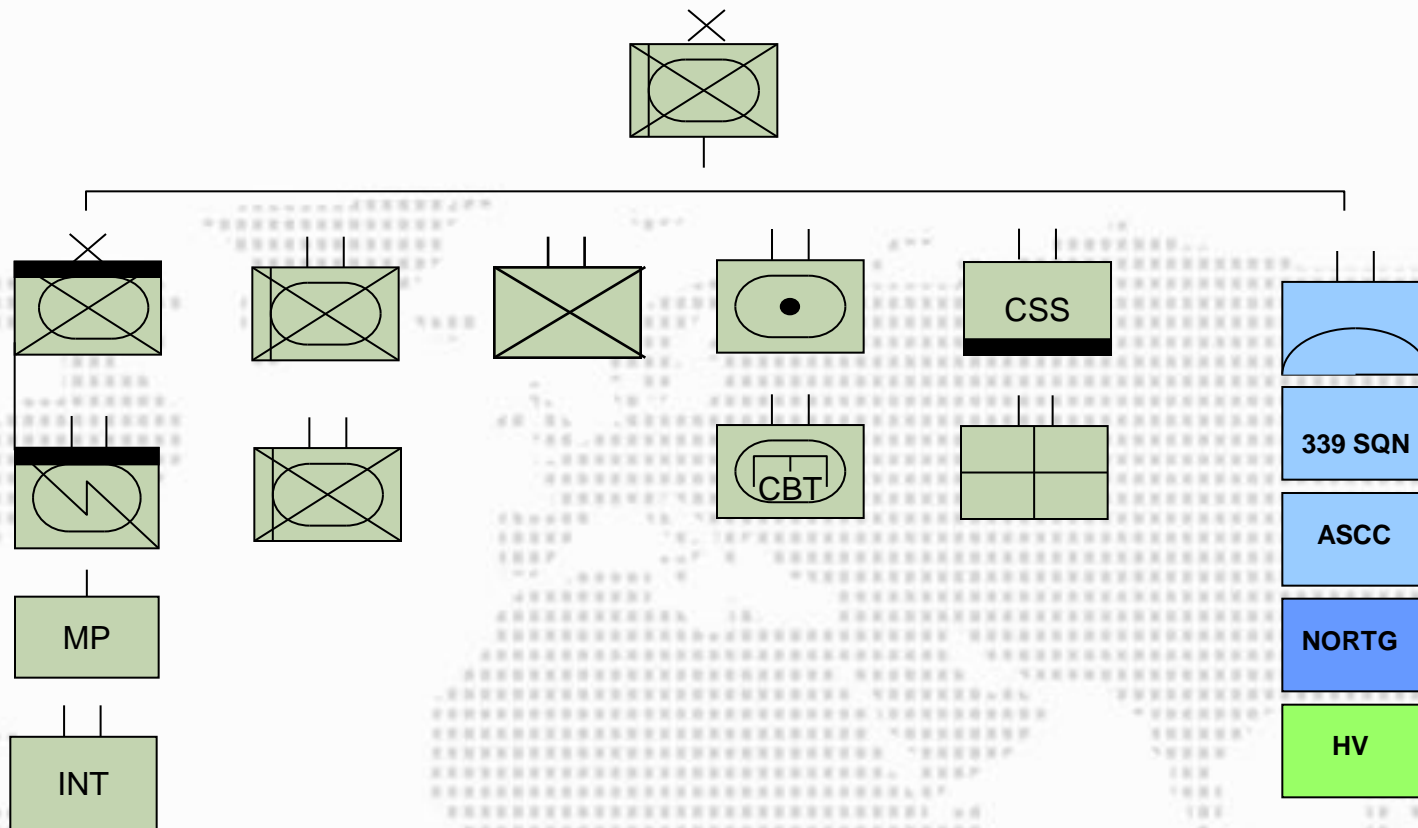


**Numbers: Active**

- 4500 employees, 4500 conscripts.
- 300 deployed in international operations.
- Operating Budget: 5,6 mrd (NOK) / \$1 billion.
- 3000 vehicles, fuel consumption: 3,5mill ltrs.
- 800 000m2 buidlings



# Brigade North



# Mechanized battalions



## Armour bn / Brigade North



High readiness units / enlisted soldiers

Able to operate in battle groups/ task groups/ task units - tailored to mission

## Telemark bn / Brigade North





## 2nd Infantry Battalion/ Brigade North



### Light Infantry capability:

Javelin AT system, snipers, mortars, heavy and medium machine guns.  
Winter warfare specialists. Able to operate in battle groups/ task groups/  
task units as mission requires.



## Brigade Combat Support and CSS units

Artillery Bn: New artillery system and Air Defence system  
- more enlisted soldiers.



Engineer Bn: CBRN capability, replace Leo 1, replace parts of M113s - more enlisted soldiers.



CSS bn: Replace all types of trucks, armour/ and armour capable – more enlisted soldiers.

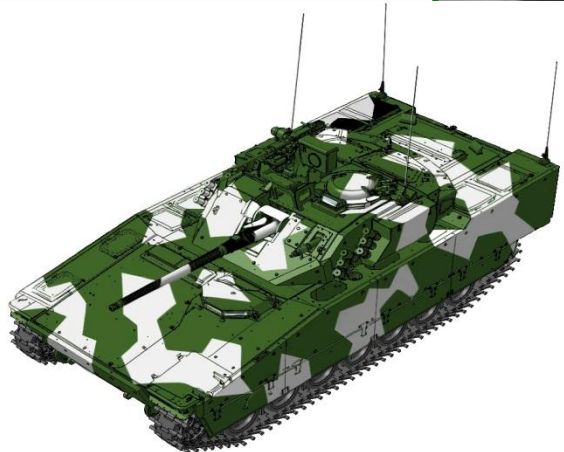
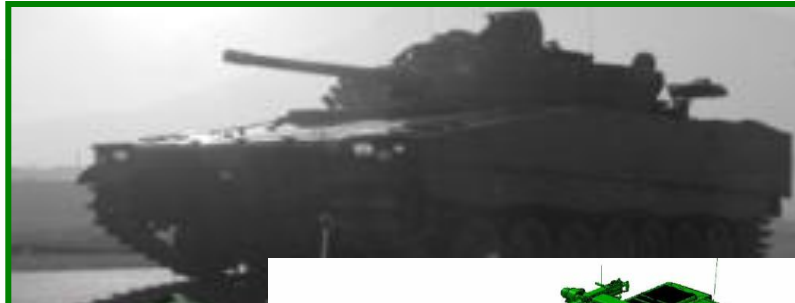


Medical Bn: More enlisted soldiers, field PASI 203 wheeled ambulances.

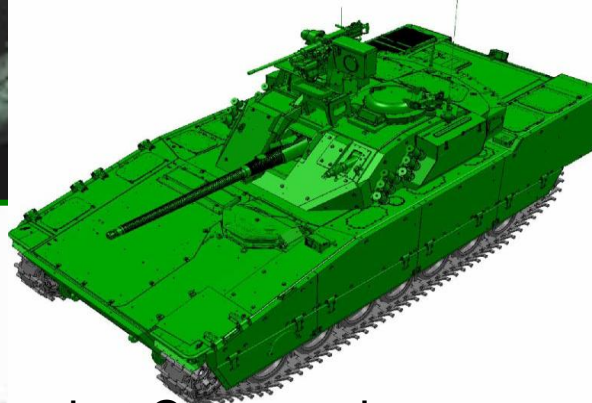
# P5436 Combat fighting vehicle project



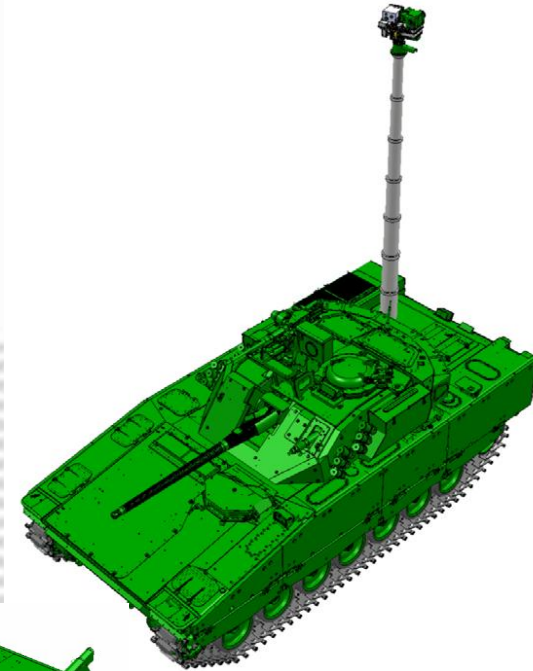
Investment  
\$1,7billion



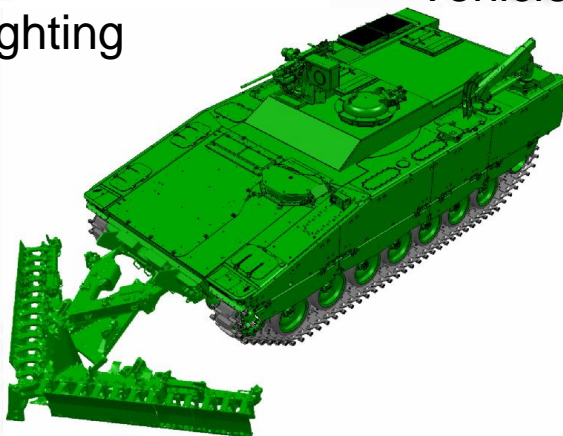
Infantry Fighting Vehicle



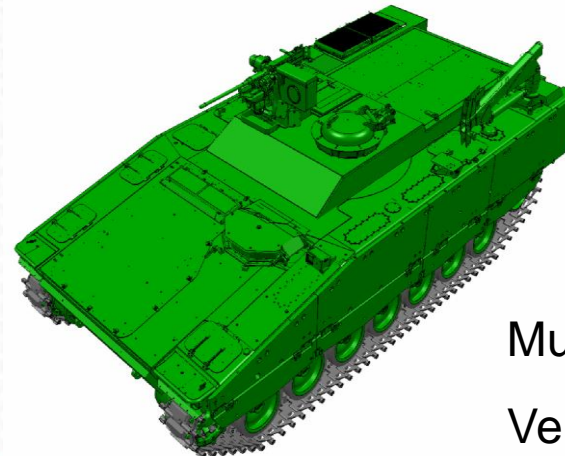
Combat Command Vehicle



Armored Reconnaissance Vehicle



Combat Engineering vehicle



Multi-role support Vehicle (mortar)





# Combat Fighting Vehicle Project

- Increase NorArmys capabilities
  - Give mechanized battalion future-oriented capabilities located on medium armoured platforms
- Increase protection on all vehicles
- Establish network capacity on all vehicles
- Control of the logistic costs
- Contract signed 2012, deliveries 2014-2018
- 1<sup>st</sup> vehicle delivered for testing feb 2014

# M113 armoured support vehicles

## New upgraded models (F3 and F4)



- Workhorse ( 50 years service)
- Several ongoing and planned projects
  - Total rebuild and capabilities equal to modern vehicles in same class

### *The advantage with the M113:*

- *Offers protection and mobility*
- *Easy to operate*
- *Is flexible and can fill different support roles*
- *Very low operating costs compared to new vehicles*



# M113F3 program

- Specialised versions include:
  - Ambulance, medical treatment, command post, forward command vehicle, cbt engineer vehicle and anti-tank (Javelin)
- Reliability and mobility equal to modern vehicles in same weight class
- Modern powerpack
- Rubber band tracks
- Digitalized C2/SOTAS intercom/BMS
- Increased protection against mine/IED and ballistic threats
- More than 100 vehicles in service/planned



# M113F4 program

- Program planned for 2014-2019
- Stretched versions (6 or 7 roadwheels) for:
  - C3IS functions,
  - Logistics carrier
  - Forward repair teams
  - Air-defense
  - Artillery location radar system
- Increased interior volume and height of roof
- Increased Mine/IED protection compared to M113F3
- More than 75-150 vehicles planned



# M113F4 program

- Technical demonstrators for 6- and 7- roadwheel versions produced and undergoing trials



6-roadwheel version  
w/10' ARTHUR mock-up

7-roadwheel version  
w/10' capacity



# M113F4 program



# Armoured wheeled vehicle fleet:



FUCHS /CBRN



SISUXA / PASI203N



DINGO-2



IVECO LMV



MULTI

- Product of our deployments in peace support operations, and especially urgent operational needs in Afghanistan.
- Most likely need for such vehicles in future operations.
- SISU/PASI will be upgraded – fill ambulance and EOD roles.
- DINGO will be used in Afghanistan until end of 2014.
- IVECO LMV will enter service in national structure (60%) and be based in stockpiles for future ops (40%) – the procurement will be completed with the last 62 vehicles in 2014.
- No plans for further larger investments as of now.



# Q & A or comments ?

Norwegian Army Staff / Force development