



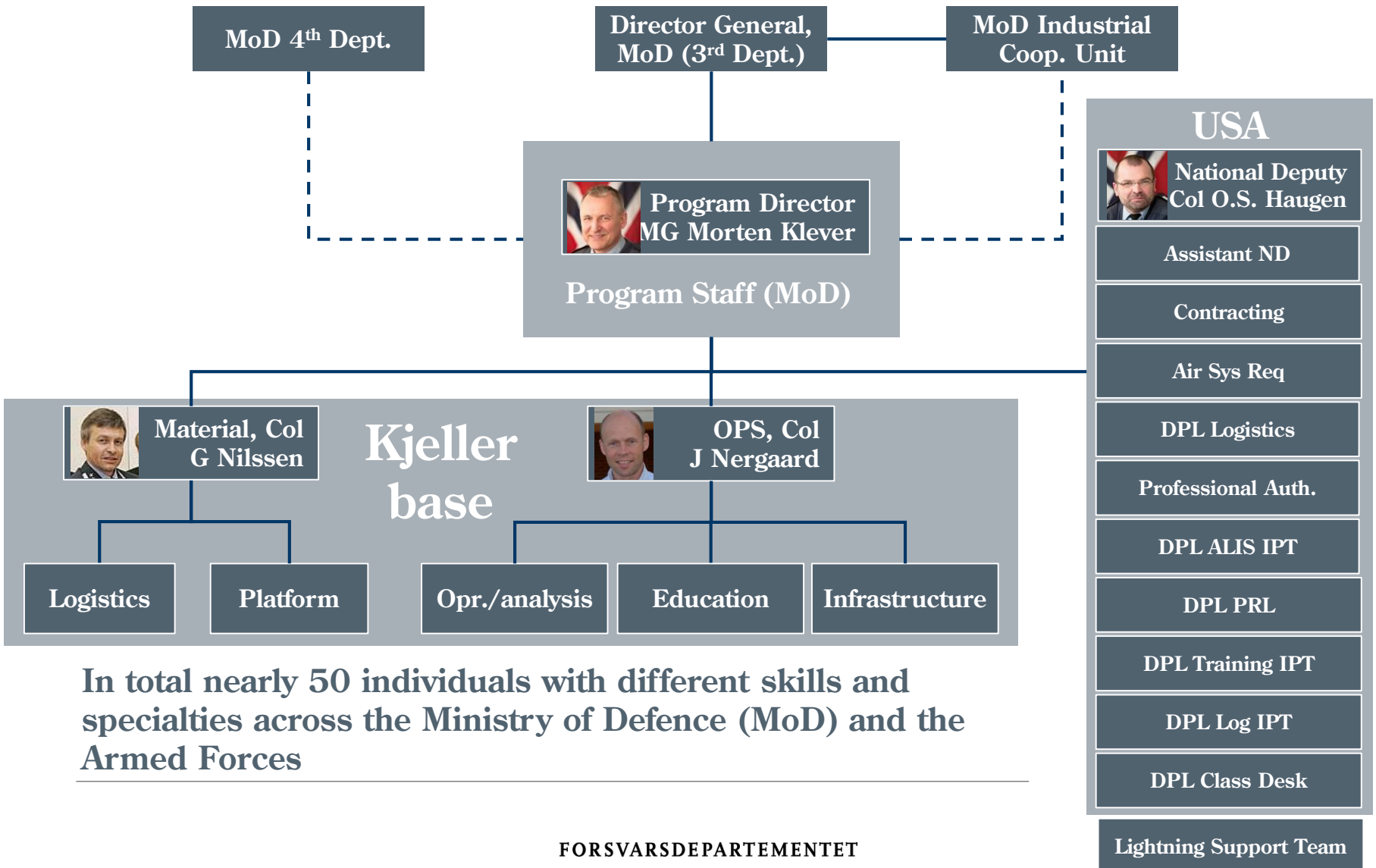
FORSVARSDEPARTEMENTET



F-35 Program Office

F-35 – Strengthening all of the Armed Forces

Current Norwegian F-35 Program Office



In total nearly 50 individuals with different skills and specialties across the Ministry of Defence (MoD) and the Armed Forces

Our Strategic Environment



Quick Facts - Norway

Land Territory:	320 000 km ²
Sea Territory:	2 000 000 km ²
Population:	5 million

Main Challenges Facing Norway

- **Vast distances**
- **Significant Natural Resources in Immediate Region**
- **Cannot Operate a Large Peace-Time Organization**
- **«Come-As-You-Are» Conflicts**
- **Changing Threat Spectrum, New Technologies**

The Peace Time Organization of the Armed Forces must have Tools Enabling the Rapid Establishment of a Threshold against Military Pressure

Combat Aircraft an Important Part of the Solution

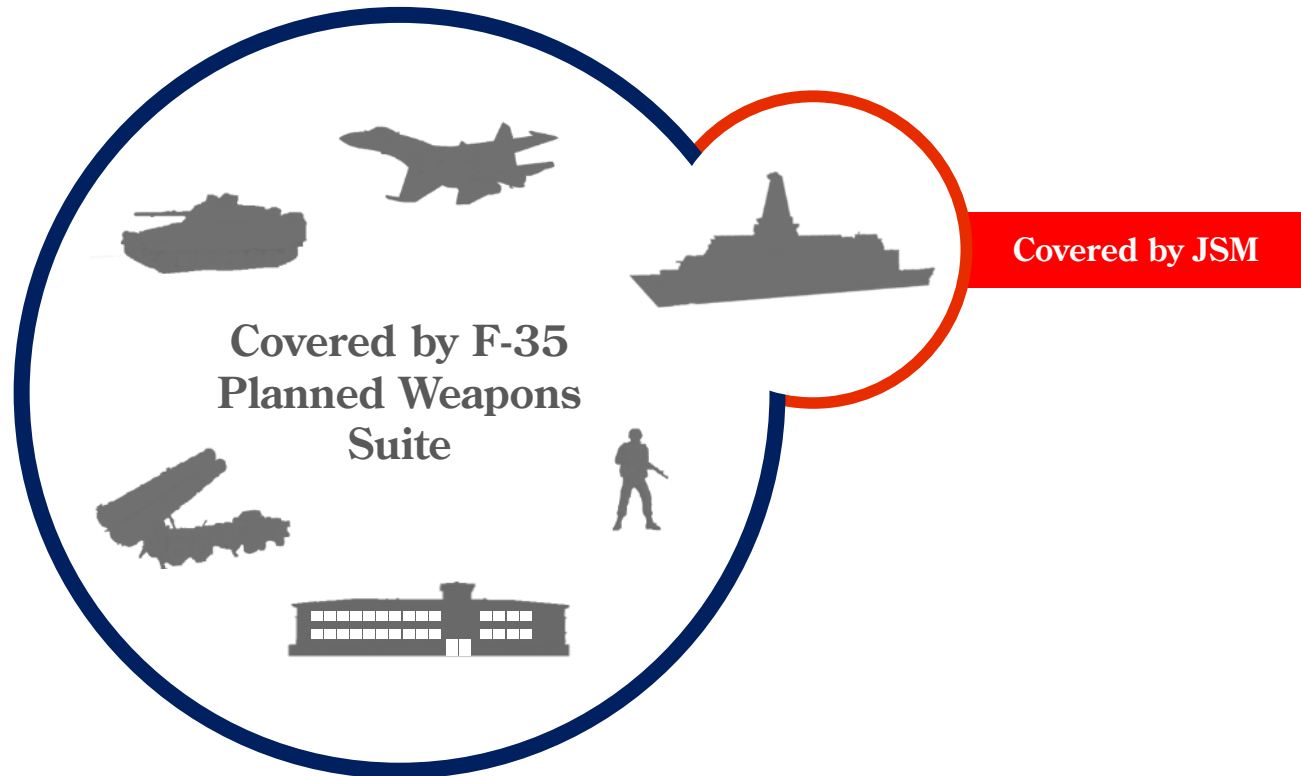
- **High Speed, Rapid Response**
- **Range**
- **Powerful Sensors and Weapons**
- **Can be Rapidly Mobilized in Response to Changing Threats**
- **Survivability**



Provides Norway the Liberty and Ability to Intervene in Critical Situations that Threaten Norwegian Sovereignty and Security

Powerful Sensors and Weapons

Norway operates only one combat aircraft – must ensure that one platform is able to deliver credible capability across all target categories



To Fulfill Norway's Operational Requirements We Need the JSM

F-35, with a weapons suite including the JSM, will ensure high potential cost for anyone considering the use of force against Norway



Significantly Improved Capability to Support Others



The F-35 Will Be Able To

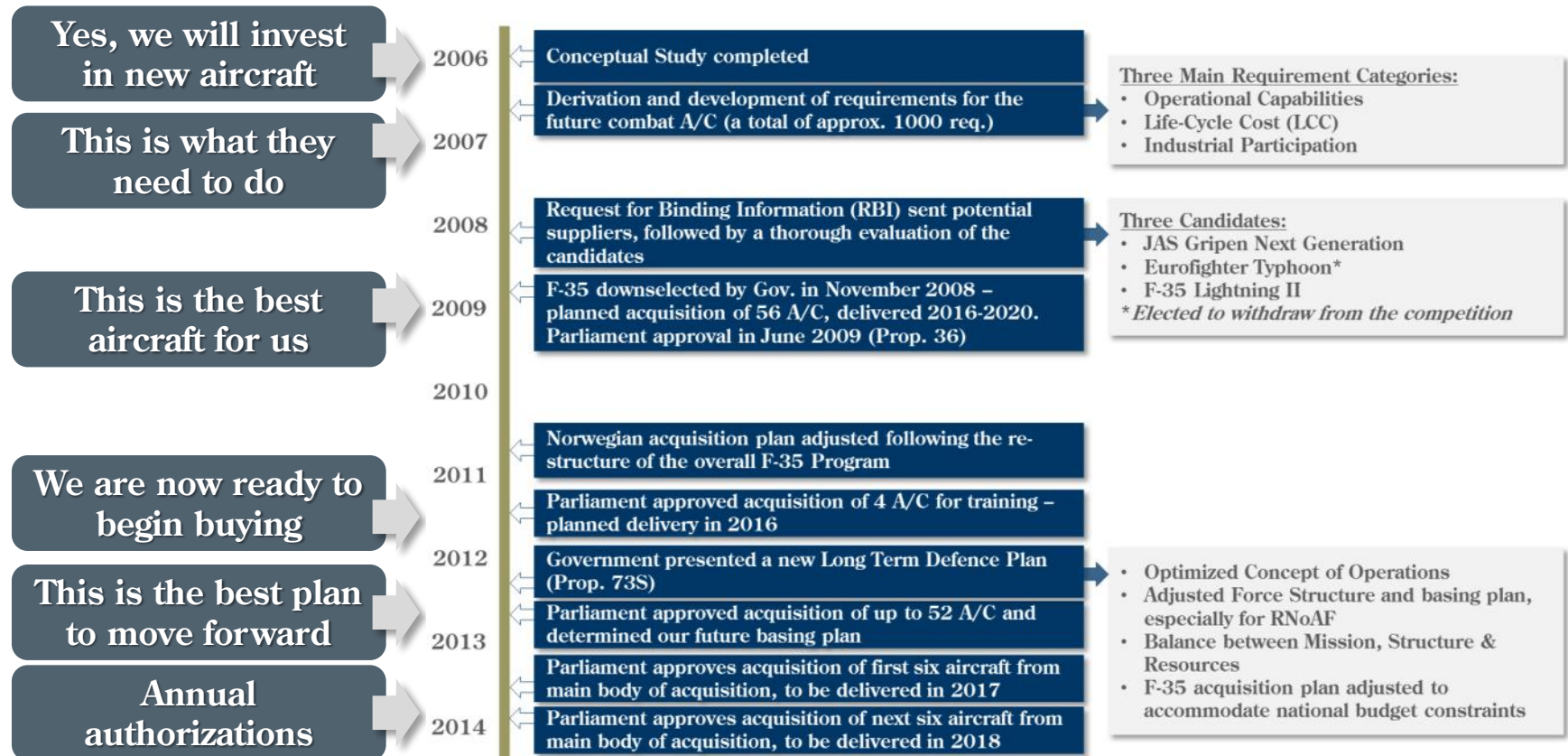
- Secure Norwegian Airspace
- Gather and Transmit Intel
- Locate Targets for Others
- Provide All-Weather Fire Support
- Engage Opponent's Strategic Centers of Gravity
- Be at the Center of a Future Network-Centric Force



Norway Requires the F-35 to be Delivered on Time – With the Required Capabilities - to Ensure the Operational Capability of Our Armed Forces

Key Steps in the Norwegian Process

Since 2005, the Norwegian Ministry of Defence has emphasised a thorough step-by-step process



Buy-In from Government, Parliament and Armed Forces Secured at Every Step

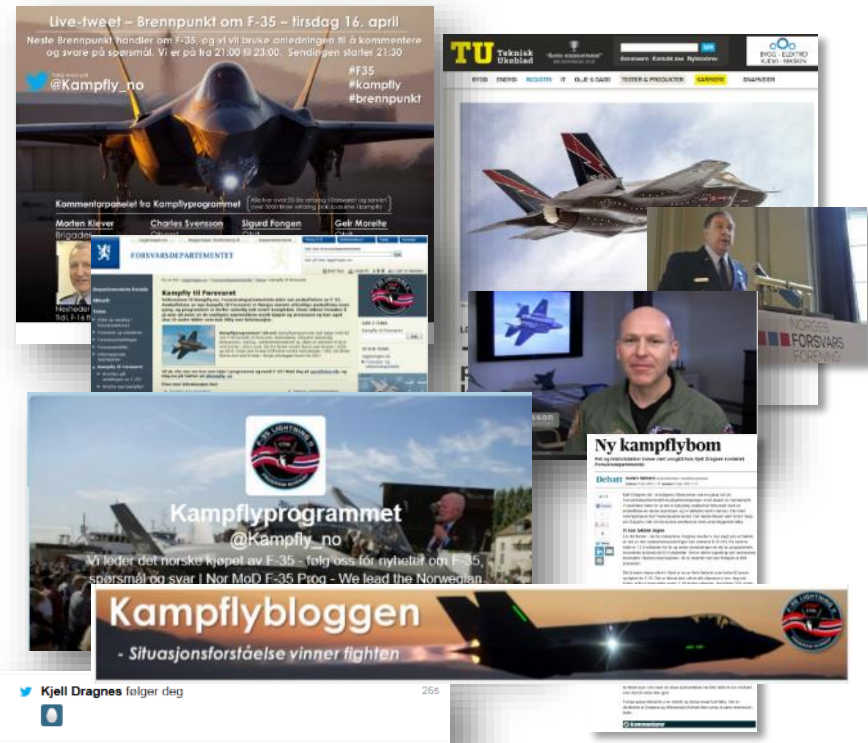
Active Communications Profile

In the face of a debate rife with myths and factual errors, the Norwegian program has sought to help balance the impression

Highly Negative Media Impression



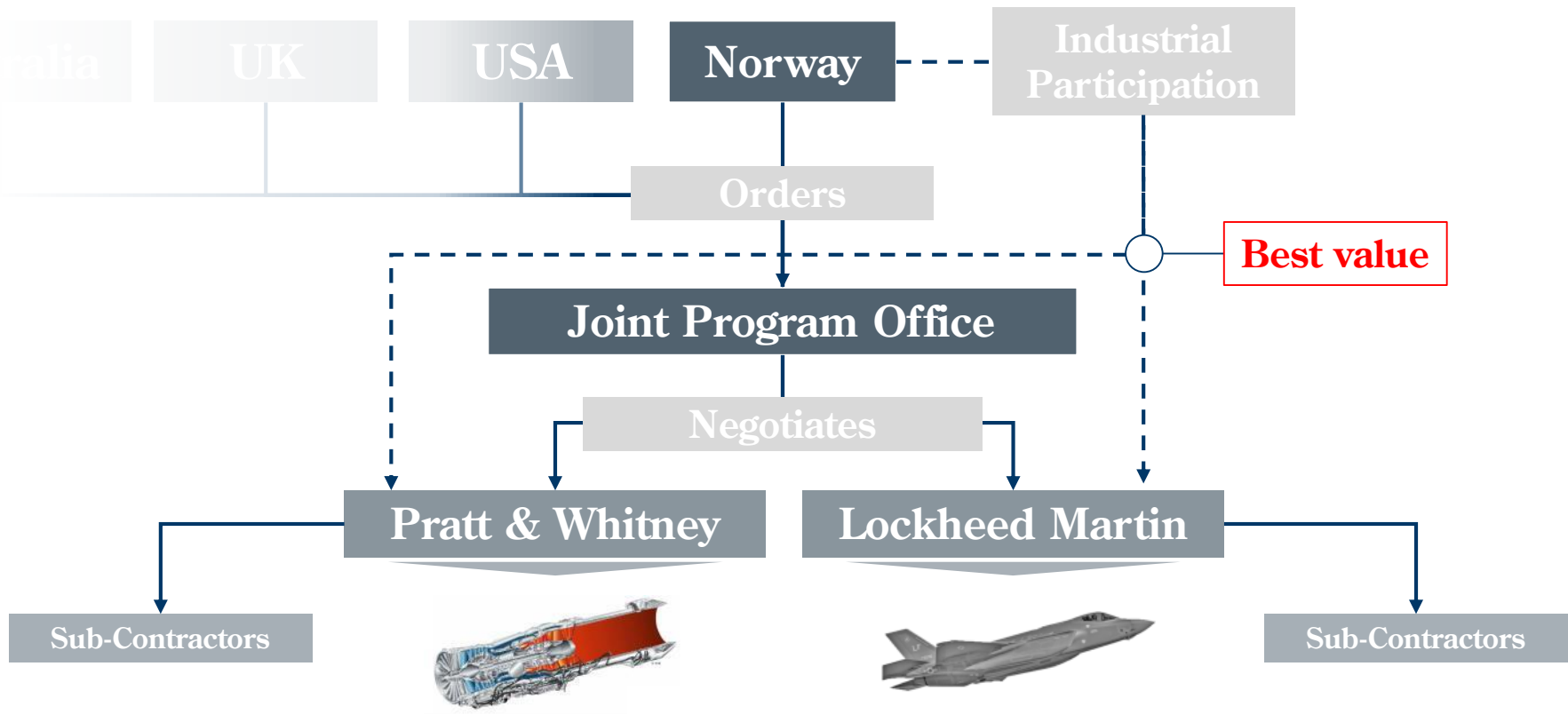
Several Initiatives to Help Ensure Balance



Our Goal is to be Open, Honest and Available, While Making it Easier for Those Interested to Find Correct Information About the F-35

Distinct Roles Within the Program

Partner nations have no formal relations with LM or P&W – JPO serves as intermediary



Partnership Negotiates With Industry as a Single Customer

A Norwegian Pilot walking up to the
Norwegian F-35s at Luke AFB in August 2016

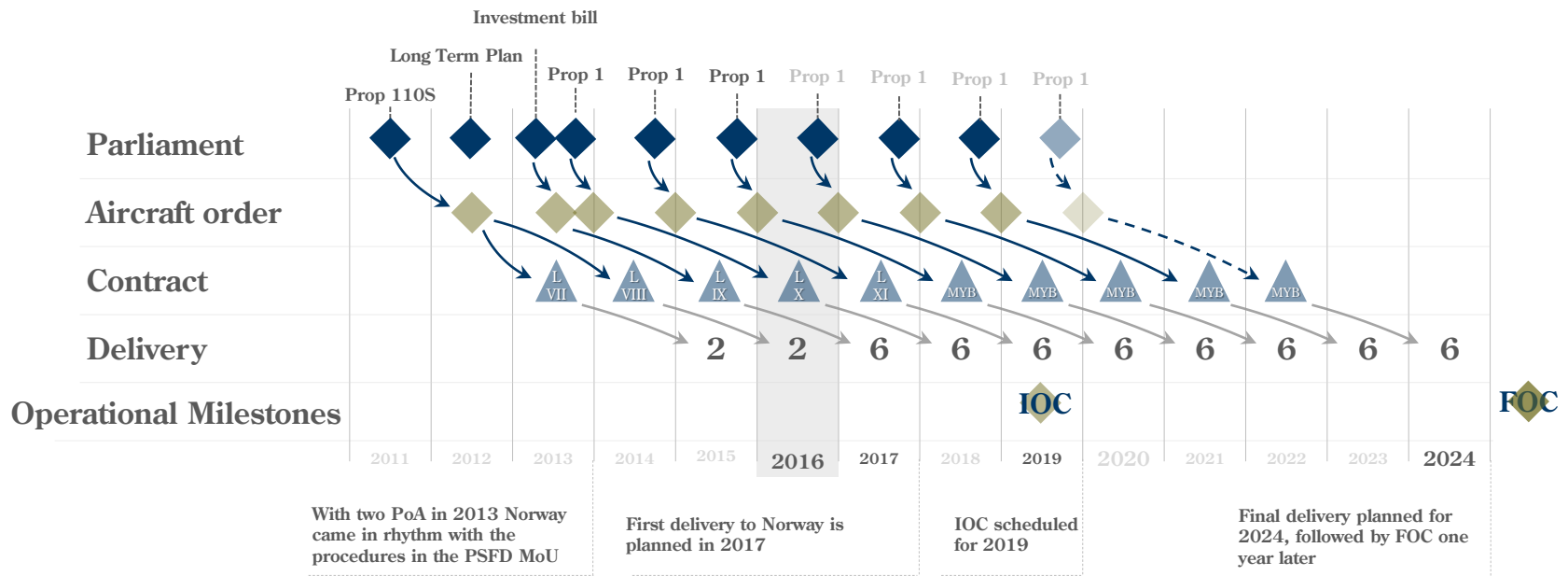


Four First Aircraft Delivered On Time¹²

F-35 Acquisition Plan

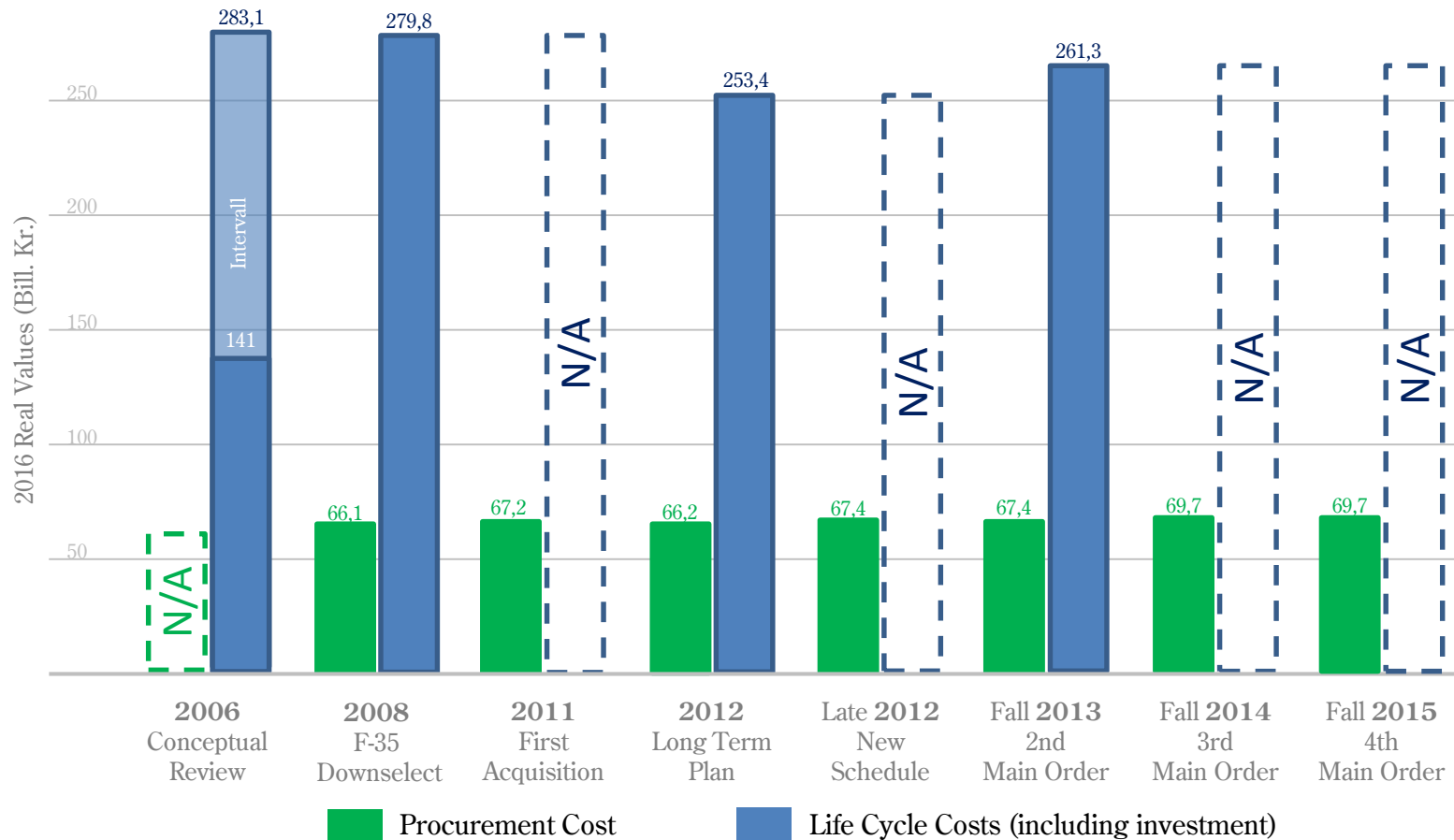
MoD to collect annual Power of Attorney (PoA) from Parliament for placing aircraft orders in accordance with Long Term Plan for the Armed Forces

Norway changed its procurement plan in 2012, and introduced two bills to Parliament in 2013 to realign with JSF program schedule



Norwegian Process Provides Up-Front Approvals for Annual Commitments

Top Level Cost Development – 2016-values

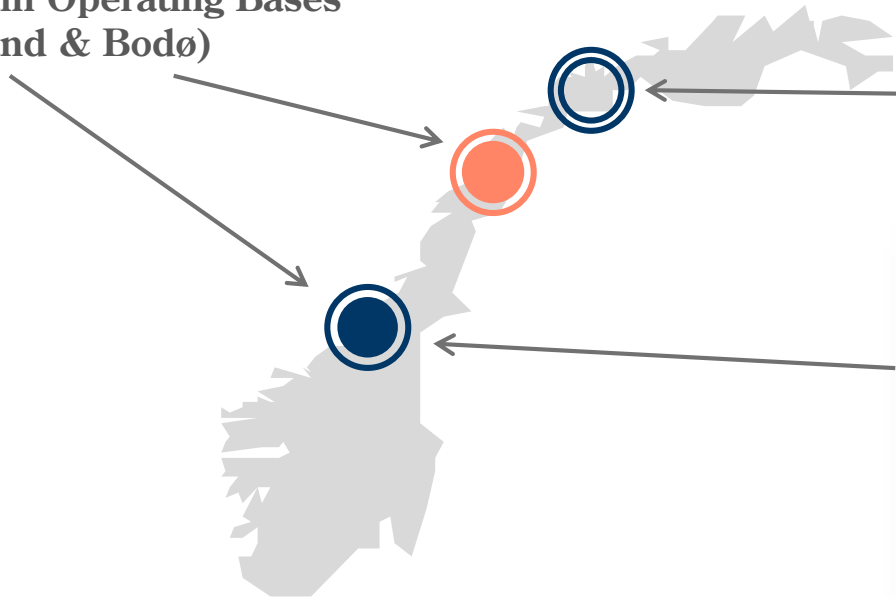


The Overall Procurement Cost has Grown by 6% since 2008, Primarily due to a New Norwegian Procurement Schedule and Weapons Development

Basing Structure – Fighter A/C

Current

3 Squadrons, 57 A/C total (F-16)
2 Main Operating Bases
(Ørland & Bodø)



Future

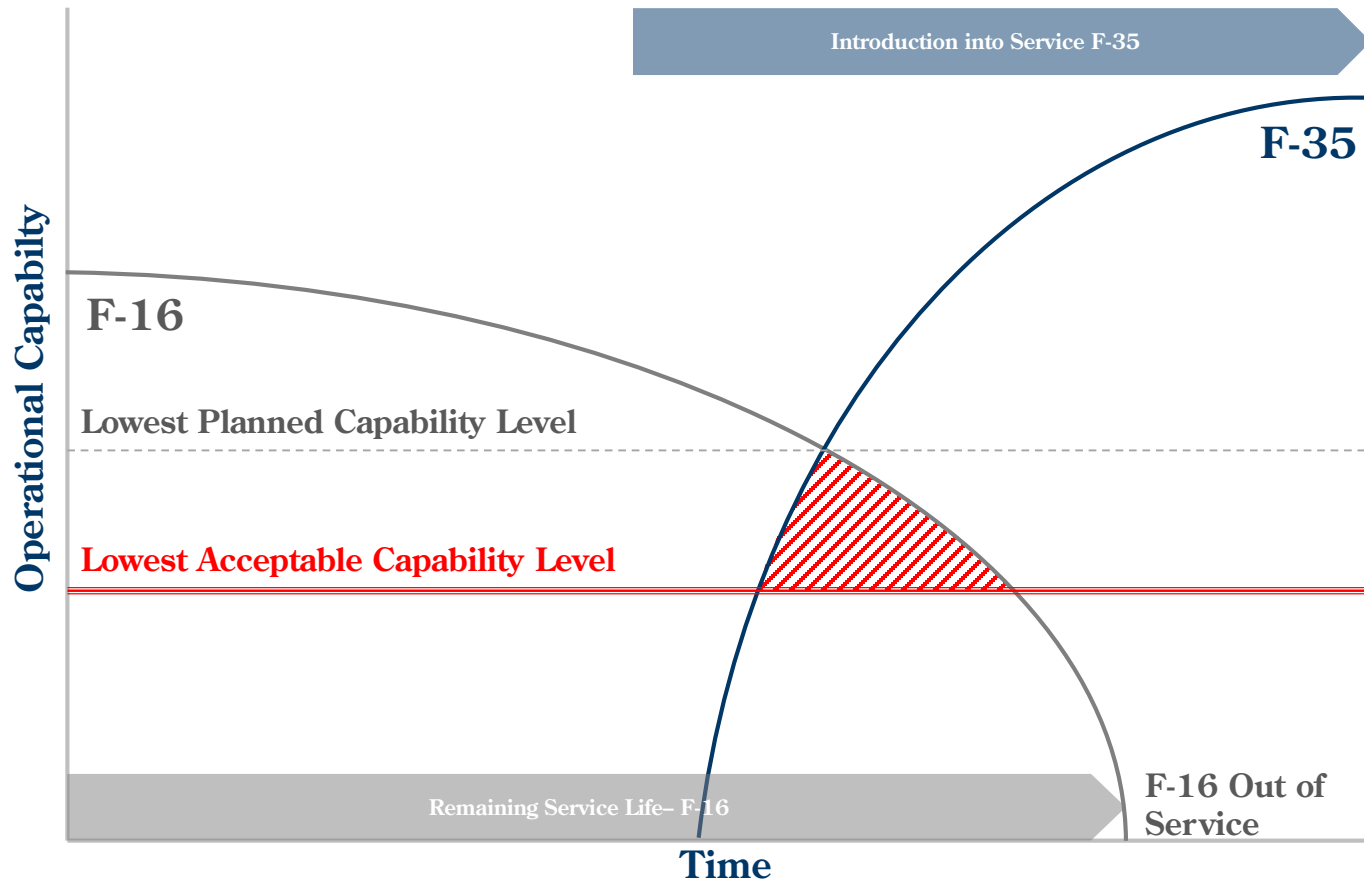
2 Squadrons, 48 A/C total (F-35)
1 Main Operating Base (Ørland)
1 Forward Operating Base
(Evenes)
1 Perm. Training Det. in US 4 A/C
(Luke AFB)



Working With Both the Program and Lockheed Martin to Implement
Necessary Infrastructure

F-16 – F-35 Transition

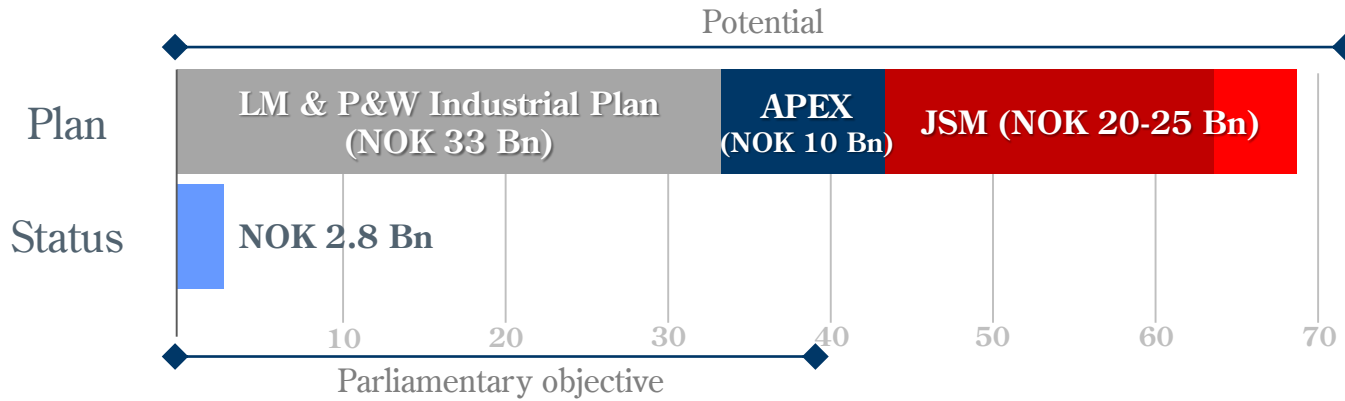
Transition from one Aircraft to Another will Lead to a Reduction in Capability – Will Be Managed to Limit this Drop as Much as Possible



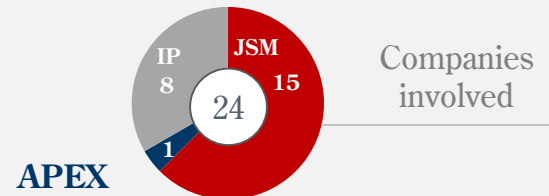
Rapidly Aging F-16s Makes Timely Delivery of F-35 an Absolute Requirement

Industrial Collaboration

F-35 Industrial Cooperation has a Significant Potential over the Coming 40 Years, Particularly Within Weapons, Ammunition and Maintenance



- Limited production rates so far have also limited potential to Norwegian industry
- Potential market for weapons, ammunition and maintenance is not accessible until aircraft has entered operational service



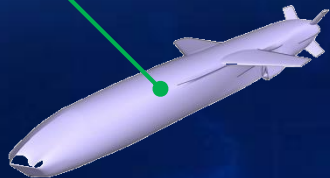
Requires Constant Follow-Up and Dialogue from both the Norwegian Government and Industry



F-35 Norwegian Components



Joint Strike Missile
Kongsberg Defense Systems



Vertical Leading Edge
Kongsberg Defense Systems

Rudder
Kongsberg Defense Systems

Engine Components
GKN Aerospace Norway

F-35 Technical Courseware
Applica Training Systems

Vertical/Horizontal tail
AIM Norway

Product Data Exchange (Alenia FACO)
JOTNE

EHAS Rack Mounts
Techni

Optical Backplane
T&G Elektro

MLG Closeout Panels
Kongsberg Defense Systems

Integrated Backplane Assembly for Integrated Core Processor
Kitron

Machined Parts
Berget

Advanced Composite Panels for Center Fuselage
Kongsberg Defense Systems

25mm APEX Ammunition
NAMMO

External Air-to-Air Pylon (AME)
Kongsberg Defense Systems

The F-35 – Because the use of Force Against Norway Should Involve both Significant Risk and Cost

