



NyeVeier

# Welcome to Nye Veiers Vendor Conference

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*Radisson Blu Plaza Hotel*

*12.09.2018*

# Agenda



- 08.15 - 09.00: Registration, coffee and mingling
- 09.00 - 09.15: **Welcome to the vendor conference**
- 09.15 – 09.30: **This is Nye Veier – status autumn 2018** by Managing director Ingrid Dahl Hovland
- 09.30 – 10.50: **Nye Veiers upcoming projects** - Nye Veier's project directors
- 10.50 – 11.30: Break
- 11.30 – 12.00: **Operation contract for road and electrical** - Field Manager Operation and Maintenance, Tor Alf Høye
- 12.00 – 12.30: **Slik gjør Nye Veier sine anskaffelser** - Director for contracts and procurement, Bjørn Børseth
- 12.30 – 13.15: Mingling, the chance to talk with the projects
- 13.15 - 15.00 **Separate session for operations and maintenance**



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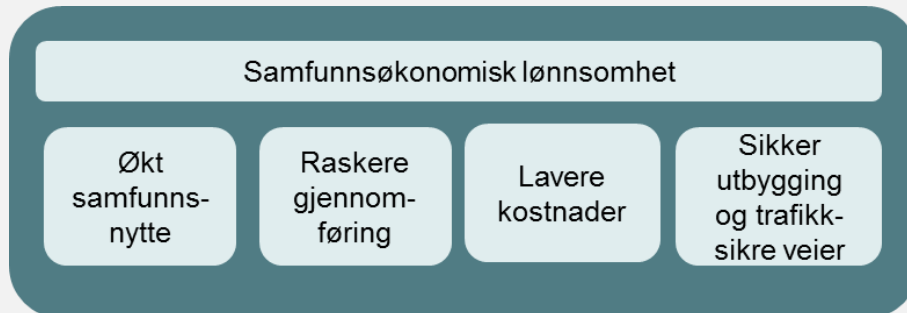
# Nye Veier – status autumn 2018

*Ingrid Dahl Hovland, Managing Director*

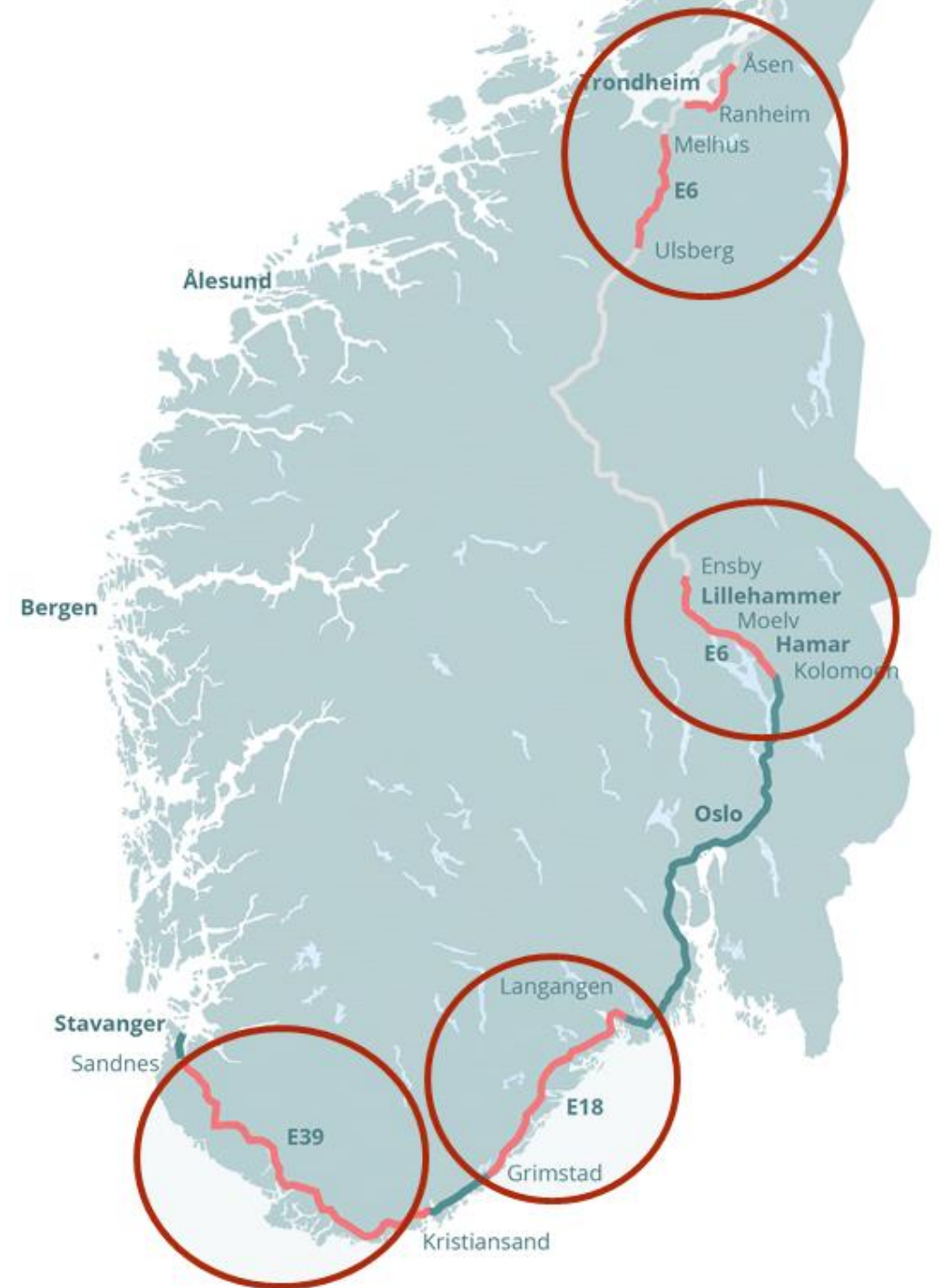
# The company's mission



- White paper 25-2014/2015 – On the Right Road (På rett vei)
- Plan, build, run and maintain important main roads
- Overall and cost-effective expansion and running of safe main roads
- Strengthen the competitive power of industry and commerce
- More effective, predictable and safer road transport
- More road for the money



- Normal capacity from the 1st of January 2016
- Governmental company wholly-owned by the Ministry of Transport and Communications
- Headquarters in Kristiansand
- A lean and effective builder organization with 145 employees
  
- Initial portfolio:
- 530 km classified road
- 148 billion NOK





**RENEWING**

**Renewing** by challenging ourselves to take a fresh perspective



**IMPROVING**

**Improving** by bringing value to our work – every day



**ASSURING**

**Assuring** by guaranteeing that we take our social responsibility seriously



# Status autumn 2018

## Construction work in process:

E18 Tvedestrand – Arendal (23 km)

E18 Rugtvedt – Dørdal (17 km)

E18 Kjørholt and Bamble tunnels

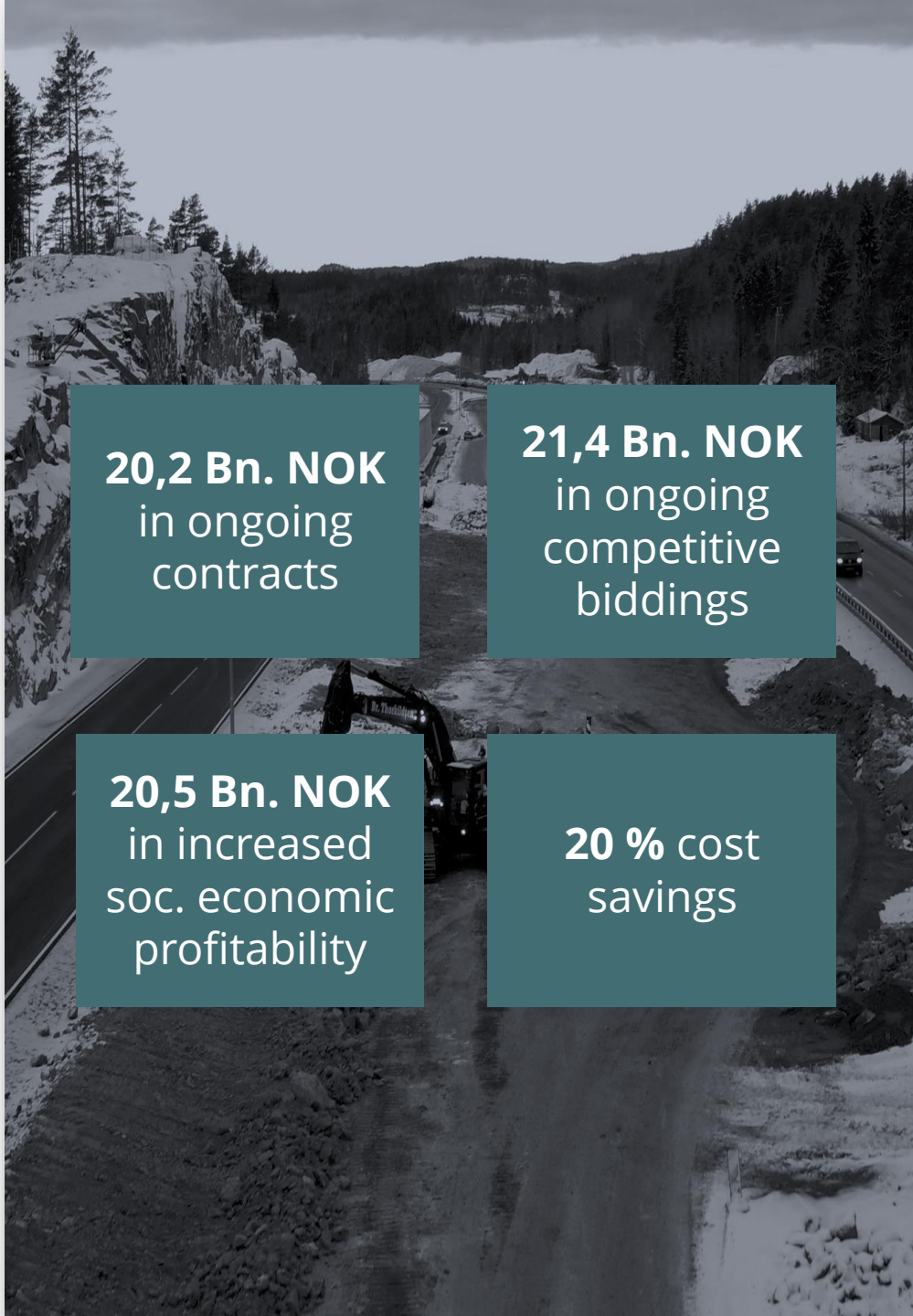
E6 Kolomoen – Arnkvern (19 km)

E6 Arnkvern – Moelv (24 km)



# Status after two years of operations

- Very good cooperation with the construction business
- High HSE standard and Norwegian Confederation of Trade Unions coordinator in all of the projects
- High innovation pace and introduction of new solutions
- Offensive moves for the environment and climate
- Effective organization at complete operational capacity



**20,2 Bn. NOK**  
in ongoing  
contracts

**21,4 Bn. NOK**  
in ongoing  
competitive  
biddings

**20,5 Bn. NOK**  
in increased  
soc. economic  
profitability

**20 %** cost  
savings

# 20,5 Bn. NOK in increased social economic profitability



	▲ Net benefit Changed (increased) social economic profitability 2016-17 (M. NOK)	▲ Benefit Changed benefit 2016- 17 (M. NOK)	▲ Costs Changed costs 2016-17 (M. NOK)
E6 Moelv-Øyer south	+7508	+1735	-5773
E6 Ranheim-Åsen	+6838	+3021	-3817
E39 Kristiansand V-Lyngdal	+3313	- 277	-3590
E6 Ulsberg-Melhus	+2581	+2050	-531
E18 Langangen-Dørdal	+283	-675	-958
<b>SUM</b>	<b>20523</b>	<b>5854</b>	<b>-14669</b>

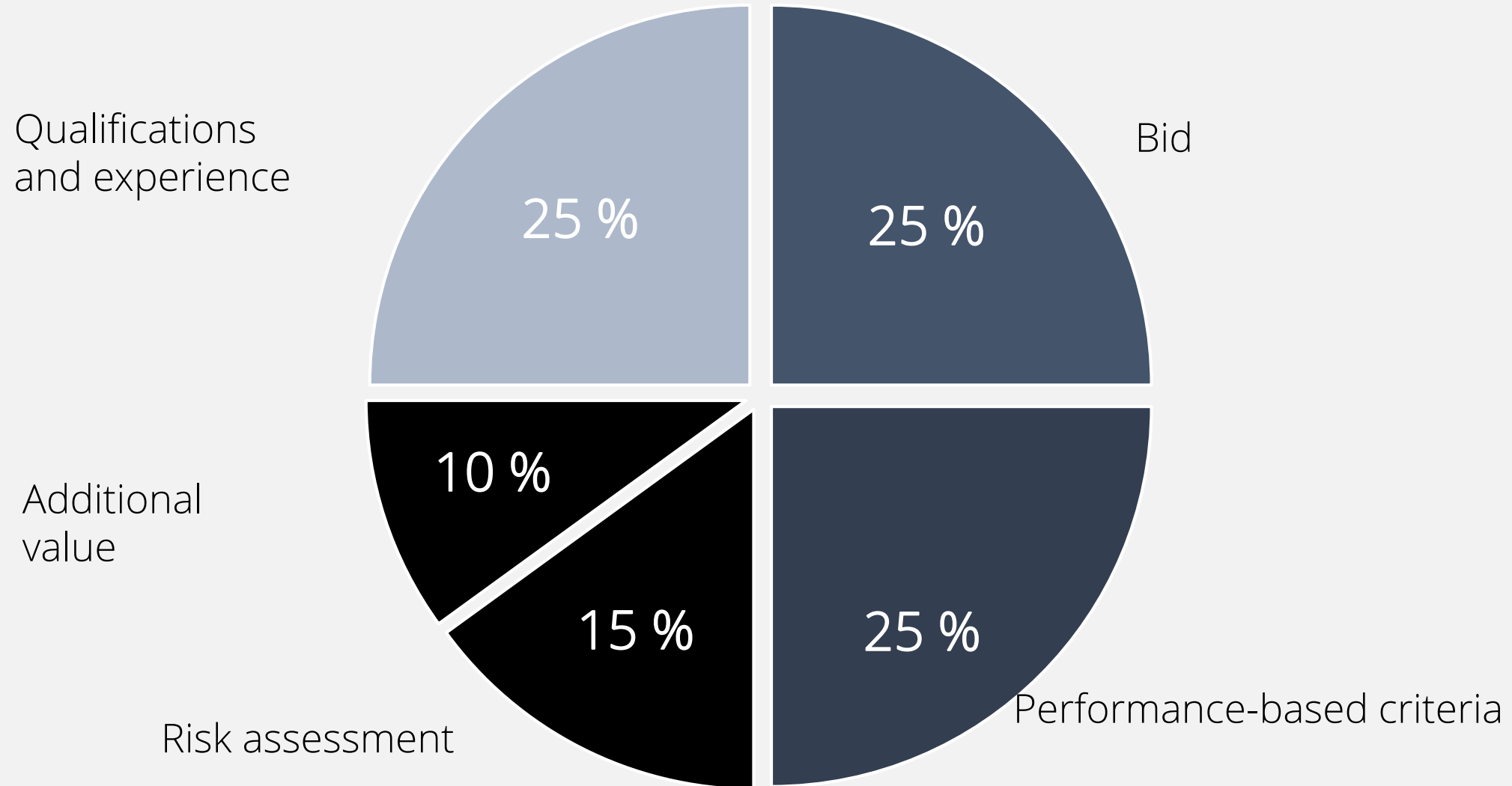
(For the road stretches that the project areas optimize before the Contractor is procured)

# Nye Veiers actions to reduce costs

- Overall **implementation model**
  - technology and innovation into the projects
  - industrialization
  - the contractor manages the design
  - facilitates for more effective operations over longer stretches
- **Standardization**
  - reduce the **extent** in and around route and road
  - **the re-use** and reduction of expensive elements (bridge, tunnel)
- **Process innovation**, simultaneously
  - financing, planning, designing and building

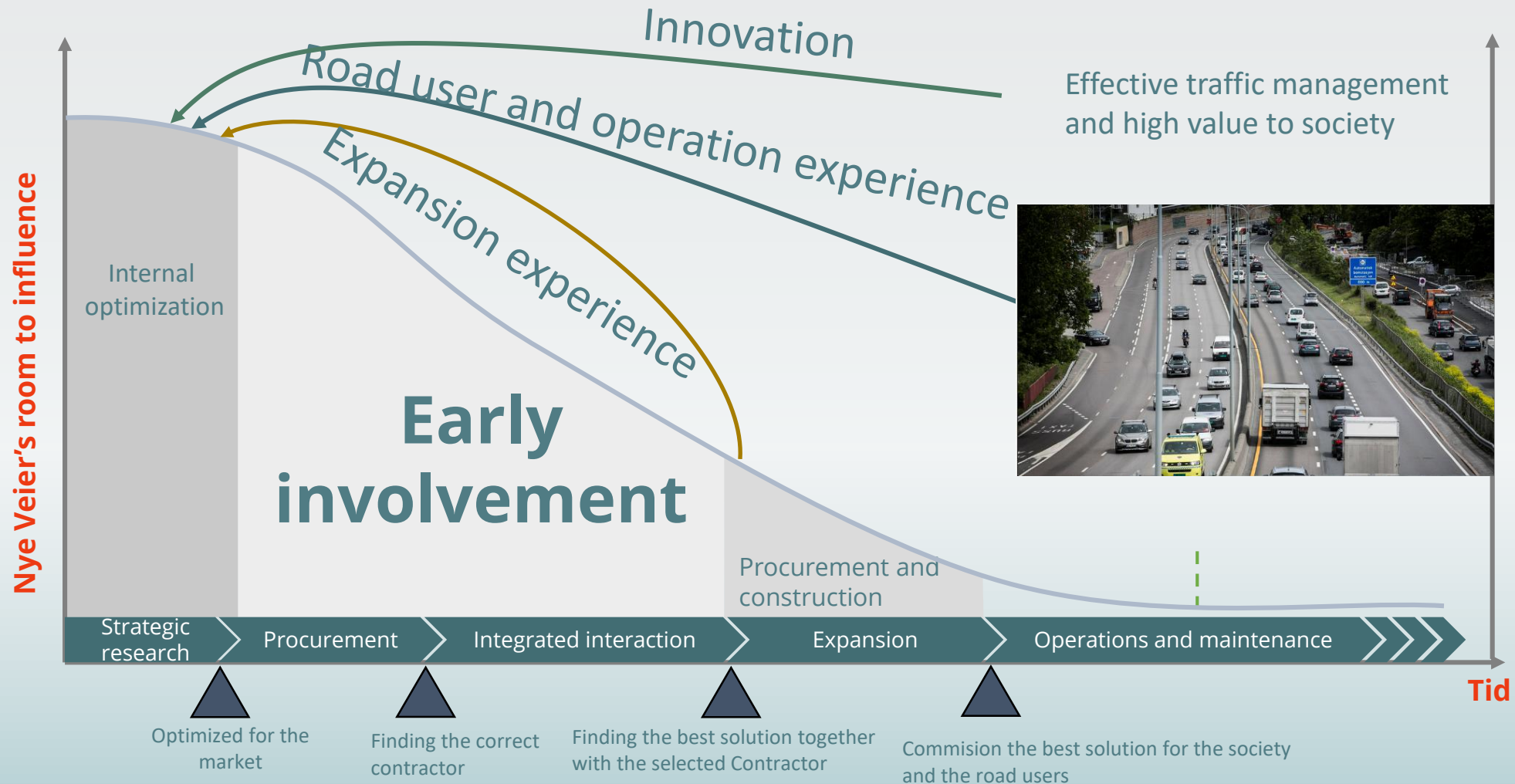
# Performance procurement after e.g. Best Value Procurement (BVP)

## Evaluation criteria Rugtvedt-Dørdal

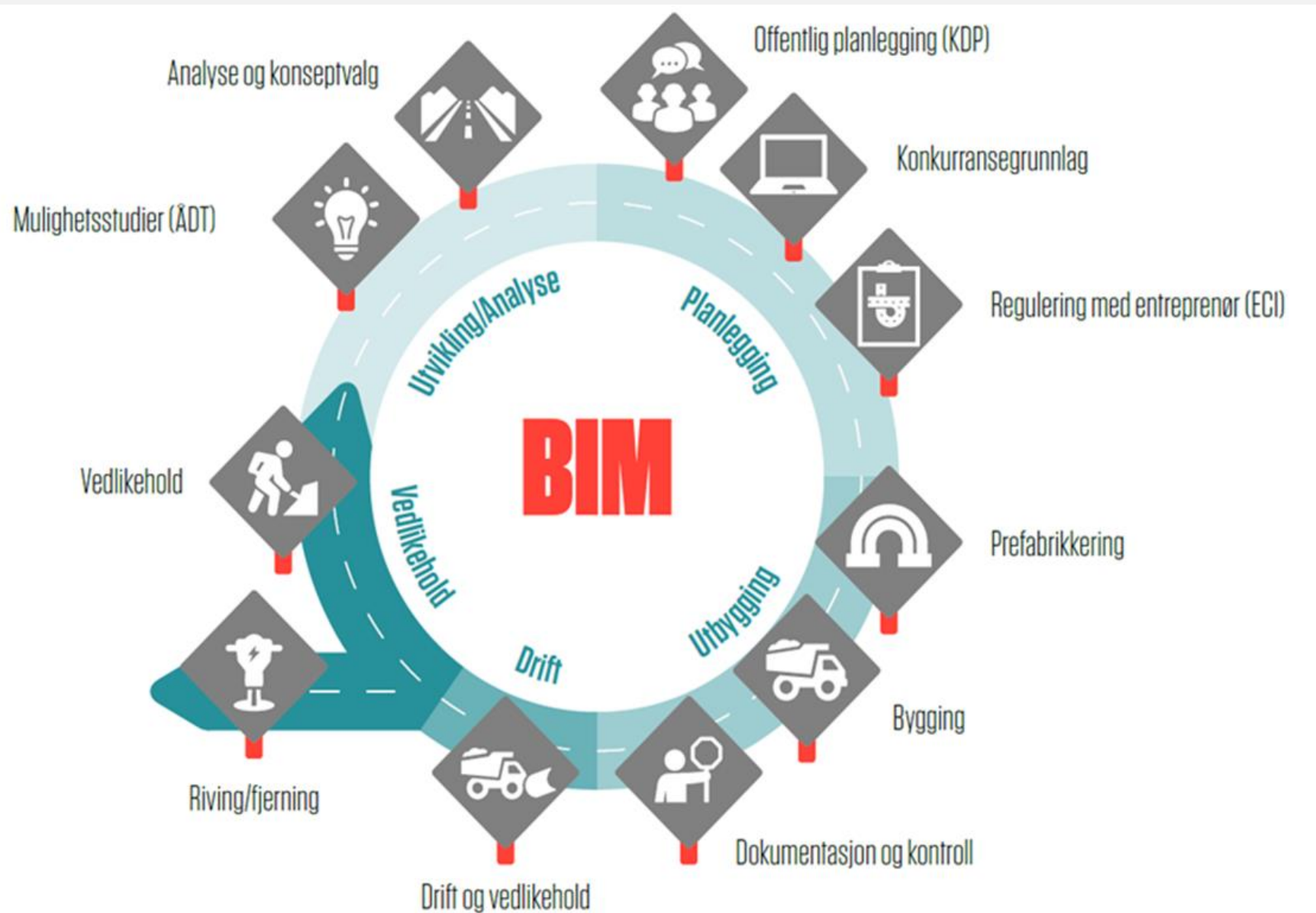


# Overall process – good solutions in an operating time perspective

Repeating even better projects – increases the value to society



# Digitalization throughout the value chain in 2020



# Close collaboration with the Norwegian Confederation of Trade Unions and the Norwegian Tax Administration

- Nye Veier will have a Norwegian Confederation of Trade Unions coordinator in all of our projects
- Specific tasks for follow-up of salary- and working conditions
- Collaboration with the Norwegian Tax Administration against work-related crime
- Central in Nye Veier's work against social dumping



## Nye Veier inngår avtale med LO

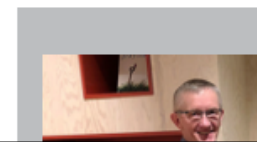
Nye Veier E6 Mjøsregionen har blitt enige med LO om å inngå avtale om LO-koordinator for utbyggingen av E6 fra Kolomoen – Moelv. Koordinatoren skal engasjeres på fulltid og inngå i Nye Veiers organisasjon.

Byggeindustrien



Publisert: 22.08.2017 12:40. Sist endret: 22.08.2017 12:40.

Den primære oppgaven for LO-koordinatoren blir å ivareta Nye Veiers samfunnsansvar, med særlig vekt på lønns- og arbeidsvilkår, boforhold, arbeidstid, bruk av kontraktsmedhjelpere samt bruk av faglærte og lærlinger.





Thank you for listening!



Vi bygger  
**gode** veier  
**raskt** og  
**smart**



forny  
forbedrer  
forsikrer





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# E18 Langangen-Grimstad

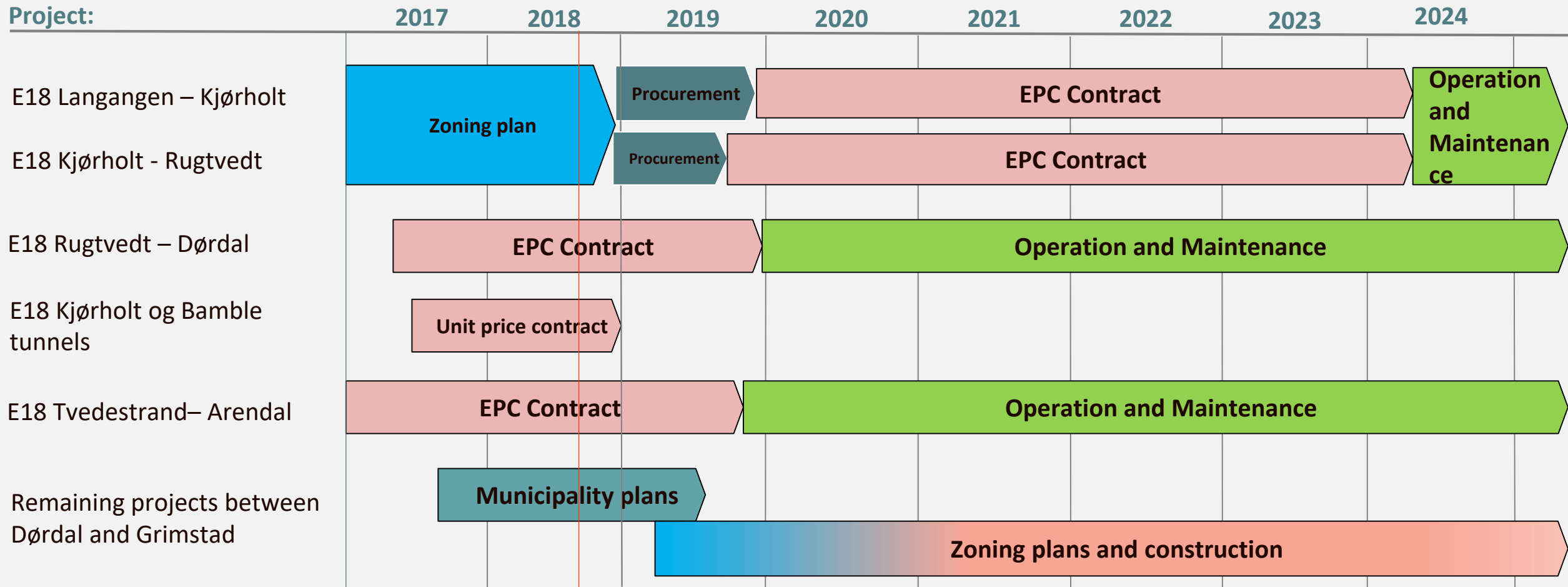
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*Magne Ramlo, Project Director E18 Langangen-Grimstad*

# Project status E18 Langangen - Grimstad



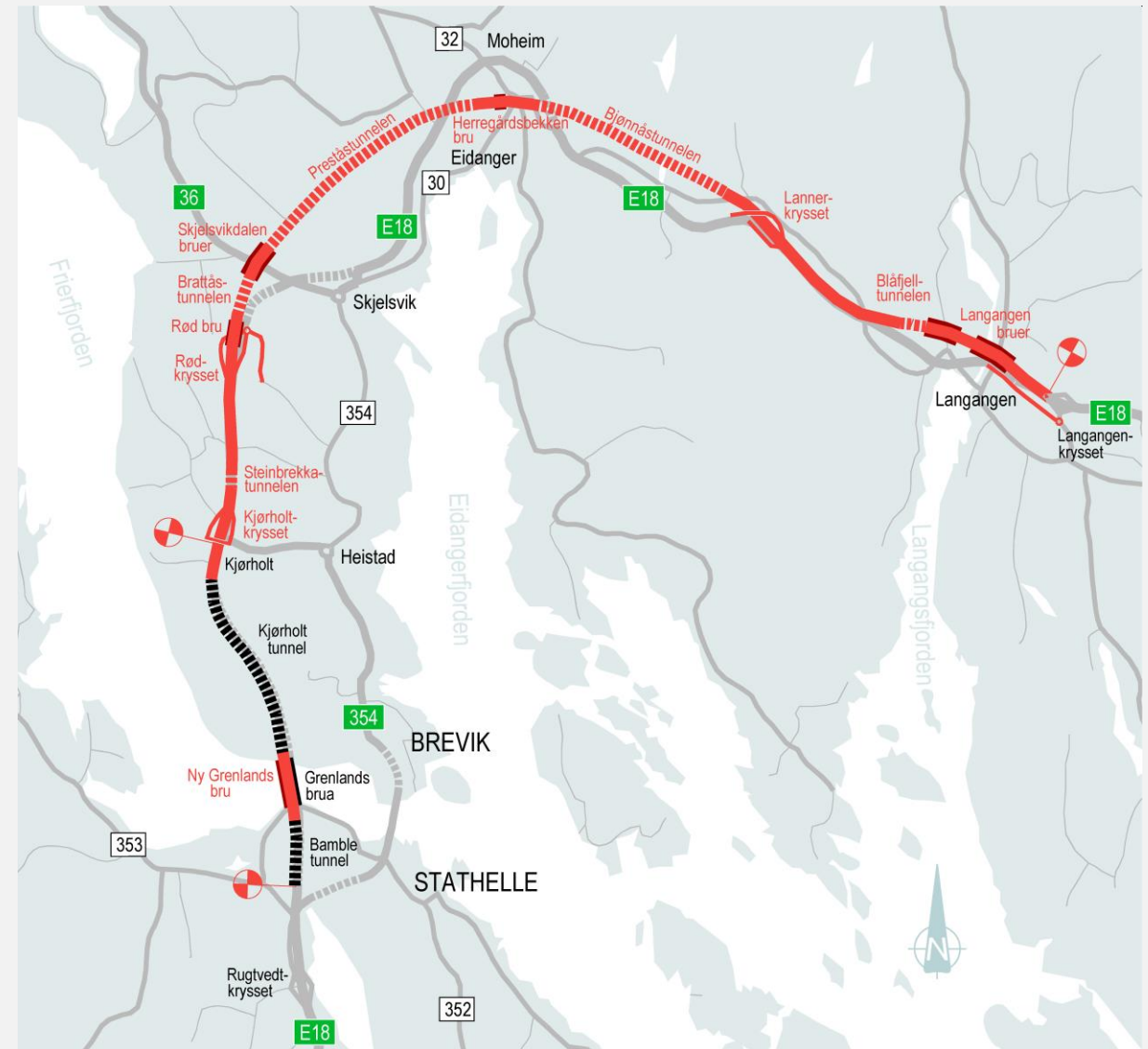
# Project portfolio E18 Langangen - Grimstad



# Contract Strategy E18 Langangen-Rugtvedt



- 2 contracts:
  - **E18 Langangen – Kjørholt 13.2 km**
    - New 4 lane highway incl. several bridges and tunnels
  - **E18 Kjørholt – Rugtvedt 3.5 km**
    - Completion and installation works for two tunnels already excavated and secured
    - Construction of the new Grenland bridge
- EPC contracts based on NS8407
- Tender and procurement process according to «Best Value Procurement»
- Tender documents to be issued Q4 2018
- E18 Kjørholt – Rugtvedt to be entered into first
- For E18 Langangen –Kjørholt it might be an option to include remaining works for completion of the zoning plan

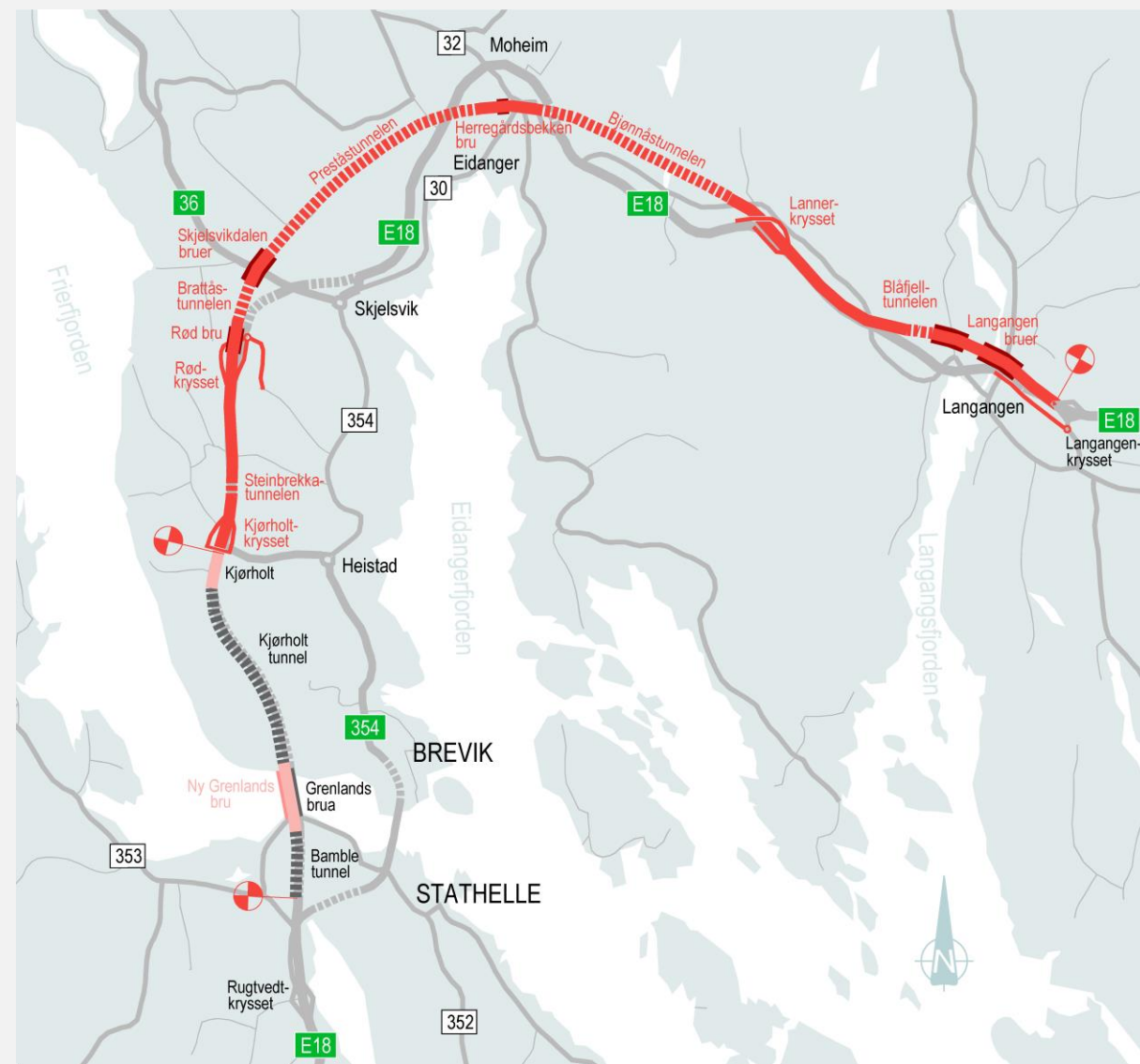


# Contract 1: E18 Langangen - Kjørholt



- Roadworks ca. 6 000 m
- Tunnels (two in parallel except for Steinbrekka):
  - Blåfjell ca. 350 m
  - Bjønnås ca. 2 250 m
  - Prestås ca. 2 900 m
  - Brattås ca. 400 m
  - Steinbrekka ca. 200 m
- Bridges:
  - Langangen 1 ca. 400 m
  - Langangen 2 ca. 250 m
  - Herregårdsbekken ca. 55 m
  - Skjelsvikdalen \*) ca. 205 m
  - Rød ca. 200 m
- 3 intersections at Lanner, Rød and Kjørholt

\*) Cut & cover tunnel as an option

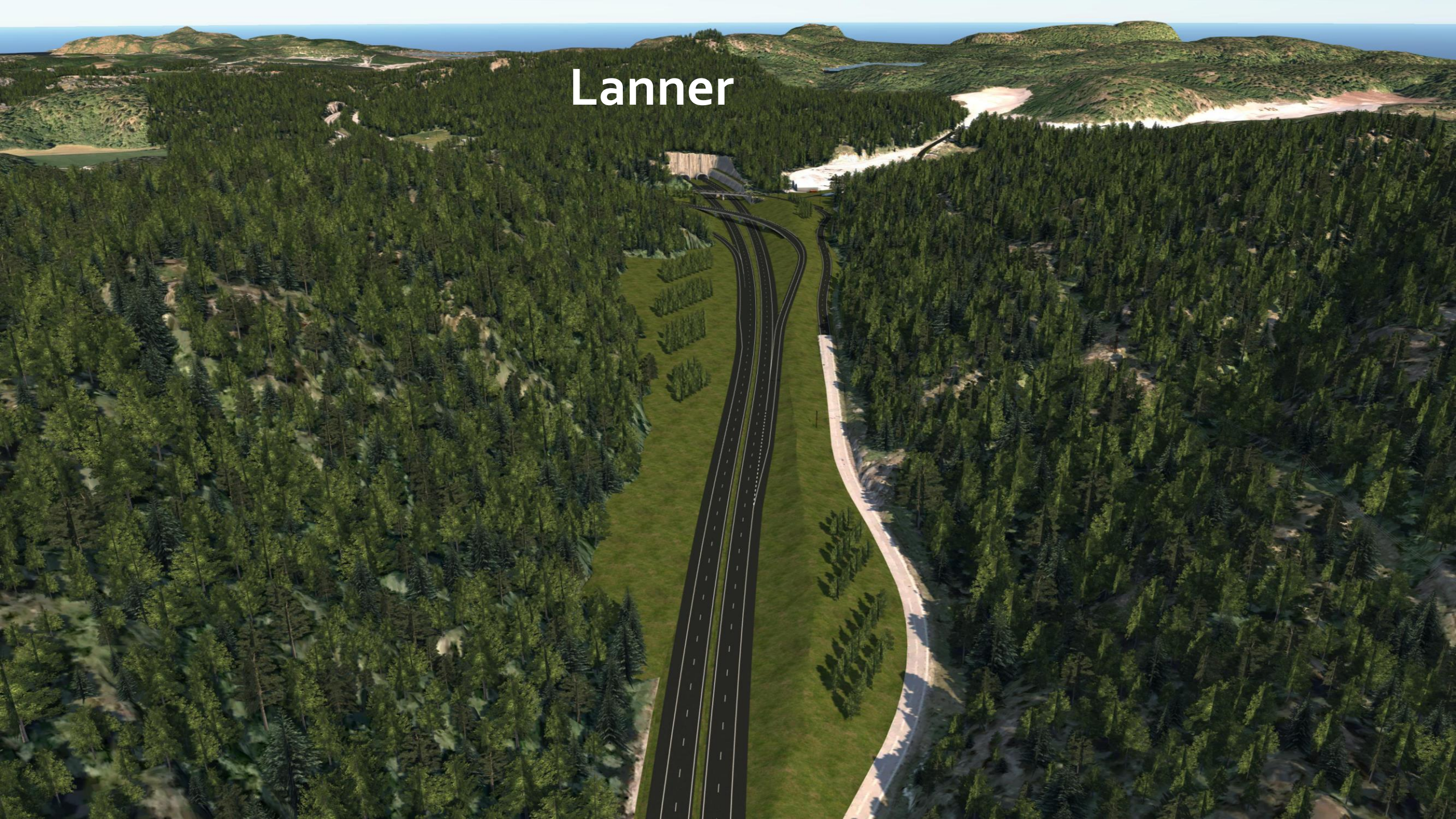


Reguleringsplan 100%

# Langangen



Lanner



# Herregårdsbekken



# Skjelsvikdalen



Rød

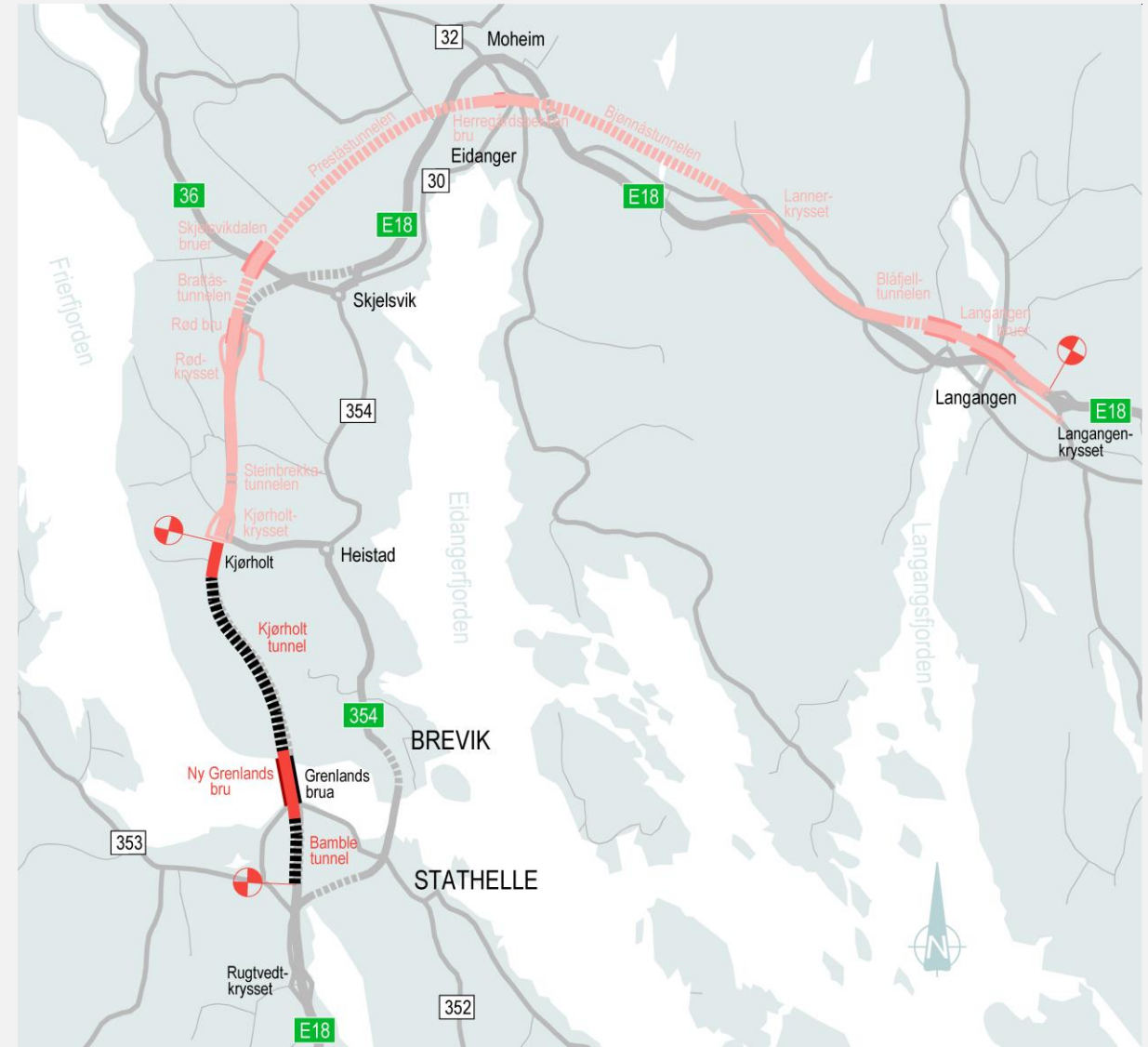


# Kjørholt



# Contract 2: E18 Kjørholt - Rugtvedt

- New Grenland bridge ca. 600m
- Completion and installation of newly excavated tunnels:
  - Kjørholt tunnel ca. 2 200m
  - Bamble tunnel ca. 750 m



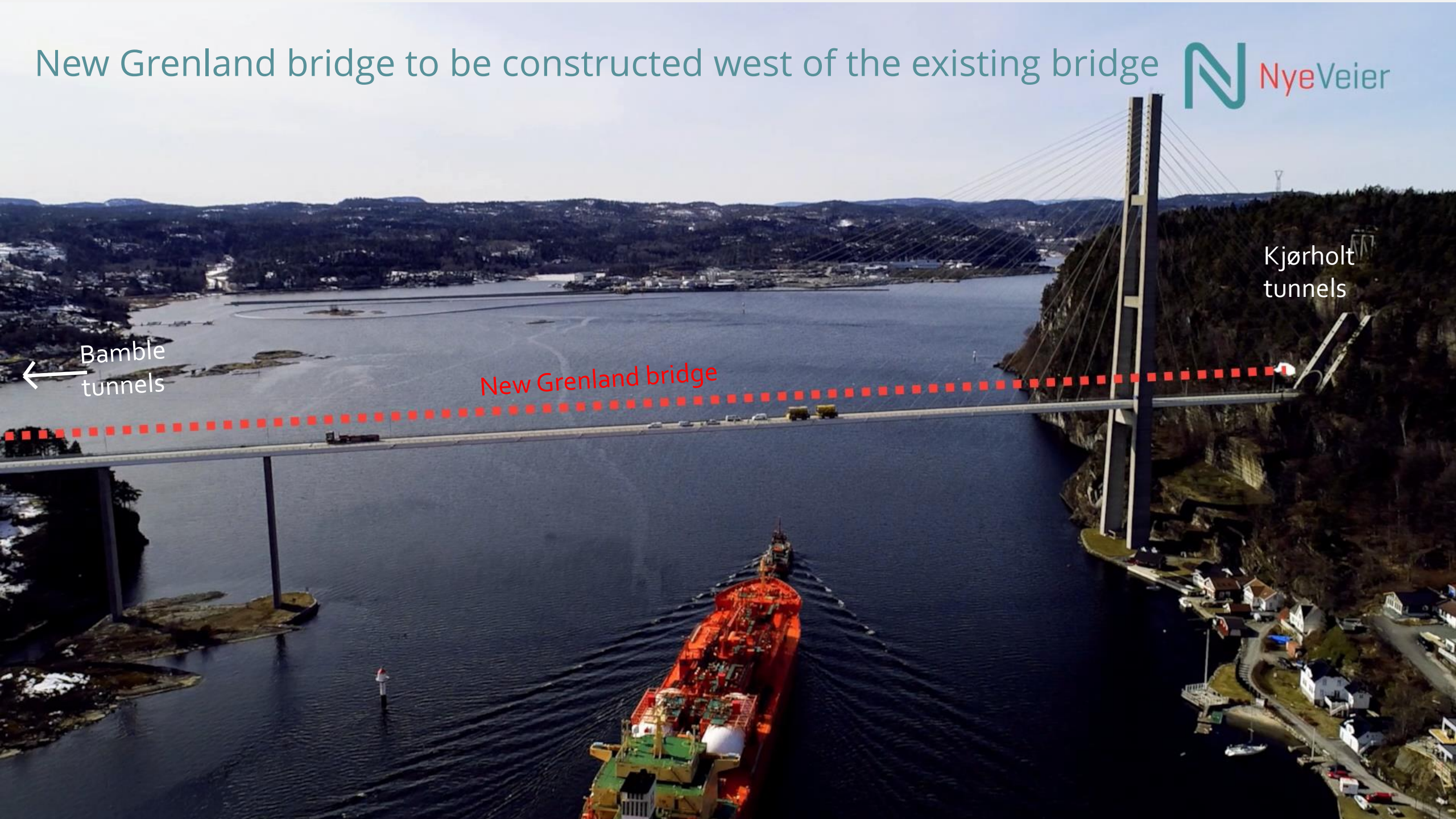
New Grenland bridge to be constructed west of the existing bridge



Bamble tunnels  
←

New Grenland bridge

Kjørholt tunnels



# Grenland bridge



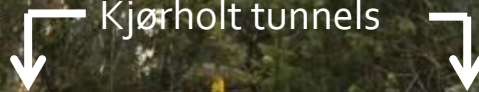
Bamble tunnels



New  
Grenland  
bridge



Kjørholt tunnels





# Kjørholt tunnels – southern exit



New  
Kjørholt  
tunnel



# New Bamble tunnel – northern exit



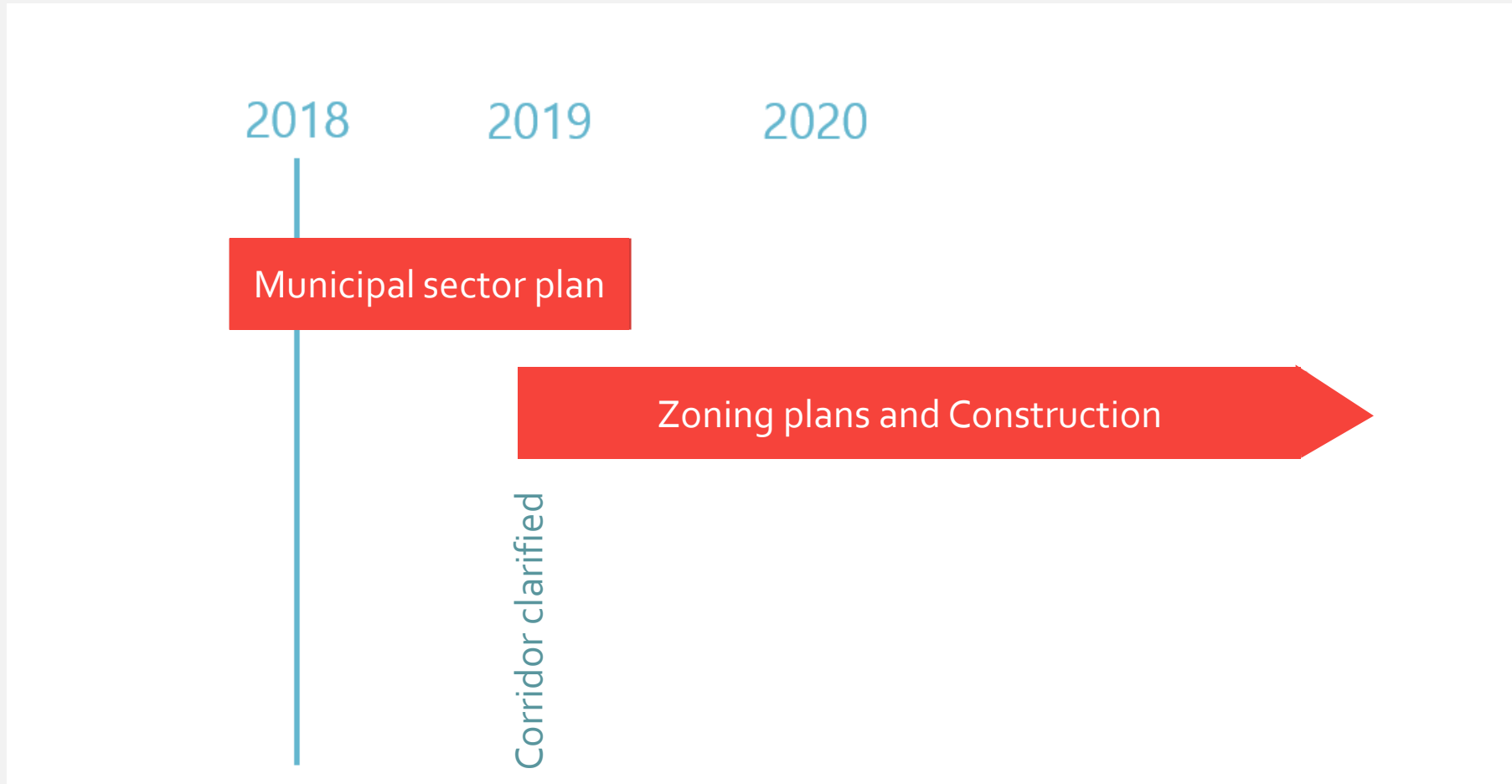
# Bamble tunnels – southern exit in Rugtvedt



# E18 Dørdal-Grimstad – Work with the municipal sector plan is in progress



# E18 Dørdal-Grimstad – possible construction start in 2020 <sup>N</sup>





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# E6 Innlandet

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*New contracts E6 Kolomoen – Øyer*

*Øyvind Moshagen, Project Director E6 Innlandet*



- **E6 Innlandet**

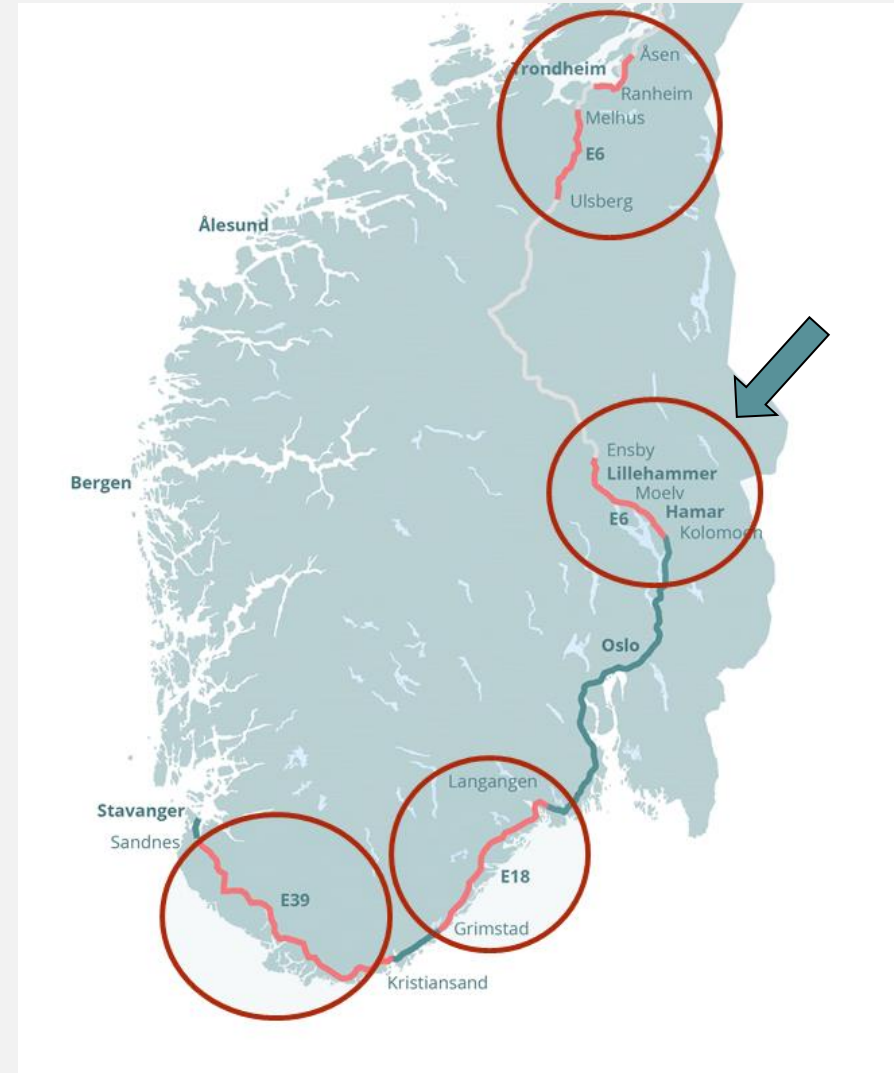
- E6 Kolomoen – Moelv

- E6 Moelv – Øyer

- Which contractor will be awarded the contract?

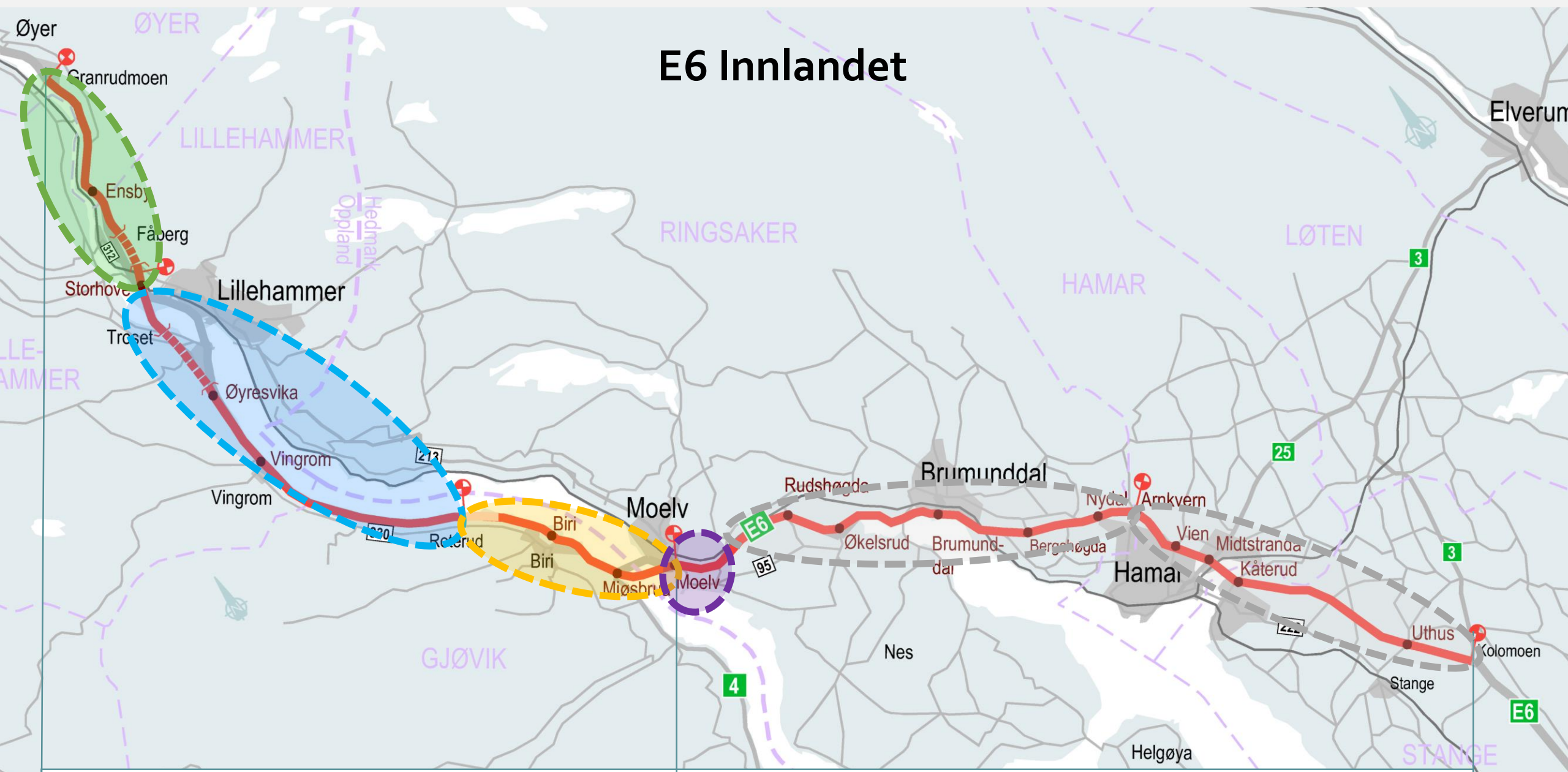
# E6 Innlandet – Development area with a revenue of ~2 bn. NOK per year, until the end of 2025

- 2 projects
  - E6 Kolomoen – Moelv
  - E6 Moelv - Øyer
- 6 large EPC-contracts
  - 2 ongoing
  - 1 announced 2018
  - 3 announced 2019\*
- Smaller contracts on byroad upgrades in 2026.



\* Provided parliament approval spring 2019

# E6 Innlandet



Project 2: Moelv – Øyer, 44 km  
2019-2025

Project 1: Kolomoen – Moelv, 43 km  
2017-2020

- E6 Innlandet
- **E6 Kolomoen – Moelv**
- E6 Moelv – Øyer
- Which contractor will be awarded the contract?

# E6 Kolomoen – Moelv

- **Key figures**

- 43 km under construction
- 700 construction workers
- Betonmast Hæhre and Veidekke
- 650.000 man hours
- 0 absence due to injuries
- 0 environmental damages

- **The final construction contract will be announced in the autumn of 2018.**



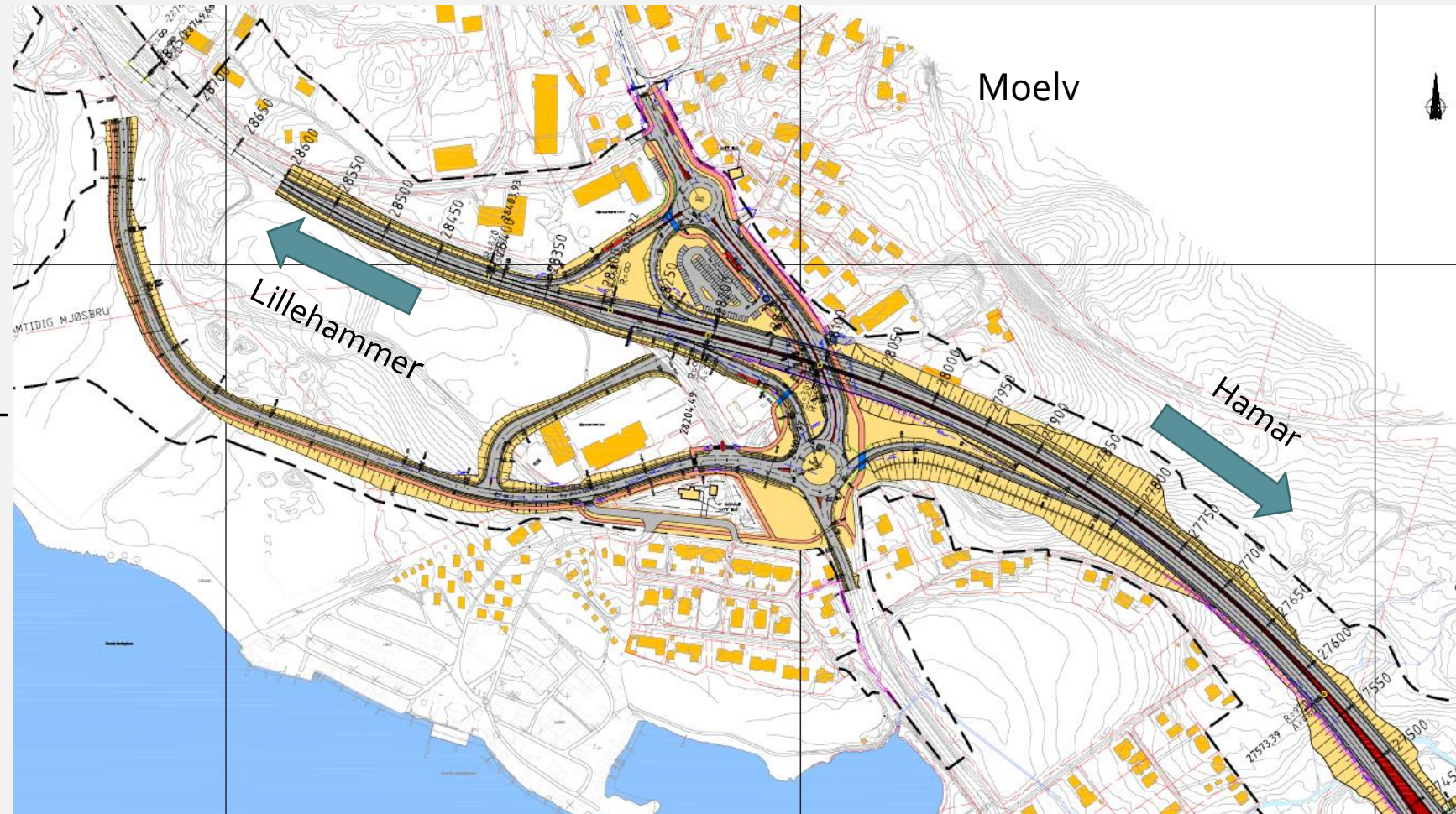
# EPC-contract will be announced autumn 2018.



- **Interchange E6 Moelv**

- Zoning plan adopted 2017
- Engineering
- Ca. 1 km E6
- Slip roads
- Local road system
- Bus lay-bys and parking
- Roundabouts
- Noise barriers and noise-deflection walls
- Drainage
- Lighting
- Smaller retaining wall
- Some local water supply and sewage

- To be completed Oct/Nov 2020.



Today's interchange is being further developed – some re-use



- E6 Innlandet
- E6 Kolomoen – Moelv
- **E6 Moelv – Øyer**
  - E6 Moelv – Roterud
  - E6 Roterud – Storhove
  - E6 Storhove – Øyer
- Which contractor will be awarded the contract?



# The project is divided into three EPC-contracts



## E6 Moelv - Roterud [~11 km]

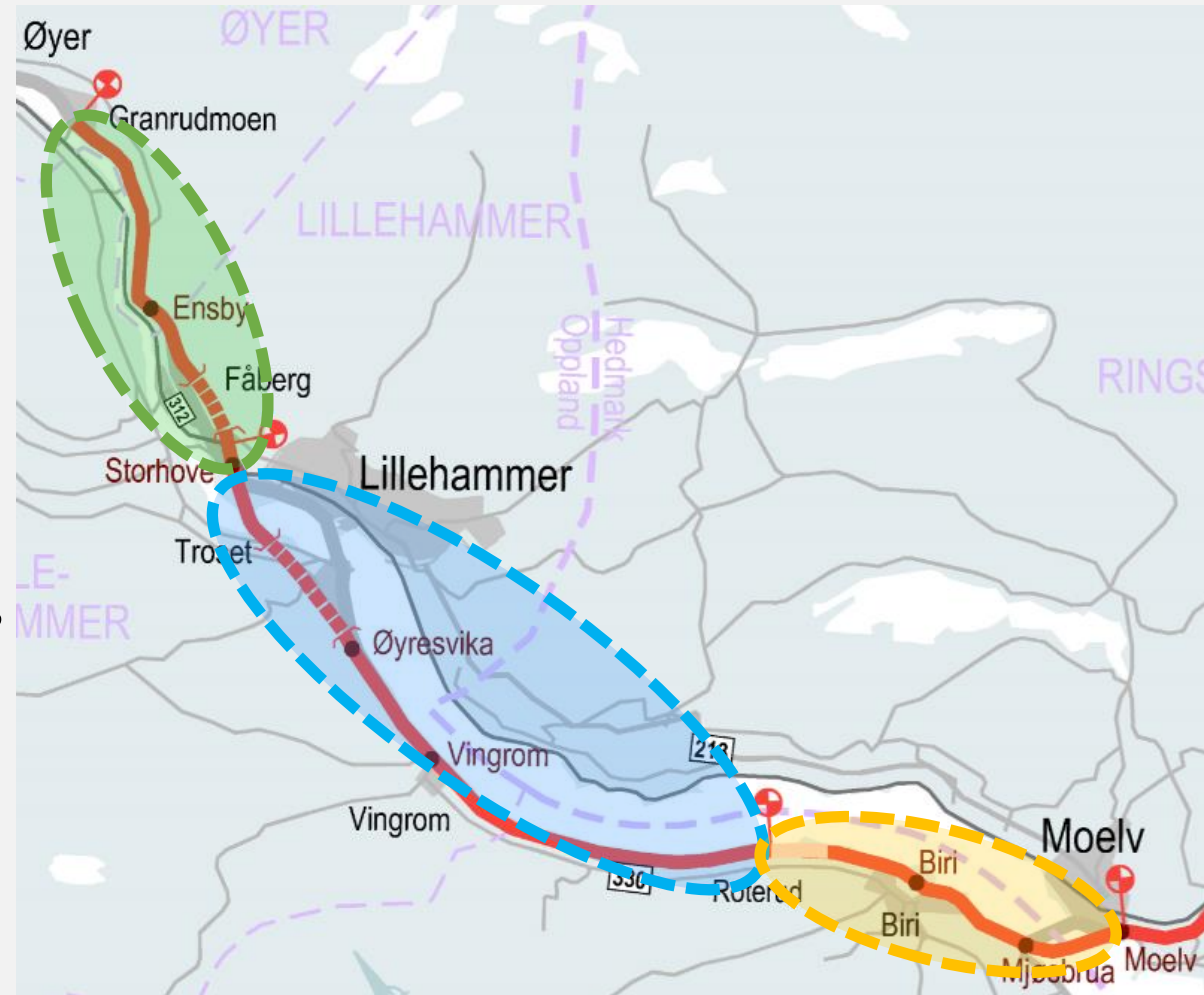
- Lake Mjøsa bridge (~1,6km)
- 4-lane highway on each side of Lake Mjøsa bridge (~9,4 km)
- 8 smaller structures and 2 interchanges

## E6 Roterud - Storhove [~21 km]

- 4-lane highway (~16km)
- Øyresvika tunnel (~4,2 km)
- New Lågen bridge (~0,7km)
- 19 smaller structures and 3 interchanges

## E6 Storhove - Øyer [~12 km]

- Fåberg tunnel (~1,6km)
- 4-lane highway (~10,4 km)
- 6 smaller structures and 1 interchange



# EPC-contracts with project development and optimization (Municipal sector plan adopted)



**E6 Moelv -  
Roterud  
[~11 km]**

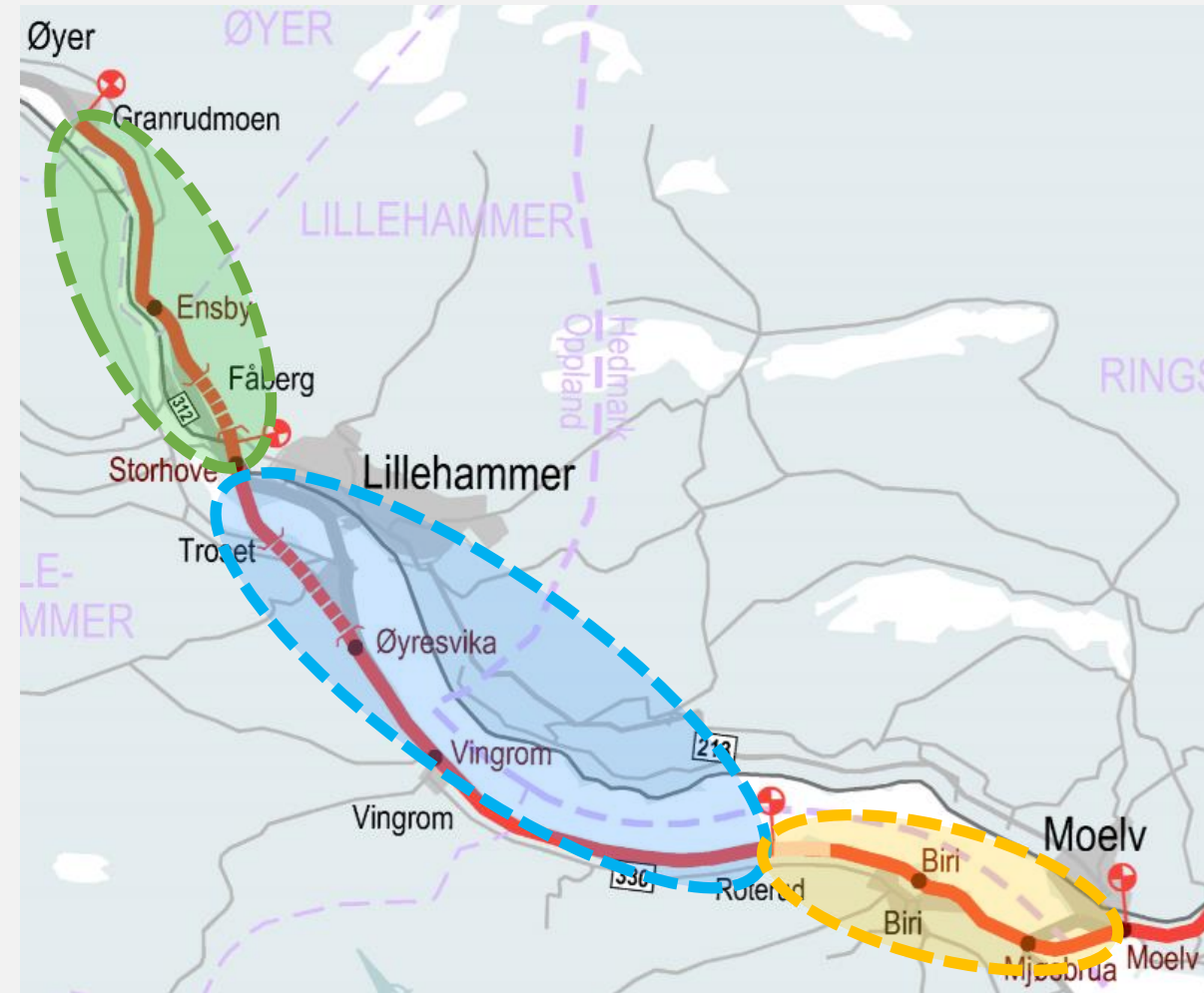
- EPC-contract with a collaboration phase. The Contractor participates in the development of the zoning plan.
- Pre-qualification Q2 2019

**E6 Roterud -  
Storhove  
[~21 km]**

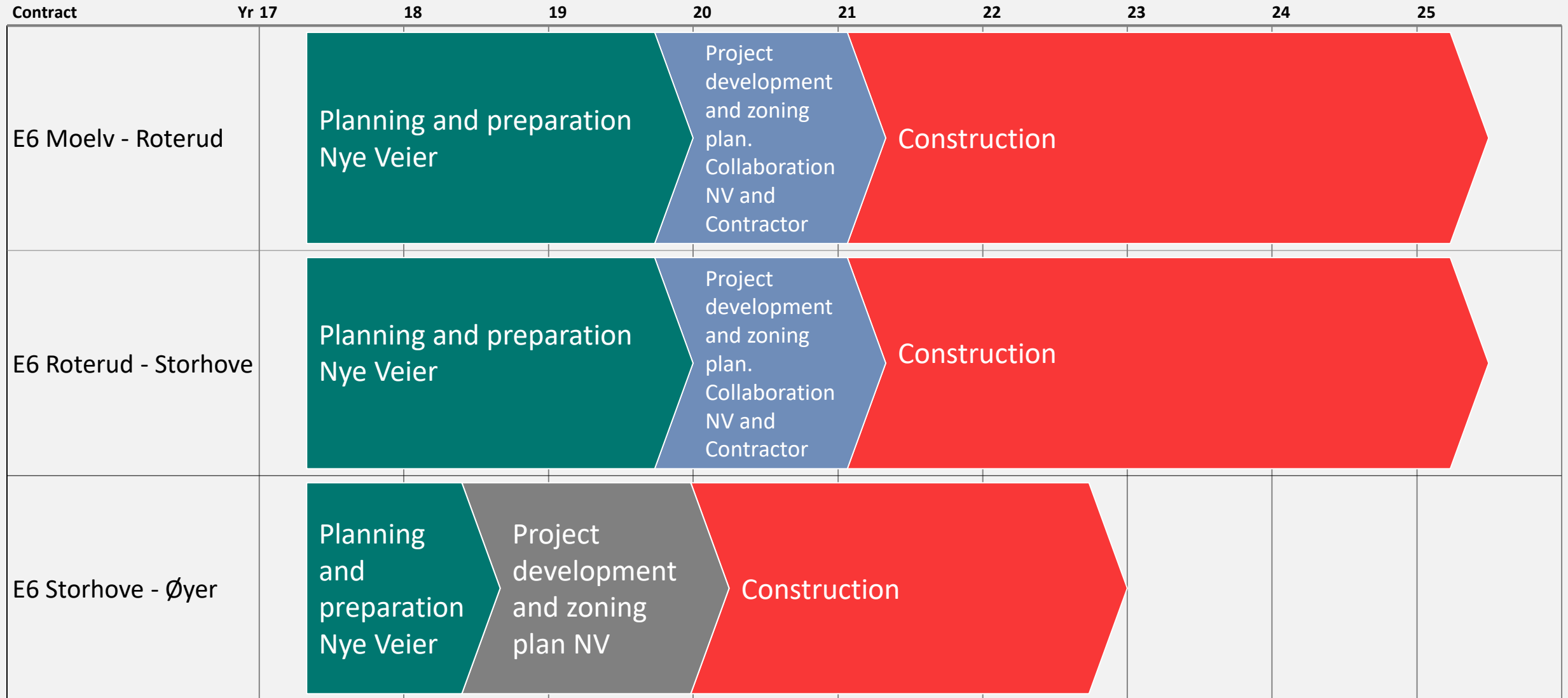
- EPC-contract with a collaboration phase. The Contractor participates in the development of the zoning plan.
- Pre-qualification Q3 2019

**E6 Storhove -  
Øyer  
[~12 km]**

- EPC-contract with optimization. Zoning plan developed by Nye Veier
- Pre-qualification Q2 2019

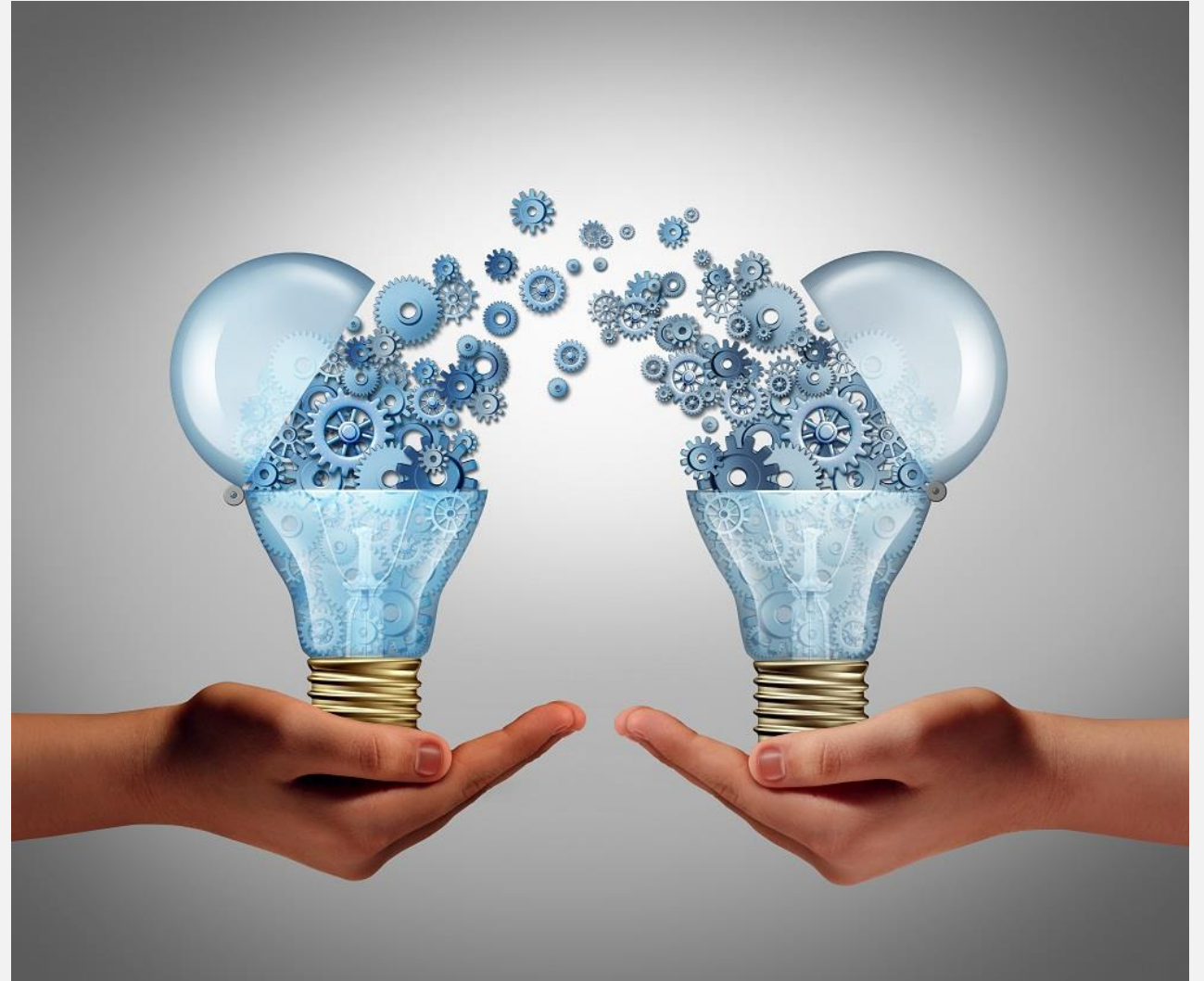


# General tentative schedule for E6 Moelv – Øyer. Pre-qualification prior to Q2 2019



Nye Veier seeks to utilize the Contractors' competence to optimize the project. **Collaboration.**

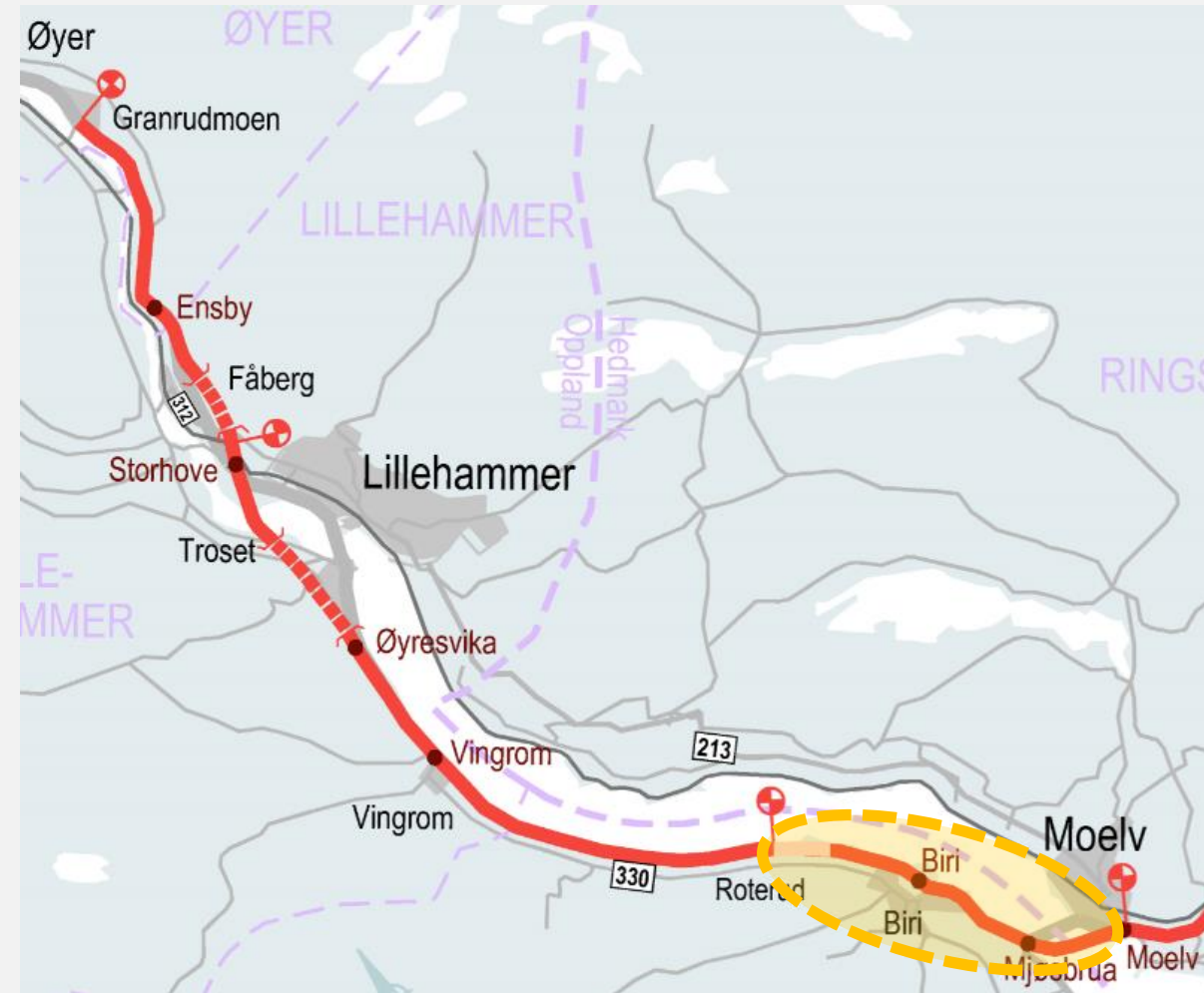
- Early contractor involvement
- Innovation
- Optimizing the value to society
- Overall development of the project
- The Contractor discovers the good solutions
- Open collaborative culture



- E6 Innlandet
- E6 Kolomoen – Moelv
- **E6 Moelv – Øyer**
  - *E6 Moelv – Roterud*
  - *E6 Roterud – Storhove*
  - *E6 Storhove – Øyer*
- Which contractor will be awarded the contract?

E6 Moelv – Roterud (~11km) includes the construction of a new Lake Mjøsa bridge, which will have a particular focus in the project N

- Some of the criteria for the Contractor selection:
  - Bridge concept
  - CO<sub>2</sub>/climate
  - Competance and experience
  - Project execution plan
  - Cost-efficient solutions



# The Contractor competes on bridge concept and technical solution

- Nye Veier seeks to find the best possible bridge concept through **collaboration** with the Contractor and interested parties





Illustration cantilever bridge - concrete





Illustration cantilever bridge - wood



Illustrasjon wood



Illustration cable-stayed bridge



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# Ongoing sub-surface surveys for the new Lake Mjøsa bridge



- Major costs related to the foundation
- Thorough site investigations produces valuable knowledge
- Risk reduction
- Cone penetration testing and comprehensive sample testing (ca. 100 drilling holes)



Northern contract border. Some width expansion of the existing 4-lane highway is required.



Lillehammer

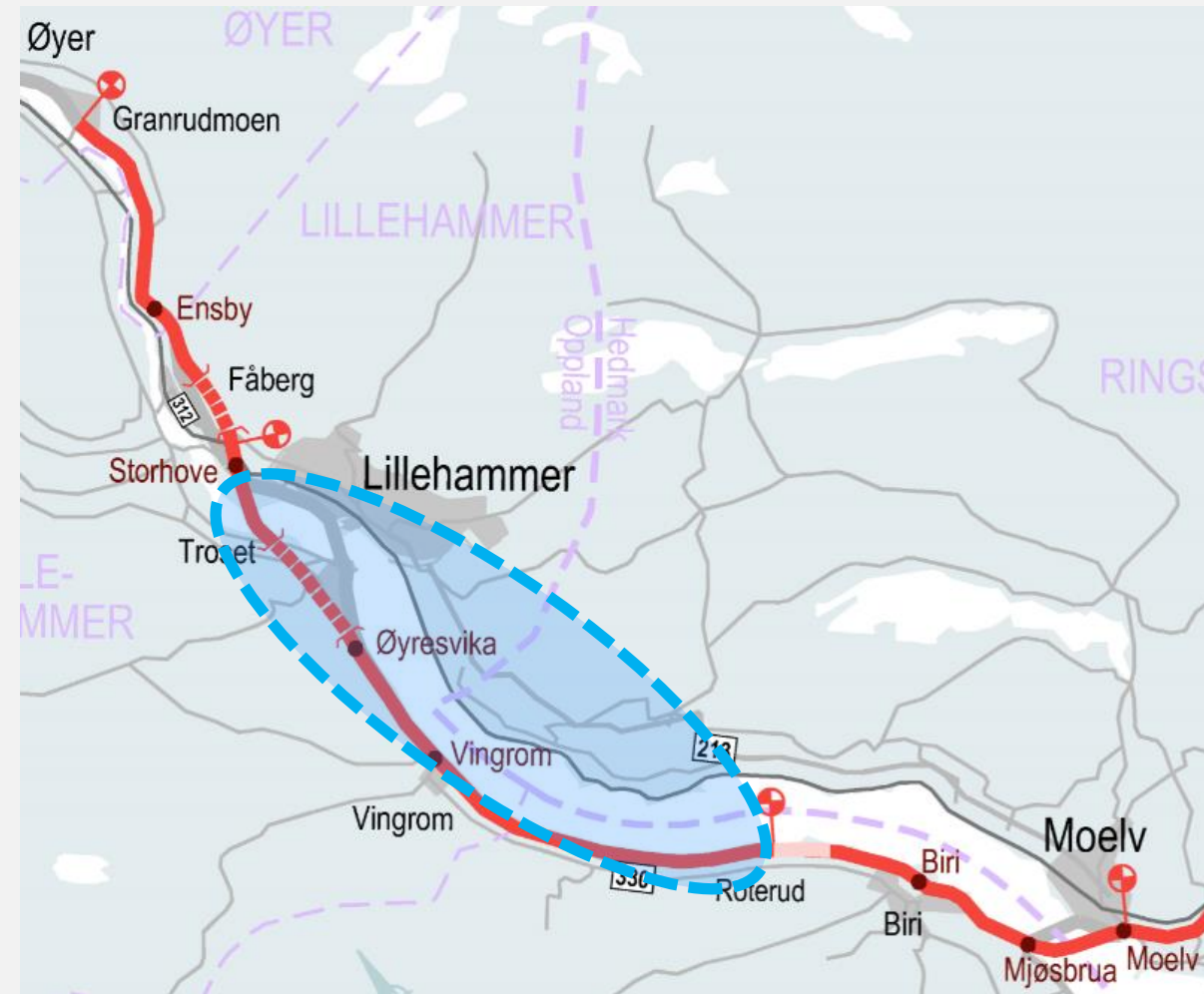
Hamar

- E6 Innlandet
- E6 Kolomoen – Moelv
- **E6 Moelv – Øyer**
  - *E6 Moelv – Roterud*
  - ***E6 Roterud – Storhove***
  - *E6 Storhove – Øyer*
- Which contractor will be awarded the contract?

E6 Roterud – Storhove (~21km) is a varied project with a 4-lane highway, a long tunnel and a major bridge.



- Ca. 4,2 km tunnel, 2 x T10,5
- Ca. 700 m Lågen bridge for E6
- Ca. 16 km of existing highway
  - Secure and good road construction along the existing E6
  - Agricultural road crossings
  - Mass haulage
  - CO2 focus in bridge concept
  - Environmental requirements in nature reserves





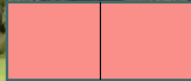
# E6 Vingrom with a view to Lillehammer



Lillehammer

Hamar

# Entrance for «The Vingnes tunnel» - 4,2 km long



Lillehammer

Hamar



# Crossing of Lågen natural reserve – ca. 700 m long bridge N

E6 seen from the south



E6 seen from the northwest

- E6 Innlandet
- E6 Kolomoen – Moelv
- **E6 Moelv – Øyer**
  - *E6 Moelv – Roterud*
  - *E6 Roterud – Storhove*
  - ***E6 Storhove – Øyer***
- Which contractor will be awarded the contract?

# E6 Storhove – Øyer (~12km) with the construction of a tunnel and expansion of the existing 2-lane highway.



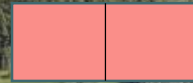
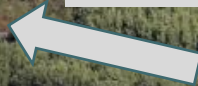
- Ca. 1,6 km 2xT10,5 tunnel
- Ca. 8,5 km development of the existing highway
  - Mass transfer
  - Selecting good and optimal solutions within the framework of the zoning plan



# Storhove interchange and southern entrance to the Fåberg tunnel



Øyer



Lillehammer



# Ensby interchange towards Øyer



Øyer

Lillehammer

# E6 past Hunderfossen

Ensby

Lillehammer

Øyer

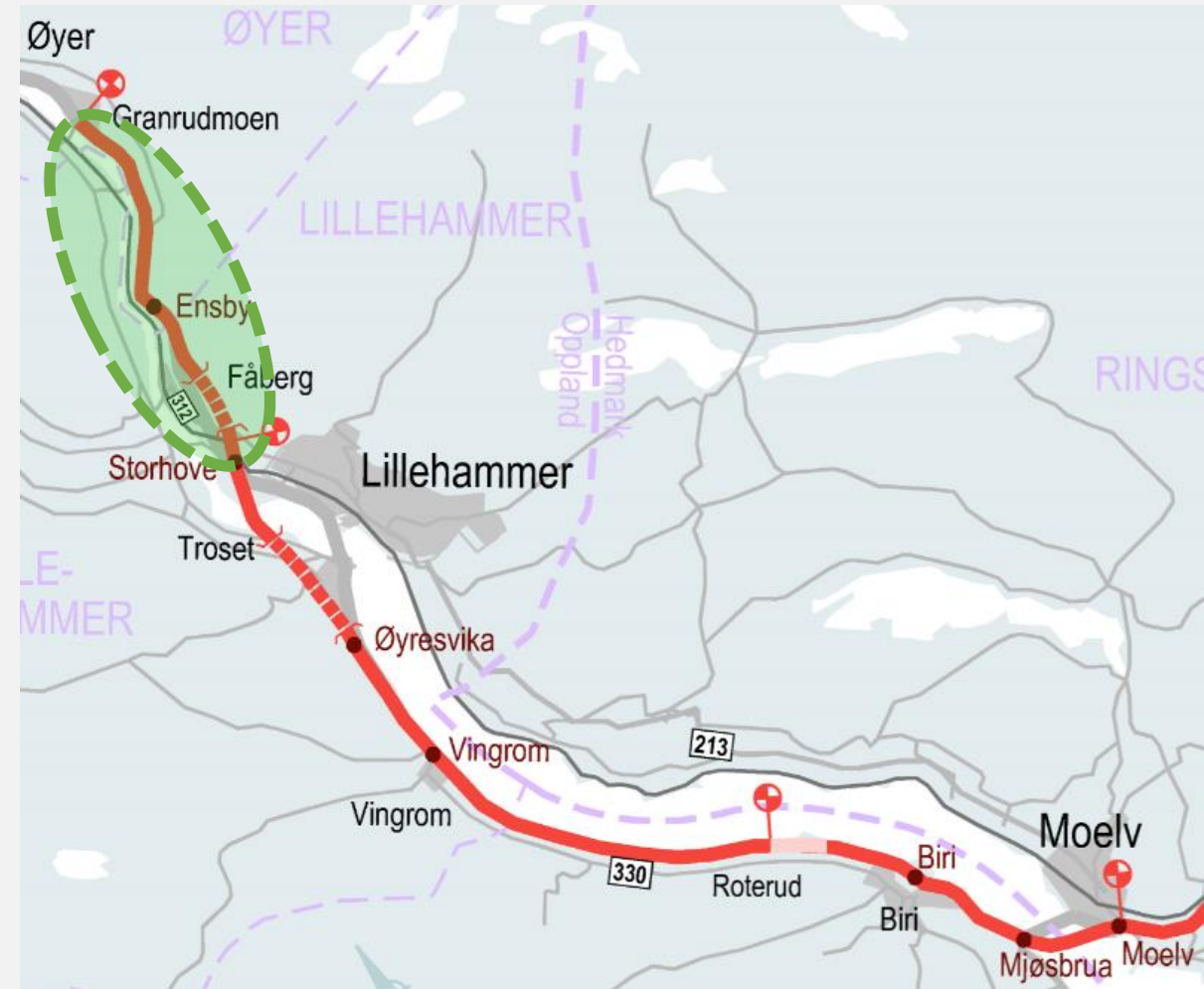




# E6 Storhove – Øyer has an ongoing mini-competition for a technical consultant assignment for the zoning plan with consequence analysis



- Develop technical plans and documentation
- Complete zoning plan with impact assessment in two municipalities.
- Special focus on:
  - Schedule
  - Innovation in the process and solutions
  - Communication
  - Facilitate good construction engineering
  - Achievement of objectives



- E6 Innlandet
- E6 Kolomoen – Moelv
- E6 Moelv – Øyer
- **Which contractor will be awarded the contract?**

Which contractor will be awarded the contract?



*The Contracting team with the best appreciation for the project, the procurement process, and that has the best contribution to the project's overall targets, whilst at the same time reducing the Builder's risk.*

Many opportunities!



*Development area with ca. 2 billions in yearly revenue, until the end of 2025. Pre-qualification for these three large EPC-contracts begins Q2 2019. Welcome!*



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# E39 Lyngdal - Sandnes

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*Asbjørn Heieraas, Project Director E39 Kristiansand - Sandnes*

# E39 – Sandnes - Kristiansand



- 170 km highway
- 5 - 6 billion euro
- Two contracts awarded

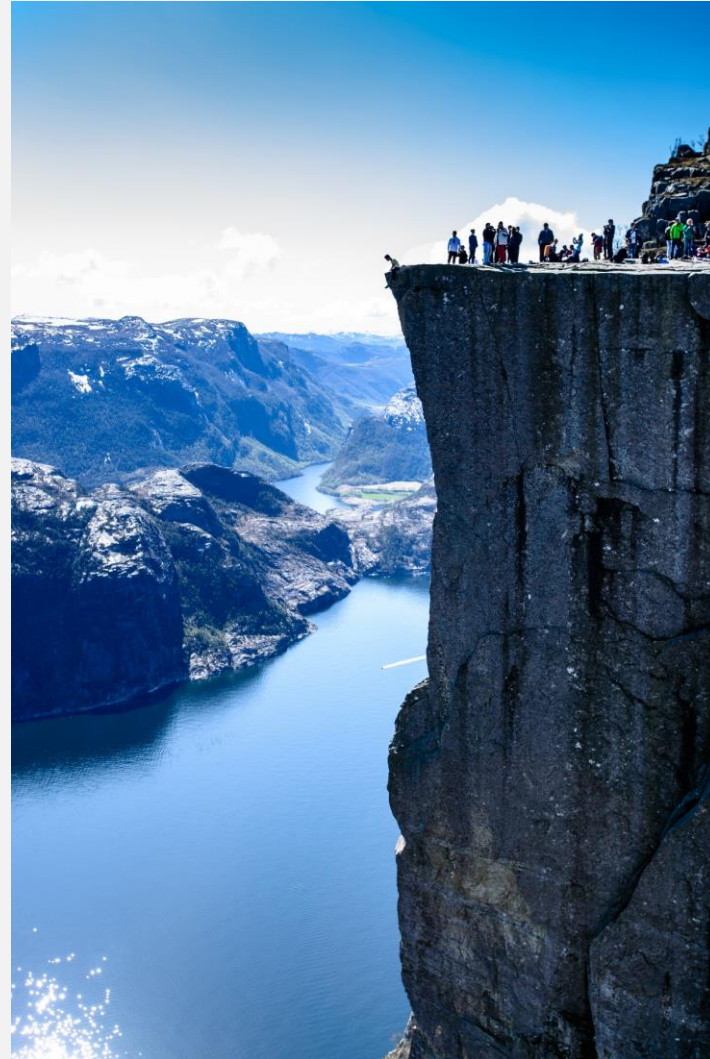


# The south west region

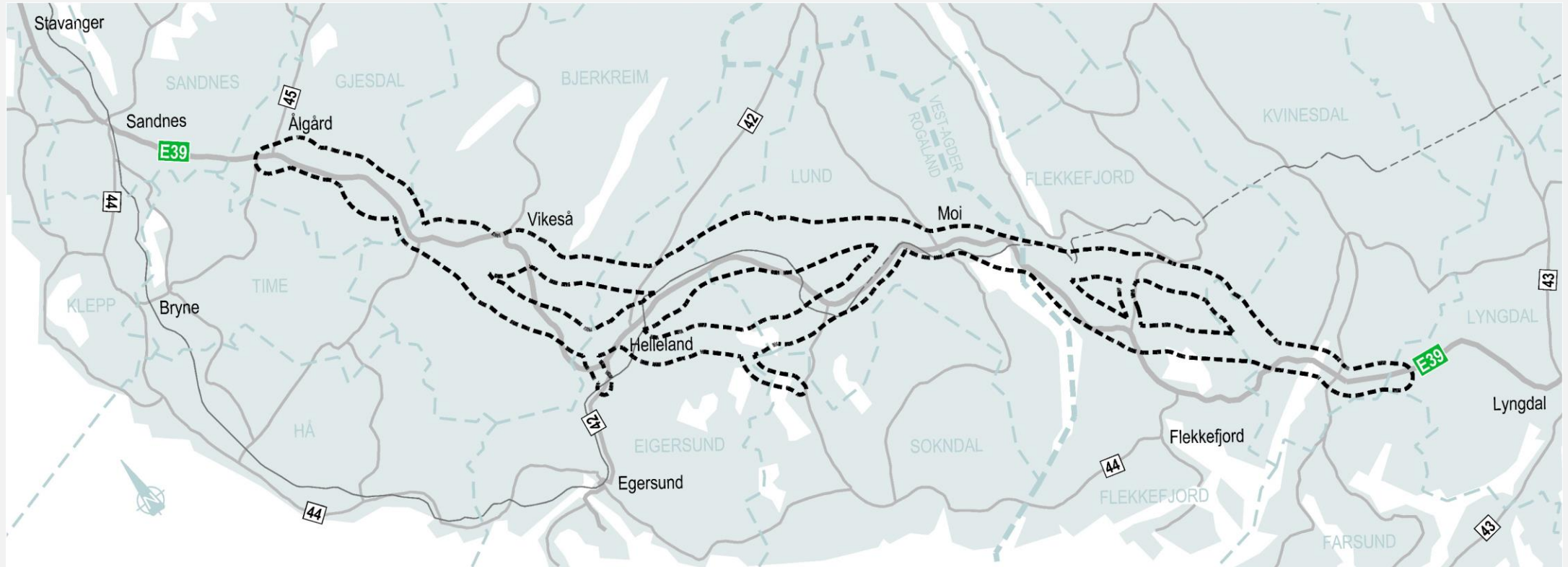




# Rogaland



# Sandnes to Lyngdal West

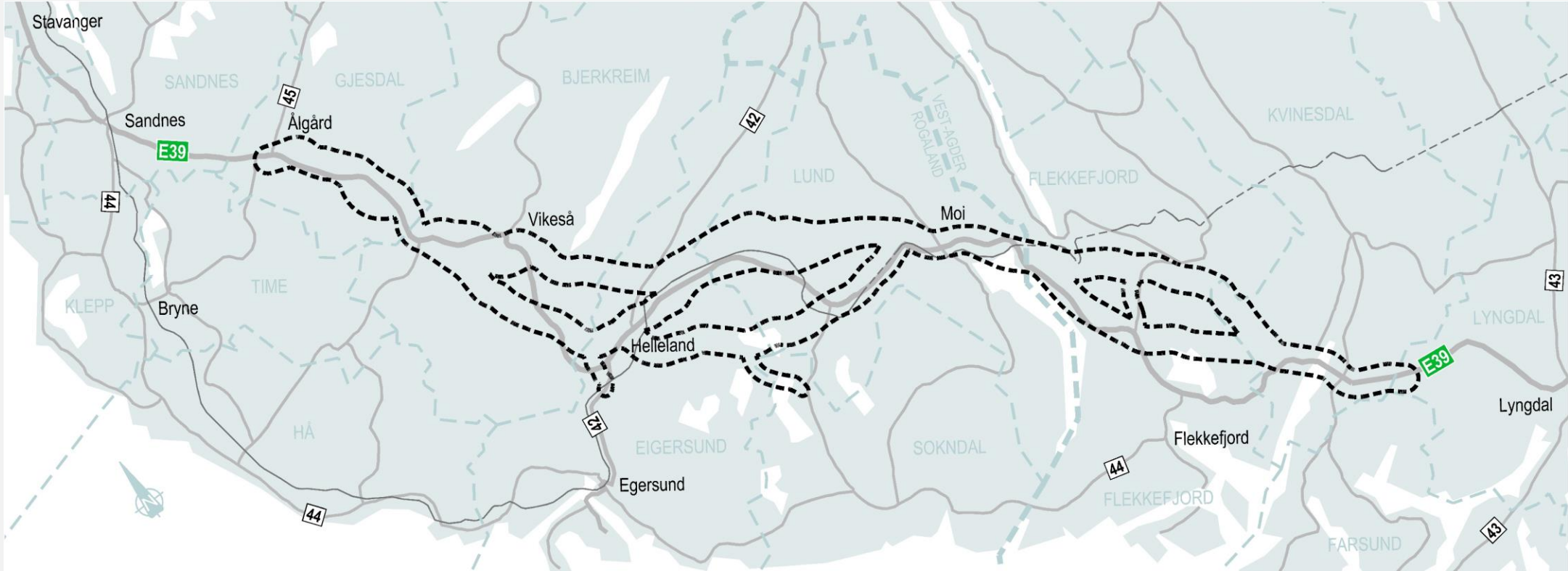


# Next contracts



- To the market - 2019
- 200 million euro
- 600 million euro

# Lyngdal West to Sandnes



# Infrastructur for generations

- Safer transport
- Shorter transport
- Lower costs
- Opening in 2027





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# E6 Trøndelag – Project Portfolio

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*Johan Arnt Vatnan, Project Director E6 Trøndelag*

# Nye Veiers project portfolio in Trøndelag / Mid-Norway

- **106 km with new E6:**  
E6 Ulsberg–Melhus S  
E6 Ranheim–Åsen
- **EPCC with 20 years maintenance (guarantee)**
- **Cost of portefolio before optimization: NOK 29 billions**  
⇒ 4 lain motorway and 2-/3-lains road  
⇒ 90 og 100 km/h speed



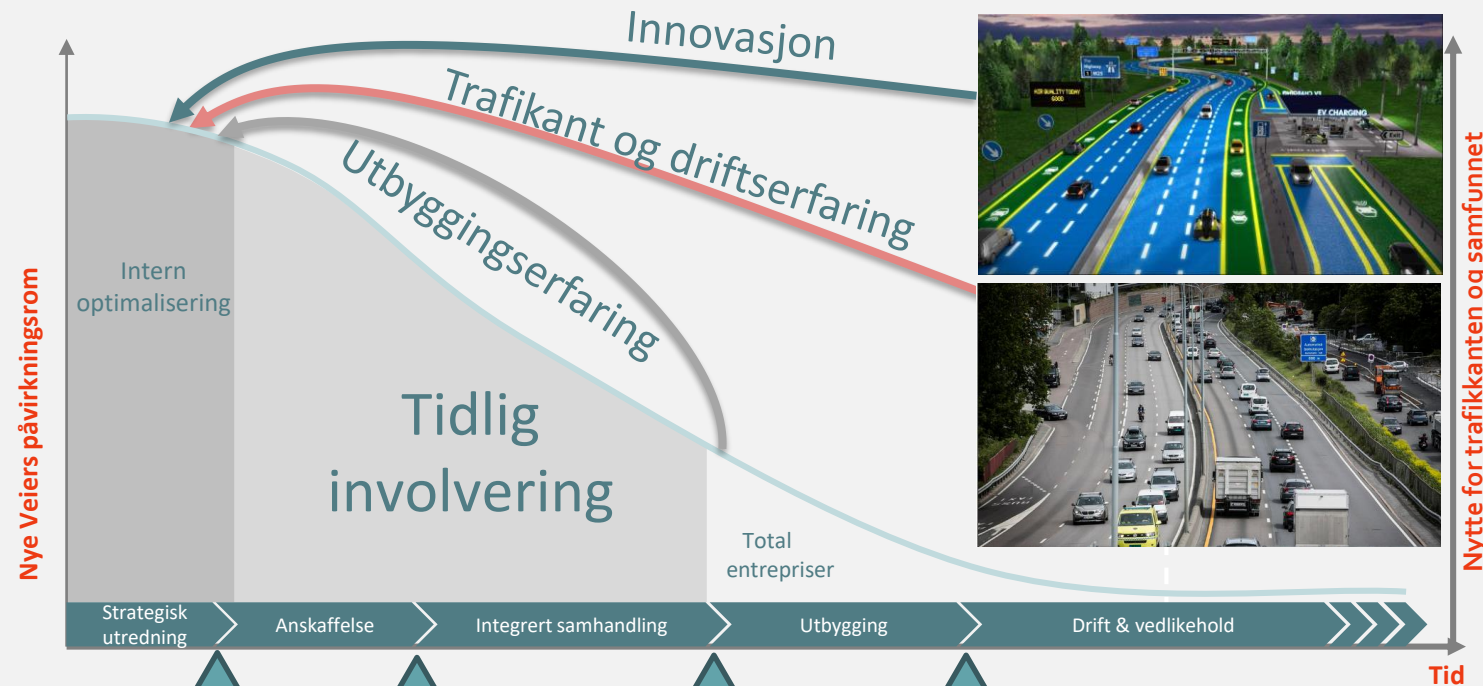
- **Optimization**  
⇒ In general 4 lain motorway  
⇒ 110 km/h speed  
⇒ 20% cost reduction

Net benefit





# Project and Execution strategy

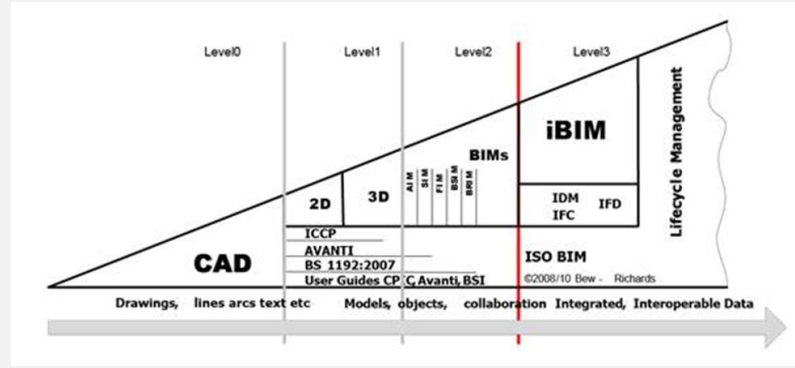


Optimalisert for markedet  
 Finne riktig entreprenør  
 Finne den beste løsningen sammen med valgt entreprenør  
 Idriftsette den beste løsningen for samfunnet og trafikantene

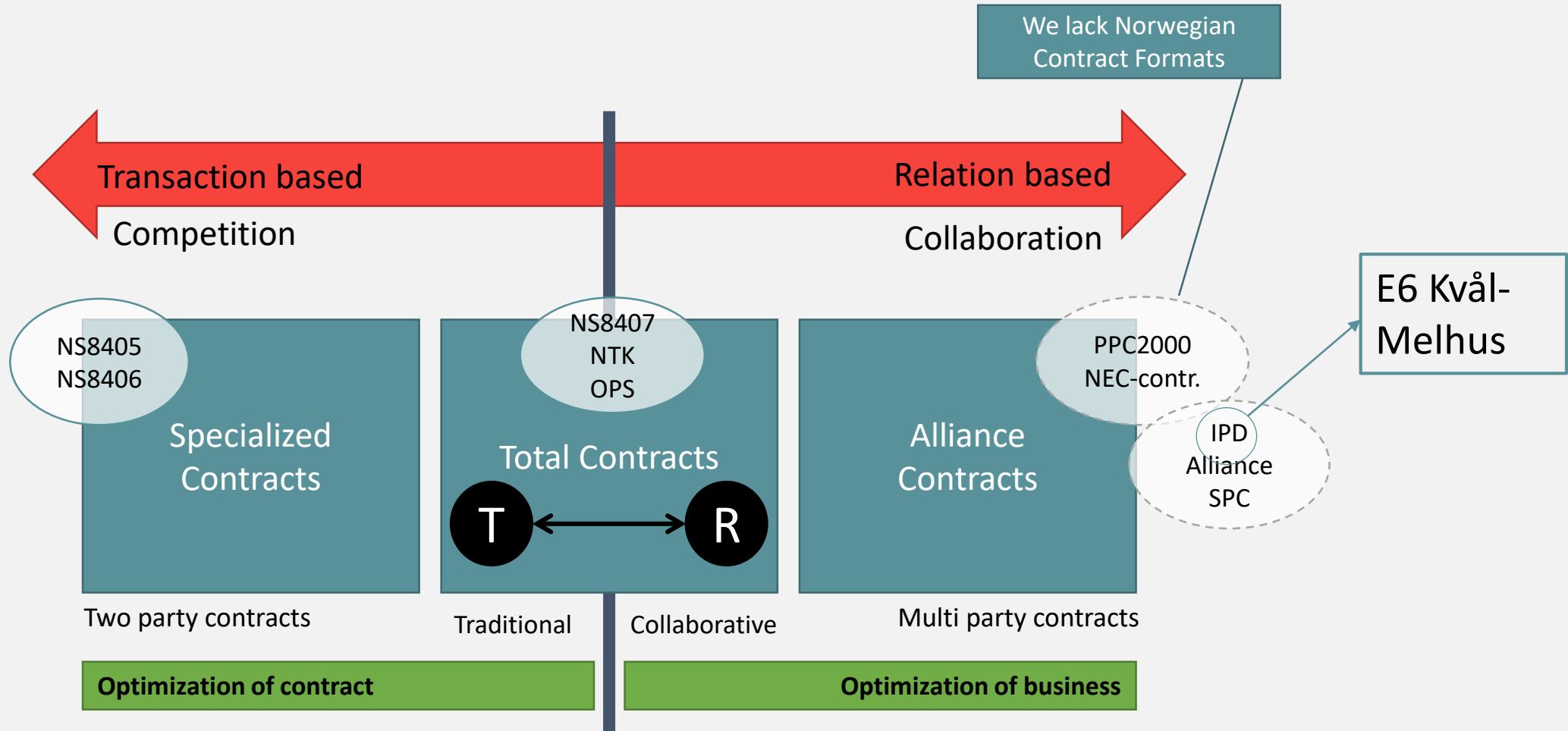


**DIGITALIZATION**

- Revised and new Project models – Design & Build -
- BVP – Best Value Procurement – performance goals and risk focus
- Increase Project Value
- Strong focus and requirements to HSE and CSR
- Real collaboration



# New Map Characteristics



Kilde: Ole J. Klakegg, prof. NTNU  
Mod.: Johan Arnt Vatnan

# Contract strategy

- 6 Contracts
- Integrated collaboration – Integrated Project Delivery
- Phase 1
  - Optimization
  - Conceptual design
  - Revised or new zoning plans
- Phase 2
  - EPCC with 20 years guarantee (maintenace)

Entreprise	År 17	18	19	20	21	22	23	24	25	26	27	28
E6 Ranheim - Værnes												
E6 Kvithamar - Åsen												
E6 Kvål - Melhus S												
E6 Gyllan - Kvål												
E6 Korporalsbrua - Gyllan												
E6 Ulsberg - Vindåsliene												

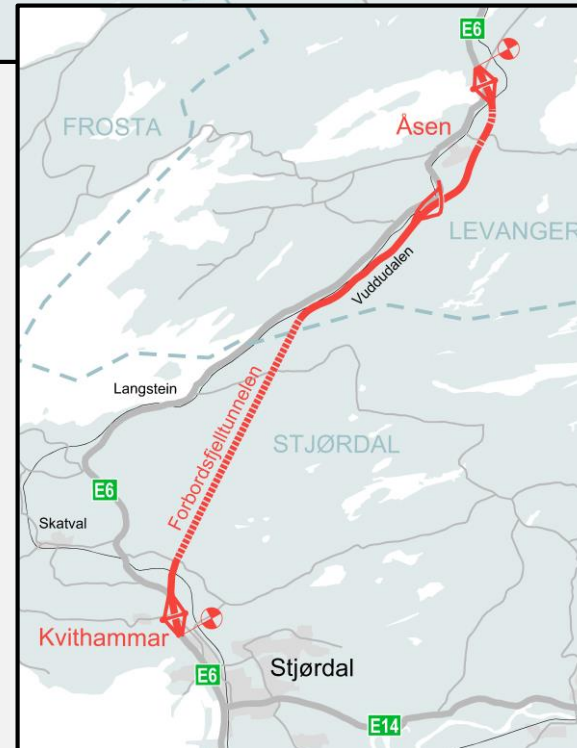
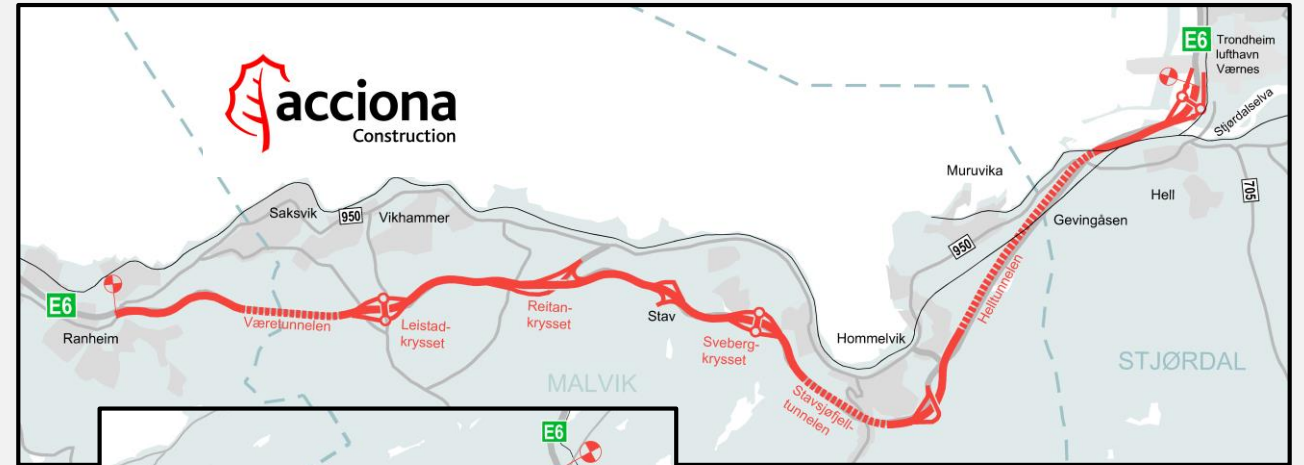
■ Planlegging- og samhandlingsfase  
■ Utbyggingsfase



# Contract strategy – E6 North



- 2 Contracts
- E6 Ranheim—Værnes
  - 23 km
  - Contract value approx. 4,0 bill NOK
  - Integrated Collaboration contract
  - Clarification phase
  - Planned contract date 28.09.18
  
- E6 Kvithammer—Åsen
  - 19 km
  - Contract value approx. 3,8 bill NOK
  - Integrated Collaboration contract
  - Start of prequalification phase
  - Planned contract date 16.05.19



# Contract strategy – E6 South

## Provisional

- 4 Contracts
- E6 Kvål—Melhus S
  - 7 km
  - Contract value approx. 0,6 bill NOK
  - **Integrated Project Delivery contract - IPD**
  - Prequalification phase
  - Planned contract date 03.01.19



# Contract strategy – E6 South

## Provisional

- 4 Contracts
- E6 Kvål—Melhus S
  - 7 km
  - Contract value approx. 0,6 bill NOK
  - **Integrated Project Delivery contract - IPD**
  - Prequalification phase
  - Planned contract date 03.01.19
- E6 Ulsberg—Vindåsliene
  - 25 km
  - Contract value approx. 2,6 bill NOK



# Contract strategy – E6 South

## Provisional

- 4 Contracts
- E6 Kvål—Melhus S
  - 7 km
  - Contract value approx. 0,6 bill NOK
  - **Integrated Project Delivery contract - IPD**
  - Prequalification phase
  - Planned contract date 03.01.19
- E6 Ulsberg—Vindåsliene
  - 25 km
  - Contract value approx. 2,6 bill NOK
- E6 Korporalsbrua—Gyllan
  - 15 km
  - Contract value approx. 2,1 bill NOK



# Contract strategy – E6 South

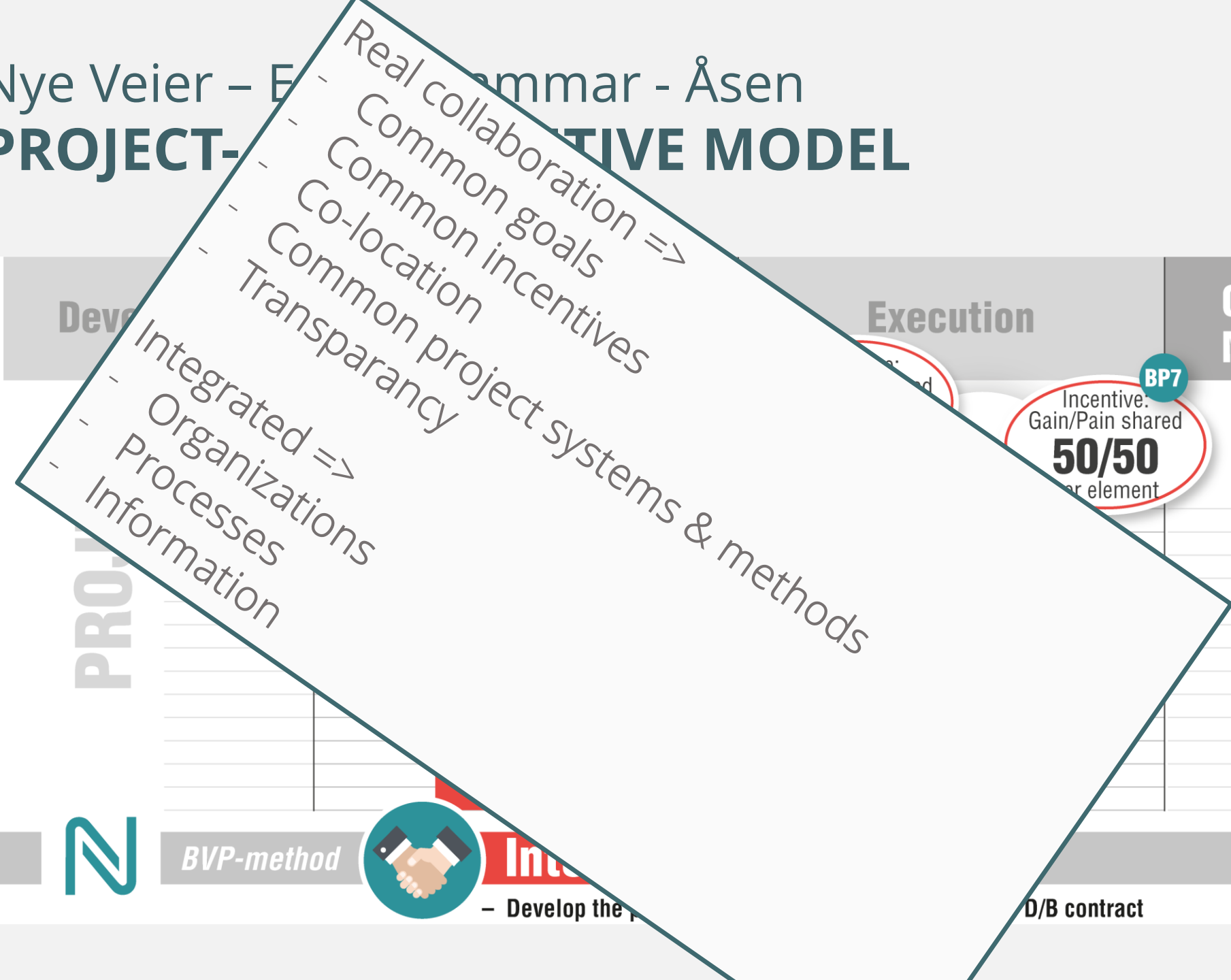
## Provisional

- 4 Contracts
- E6 Kvål—Melhus S
  - 7 km
  - Contract value approx. 0,6 bill NOK
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  - Prequalification phase
  - Planned contract date 03.01.19
- E6 Ulsberg—Vindåsliene
  - 25 km
  - Contract value approx. 2,6 bill NOK
- E6 Korporalsbrua—Gyllan
  - 15 km
  - Contract value approx. 2,1 bill NOK
- E6 Gyllan—Kvål
  - 17 km
  - Contract value approx. 3,3 bill NOK





# Nye Veier – E... ammar - Åsen PROJECT-... TIVE MODEL



Deve

Execution

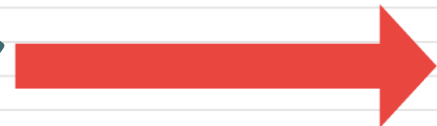
Operation and Maintenance

BP7

Incentive:  
Gain/Pain shared

**50/50**

per element



Guarantee



BVP-method



Inte

- Develop the

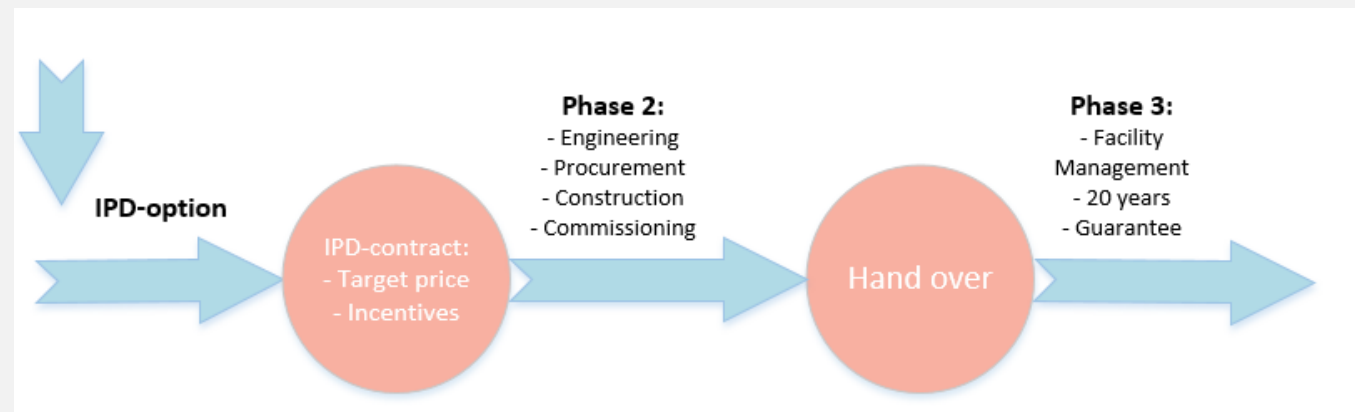
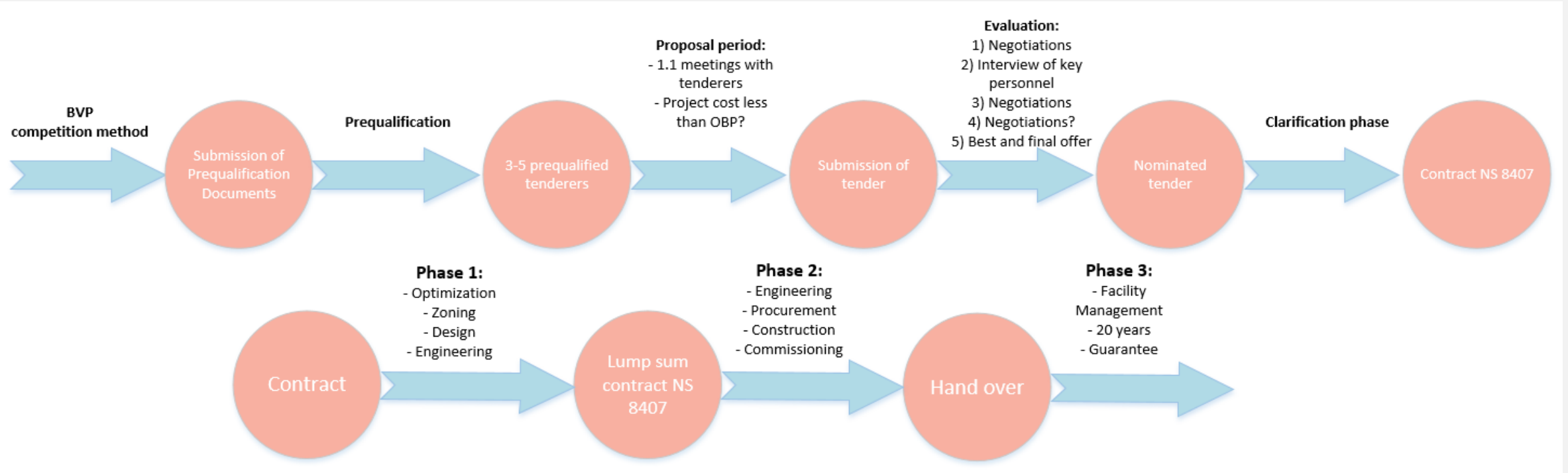
D/B contract

BP

= decision gate

# Project- and Execution Model – Integrated Collaboration

## E6 Kvithammer—Åsen

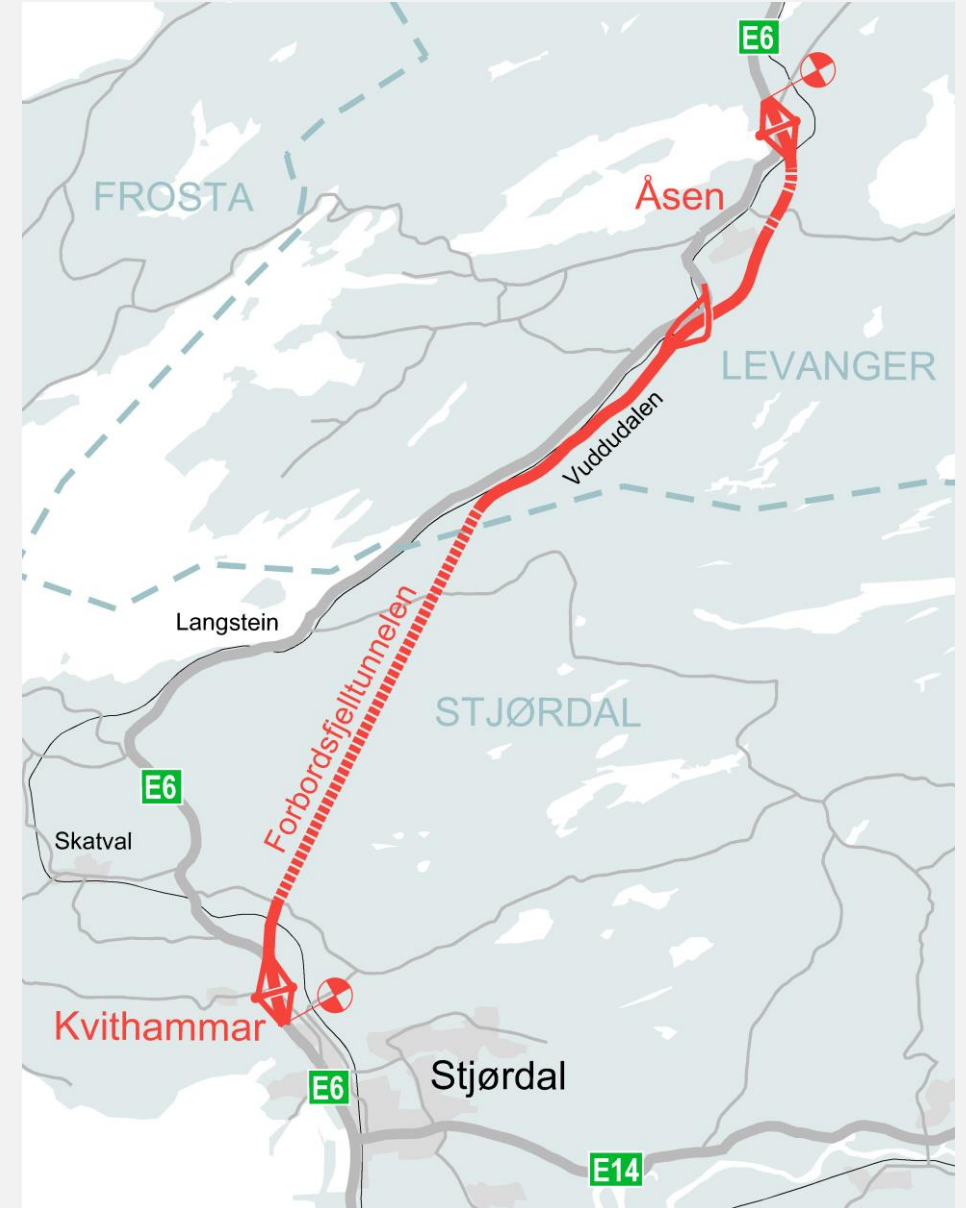


E6 Kvithammar-Åsen:

# Project Performance Goals – Execution



- Deliver on the goal of zero accidents and injuries during construction and operation phases, as well as ensuring a health promoting and fair working environment
- Minimize the construction and life time cost by the means of joint interaction and digitalization
- Minimize the inconvenience of all road users involved during construction and operation phases
- Minimize greenhouse gas emissions as well as other pollution to the environment
- Minimize temporary and permanent seizure of farmlands



# Overall schedule, E6 Kvithammar—Åsen



- Preannouncement: 12.06.18
- Deadline to join qualification: 20.08.18
- Announcement of qualification: 31.08.18
- **Deadline for qualification: 10.10.18**
- Selection of 3-5 Tenderers: 02.11.18
- Information meeting, start tender phase: 19.11.18
- **Deadline to deliver Tender: 08.02.19**
- Announcement of selected Tenderer: 26.03.19
- **Signing of contract: 16.05.19**
- Integrated collaboration and zoning plans: Q2-2019 to Q2-2020
- Mobilisation and physical start: Medio-2020
- Project completion: 2025/26

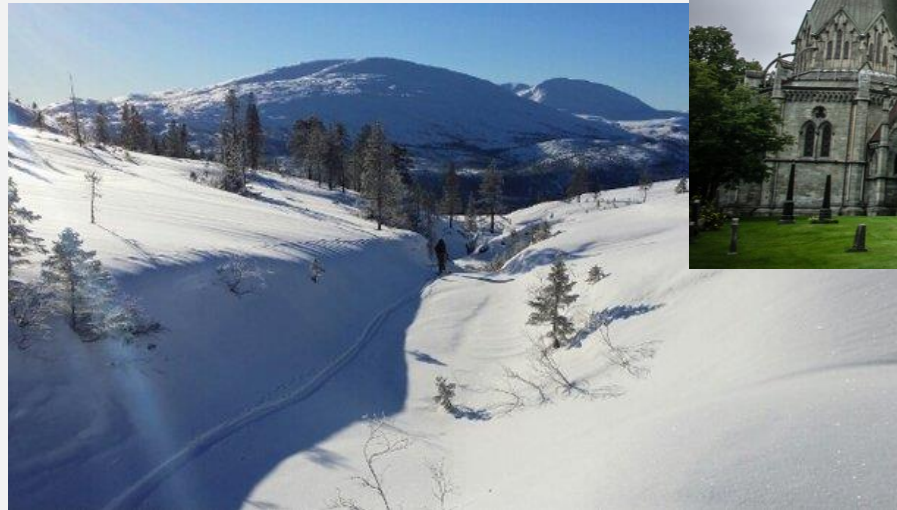
# Prosperous Trøndelag

- Cooperation
- Entrepreneurship
- Innovation
- Social and political stability
- Low crime
- Great nature



## Trondheim – leading city of:

- Technology and research
- Education
- Sports
- History
- Religion





NyeVeier

# Operating contract for roads including electrical and automation systems

---

*Tor Alf Høye, Field Manager Operation and Maintenance*

# Benefits of building roads



## **Traffic safety is the most important:**

- safe roads with lower accident costs

## **The benefit for road users:**

- shorter travel times
- lower travel costs

## **User-oriented road operation:**

- traffic safety, availability and conditions
- universal standard
- implementation of useful and necessary technology





# Road operation and safeguarding the benefits for road users



Nye Veier will

- **update** and **improve** the way we operate roads
- serve as a professional and innovative partner
- use the expertise in the market to develop effective road operation
- **assure** road users that we provide a safe and accessible road network with good regularity and a high availability



RENEWING

**Renewing** by challenging ourselves to take a fresh perspective



IMPROVING

**Improving** by bringing value to our work – every day



ASSURING

**Assuring** by guaranteeing that we take our social responsibility seriously

# Opening of four-lane motorway\*

2019



2020



2021



2022



\*accumulated

Technical  
UPS, SRO

Bridge:  
- concrete  
- steel  
- wood

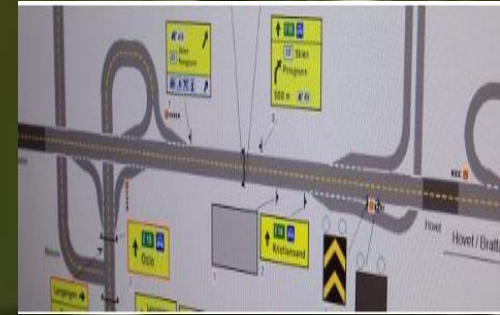
Tunnel:  
- mountain rock  
- emergency equipment  
- fans, lights  
- camera  
- control  
- Co, Nox, visibility  
- DAB, public safety network

Tunnel  
washing

Wall

Anti-erosion  
measures

Fencing



VTS - NPRA  
traffic  
management

Noise barriers

Road  
lighting

Grass,  
flowers

Bushes,  
trees

Signage,  
warnings,  
free text

Rock scaling

Rock flushing

Counting sensors

Climate station  
sensors

**Emergencies:**  
▪ roads 24/7  
▪ electro 24/7  
▪ Nye Veier 24/7

Guarantees  
Operation summer  
winter

Electro OM  
Maintenance

Renovation equipment

Management

(property, neighbours, TS,  
dust, noise, advertising,  
environment...)

Asphalt  
lane 3/4

Asphalt

Marking

Drainage  
ducts



Roadwork  
signage

Traffic damage  
TFF/insurance

Overnight  
stopping  
places

Edge-  
trimming

Vegetation

Crash  
buffers

Winter  
operation

Drains

Cleaning

Manholes

Ditches

Piping

Drainage

Bus lay-bys  
Rest stops

Settling  
basins

# Objectives – operating contract

- efficient operation
- developing road operation in Norway

Nye Veier will prioritise:

- major national contractors
- effective and innovative development of operating processes, tools and methods
- contractors at the forefront of road operation development in Norway
- contractors with a high level of technical expertise
- targeted maintenance



Semcon og Øveraasen, Avinors prosjekt Yeti Snow Technology

# Scope of operating contract

The operating contract covers stretches to be completed by 2022.

7 stretches:

- E6 Kvål – Melhus S 6.9 km
- E6 Arnkvern – Moelv 24.0 km
- E6 Kolomoen – Arnkvern 19.0 km
- E18 Rugtvedt – Dørdal 17.0 km
- E18 Tvedestrand – Arendal 23.0 km
- E39 Kristiansand V – Mandal Ø 19.0 km
- E39 Mandal Ø – Mandal town 7.0 km

Total 116 km.



# Scope of operating contract



- road operation including electrical and automation systems (support NRPA to achieve highest possible availability)
- operation of the main roads E6, E18 and E39
- to a small extent access roads, footpaths and cycle paths, service facilities
- primary stretches to be put into operation by the end of 2022
- emergencies 24/7 - 365



# Scope of operating contract

Overarching functional requirements & simplified description based on

- Manual R610 standard for operation and maintenance
- Manual R763 template for operating contracts - roads and electro-technical installations
- the desire to increase the contractor's freedom to suggest good solutions
- simplifying the documentation to be supplied by the operating contractor
- sharing efficiency gains
- developing and improving Nye Veier's systems and procedures



# Timetable



- Competition to be announced **by December 2018**
- Preferred contractor to be selected **by April 2019**
- Ready to start operation **October 2019**
- The contract will have a duration of **5 years + option for extension.**
- The short-term strategy will be revised and later form the basis for a long-term contract strategy for the operation of the entire portfolio



E18 Grimstad - Kristiansand

**Agderposten**



# What does operation entail

## Operation:

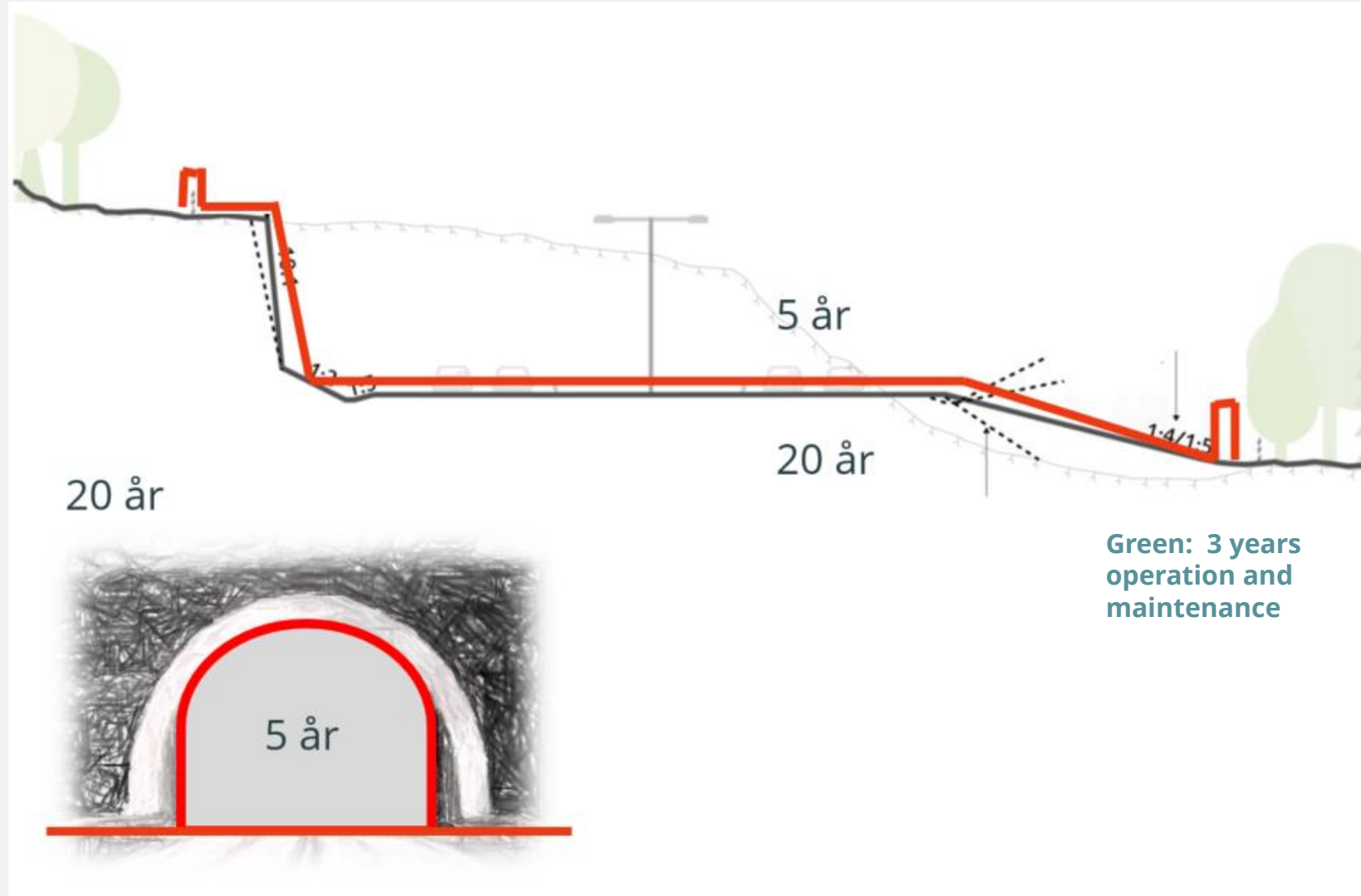
- Typical activities:
  - snow clearing
  - salting and sand application
  - washing and cleaning
  - erecting signs
  - landscaping of green areas
  - preventive measures
  - call-outs
  - and more
- Operation includes the operation of
  - electro-technical equipment

## Maintenance and guarantee:

- This is part of the design and build contracts and not included in the operating contract.



# Guarantee periods



# Competition and pricing

- Several factors in addition to price will be considered, e.g.:
  - understanding of the task
  - quality in terms of expertise and capacity
  - call-out capability
- target price and shared risk
- bonus and discount arrangements
- innovation resources
- partnership and cooperation
- the agreement will serve as a pilot for future operation contracts
- procurement with negotiation
- potential collaboration with other contractors



# 13.15 - 15.00 Arrangement for operation and maintenance



## Agenda

- introduction and targets for development of operation in Nye Veier
- form of competition and contract
- structure and content of technical description
- price and incentive model
- conclusion and Questback survey

**Bye for now!**

Nye Veier arrangerer leverandørkonferanse på Radisson Blu Plaza Hotel i Oslo 12. september 2018.



[Click here for english edition](#)

Nye Veiers kommende prosjekter skal presenteres for entreprenørselskaper, større underleverandører og rådgivere. Det vil i tillegg bli muligheter for samtaler og møter med sentrale medarbeidere i prosjektene. Drift og vedlikehold vil også være et sentralt tema, og vil bli grundig presentert i en egen sesjon.

Arrangementet vil være beregnet for et internasjonalt leverandørmarked.

### Tentativt program:

08.30 - 09.00 Registrering, kaffe og mingling

09.00 - 09.30 **Velkommen til leverandørkonferanse.** Adm. direktør Ingrid Dahl Hovland

09.30 - 10.00 **Slå opplever vi Nye Veier som byggherre** (ekstern foredrag)

10.00 - 12.00 **Nye Veiers kommende prosjekter.** Nye Veiers prosjektdirektører

12.00 - 12.30 **Konkurranse for drift og vedlikehold**

12.30 - 13.00 **Slå gjør Nye Veier sine anskaffelser.** Direktør for kontrakt og anskaffelser, Bjørn Børseth

13.00 - Muligheter for samtaler med prosjektene - eget arr. for Drift og vedlikehold

13.15 - 15.00 **Eget arrangement for drift og vedlikehold**

*Nye veier inviterer interesserte driftsaktører til dialog om en landsdekkende driftskontrakt for vei og elektro.*

*Vi vil presentere driftstrategi og konkrete forslag til form, innhold og risikodeling i driftskontrakten.*

*Vi ønsker tilbakemeldinger i eller rett etter møtet.*

- Agenda:**
- Introduksjon og mål for utvikling av drift i Nye veier.
  - Konkurranse- og kontraktsform
  - Struktur og innhold i teknisk beskrivelse
  - Pris- og insentivmodell
  - Avslutning



NyeVeier

# Procurement in Nye Veier

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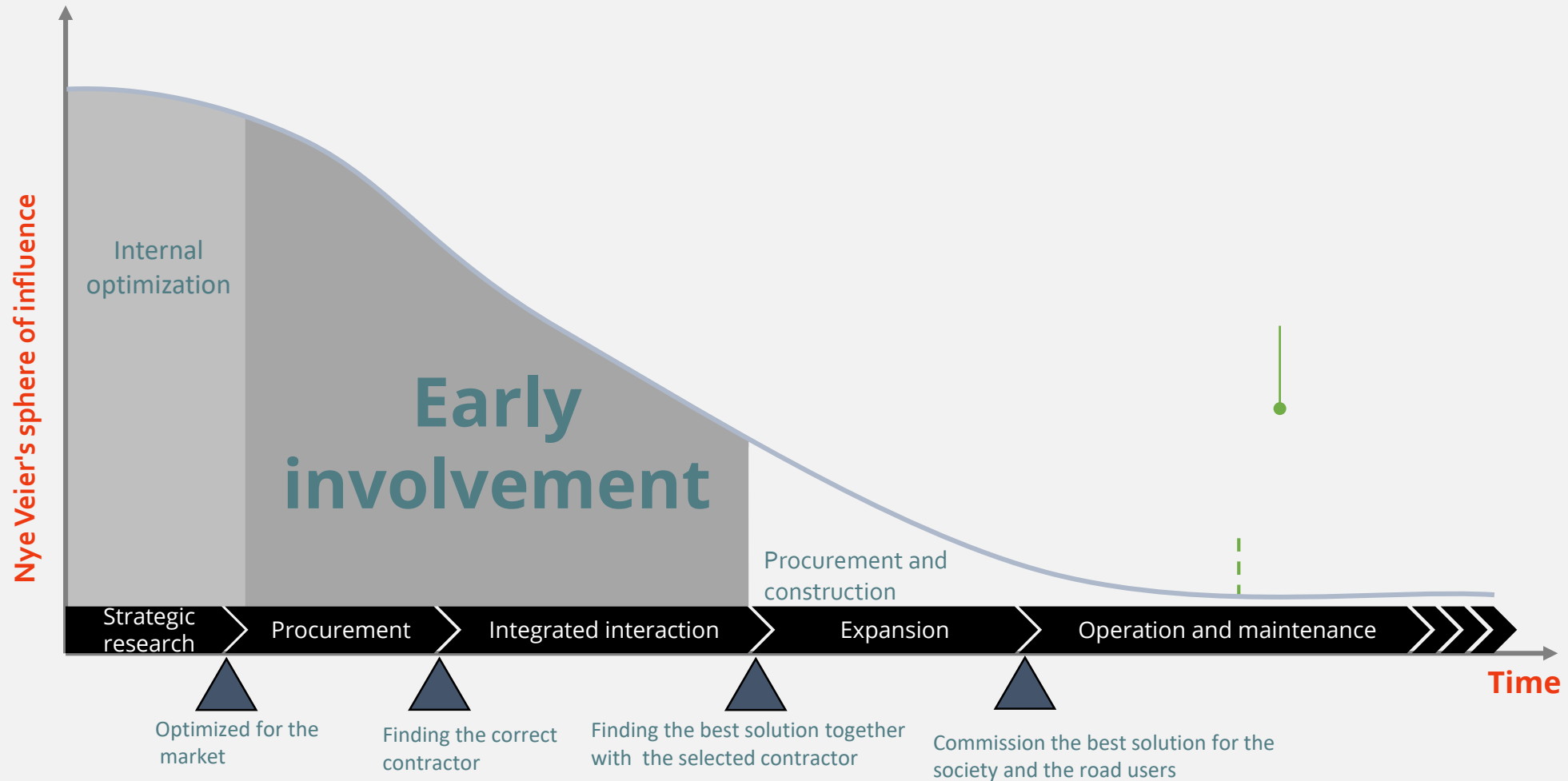
*Bjørn Børseth – Director of contract og procurement*

# Nye Veier prefer professional suppliers



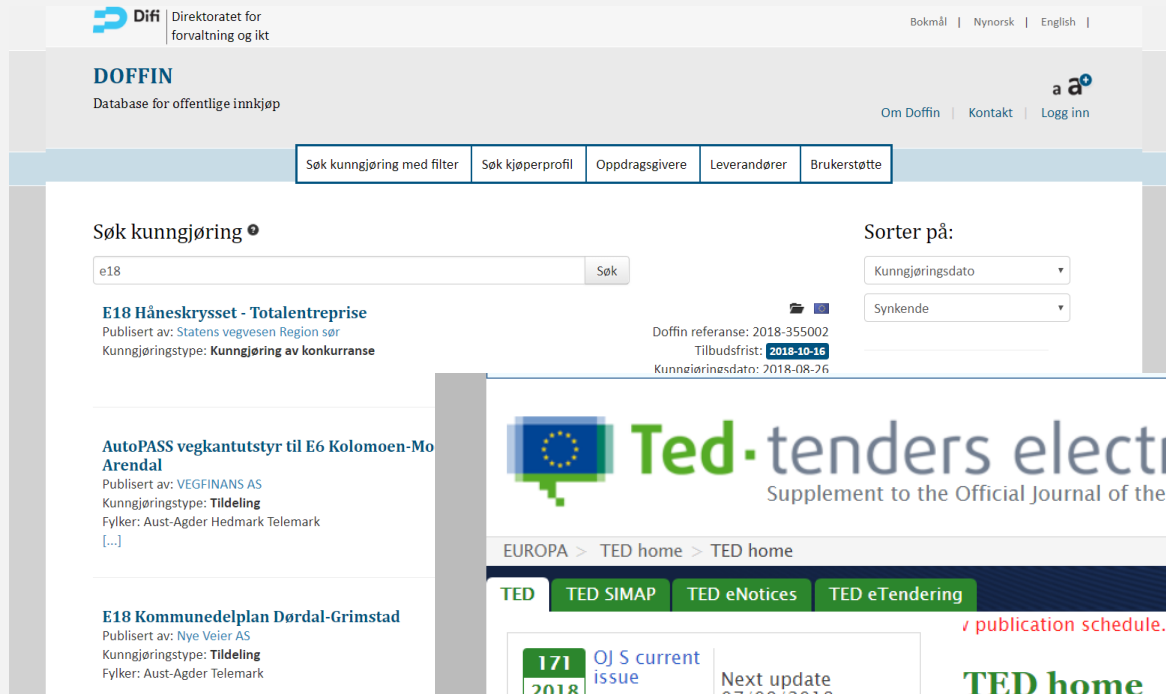
- Professional suppliers to Nye Veier:
  - Able to qualify for the current job/delivery.
  - Able to compete on equal terms with its competitors.
  - Able to bring out its strengths in the tender.
  - Contributes to reduce Nye Veiers risks through preventive measures.
  - Ability to cooperate with Nye Veier to achieve the goals of the project.
  - Ability to carry out the deliveries with high quality, at the right time and at the agreed price.
  - Provides feedback on improvements.

# Nye Veier involves suppliers early





# Competitions are announced on Doffin and TED simultaneously



**Doffin** | Direktoratet for forvaltning og ikt

Bokmål | Nynorsk | English

**DOFFIN**  
Database for offentlige innkjøp

Om Doffin | Kontakt | Logg inn

Søk kunnngjøring med filter | Søk kjøperprofil | Oppdragsgivere | Leverandører | Brukerstøtte

Søk kunnngjøring

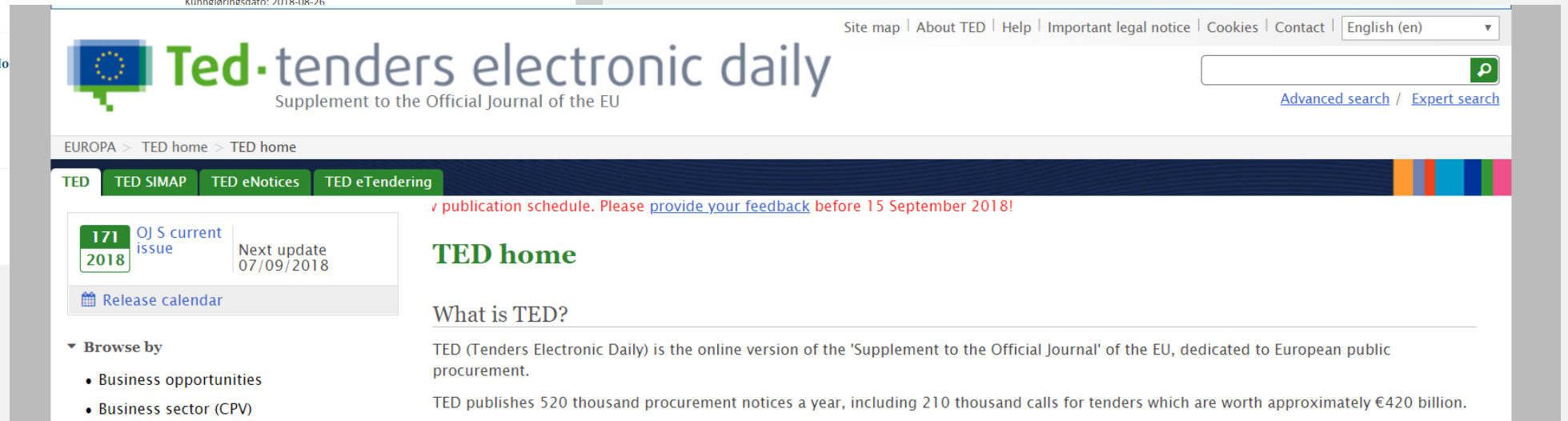
e18

Sorter på:  
Kunnngjøringsdato  
Synkende


**E18 Håneskrysset - Totalentreprise**  
Publisert av: Statens vegvesen Region sør  
Kunnngjøringstype: **Kunnngjøring av konkurranse**  
Doffin referanse: 2018-355002  
Tilbudsfrist: **2018-10-16**  
Kunngjøringsdato: 2018-08-26

**AutoPASS vegkantutstyr til E6 Kolomoen-Mo Arendal**  
Publisert av: VEGFINANS AS  
Kunnngjøringstype: **Tildeling**  
Fylker: Aust-Agder Hedmark Telemark  
[...]

**E18 Kommunedelplan Dørdal-Grimstad**  
Publisert av: Nye Veier AS  
Kunnngjøringstype: **Tildeling**  
Fylker: Aust-Agder Telemark



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 **Ted-tenders electronic daily**  
Supplement to the Official Journal of the EU

EUROPA > TED home > TED home

TED | TED SIMAP | TED eNotices | TED eTendering

171 OJ S current issue 2018  
Next update 07/09/2018  
[Release calendar](#)

! publication schedule. Please [provide your feedback](#) before 15 September 2018!

## TED home

### What is TED?

TED (Tenders Electronic Daily) is the online version of the 'Supplement to the Official Journal' of the EU, dedicated to European public procurement.

TED publishes 520 thousand procurement notices a year, including 210 thousand calls for tenders which are worth approximately €420 billion.

▼ Browse by

- Business opportunities
- Business sector (CPV)

# All competitions are carried out in the KGV system



**NyeVeier**

**Kundelogin**

Brukernavn

Passord

Log in

Tilbakestill passord eller finn ditt brukernavn?

- Offentlige kunngjøringer
- Ny leverandør? Registrer online
- Cookies
- Planned downtimes

**Nye Veier**  
Tangen 76  
4608 Kristiansand

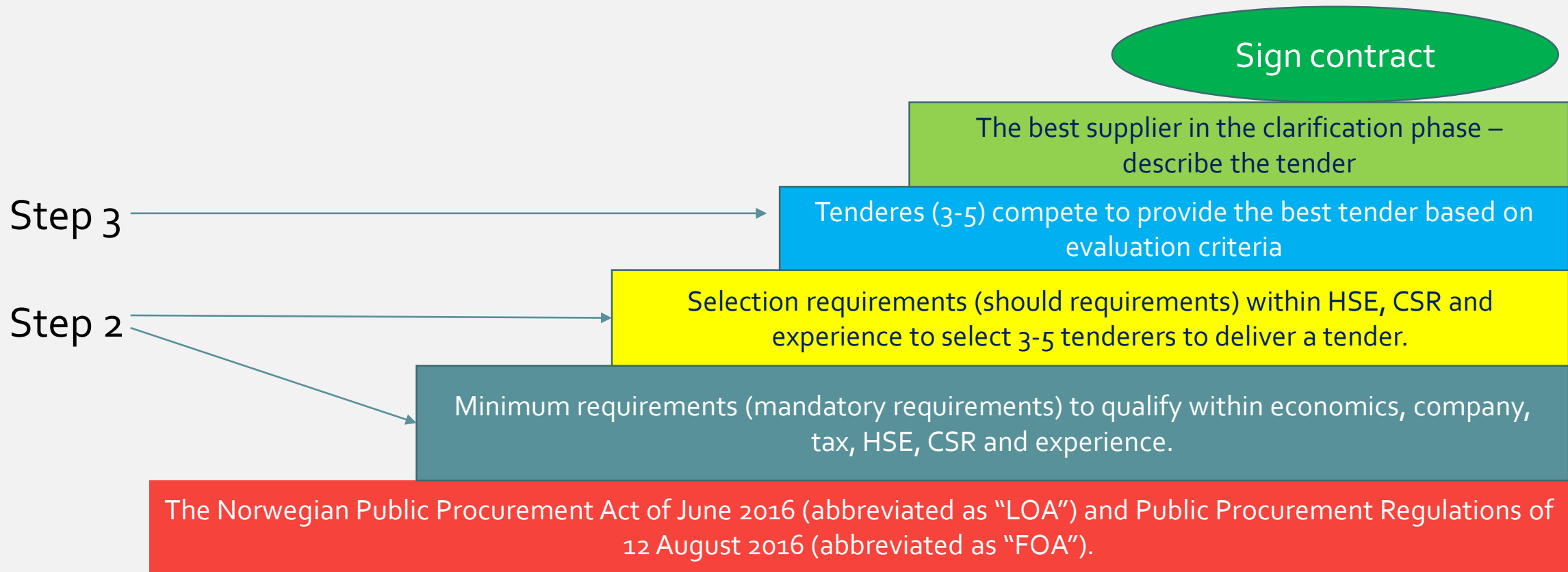
Trenger du teknisk support?  
E-post: [kgv@eu-supply.com](mailto:kgv@eu-supply.com)  
Telefon: +47 23 96 00 10

Electronic access to documents, requirements and evaluation methods.

Contracts are signed in the same system.

<https://eu.eu-supply.com/login.asp?B=NYEVEIER>

# The connection between requirements and supplier selection



# Step 2 - Application for qualification in CTM



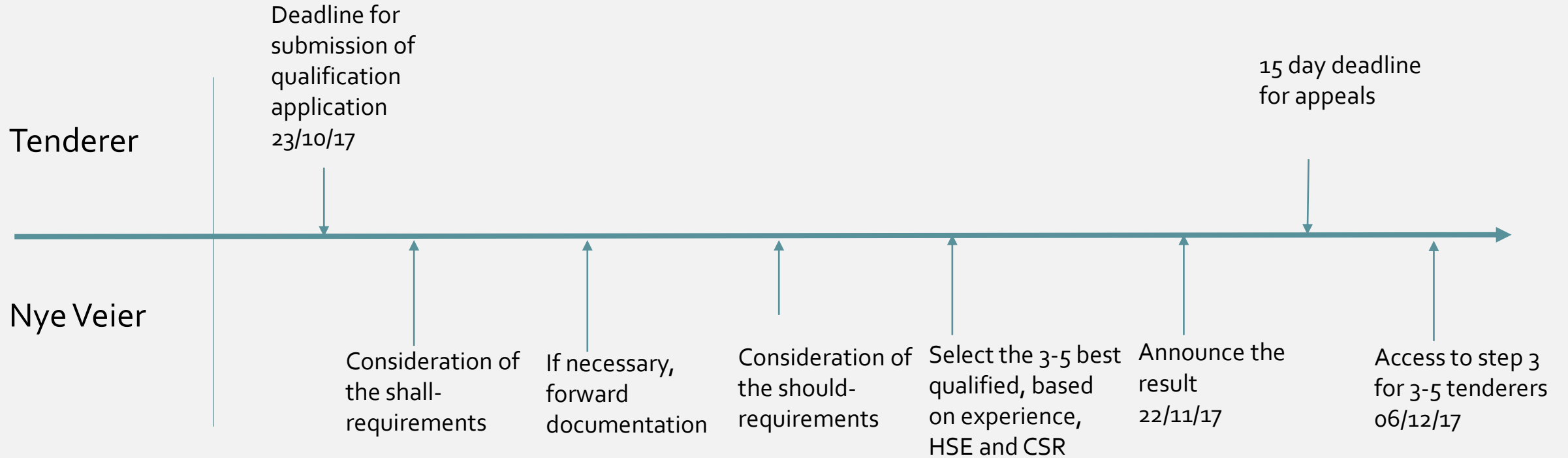
- All requirements are found in CTM (EU Supply)
- Shall-requirements must be fulfilled in order to qualify
- Should-requirements are assigned points, and contributes to distinguish the 3-5 best to step 3 – tender process

The screenshot shows the NVE VEIER portal interface for RFT 163240 - E39 Kristiansand vest - Mandal øst. The page is titled 'RFT 163240 - E39 Kristiansand vest - Mandal øst' and includes a navigation bar with 'Administration', 'Camilla', 'Help', and 'Log out' options. The main content area is divided into several sections:

- Instructions:** A section with a red warning box stating 'Quotation not submitted (Scroll down to submit)'. Below this, there is a 'Time left: 713:58:05' indicator.
- Submit quotation:** A section with a red warning box stating 'Please allow some time for sending of your quotation'. Below this, there is a 'Detailed instructions' button.
- Submit with a digital signature:** A section with a blue box stating 'Submit with a digital signature: In this particular RFT the buyer has requested you to sign your response using a digital signature. When you click on the Submit response button you will be able to choose between different options for signing. You can choose between Danish Nem ID, Norwegian Bank ID or a certificate installed locally on your computer. For the certificate installed on your computer you must use Internet Explorer as a web browser.'
- Submit without a digital signature:** A section with a blue box stating 'If you do not have a certificate installed on your computer you can still submit by select the option 'Sign without a digital signature'. After verifying with your username and password, you must print, sign and scan the authentication letter and send it through the messaging tool to the buyer before ETQ. Please note that some buyers may deviate from this, see the invitation letter or the documentation for additional information.'
- Navigation:** A row of tabs: RFT, Qual, RFQ, Contracts, Messaging, Audit trail.
- RFT Details:** A table with the following data:

RFT	Dates	(CET)
	Deadline of clarification questions	17/10/2017 12:00
	ETQ	23/10/2017 12:00
	Validity of tender	28/07/2018 12:00
	Planned award date	06/04/2018 12:00
- My response:** A section with a blue box stating 'E39 Kristiansand vest - Mandal øst'. Below this, there is a 'Qualification questions' section with '0 of 79 question(s) answered' and buttons for 'Assign sections...' and 'Answer questions...'. There is also an 'Additional quotation documents' section with '0 document(s) attached in this section' and an 'Attach documents...' button.
- Progress:** A section with a 'Percent complete' bar and a 'Totals' section. The 'Totals' section includes:
  - 'At least one requirement not met!' (45)
  - 'No document attached to question with mandatory document attachment. Click on "Answer questions" an look for a red folder icon to the right of the question.'
  - 'Number of not answered mandatory requirements' (3)
  - 'Mandatory requirement(s) NOT met!' (3)
- Buttons:** At the bottom, there are three buttons: 'View/Print response form', 'Cancel expression of interest', and 'Submit quotation'.

# Example of qualification schedule for step 3



# Criteria for selection of tenderers to step 3 – tender process



- Evaluation of the should requirements will be based on the following weighting:

## 1. Relevance of reference projects – 60 % weighting

- a) Documentation in response to the should requirements in KGV regarding construction reference projects – 80 % weighting (out of 60 %)
- b) Documentation in response to the should requirements in KGV regarding engineering reference projects – 20 % weighting (out of 60 %)

## 2. HSEQ – 20% weighting

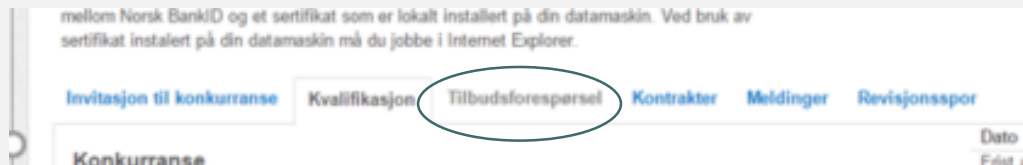
- a) Documentation in response to the should requirements in KGV regarding HSEQ reference projects (less question 2) – 50 % weighting (out of 20%)
- b) Documentation in response to the should requirements in KGV related to HSEQ – 30 % weighting (out of 20%)
- c) Documentation in response to the should requirements in KGV related to H2 og F values – 20 % weighting (out of 20%)

## 3. CSR – 20% weighting

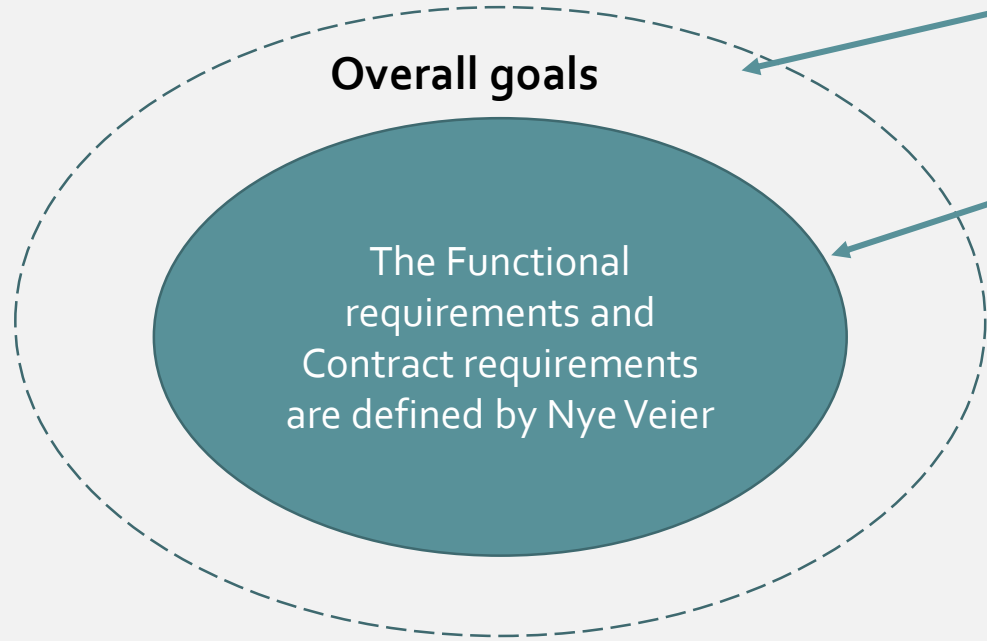
- a) Documentation in response to the should requirements in KGV regarding HSEQ/ CSR reference projects (question 2) – 50 % weighting (out of 20%)
- b) Documentation in response to the should requirements in KGV regarding CSR – 50% weighting (out of 20%)

# Step 3 – Tender process

- 3-5 contractors selected as the best qualified under step 2- qualification – will be invited to submit a tender.
- CTM system are opened for these 3-5 – Tender can be submitted



# Basic conditions



Those invited to submit tender are pre-qualified to complete the project.

We expect that all invited can deliver according to the functional requirements, and that they will comply with the contract requirements.

# Tender documentation

KAPITTEL A	KAPITTEL B Konkurranseregler	KAPITTEL C Kontraks- bestemmelser	KAPITTEL D Beskrivende del
A1 Oversikt over konkurranseregler	B1 Konkurranseregler	C1 Alminnelige kontraks- bestemmelser	D0 Innledning og dokumentliste
		C2 Spesielle kontraks- bestemmelser	D1_1 Beskrivelse og mengdefortegnelse
		C2_1 Milepæler	D1_2 Krav til prosjektering og utførelse
		C3 Spesielle kontraks- bestemmelser om HMS	D2 Tegninger og dokumentasjon
		C4 Spesielle kontraks- bestemmelser om samfunnsansvar	
		C5 Skjemaer	
		C6 Avtaledokumentet	

Fellesforbundet    Høgskolen i Buskerud    bnlj    difi    KS

**Seriøsitetsskrav**

Seriousity requirements are included in the contractual requirements



# The project's overall goals are stated in chapter B1 – section 1



## 1 THE PROJECT'S OVERALL PERFORMANCE GOALS

The project has the following overall objectives:

- Minimize disadvantages for all road user groups in the construction and operating period
- Realising an innovative and future-oriented road project
- Realising the goal of an injury and accident-free construction period
- Minimising the pressures on the external environment in the construction and operating period and adding value for the future
- No unsettled disputes upon completion

It is very important to focus on the goals, and how you can contribute to achieve them

## CONTENTS

1	THE PROJECT'S OVERALL PERFORMANCE GOALS.....	3
2	GENERAL COMPETITION RULES .....	3
3	RESERVATIONS REGARDING BUDGET ALLOCATION/FUNDING.....	3
4	LANGUAGE REQUIREMENTS AND COMMUNICATION.....	3
5	INFORMATION MEETING AND INDIVIDUAL MEETINGS .....	4
6	CONFIDENTIALITY AND PUBLIC ACCESS .....	4
7	REVIEW OF THE TENDER DOCUMENTS IN STEP 3 .....	4
8	EARLY PHASE DELIVERIES .....	5
9	SUBMISSION OF BIDS.....	5
10	DEVIATIONS AND RESERVATIONS.....	5
11	TENDER OUTLINE - EXPIRATION OF THE TENDER ACCEPTANCE PERIOD - DOCUMENTATION OF THE AWARDING CRITERIA .....	5
12	AWARDING CRITERIA .....	7
14	REJECTION OF TENDERS.....	13
16	THE CLARIFICATION PHASE.....	13
17	COMPENSATION FOR PARTICIPATION IN THE TENDER.....	14
18	THE TENTATIVE SCHEDULE FOR CONDUCTING THE TENDER COMPETION .	14

# The tender's content

- **Evaluation criteria:**
  - T – Tender amount – complete price form in EU Supply
  - K1 – Level of Expertise– maximum 2 pages (template)
  - K2 – Risk assessment – maximum 2 pages (template)
  - K3 – Value Added– maximum 2 pages (template)
  - K4 – Interview of key personnel – CVs – everything has to be entered in the CV template
- **Other deliveries:**
  - 2 progress plans (clarification phase and execution phase)
  - Billing plan
- **Deviations and reservations:**
  - Any deviations and/or reservations must be stated in a separate template – all fields must be completed
  - Substantial deviations and reservations could lead to rejection.

Svarbrev		
Poengsum		Vekt
	<b>K1 - Prestasjonsbegrunnelse 25%</b>	1 kravkriterier å besvare Vekt 25.00 %
1	Totalentreprenør skal bruke mal for prestasjonsbegrunnelse vedlagt kapittel B i EU Supply. Maksimum 2 A4 sider. Ingen henvisninger til totalentreprenøren eller dens underleverandører skal oppgis i svaret. Firmanavn eller logo skal heller ikke være med i svaret. For utdypende informasjon se Kapittel B punkt 13.3 <input type="radio"/> Prestasjonsbegrunnelse er vedlagt	
	<b>K2 - Risikovurdering 15%</b>	1 kravkriterier å besvare Vekt 15.00 %
2	Totalentreprenør skal bruke mal for risikovurdering vedlagt kapittel B i EU Supply. Maksimum 2 A4 sider. Ingen henvisninger til totalentreprenøren eller dens underleverandører skal oppgis i svaret. Firmanavn eller logo skal heller ikke være med i svaret. For utdypende informasjon se Kapittel B punkt 13.4 <input type="radio"/> Risikovurderingsplan er vedlagt	
	<b>K3 - Tilleggsverdi 10%</b>	1 kravkriterier å besvare Vekt 10.00 %
3	Totalentreprenør skal bruke mal for tilleggsverdi er vedlagt kapittel B i EU Supply. Maksimum 2 A4 sider. Ingen henvisninger til totalentreprenøren eller dens underleverandører skal oppgis i svaret. Firmanavn eller logo skal heller ikke være med i svaret. For utdypende informasjon se Kapittel B punkt 13.5 <input type="radio"/> Tilleggsverdi er vedlagt	
	<b>K4 - Kompetanse og erfaring nøkkelpersoner 25%</b>	1 kravkriterier å besvare Vekt 25.00 %
4	a) Utfyll CV-mal (bruk vedlagt mal i EU Supply) for alle nøkkelpersoner (beskrevet i Kapittel C2 punkt 10.4). Fyll ut alle feltet i CV malen. Evalueringen vil omfatte de utpekte nøkkelpersonene, og vil bli gjennomført i forbindelse med intervjuene. b) Organisasjonskart for prosjektorganisasjonen som beskriver plassering av nøkkelpersonell og hvilke selskaper disse er ansatt i. Denne delen inngår ikke i evaluering. <input type="radio"/> CV'er på nøkkelpersoner og organisasjonskart er vedlagt	
	<b>Øvrige leveranser</b>	2 kravkriterier å besvare
5	Det skal utarbeides to fremdriftsplaner, en fremdriftsplan for konkretiseringsfasen og en fremdriftsplan for utbyggingsfasen. Fremdriftsplanen for utbyggingsfasen skal utarbeides på et overordnet nivå som viser at totalentreprenøren er i stand til å gjennomføre kontraktarbeidet til avtalt ferdigstillelsesdato 1 oktober 2021 og med delåpningstider slik dette fremgår av kapittel C2. <input type="radio"/> Fremdriftsplan er vedlagt	
6	Totalentreprenøren skal levere en faktureringsplan for utbyggingsfasen og en for en eventuell vedlikeholdsperiode. Byggherreforbeholder seg retten til å kunne overstyre faktureringsplanen. <input type="radio"/> Faktureringsplan er vedlagt	
	<b>Forbehold</b>	1 kravkriterier å besvare
7	Alle forbehold skal oppgis i vedlagte mal under Forbehold. Totalentreprenøren skal bekrefte at alle øvrige krav i konkurransegrunnlaget vil bli oppfylt. <input type="checkbox"/> Vi har ingen forbehold og bekrefter at alle krav i konkurransegrunnlaget vil bli oppfylt <input type="checkbox"/> Vi har forbehold i iht vedlegg	

# The tenders 6 pages



**NyeVeier** TEMPLATE FOR PERFORMANCE DOCUMENT

<b>Claim 1</b>	2 pages of what to do for achieving goals – and why with dominant information.
Substantiate the claim with measurable performance information	
<b>Claim 2</b>	
Substantiate the claim with	

- Specific and Measurable assertions
- Ambitious
- Realistic because they are attainable
- Time bound to this project

<b>Added value 1*</b>	
How will this value-adding measure contribute to achieving the project's overall performance goals and/ or the contract work?	2 pages of added value
<u>Substantiation</u>	
<u>Consequences for cost</u>	
<u>Consequences for time</u>	
<b>Added value 2</b>	

**NyeVeier** TEMPLATE FOR RISK ASSESMENT

<b>Risk 1</b>	
Why is this considered a risk?	
Identify preventive measures (cost must be included in the BMP)	2 pages of the most important risks for the client – and what will you do to reduce the risk
Document the effect of the proposed risk-reduction measures with persuasive dominant information	
Identify corrective and mitigating measures	
Identify costs for corrective and mitigating measures	
<b>Risiko 2</b>	

# Interview key personnel

- Up to 4 key personnel from each tenderer will be interviewed for about 1 hour (separate)
- An interviewer conduct the interviews
- The evaluation team evaluate the answers given during the interview (the interviewer don't participate in the evaluation team)
- The interviews are recorded and will be a part of the contract



Score	Evaluation
100	The expertise and experience of the key personnel contributes extremely well to the realisation of the project's overall performance goals and the contract work.
80	The expertise and experience of the key personnel contributes very well to the realisation of the project's overall performance goals and the contract work.
60	The expertise and experience of the key personnel contributes well to the realisation of the project's overall performance goals and the contract work.
40	The expertise and experience of the key personnel contributes little to the realisation of the project's overall performance goals and the contract work.
20	The expertise and experience of the key personnel contributes very little to the realisation of the project's overall performance goals and the contract work.
0	The expertise and experience of the key personnel does not contribute to the realisation of the project's overall performance goals and the contract work.

# Clarification phase

Progress	What happens?	Responsible
Right after selection of the tenderer	The Client checks the selected tenderer's statements in the tender	Client
No later than 2 weeks after selection of the tenderer	Information meeting about what is going to happen in the clarification phase. In this meeting, the tenderer shall describe how it intends to perform the start-up meeting. The Client provides necessary input	Client
No later than 1 week after the information meeting	Start-up meeting	Tenderer
4-6 weeks	The clarification phase	Tenderer
Allocation meeting	Clarify which documents are included in the contract and the structuring of these	Client



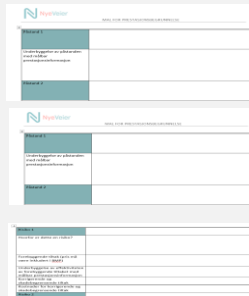
Completed when the contract is signed – provided that the parties are in agreement

# The difference between BVP og other tenders



BVP

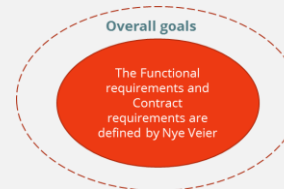
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2 pages

2 pages

2 pages



Best tenderer present its plan

Other

=



X4



Good luck – we are looking forward to your participation  
in our future competitions



NyeVeier