OCEAN SPACE FIELD LABORATORY

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Vice President Maritime, SINTEF Ocean

SINTEF

Nasjonal satsing på forskningsinfrastruktur (INFRASTRUKTUR)

Inntil 1 milliard kroner til forskningsinfrastruktur

Midlene som lyses ut skal gå til forskningsinfrastruktur av nasjonal viktighet, inkludert norsk deltakelse i internasjonal forskningsinfrastruktur. Utlysningen omfatter alle fag-, tema og teknologiområder.

Forskningsinfrastruktur **Velg ›**

Søknadsfrist: 12.10.2016 13:00 CEST

Meldinger:

- Utlysningen blir aktiv 31.08.16. Tekst kan bli endret fram til da.
- Vi inviterer til informasjonsmøte for nye søkere 2.9.2016. Mer informasjon om program for møtet og påmelding finnes på nettsidene til INFRASTRUKTUR (se lenke til Programmets hjemmeside til høyre)

Status: Gjennomført

Antatt tilgjengelige midler:
For denne utlysningen er det satt av en ramme på inntil 1 milliard kroner.

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Application areas

Subsea interventions and maritime transport

Biomarine production, fish farming and fisheries

Integrated environmental monitoring and forecasting

Infrastructure

Test area for autonomous interventions

Test area for autonomous ships

Test site for aquaculture

e-Infrastructure

OCEAN SPACE CENTRE

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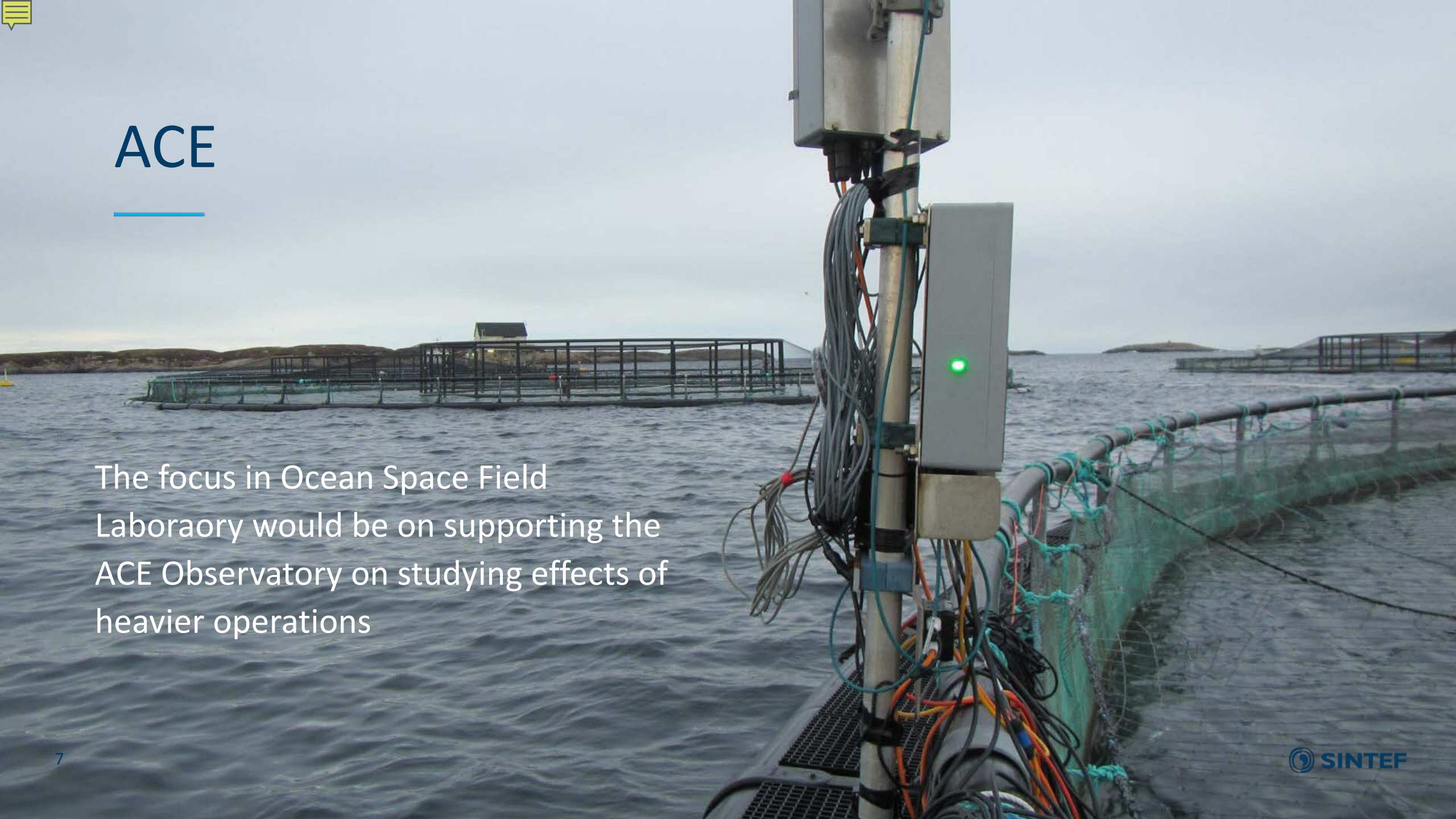
Partnere

Partners	Key personnel	Scientific and technological competence and expertise	Role and responsibilities
Academia			
SINTEF Fisheries and aquaculture	V. Johansen A. Fredheim	Fisheries, aquaculture, modelling	Project owner
SINTEF Materials and Chemistry	T. Aunaas S. Johnsen	Environmental technologies, metocean modelling	
SINTEF ICT	T.A. Reinen	Communication, data network, data management	WP4
MARINTEK	Ø.J. Rødseth K.E. Fjørtoft B. Kvamstad-Lervold	Unmanned ship, maritime communication, maritime data analysis	WP 4 – leader
NTNU	I. Schjølberg	Director NTNU Ocean	
SFF AMOS	A. Sørensen M. Ludvigsen	SFF AMOS management, autonomous underwater and systems and drones	Project coordinator Purchase
Industry			
Statoil	C. Collin-Hansen	Oil and gas	User panel Technology provider
Kongsberg Seatex	G. Ueland	Oil and gas, maritime, one of the initiative takers to "test area for autonomous ships in Trondheim fjord"	User panel Technology provider
Maritime Robotics	V.E. Hovstein	Surface and air autonomous systems, autonomous operations	User panel Owner of autonomous vessel, drones, operation centre
Authorities			
The Norwegian Coastal Administration	T. Langemyr	Coastal infrastructure administration, port and coast state rules and regulations	User panel
The Norwegian Maritime Authority	H. Gaaseide	Safety at sea, flag state rules and regulations	User panel
Other			
Trondheim Havn	E. Hjorthol	Port operations, port area administration	User panel

LoVe observatory

- The focus in Ocean Space Field Laboratory would be on supporting the LoVe Observatory on developing autonomy and dock-in solutions in the area

ACE

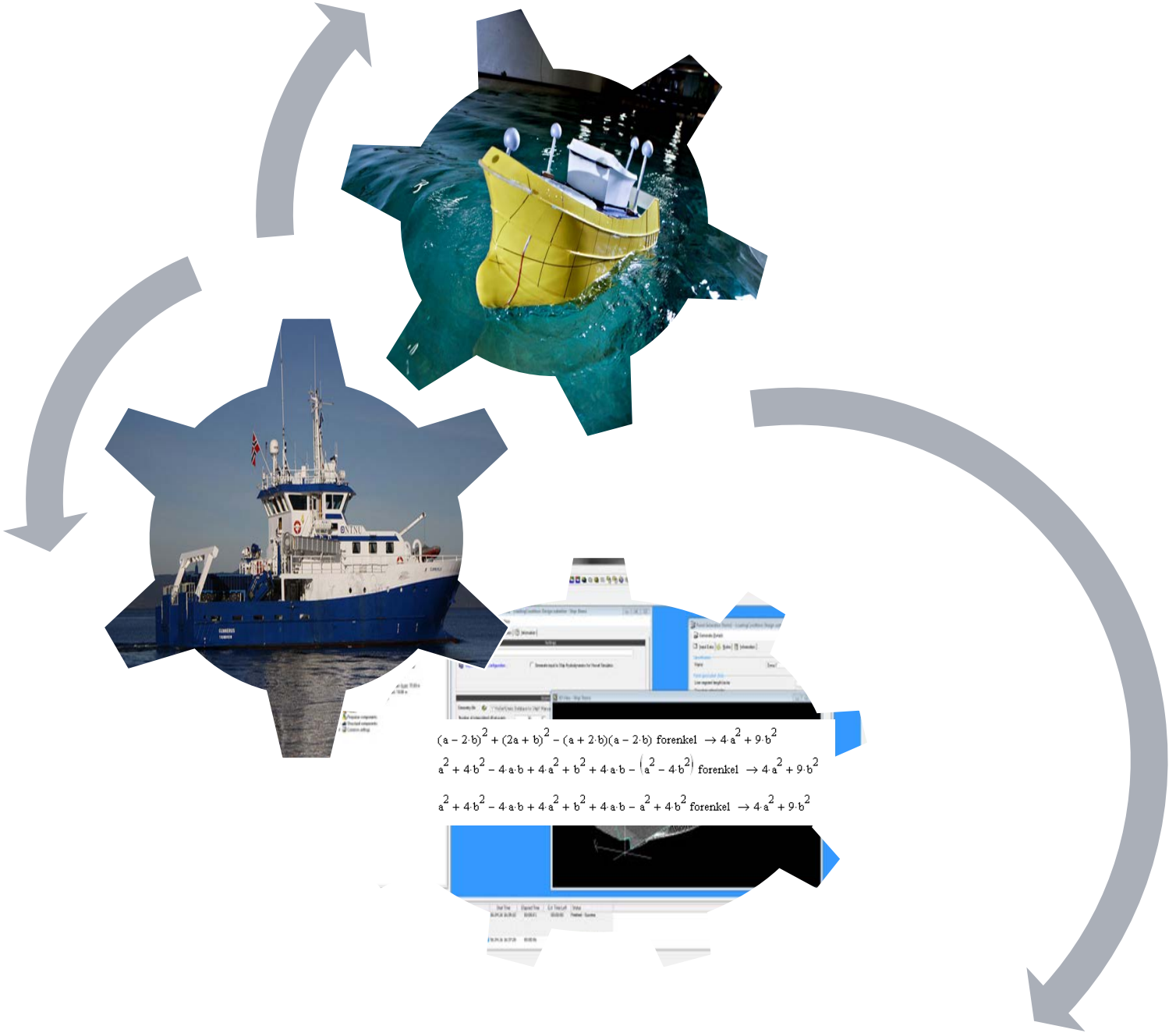


The focus in Ocean Space Field Laboraory would be on supporting the ACE Observatory on studying effects of heavier operations

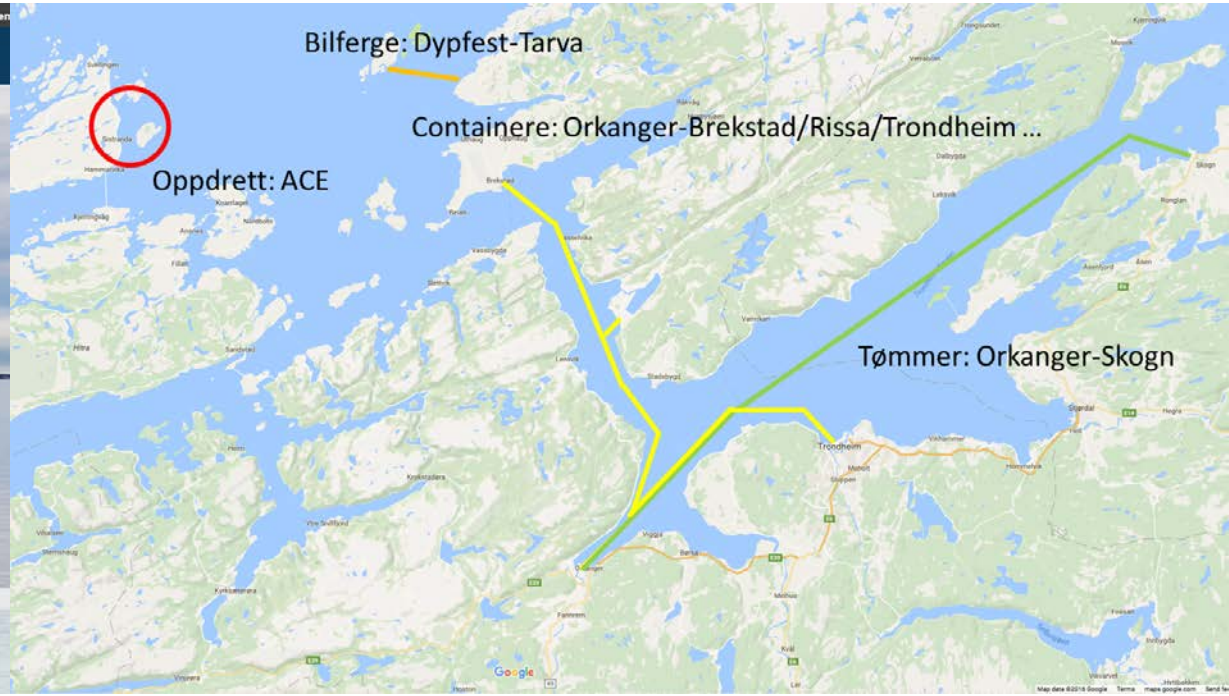
AUR-lab

- 2 large ROVs
- 3 smaller AUVs
- Experience with the type of equipment and infrastructure
- Autonomous operations

Ocean Space Field Laboratory will contribute to a stronger coupling between numerics, results from laboratory and full scale tests.



Test area for autonmous ship in Trondheimsfjorden

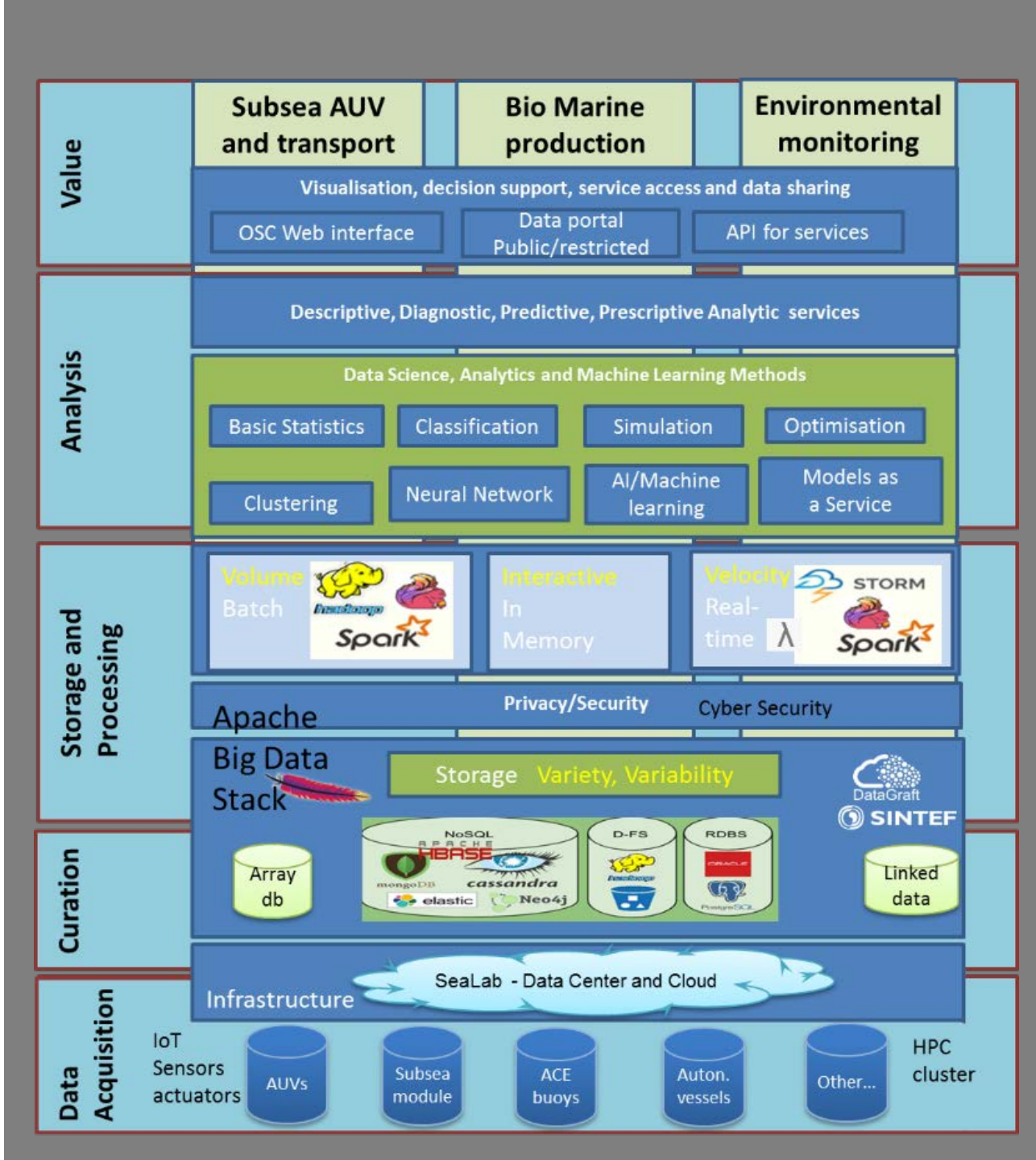


Application areas

- Autonomous subsea interventions and monitoring
- Test area for autonomous ships in Trondheim fjord
- Bio marine production, fish farming and fisheries
- Integrated environmental monitoring and forecasting

Ocean Space Field Laboratory infrastructure

- A subsea facility
- One medium sized and two small sized AUV
- Two instrumented buoys
- An unmanned surface vessel (USV System)
- Lidar radar and GNSS compass
- Underwater wireless communication node network
- An e-Infrastructure
- A work boat



Technology areas

- Autonomy
- Communication
- Sensors
- Navigation
- Integrated monitoring and decision support

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Time schedule

	Activity	Y1				Y2				Y3				Y4				Y5			
1	Project management, HSE and QA	X	XD	X	MD	X	XD	X	MD	X	XD	X	MD	X	XD	X	MD				
2	Overall technical design, detailed planning	X	XD	MD																	
3	Implement and test e-Infrastructure extensions		XD	X	XD	MD	X	X	MD												
4	Detailed equipment specifications and quotations			X	MD	X	MD														
5	Equipment installation and testing					X	X	X	X	X	X	X	MD								
6	Complete infrastructure									XD	X	X	MD	X	X	X	MD				

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Teknologi for et bedre samfunn