



OCEAN2020 PROJECT

Project Overview



OCEAN2020 Project Objectives

- **Operational objectives**

- Significant improvement to maritime Situation Awareness
- Extended ISTAR performance by use of UXS and integration into CMS
- EU-NATO interoperability by the use of open architecture and standards

- **Technical objectives**

- High integration among EU countries and heterogeneous systems, demonstrated in full scale-demo
 - ***Mediterranean Sea demonstration in 2019, Baltic Sea demonstration in 2020***
- Integration of EU/NATO/civil framework data
- Increased autonomy for UXS and swarm operations
- Application of advanced data and information fusion techniques for shorter decision time
- Development of EU C4ISR open architecture
- Identification of open and industry endorsed standards

- **Impact-making objectives**

- Diverse EU wide consortium to demonstrate large military R&T effort
- Improve market position of European defence industry in UXS
- Involve End-User in design choices



OCEAN2020 Consortium



LARGE ENTERPRISE
SMALL/MEDIUM ENTERPRISE
RESEARCH INSTITUTE
END USER

SAAB
UMS SKELDAR

FRAUNHOFER IOSB
HENSOLDT
MBDA
INFINITE VISION
SCHÖNHOFER
WTD 71

TERMA

VTT

TNO

QINETIQ
AUTONAUT
BLUE BEAR

CYBERNETICA

CMRE
LUCIAD

BPTI
LITHUANIAN NAVY

SAFRAN
ECA
ANTYCIP
PROLEXIA

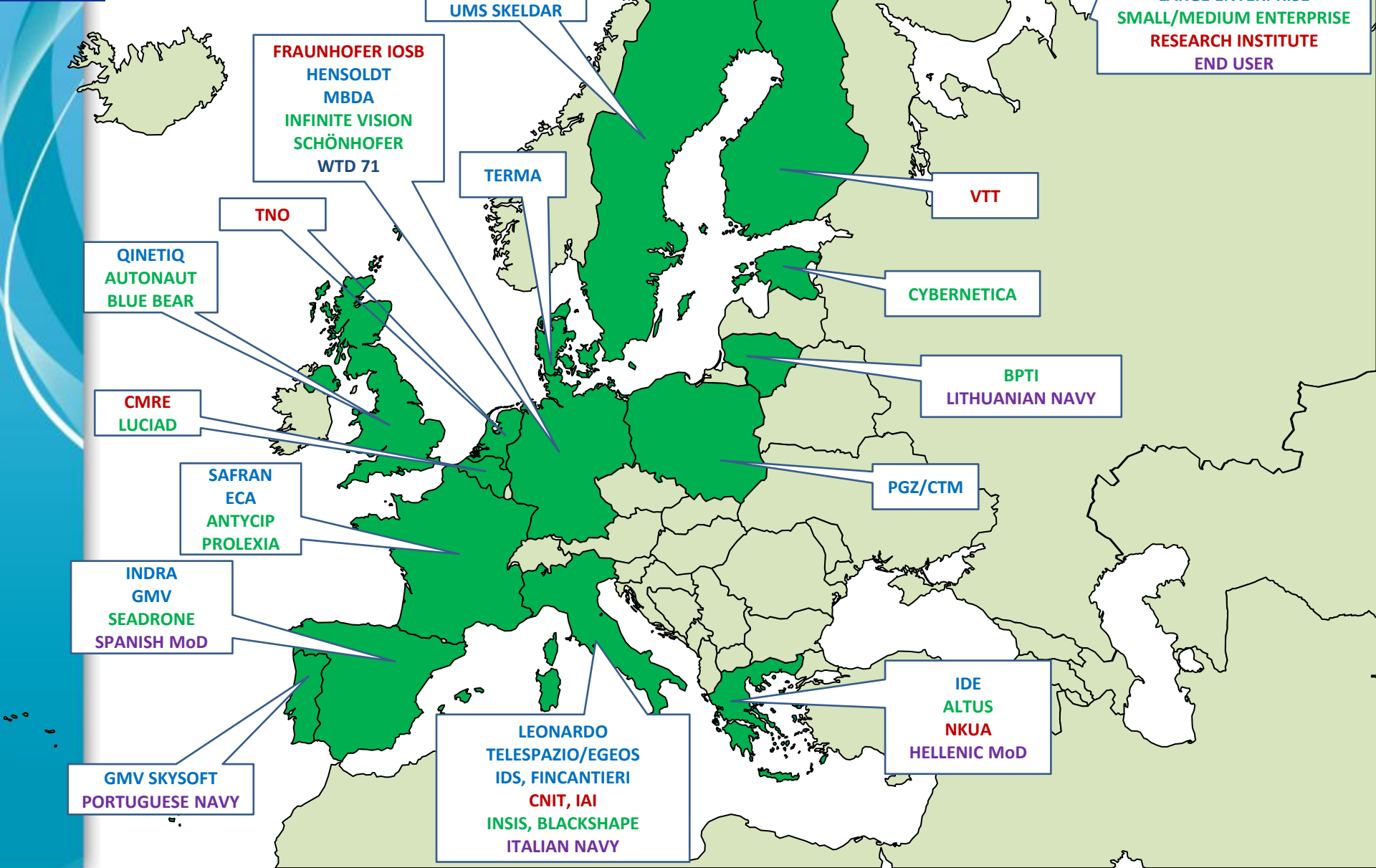
PGZ/CTM

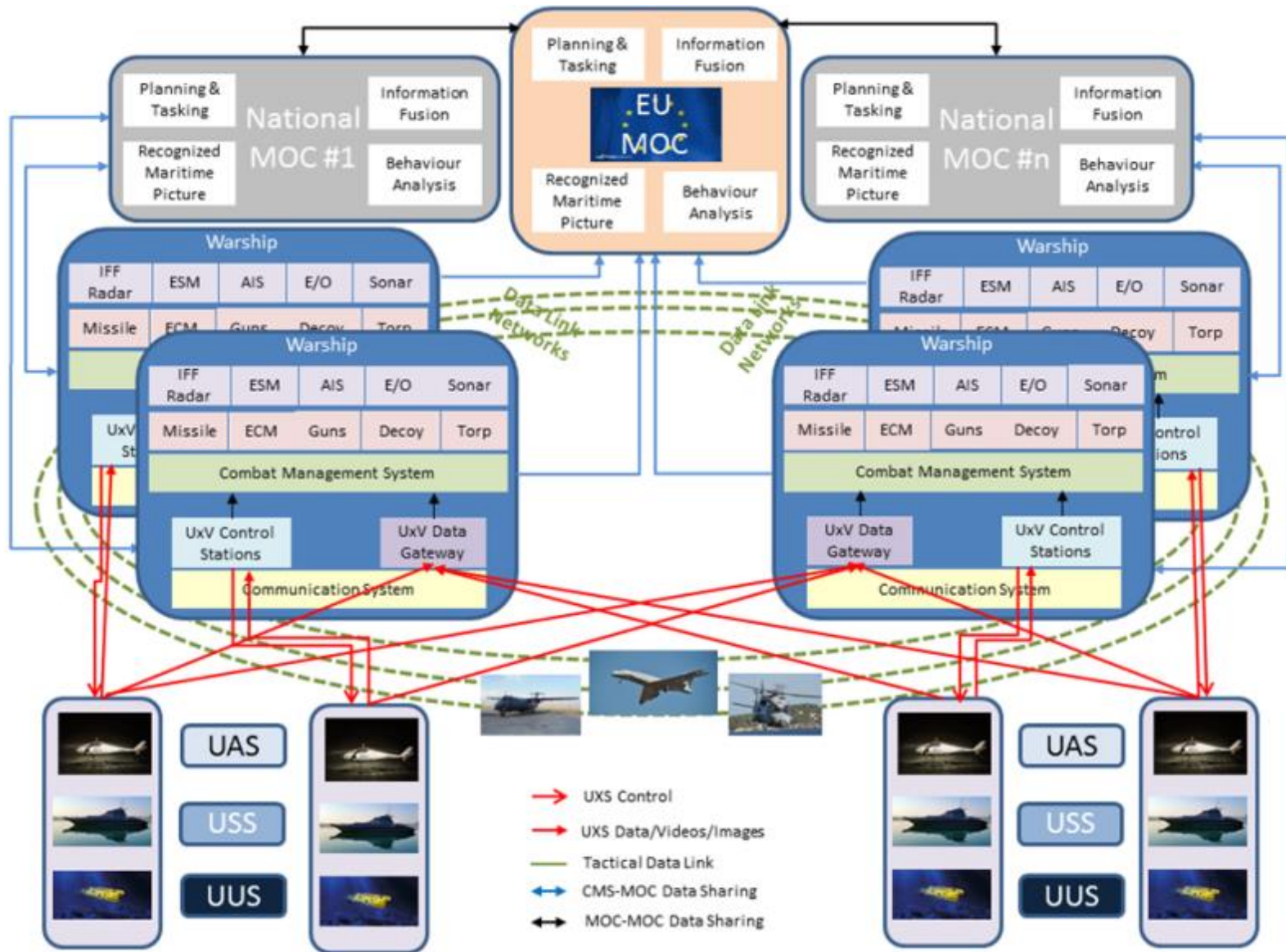
INDRA
GMV
SEADRONE
SPANISH MoD

IDE
ALTUS
NKUA
HELLENIC MoD

GMV SKYSOFT
PORTUGUESE NAVY

LEONARDO
TELESPAZIO/EGEOS
IDS, FINCANTIERI
CNIT, IAI
INSIS, BLACKSHAPE
ITALIAN NAVY







OCEAN2020 Unmanned Systems



Patroller



Blackshape



Black Start



Aw-Hero



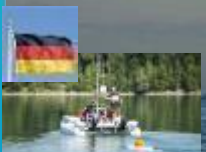
SW4-Solo



Pelican



Skeldar



Water Strider



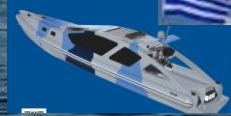
SeaDrone



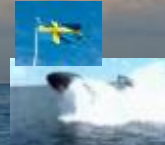
Wave Glider



Artigiana



SeaRider



Patrol Craft



MAST



AutoNaut



Inspector MKII



Great Diver



DEDAVE



CMRE UAV



Oceanscan



SAROV



Surv SAAB



A-Series



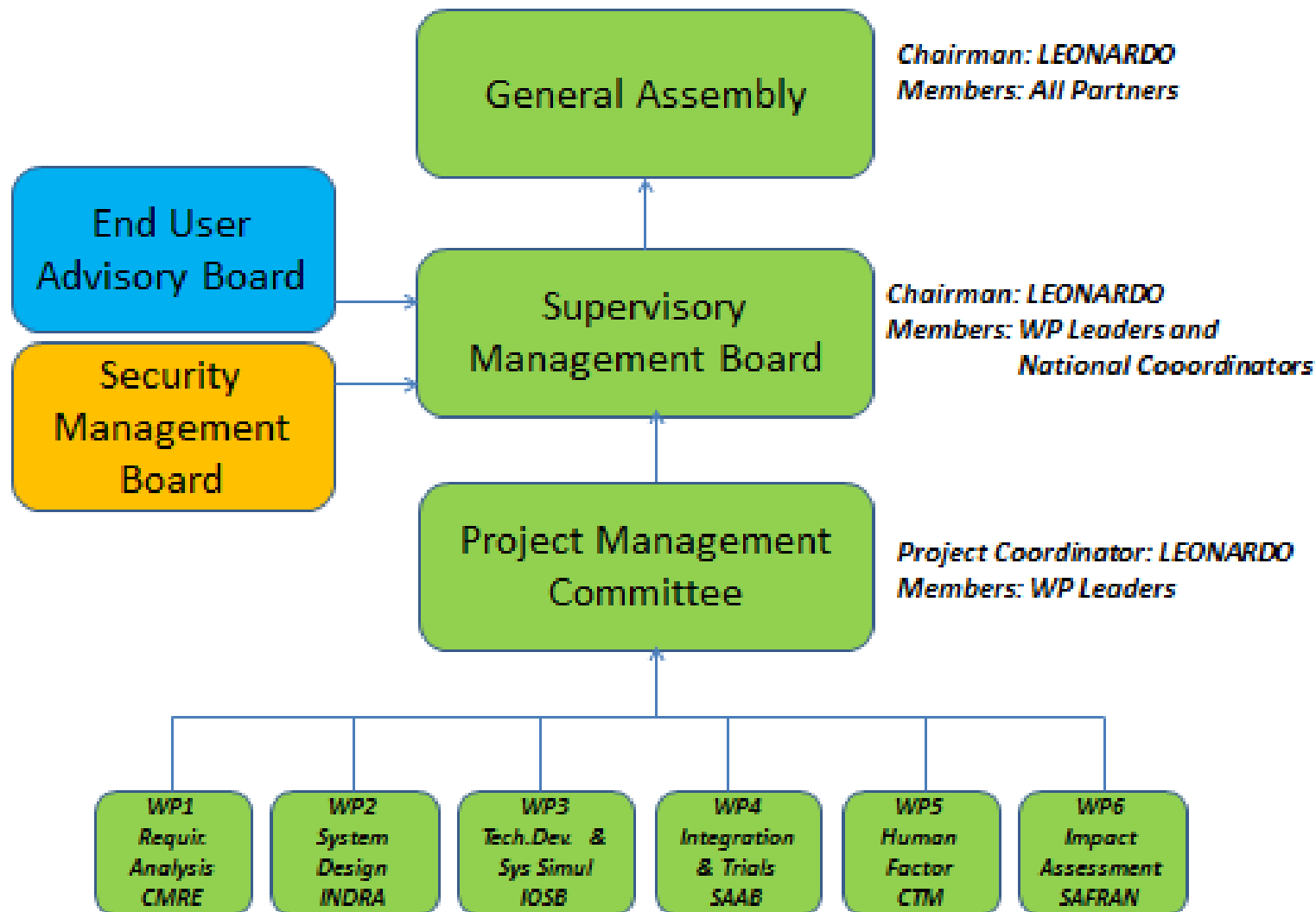
Project Impact



- Potential of EU-funded research for defence applications
 - Convincing demonstration of the potential of EU-funded research for defence applications
- Unmanned systems industry for European defence
 - Development of the European industrial capability in the market segment of unmanned systems for defence capabilities
- Military structures evolution resulting from the use of unmanned assets
 - Informing the shape of future military structures in view of the use of advanced unmanned systems
 - Improved efficiency and cost-effectiveness
- Demonstration of enhanced operational capabilities through the use of unmanned assets
 - Substantial gain towards autonomous and safe operation from Navy ships of UxS providing suitable payload, range, endurance and handling
 - Enhancement of maritime situational awareness and command and control capabilities
 - Reliable operation in complex and severe maritime environment
 - Improved interoperability between manned and unmanned systems, with naval platforms and mission systems, and with multilateral EU defence systems



Project Governance



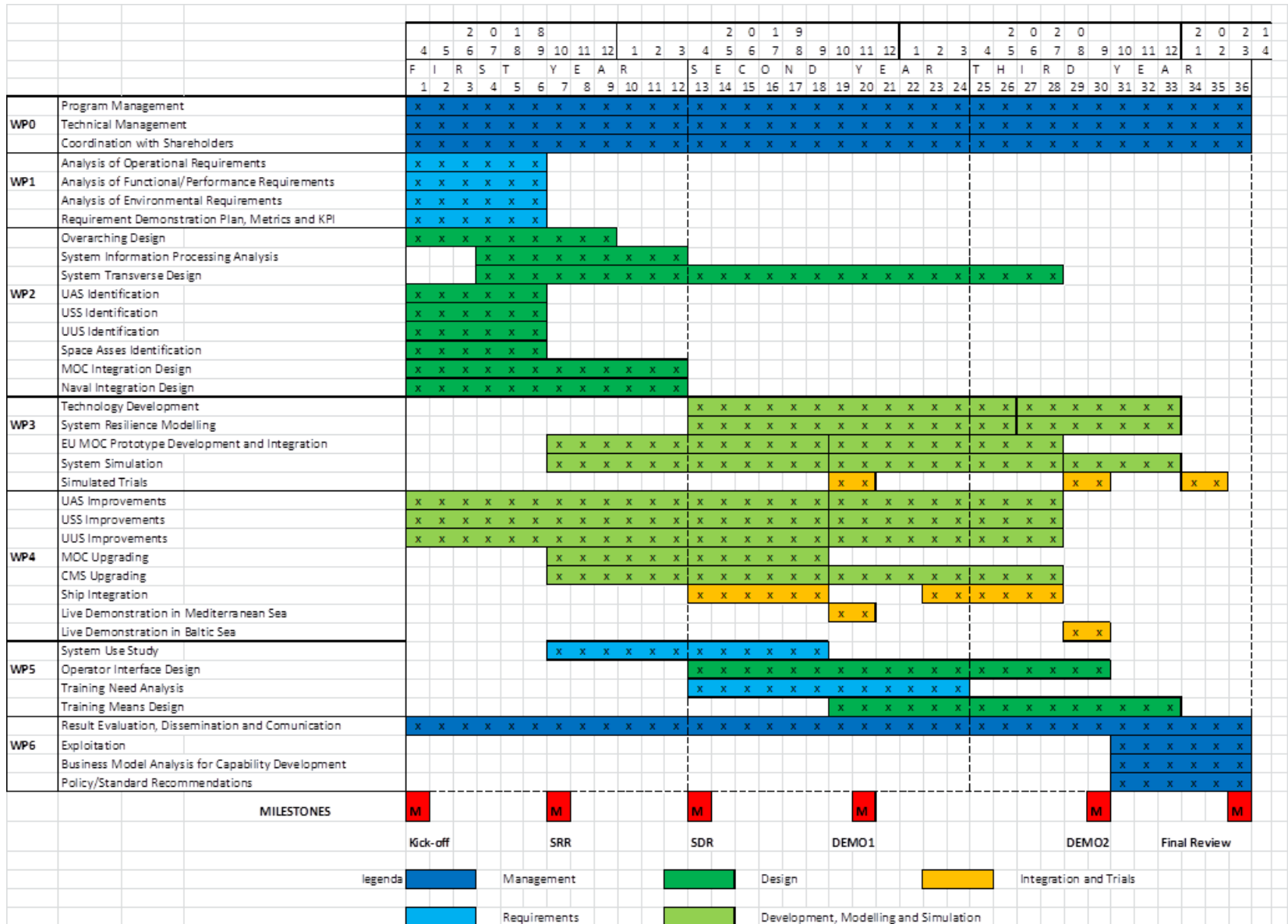
Work Breakdown Structure

(up to level 2)





Gantt Diagram





END OF PRESENTATION

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