



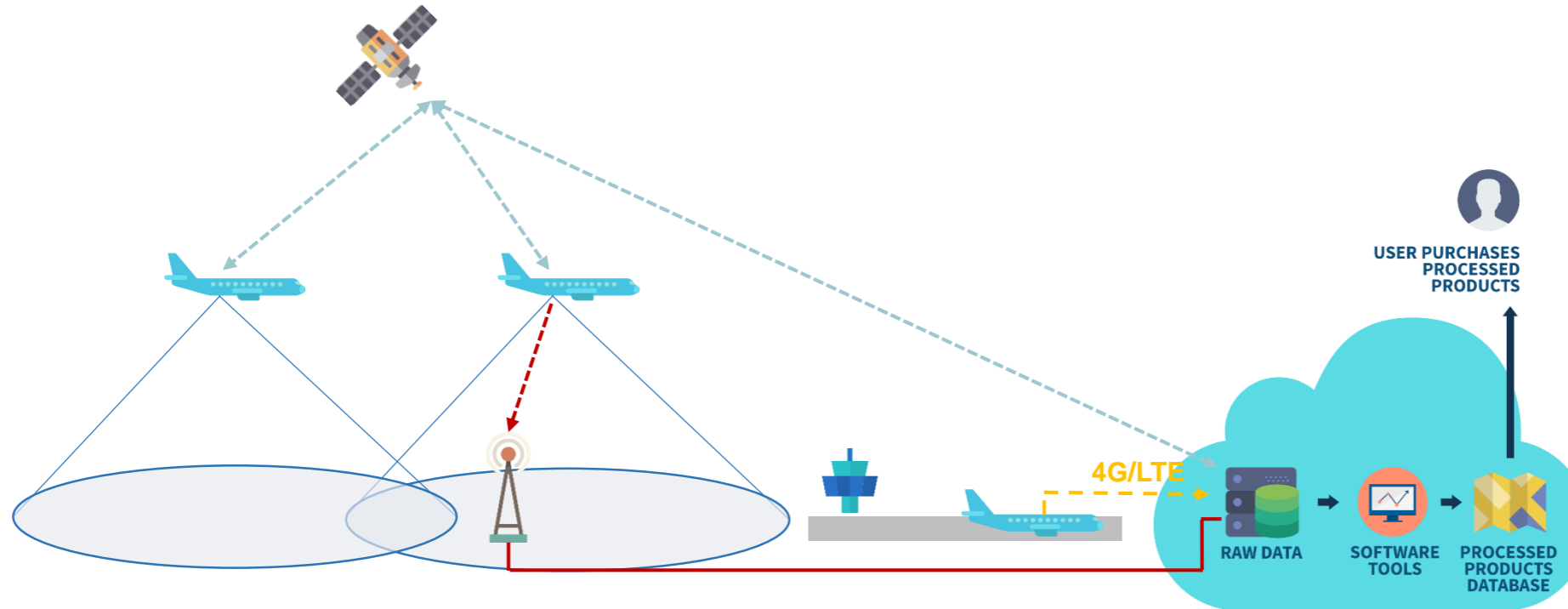
954

ORCA

OPTICAL AND RADIO-FREQUENCY
CONSTELLATIONS ON AIRCRAFT

SYSTEM SERVICE ARCHITECTURE

A MARRIAGE OF SPACE AND AVIATION SEGMENTS



ORCA SERVICE OFFERING

A MOST ECOLOGICAL CONSTELLATION RE-USING THE MOST RELIABLE PLATFORM: COMMERCIAL AIRCRAFT



DATA COMPETITIVE ADVANTAGES



HIGH SPATIAL RESOLUTION



HIGH TEMPORAL RESOLUTION



EXCELLENT COVERAGE

OPERATIONAL COMPETITIVE ADVANTAGES



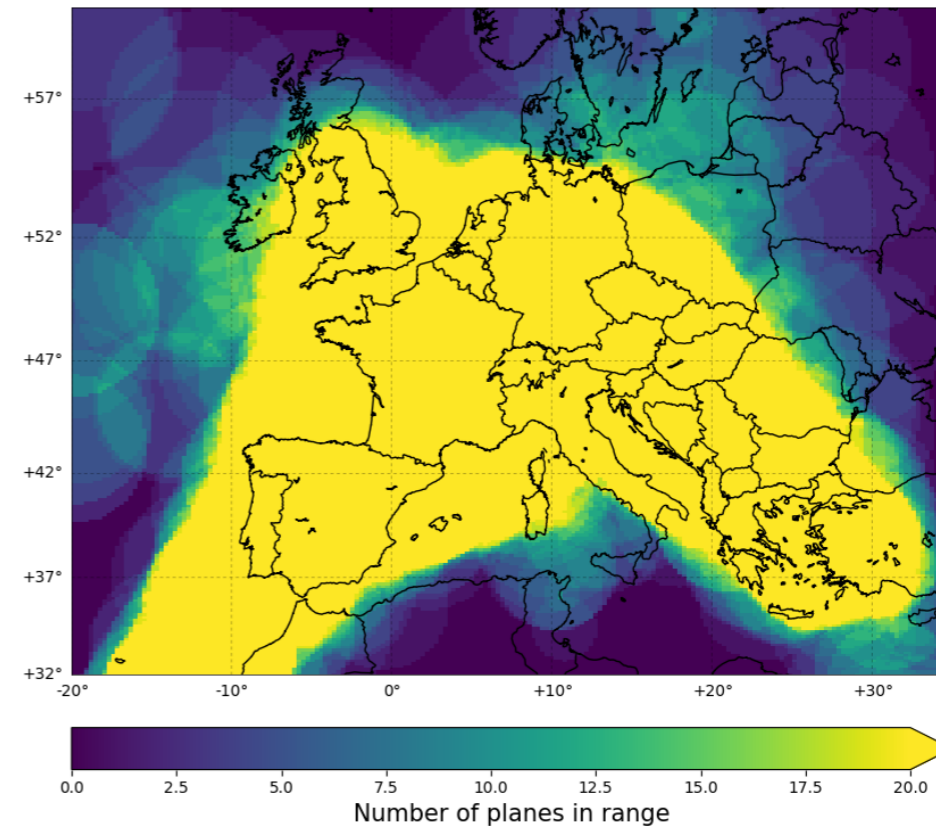
PAYLOAD SERVICEABILITY



LOW CAPEX & OPERATIONAL COST

LINE OF SIGHT COVERAGE SIMULATION

Low traffic day from 07:00 to 19:00
(with TUI fleet only)*



*Created using Eurocontrol Data

PROPRIETARY MATERIAL BELONGING TO ESA AND SKYFLOX B.V.

Ref. SFX-00-02-170918-SPMV

18-SEP-2017

ESA PROJECT DOCS - DEMONSTRATION OF ORCA CONSTELLATION SERVICES

EVALUATING ORCA TECHNICAL, BUSINESS, AND LEGAL ASPECTS



DOCS PROJECT PARTNERS



Prime
Coordination, system architecture and design, simulations, business analysis, IPR



Aircraft Certification
Payload certification, and installation on aircraft



Platform Provider
Provision of technical requirements, logistics, and provision of access to fleet

**SIGMA
GEOTECHNOLOGIE**

EO Marketing / Sales
Customer's identification and contacts, pricing strategy, Multi sensor data marketing



EO Service Provider and Image Processing
Earth observation expertise, data processing software, image processing



Connectivity
Evaluate various real-time and non-real-time connectivity options

Dr P. Mendes de Leon
Air & Space Law
University of Leiden

Legal Expert
Evaluate national and EU regulatory and legal issues

ORCA SERVICES FOR INFRASTRUCTURE PROVIDERS

A CHALLENGING SERVICE TO EVALUATE ORCA CAPABILITIES



SERVICE ADDRESSED IN THE ESA DOCS PROJECT:
FREQUENT MONITORING OF CRITICAL ASSETS

REQUIREMENTS COLLECTED BY END USERS, INCLUDING



NATURAL GAS
INFRASTRUCTURE
PROVIDER



MULTINATIONAL
ENERGY CORPORATION



CRITICAL
INFRASTRUCTURE
MONITORING EXPERT



IN PARALLEL VARIOUS OTHER APPLICATIONS ARE BEING EVALUATED AND POTENTIAL USERS CONTACTED

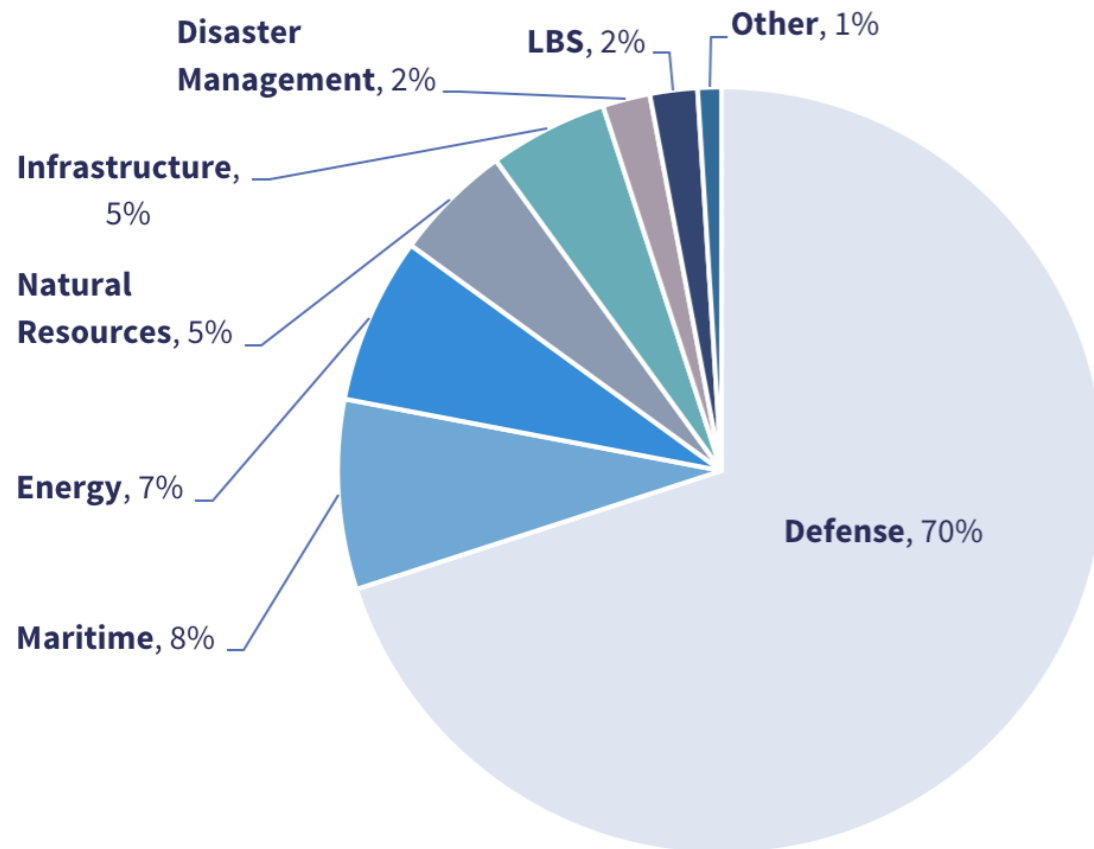
MARKET OVERVIEW

ORCA TARGETS THE HIGH GROWTH EARTH OBSERVATION MARKET



EUROPEAN COMMERCIAL EO MARKET

Valued over €1b in 2019 with CAGR of 11%



ADDRESSABLE MARKET

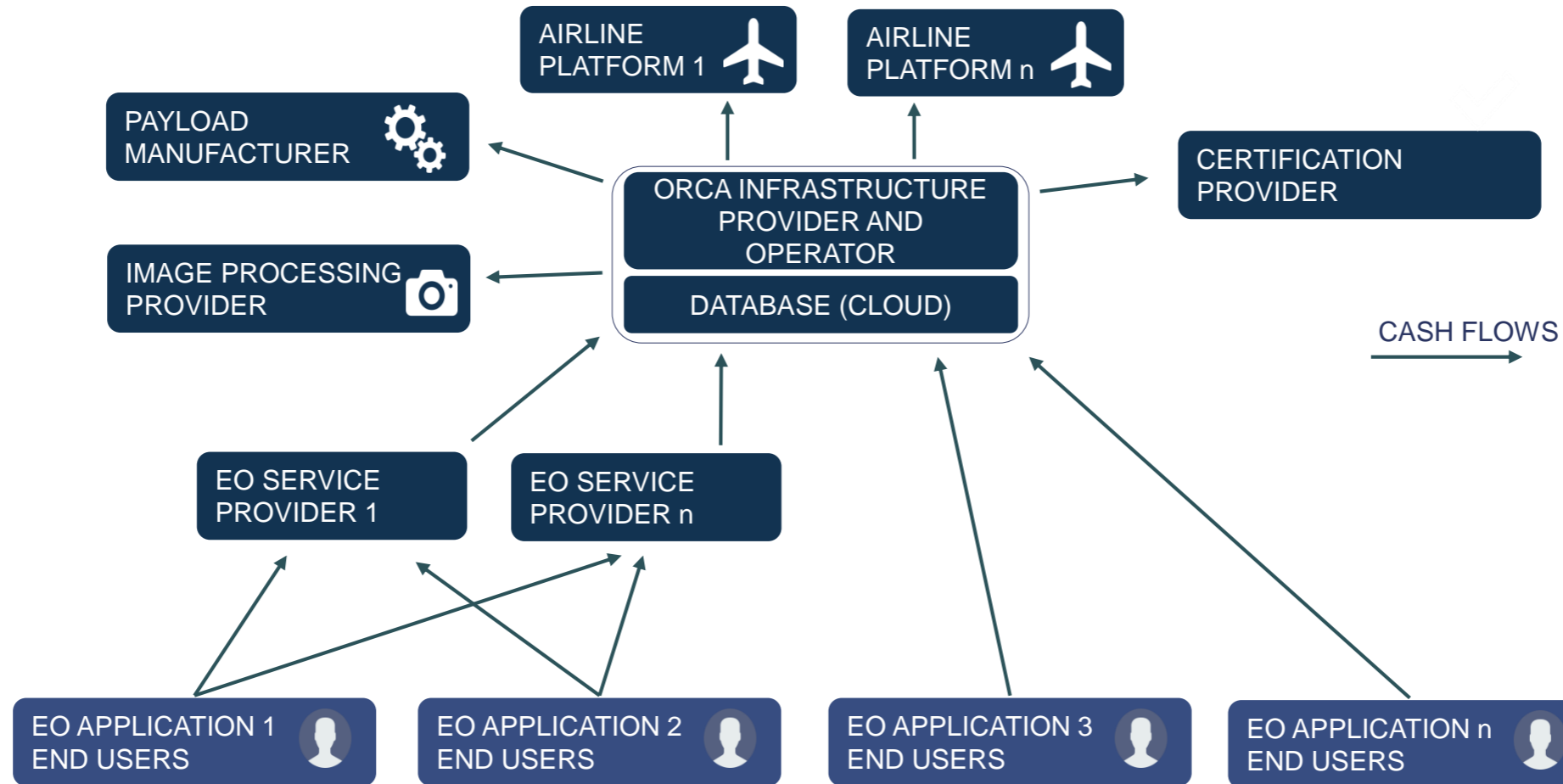
Non-defense applications in Europe provide opportunity of €300m+ in 2019 (start of operations)

- Critical Asset Monitoring
- Business/Market Intelligence
- Forest Fire Monitoring
- Coastline Monitoring
- Heat island Mapping
-

Non-EO Applications
M2M, IoT, AIS may be supported by ORCA in combination with EO

SKYFLOX WILL RETHINK EO INDUSTRY REVENUE MODEL

FREQUENCY OF DATA CALLS FOR SUBSCRIPTION BASED SERVICE PROVISION



ROADMAP

TEST FLIGHTS AT THE END OF THIS YEAR, PILOT DEPLOYMENT IN 2019



- Critical Design Review October 2017
- Flight Tests on AD&C test aircraft (End 2017)
- Project Final Review in February 2018
- Pilot Phase (certification and operations on multiple aircraft) 2018 - 2019
- Further commercial deployment as from 2019



**Interested to cooperate with SkyfloX
in the deployment and operations of ORCA?**

Contact us: info@skyflox.eu