A New Era for Aerospace Business

Meeting of Big Data & Aerospace

Autonomous control allowing versatile flight plan

Flying at 20km above commercial airspaces and bad weather

Certified aircraft with electrical propulsion

Structural optimization (wing span around 40m)

Advanced Solar Panels for perpetual flight

Advanced energy storage to fly during night

sonaca
sabena aerospace
ΞTΞMMΞ

High flexibility missions

Flight at high altitude to guarantee **ALL-WEATHER OPERATIONS** and to ensure continuous and uninterrupted service

Versatile flight plan for **DIFFERENT TYPES OF MISSION** such like scanning, surveillance or target tracking

Infinite endurance for specific missions requiring **LONG-TERM ON-SITE PRESENCE, REAL TIME INFORMATION** or **HIGH REVISIT FREQUENCY**

High flexibility in the choice of payloads and opportunity to integrate several **DIFFERENT SENSORS ON THE SAME MISSION**

Why now?

A/C Performances & Aerodynamic Behavior	Large Composite Parts & Complex Integration	High Performance Solar Panels	Control, Navigation & Autonomous Systems	Small, Low Power, High Resolution Sensors
Extreme Environmental Conditions	Large Light-Weight Constructions	High Energy Density Batteries	Airworthiness & Regulation	Cheap Data Storage & Post-processing

Three Aeronautic Companies

STEMME is an aeronautical company specialized in design and manufacturing of **high-performance motorized gliders**, and that brings skills related to **aircraft definition** and **UAV design**

SONACA is an aeronautical company specialized in design and manufacturing of **advanced structural parts**, and that brings skills related to **engineering** and **system integration**

SABENA AEROSPACE is an aeronautical company specialized in **aviation services**, and that brings skills related to **aircraft operation** and **international logistics**

SABENA SONACA STEMME
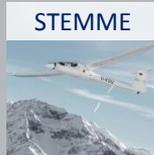
JOINT VENTURE
Aircraft & Operations

Nature Monitoring Security Logistic Risk Management Crisis Management Military Telecom

A Roadmap Based on Existing Solutions

2018

EXISTING AIRPLANE

1

Legal Mitigation

End-to-end solutions

2020

MALE UAV

2

Technical Mitigation

Long endurance services

2021

HIGH ALTITUDE UAV DEMONSTRATOR

3

Technological Mitigation

Stratospheric Flying Lab

2023

HAPS

4

Satellite look-like services

sonaca GROUP   sabena aerospace   STEMME

What can HAPS do for EO market?