UIC Railway Asset Management
Global Conference 2017

AV MEHL
Business Manager
Key Figures

2017: ALTAMETRIS is created as a 100% subsidiary of SNCF Réseau. We count almost 30 employees.

2016: 650 flights and 10 000 km covered

2015: ONERA ; SUGE ; green-cover analysis: we operate on more and more topics

2014: Creation of an intra-company: one-stop shop for all drone-based demands inside the SNCF Group.

2013: SYNAPSES Award – Open Innovation with EDF

2012: Creation of the « Drone Department » within SNCF Réseau by Nicolas POLLET. A team of 3 founders originates the project.
Fields of Application

- Land Survey
- Mapping
- Consulting
- Communication
- Surveillance
- Inspection
- Industrial Sites
- Civil Works
- Electricity
- Transport & Distribution
- Earth Works
- Rolling Stock
Our Approach

**STEP 1**
We assess your needs
- We define what you need and what the deliverables will be.
- We develop a custom solution.
- We explore whether the project is technically feasible and complies with air traffic and industrial environment regulations.

**STEP 2**
We develop your solution
- We set the value chain – deliverable, data, sensors and vehicle.
- We implement the market analysis and feasibility study to deploy high-value-added solutions such as hybrid drones and LiDAR technologies.
- We develop the system and conduct quality checks.
- We conduct a demonstration or field test to see whether the solution works in practice.

**STEP 3**
We carry out your mission
- We handle every aspect of the mission, using protocols that suit your needs.
- We deploy the solution in the field and carry out repeat missions.
- We work with the client, handling all aspects of the mission or taking control of certain parts.
- We offer assistance to the project owner.

**STEP 4**
We deliver high-value data
- We implement our own Quality Policy: quality checks, looking at accuracy and completeness.
- We aggregate, filter, combine and merge your data, extracting the relevant information in a usable format.
- We process the data, producing orthoimages, topographic maps, vegetation-cover and other information.
- We import the output into databases, information systems, map layers and connected, integrated web services.
- We record your data in our archives to manage it over time.
Land Survey - Les Moulans

Targets:
- Digital Elevation Model
- Scatter Plot: 250 pts/m²
- Dwg drawing 1/200
- Precision: <5cm

Tool: Ricopter + RIEGL LIDAR

Benefits:
- Lidar goes through green-cover
- No need to clean-up the area
- No need to send people near from the railway or into the green-cover
- Quick survey and rapid delivery
- Conform to Railway Standards
Inspection - Viaduct of Puyoô

Targets:
✓ Detect & Characterize masonry defects

Tool:
Falcon 8 & Sony Nex 7 16 Megapixel

Benefits:
✓ High precision inspection
✓ Expert can analyse data from his desk: better use of HR
✓ No requirement for heavy planning or security process like for cherry pickers
✓ Provide documented report
Altametris Buddy

Inspections done easy:
- Catenary Supports
- Rolling Stock
- Roofs

One Drone in every tool box

Put ladders to retirement!
Conclusion

1. Numerous Applications
2. Agile and Versatile Tooling
3. Integrated Solutions
4. Optimised Human Resources use: more safety, more accuracy
5. Moving towards Digital Asset Management
Thanks !

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