



OPS-SAT-1 FlatexDEGIRO Experiment

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ESA – FlatexDEGIRO Initial Contact



2020 discussions about similarities between spacecraft and banking operations between Steffen Jentsch (CIO FlatexDEGIRO Bank) and David Evans (ESA OPS-SAT-1 project manager)

- **Both the space and banking sectors are in the middle of revolutions due to digitalisation**
- **Both are experiencing disruptive new entrants (Banking = Fintech, Space = NewSpace)**
- **Both are moving towards distributed operations over the internet, generating opportunities with new risks e.g. cyber security, open source software, cloud infrastructure**

Both sectors share some unique characteristics...

- **High availability, 24/7 operations with a high level of automation**
- **Many distributed processes all have to work in perfect synchronisation, every single time**
- **The cost of making a small mistake can be extremely high**

2021 FlatexDEGIRO decide to explore these overlaps by becoming OPS-SAT-1 Experimenters



FlatexDEGIRO - OPS-SAT Experiment Timeline



March 2021	Bank registers as an OPS-SAT Experimenter and gets access to the experimental portal and technical documentation
April	Begin with a simple experiment to test the pipeline and then add functionality step by step
May	Final experiment is defined
June - July	A series of tests with the Flatsat are conducted, bugs are discovered and solved
11 th August	Final test with the Flatsat is successful
17 th Sept	Experiment software loaded to the spacecraft
20 th Sept	Experiment software installed on the spacecraft
22 Sept	Live test session with spacecraft in a nominal scenario executed (Successful)
27 th Sept	Live test session with spacecraft in a contingency scenario executed (Successful)
30th Sept	First Live Stock Market Trade ever executed in Space (Successful)

