**DATA SYSTEMS** 

# **WETRACK™**

GEO Satellite Orbits 24/7/365 Data Service





**COMMUNICATION & SITUATIONAL AWARENESS** 

Based on a patented passive ranging technology, Safran Data Systems WeTrack<sup>TM</sup> network of autonomous RF sensors **continuously tracks any visible active spacecraft in the GEO belt,** independently of any other service, and regardless the location of customers spacecraft. With three main tracking networks, WeTrack<sup>TM</sup> covers the entire globe.

WeTrack<sup>™</sup> computes **24/7 high-revisit rate passive ranging measurements** to guarantee efficient maneuver detection and accurate orbit determination.

From continuous supply to on-demand access, WeTrack™ service uses Machine-to-Machine and Secured Web portal access to cater the needs of satellite operators, regulators, defense community and space traffic management.



Space Situational Awareness



Spectral Efficiency & Awareness



Flight Dynamics Resilience

### **HIGHEST EPHEMERIS ACCURACY**

- No cross-tagging
- Top-class conjunction analysis & close approach monitoring
- Patented sensor technology ensuring utmost measurement accuracy
- Responsive co-variance matrixes and thrust vectors

### **ULTIMATE MANEUVER DETECTION**

- High-rate measurement refresh to guarantee immediate maneuver detection

#### STRAIGHTFORWARD ADOPTION

- Plug and play with major Flight Dynamics Systems
- API on web-interface
- Pay-per-use or yearly plans

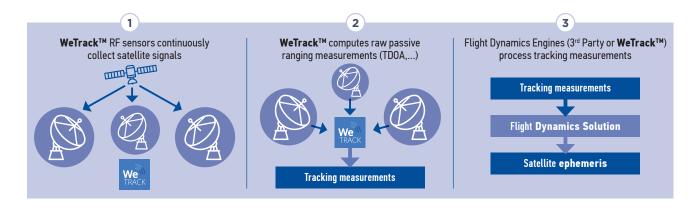
# **HIGHEST REVISIT TIME**

- Minute-class refreshed orbital measurements
- Continuous day and night tracking in all weather conditions
- Scheduled tasking in critical situation

VISIT HTTPS://WETRACK.SPACE/



# COMMUNICATION & SITUATIONAL AWARENESS WETRACK<sup>TM</sup>



# > TECHNICAL PERFORMANCES

#### Sensor observation collection

- Any radio frequency signal (sparse, continuous, wide/narrow band)
- C & Ku bands. More bands upon request
- Even in non-standard satellite status (inclined orbits, drift, emergency)

#### Supplied orbital data

- Output format: Cartesian, Keplerian and NORAD TLE
- Wide range of supported time
- Standards and reference frames
- Continuously updated
- Typical accuracy: 250m (1 sigma)

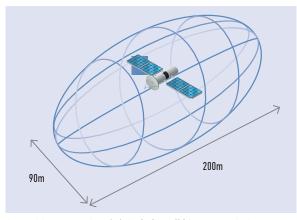
#### Subscription mode

- · Satellite continuous tracking
- Global service (full GEO belt)
- On-demand request
- Raw data observations
- Orbital elements
- Maneuver information

#### Use-cases

- · Satellite housekeeping
- Transmitter geolocation
- Satellite conjonction analysis
- Ranging maintenance backup solution
- Ranging system calibration
- Satellite drift tracking
- Data fusion

# > ORBIT DETERMINATION ACCURACY



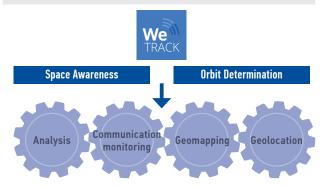
1 o-position uncertainty (m), including all bias uncertainties.

# **>** COVERAGE

Global coverage from three main tracking networks.



# GOING FURTHER WITH SATELLITE SIGNALS



Find out how our solutions will transform your operations.

#### **GLOBAL SALES**

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