



Drones in Hydropower

Safer, Smarter, Faster

HYDRO 2026 · Bologna · 14.-16. October 2026

From ground...

...to airborne.



The value of drones



Identify hazardous areas



Prevent consequential damage



Improve occupational safety



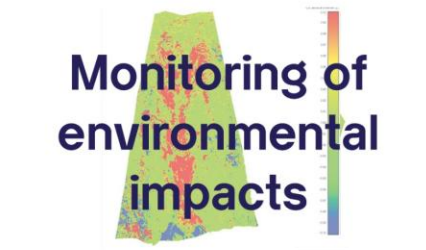
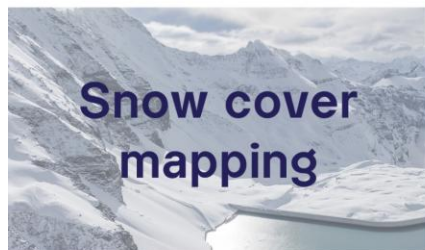
Reduce access time



Save time during incidents



Improve the data basis



Potential Applications

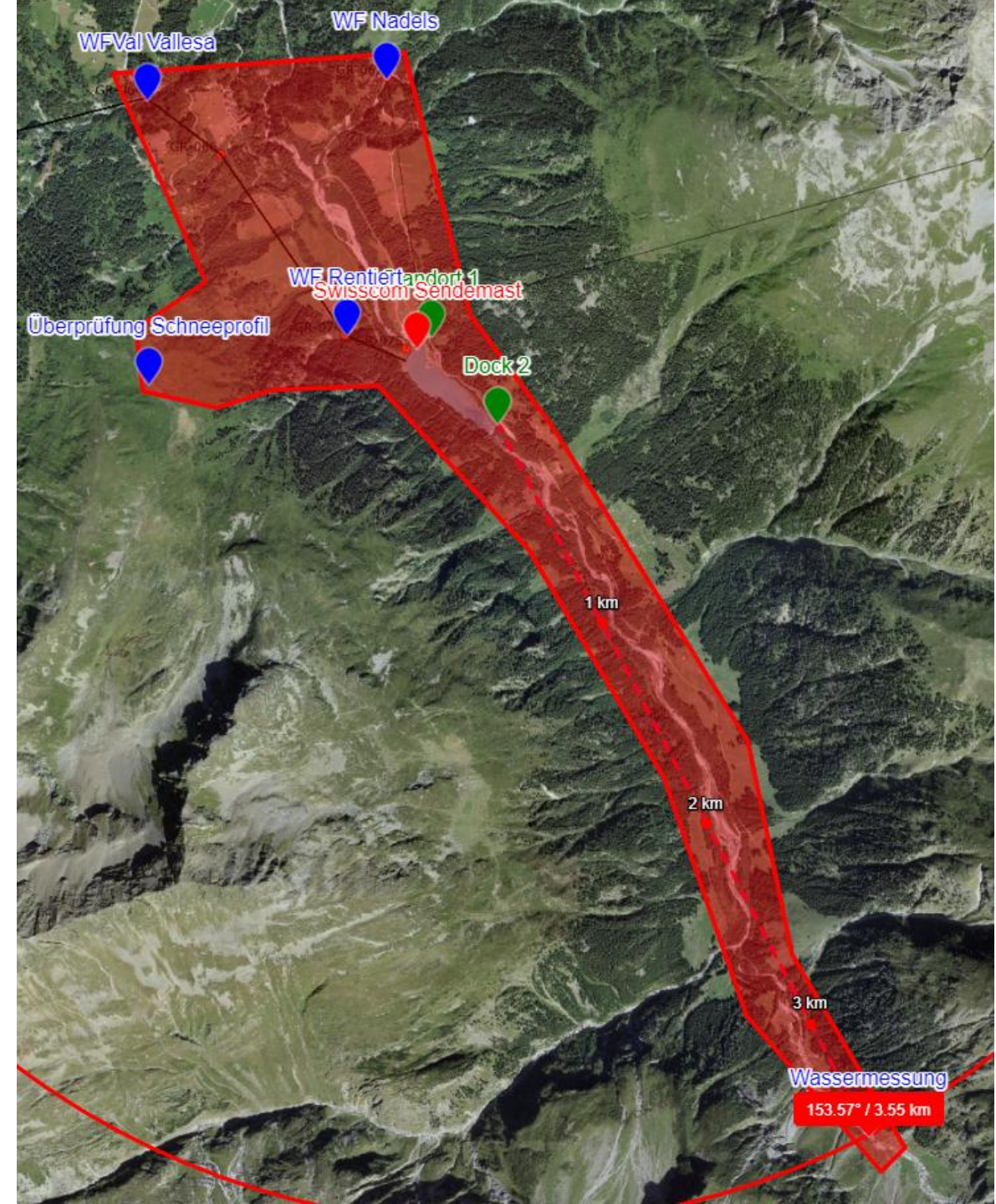
Structural inspections





Drone Dock with multiple Use Cases

- Water intakes
- Shorelines
- Riverbeds
- Snowpack profiling for avalanche assessment
- Lake level measurement
- Access roads
- Infrastructure inspection







How to Build Sustainable Drone

Our experience is built on real industrial operations



**170 PILOTS ACROSS
HYDRO, NUCLEAR AND
GRID OPERATIONS**



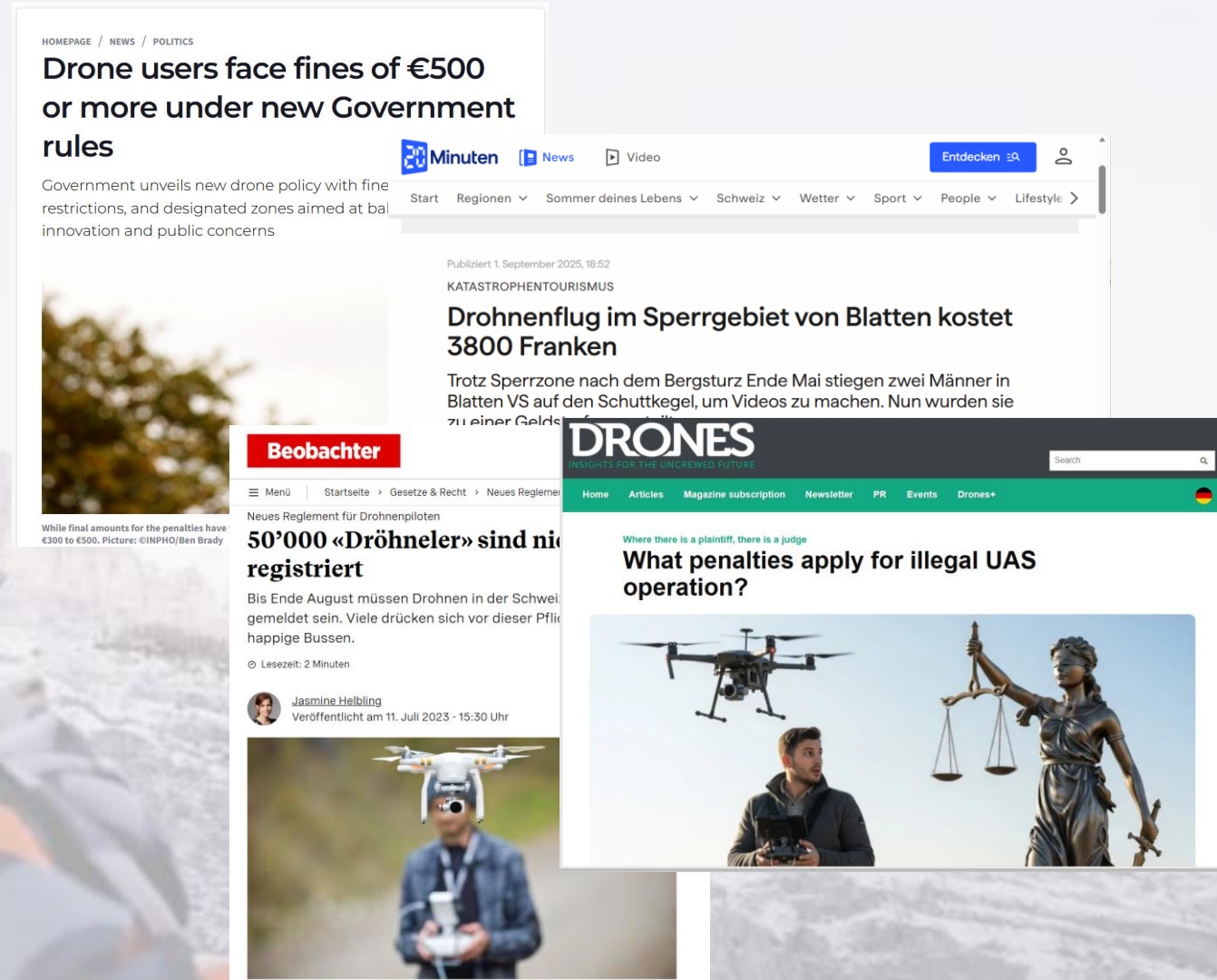
**31 OPERATIONAL TEAMS
WORKING IN DAILY FIELD
ENVIRONMENTS**



70 DRONES DEPLOYED

Flying drones is the easy part

- **Corporate Due Diligence**
- **Safety & Risk Management**
- **Regulation & BVLOS**
- **Training & Qualification**
- **Operational Support**
- **Rapid Technological Change**



Our Six Pillars of Sustainable Drone Operations



How We Implement Corporate Due Diligence



Structured Training

- Beyond standard licensing
- Practical flight operations
- BVLOS refresher training



Operational Support

- Dedicated drone support
- Pilot mentoring & on-site visits
- Operational mission support



Knowledge Sharing

- Quarterly operational exchange
- Shared lessons learned
- Common operational procedures

BVLOS - Where Drone Operations Become Aviation Operations



Airspace & Safety

- Air safety
- Manned aviation coordination
- Emergency procedures



Regulatory Requirements

- SORA
- FOCA approvals
- Compliance & reporting



Operational Implementation

- Operations manuals
- Standardized procedures
- Daily operational execution

BVLOS operations require aviation-grade processes.

MORE THAN FLYING



**Safe drone operations
start long before take-off.**

hydrone®

Questions & Discussion



Thank you!



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Airspace & Safety



Airspace Awareness

- Cooperative air traffic receiver
- Enhanced airspace monitoring
- Improved situational awareness

Pilot Ergonomics

- Optimized controller setup
- Reduced pilot workload
- More efficient operations

Regulatory and Operational



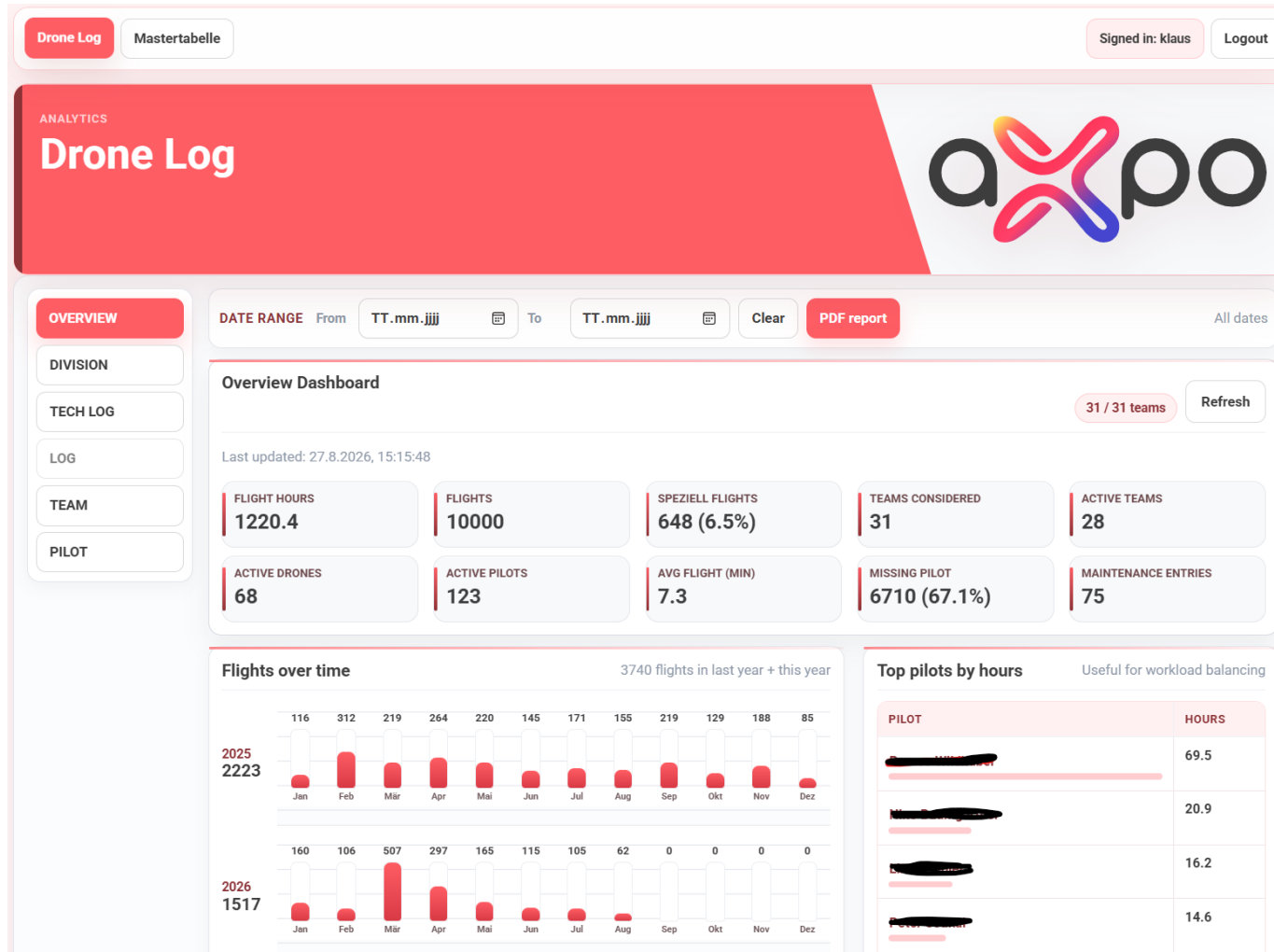
Integrated Pilot Workflow

- Digital checklists
- Electronic flight logs
- Mission documents

Operational Benefits

- Standardized operations
- Reduced pilot workload
- Operational consistency

Regulatory and Operational



Centralized Operational Data

- Automatic telemetry & logfile transfer
- License & maintenance monitoring
- FOCA reporting
- Fleet statistics & usage