

# Operational aspects of drones and HAPS

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## Commercial Space

<10km

## New Entrants: Balloons, Solar Plans, Super Sonic

<FL600

## RPAS (non segregated)

<1000FT

## RPAS/Drones

STM

Space Traffic Management

HATM or Higher UTM

Higher Airspace Traffic Management

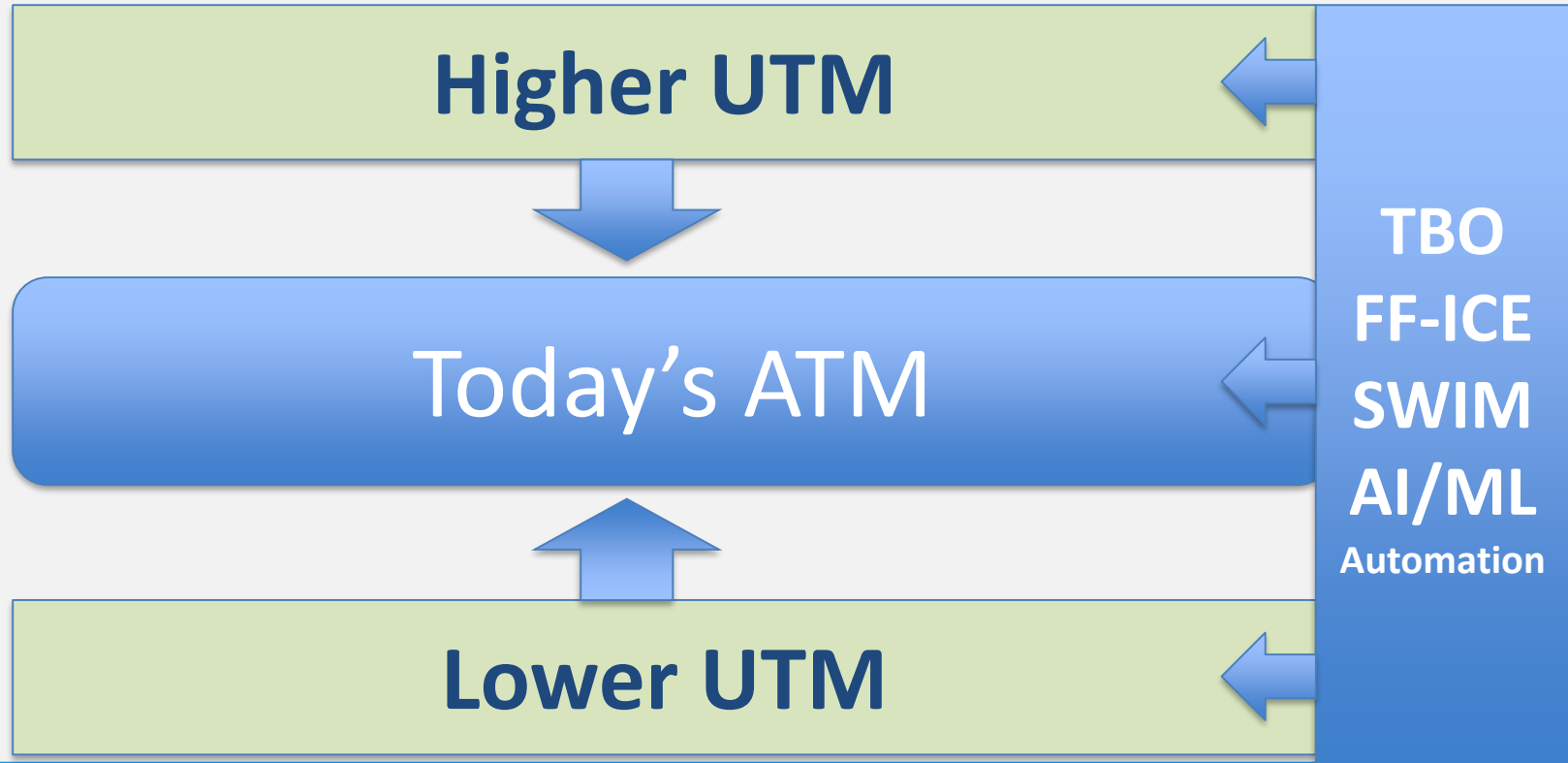
ATM

Air Traffic Management

UTM/U-SPACE/Lower UTM

UAS Traffic Management

# Sandwich of Innovation



# What is happening on HAPS?

- Industry led discussions
- Air Navigation Conference/13
  - Need for regulatory framework
  - Recognition of new entrants
- Concept of Operations
  - Needs/requirements/context/interfaces
- Trials
- ICAO Provisions

# What is happening on drones?

- Today's ATM
  - IFR integration is a priority at global and regional levels
    - The RPAS Panel is on schedule and delivering Chicago Convention annexes amendments to the ICAO Secretariat as planned; Many ICAO Docs will require amendments as well
    - EUROCONTROL, EASA, SJU are efficiently working together to support the EC
  - VFR is an exciting challenge
- At lower altitude:
  - U-space concept and technical blocks are building up; convergence is a priority and within reach
- Additional challenge of ATM / UTM interface management



*Thank you*

