



**FREQUENTIS**  
FOR A SAFER WORLD

## Building a Business Case for Remote Towers

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Think Research

**Think**

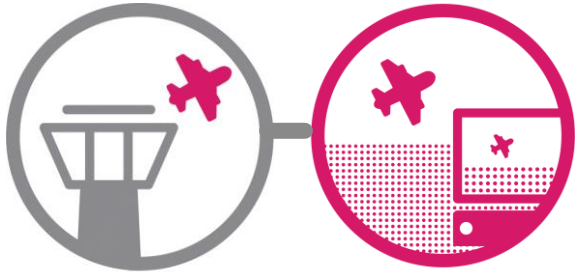
# What has driven the Business Case?

**Think**

Up until now, the Business case for Remote Towers has centred around:



Cost, or Cost Efficiency as a primary driver.



Replicating today's TWR operations and reproducing the visual link using cameras and screens.

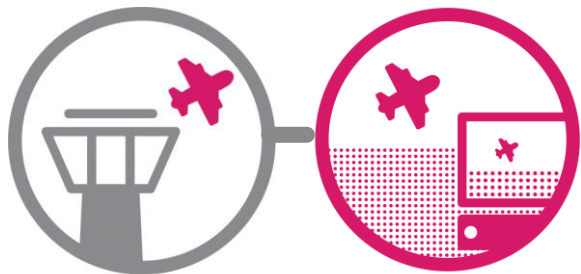
# What has driven the Business Case?

**Think**

This approach has had some success but the Business Case will not apply everywhere



Under Single Tower operations (1 remote module to 1 aerodrome) the return on investment can take many years or requires high volume roll out (“Tower Farms”). The benefits are small in proportion to costs.

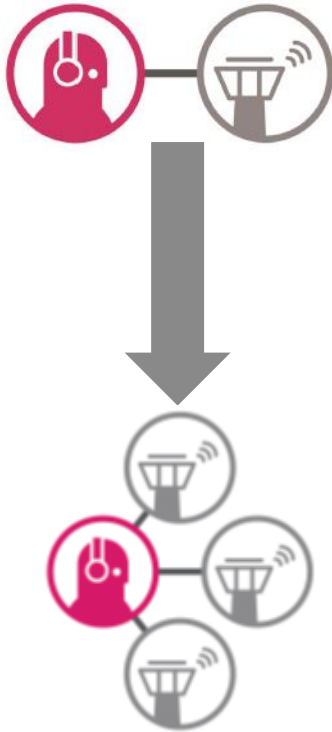


The applicability of this solution limits the operating scenarios and thus size of benefit.

# How can today's Business Case be harnessed?

**Think**

Despite the limitations, today's model has potential to be harnessed for greater or non-financial benefits.



- **Single Airfield Benefits:**
  - Recruitment, training and managing of resource
  - *Note: costs may not be lower; but the service is more sustainable*
- **Multiple Airfield Benefits:**
  - Rostering and training benefits
  - Increased reduction in infrastructure and operating costs
- **Policy Benefits:**
  - Ensure availability of cost effective airport ATS in the regions
  - Enable competition between airport ATS providers

# How can today's Business Case be harnessed?

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Despite the limitations, today's model has potential to be harnessed for greater or non-financial benefits.

## Contingency ATS:

- Revenue resilience

## "Bunker Towers"



## Replacement Tower:

- Lower cost solution when building new runways
- Relocate to secure remote location with better access

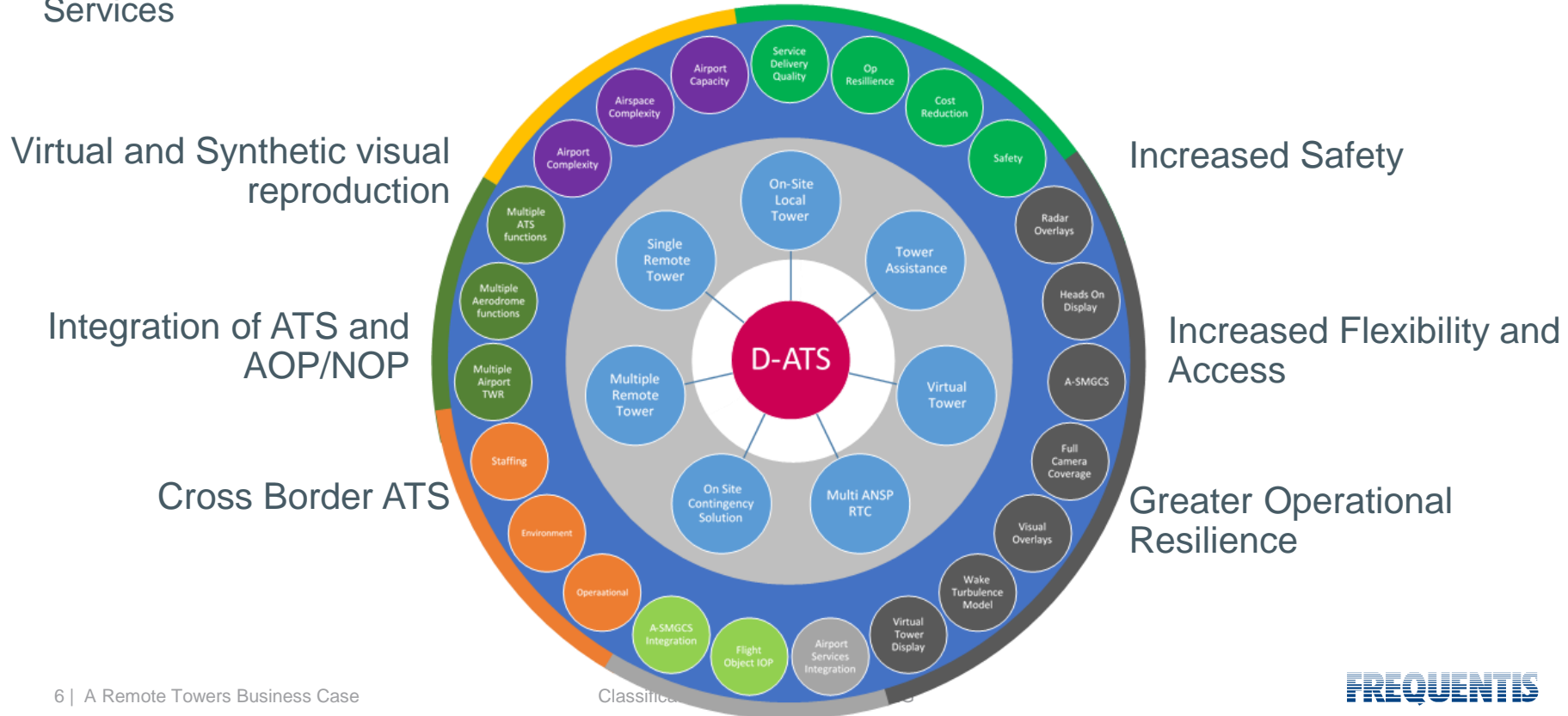
## Policy:

- Enable competition for ATS at *complex* airports

# Digital ATS: Unlocking further benefits

**Think**

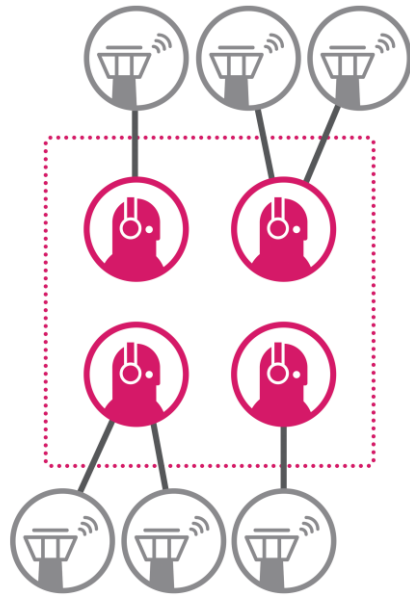
Additional benefits are available by extending our understanding of Digital Aerodrome Traffic Services



# Enabling new business models

**Think**

Remote Tower and Digital Aerodrome Traffic Services have the potential to create new business models for both Service Provider and Airport.



## ■ For the Service Provider:

- The ability to consolidate and centralise services remotely with savings passed on to the airport.
- The ability to provide services in new markets. A contestable market creates new competition and new competitors.

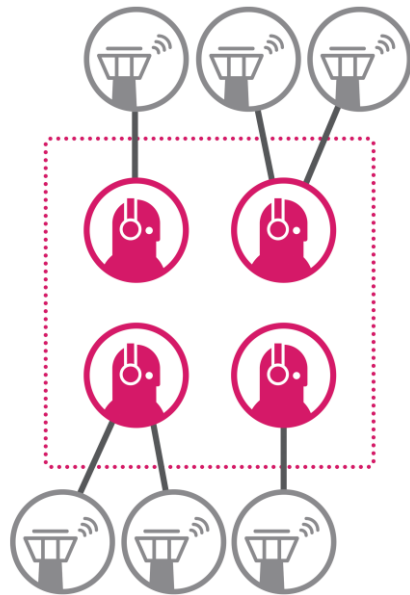
## ■ For the Airport:

- The ability to outsource ATC without reliance on new providers taking over the old tower building.
- Airports hand picking different services to suit their market and budget.
- Airport groups buying shared ATS services.

# Enabling new business models

**Think**

Remote Tower and Digital Aerodrome Traffic Services have the potential to create new business models for both Service Provider and Airport.



## ■ For the Supplier:

- The ability to provide whole ATC Tower systems or just visual sub-systems through standardised interfaces.
- The possibility of supplier owned and maintained centralised infrastructure (Remote Tower Centres), leased to service providers.
- The ability to form strategic alliances with “traditional” service providers to supply and operate in new markets.



# Conclusion

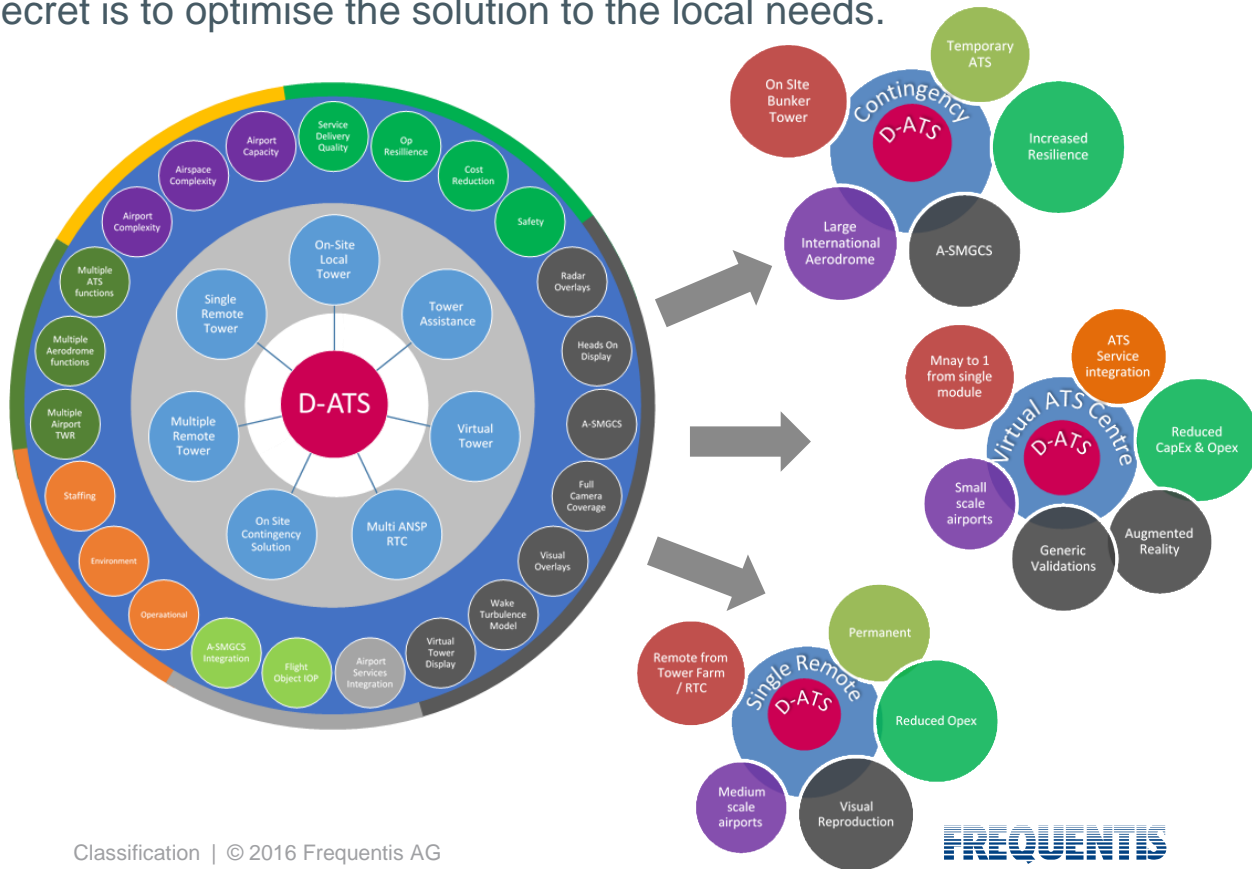
**Think**

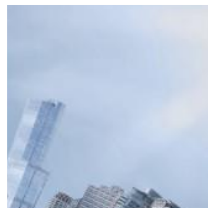
As with all business cases, the secret is to optimise the solution to the local needs.

The key thing is to work out the airport requirement for ATS and the most effective means of providing that service.

Remote Tower technology, and D-ATS, is changing what an airport can afford in terms of ATS.

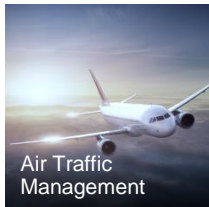
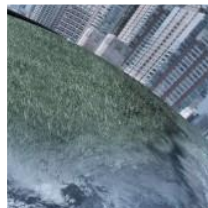
The business case for investment will continue to evolve with the technology and operational concept.



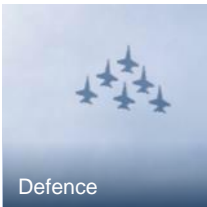


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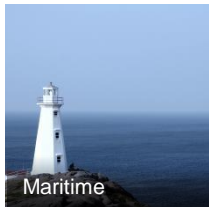
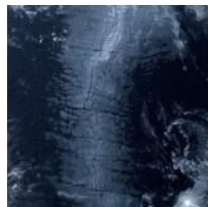
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