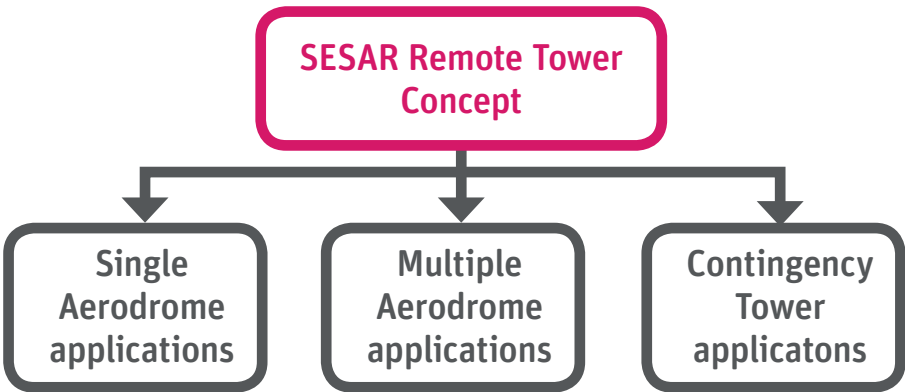


Remote Tower

Remote Tower enables the provision of ATS from a facility autonomous of the local tower (either on or off airport site). A Remote Tower facility has to provide the controller with a means of visual observation and sufficient situational awareness to maintain ATS to at least the same level as in current operations.

SESAR Solution
SESAR Remote Tower projects P06.09.03 and P06.08.04 developed the operational concept, safety and human performance cases. The projects focused on Single, Multiple and Contingency applications to small to medium airports. The aim was to develop a “basic” Remote Tower solution to validate the concept. A series of Advanced Visual Features were added at a later stage to expand the technical solution and potential use cases.

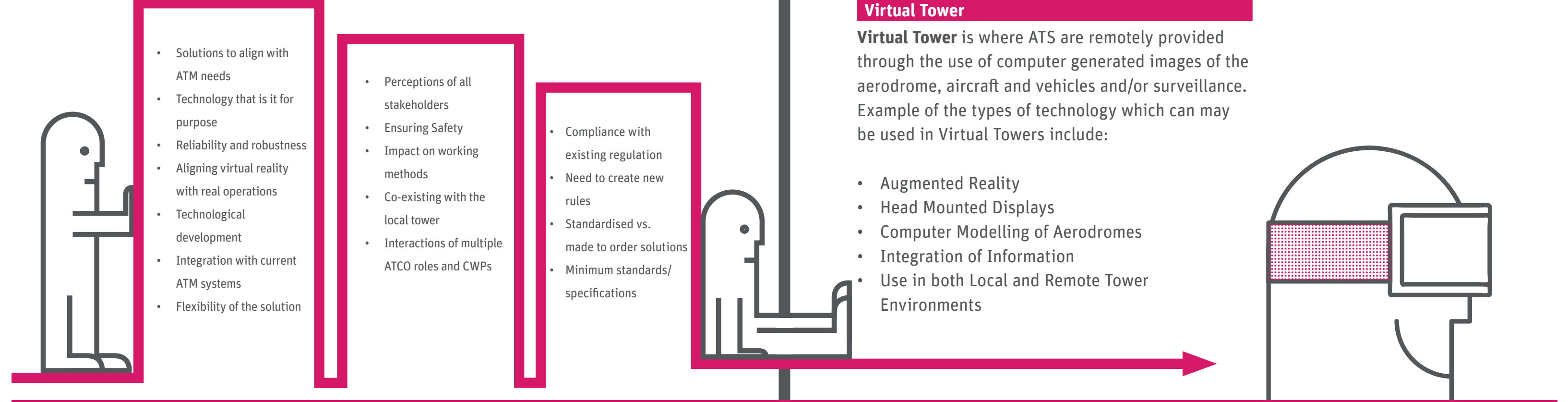
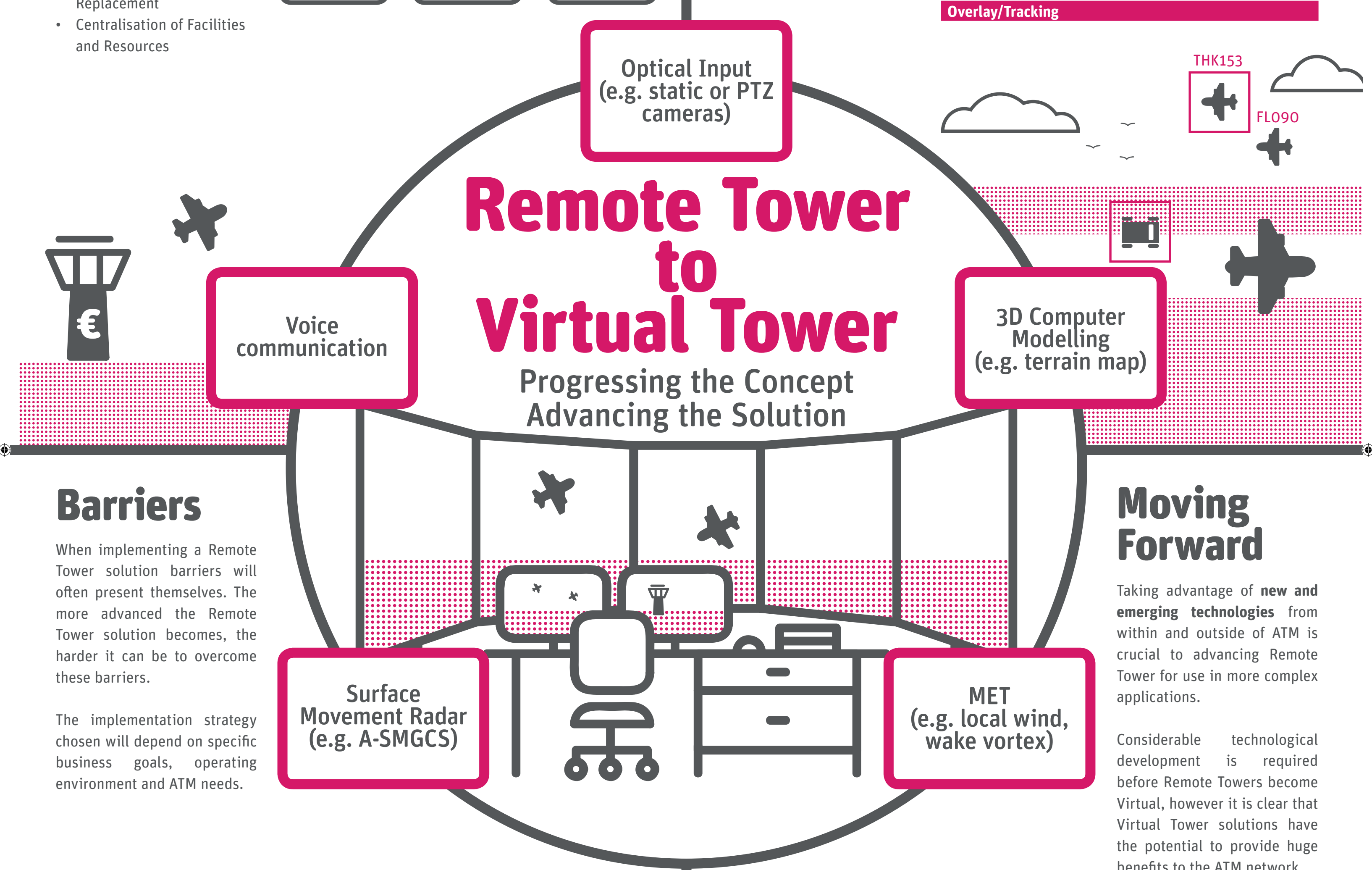
- Benefits of Remote Tower**
- Cost Efficiency
 - Operational Resilience
 - Service Continuity
 - Flexibility of ATS provision
 - Alternatives to Tower Replacement
 - Centralisation of Facilities and Resources

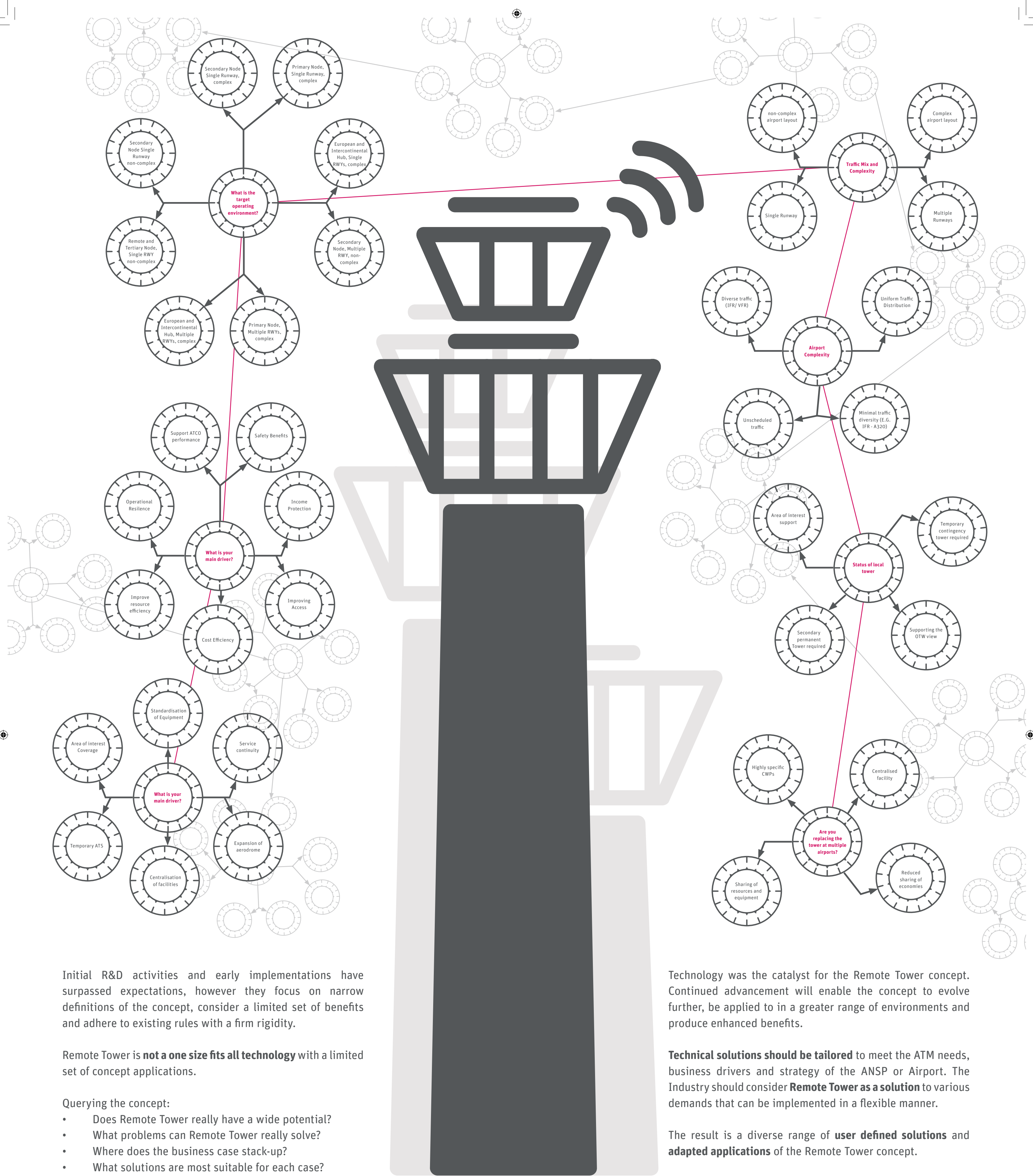


Advanced Visual Features

Facilitating New Technologies within ATS
Remote Tower provides a **unique environment and opportunity** to enable other technologies to be used in ATS provision. Such technologies were primarily developed to support controller situational awareness, however additional benefits are likely to emerge.

- | Advanced Visual Features | Potential benefits |
|---|-------------------------------------|
| • Pan Tilt Zoom (PTZ) cameras | • Improved Situational Awareness |
| • Infra-Red Sensors | • Reduced Workload |
| • Visual (non-cooperative) Target Tracking | • Enhanced Operational Safety |
| • Integrating Optical Sensors with Surveillance Sensors | • Increased Capacity and Resilience |
| • Augmented Displays | |
| • Area of Interest Viewing | |
| • Adapted Visual Presentations | |





Initial R&D activities and early implementations have surpassed expectations, however they focus on narrow definitions of the concept, consider a limited set of benefits and adhere to existing rules with a firm rigidity.

Remote Tower is **not a one size fits all technology** with a limited set of concept applications.

- Querying the concept:
- Does Remote Tower really have a wide potential?
 - What problems can Remote Tower really solve?
 - Where does the business case stack-up?
 - What solutions are most suitable for each case?

Technology was the catalyst for the Remote Tower concept. Continued advancement will enable the concept to evolve further, be applied to in a greater range of environments and produce enhanced benefits.

Technical solutions should be tailored to meet the ATM needs, business drivers and strategy of the ANSP or Airport. The Industry should consider **Remote Tower as a solution** to various demands that can be implemented in a flexible manner.

The result is a diverse range of **user defined solutions** and **adapted applications** of the Remote Tower concept.

What Remote Tower solution do I need?

