

***ATCEUC POSITION***  
***PAPER ON***  
***REMOTELY***  
***OPERATED TOWERS***

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## ***Introduction***

During the last years, ATCEUC, playing its role fully, has been following the different developments on Remotely Operated Towers (ROT).

ATCEUC's position is based on a multi-layer analysis, which includes the technical, legal, operational and social impacts in the provision of Air Traffic Control. It is of paramount importance to have a common agreed vision amongst all stakeholders on each of the topics discussed in this paper.

At both European and local level, the work of ATCEUC representatives is essential for the adequate implementation of Remotely Operated Towers.

## ***Technical analysis***

ATCEUC does believe technological developments are important if they offer an added value both to the service provision and to Safety. Since these totally new technological functions are set in operation for the first time ever in air transportation, new common technical requirements are required to ensure, (inter alia):

- Correct and continuous visualisation, with a quality equal or better than in a conventional tower
- That occurrence of hardware or software failure and cybersecurity requirements are appropriately covered under contingency measures and procedures, including those on air traffic flow management.
- Mitigation of fatigue in ATCOs working in a Remote environment (Study of Human Factor)
- The ability to handle traffic at a ROT shall be equal or better than from a conventional tower operation for the same airport

**These technical prerequisites are essential and have to be addressed properly. At European level, minimum levels of equipment and technological performance have to be clearly defined.**

## ***Legal analysis***

EASA has started a rulemaking task (RMT.0624 + NPA) and ICAO standards and recommended practices already have important framework about Aerodrome Control Towers (ICAO Doc. 9426 (Part III, 2.1.1), ICAO Doc. 4444 (Ed 15, 7.1.1.2)).

**Today ICAO Standards and Recommended Practices allow the use of cameras and impose a continuous watch of the manoeuvring area. ATCEUC is strongly attached to this principle. The development of Remotely Operated Towers has to bring added value to the service provision and the legal framework has to continue to impose a level of safety at least equivalent to today's level.**

Other areas of legal concern are:

- The need for a clarification of the ~~new map~~ of responsibilities and liabilities, since ~~new actors~~ enter the scene.
- The establishment of the number, composition of traffic and aerodrome layout targeted to be controlled remotely.

**The required regulation needs have to be identified, and properly addressed.**

## ***Multiple tower issue***

Fragmented situational awareness, use of a common frequency, completely different layouts and weather patterns: these potential difficulties can lead to a significant decrease in the safety of operations.

**Because it is not humanly possible to maintain CONTINUOUS watch to all operations on more than one aerodrome, ATCEUC strongly rejects the possibility for an ATCO to provide ATC services SIMULTANEOUSLY to more than one airport.**



## ***Licensing issue***

For ATCEUC, a TWR endorsement for a specific aerodrome shouldn't be valid for remote operations to the same aerodrome. There should be two distinct endorsements, as the working environments are totally different. Possibly different medical limitations also have to be taken into account.

For Remote Tower Centres, each aerodrome has to keep its own unit endorsement. The ROT may solve the equipment differences between two aerodromes, but cannot do the same with procedures and specificities such as layout, environment or meteorology.

**ATCEUC believes that as long as conventional tower operations exist in a country, a basic minimum of one conventional aerodrome tower endorsement needs to be kept current in addition to the remote endorsement. Additionally, each aerodrome shall continue to have its own unit endorsement.**



## ***Operational analysis***

**The operational prerequisites listed below are the cornerstone of the development of ROT.**

- Separation standards, procedures, operational minima, recommended practices have to be properly defined.
- Situational awareness, fatigue effects and safety assessments have to be carried out on real time trials.
- Adequate training ratings must be defined (initial, continuation, fall-back, emergency, etc.)
- Communication procedures and phraseology should be properly revised.
- Regulations should be studied and approved on airports according to declared capacities when remotely operated, in order to avoid transgressions on ATCOs workload.
- For multiple tower centres, the supervisor role should be clearly established.

## ***Social analysis***

The implementation of the ROT concept will also impact ATS staff concerned because they could be required to move from their actual place of employment to the ROT location. Air Traffic Services is a highly specialised domain, which depends directly on the commitment and excellence of its people. Family and social life could be strongly affected and this fundamental aspect has to be duly taken into account, especially if delocalisation is planned. Involvement in the decision process of the concerned unions shall be ensured right from the start, taking into account the principles already stated in the new Social Dialogue Toolbox.

**For ATCEUC, the social issue is of paramount importance.**



## **Conclusion**

***With the development of Remotely Operated Towers, the ATCO roles and responsibilities will remain the same, meaning to provide a safe, expeditious and orderly flow of air traffic. Where added value to the service provision and to safety can be offered, ATCEUC will support technological developments.***

***ATCEUC has pointed out several pre-requisites on social, legal, technical, operational, licensing issues. These cornerstones set the minimum standard for ATCEUC to support the ROT concept.***

***Meanwhile, the possibility for an ATCO to simultaneously provide ATC to more than one aerodrome is strongly rejected by ATCEUC.***

***To ensure a smooth and professional debate, involvement in the decision process of the concerned Trade Unions shall be ensured right from the start.***