HungaroControl
Remote Tower for Multiple Airports

Mr. Csaba Gergely

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Straight to the point

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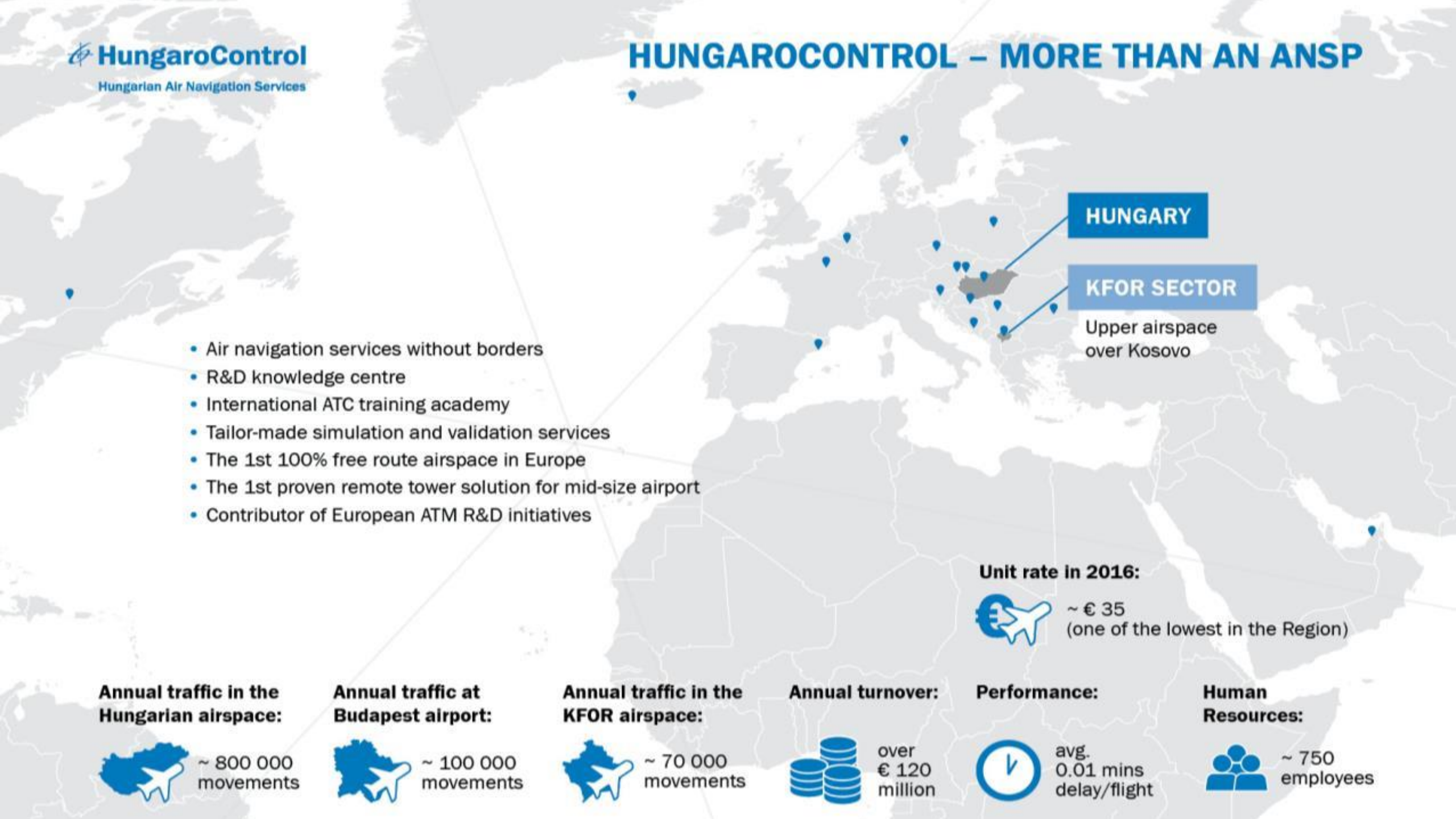
Hungarian Air Navigation Services

HUNGAROCONTROL – MORE THAN AN ANSP



- Air navigation services without borders
- R&D knowledge centre
- International ATC training academy
- Tailor-made simulation and validation services
- The 1st 100% free route airspace in Europe
- The 1st proven remote tower solution for mid-size airport
- Contributor of European ATM R&D initiatives

Unit rate in 2016:

~ € 35
(one of the lowest in the Region)

Annual traffic in the Hungarian airspace:

~ 800 000 movements

Annual traffic at Budapest airport:

~ 100 000 movements

Annual traffic in the KFOR airspace:

~ 70 000 movements

Annual turnover:

over € 120 million

Performance:

avg. 0.01 mins delay/flight

Human Resources:

~ 750 employees

REMOTE TOWER

A new approach for mid-size airports

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Video link:

https://www.youtube.com/watch?v=P01tEU_dYyI

What is a rTWR?

By 2019, HungaroControl aims to operate a full-time remote tower in Budapest. Budapest airport will be the first remotely controlled airport of its size and complexity, with over 100,000 movements per year.

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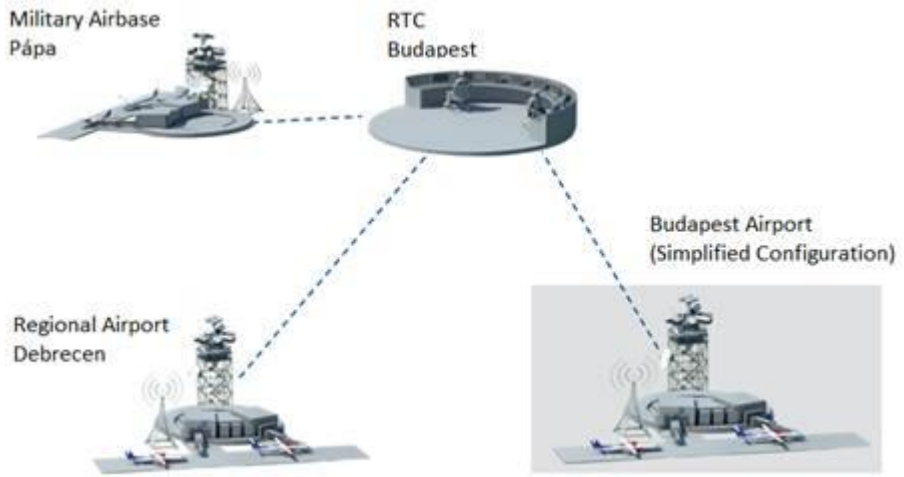
rTWR for multiple airports

The concept of multiple remote towers can further maximize the cost savings realized through the implementation of Remote Tower services. The basic notion of the concept is for a single Air Traffic Control Officer (ATCO) to deliver control services to multiple airports simultaneously from a single working position.



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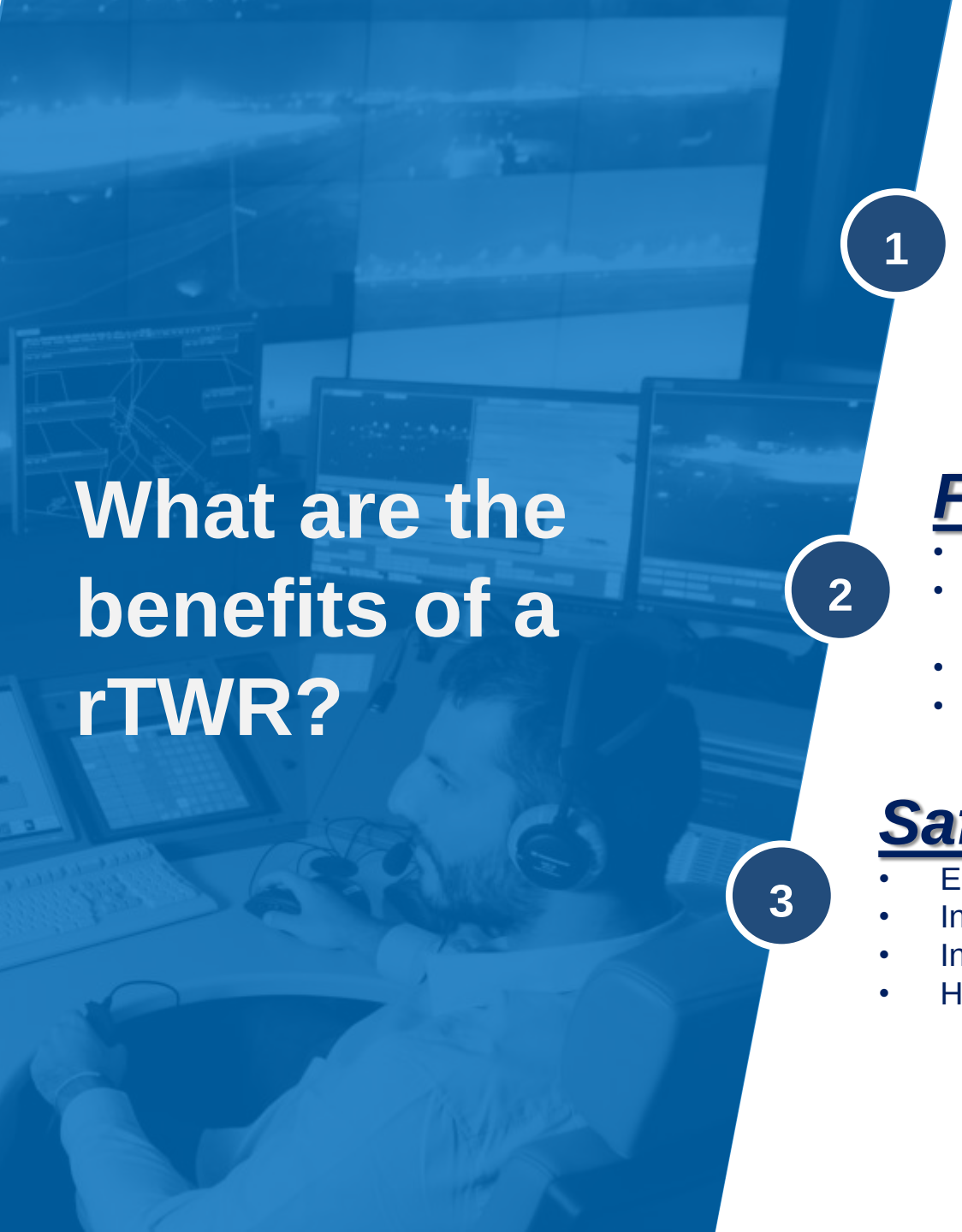

What are the benefits of a rTWR?

1

Operational benefits

- Increased situational awareness
- More convenient workplace & working position
- Increased capacity (e.g. LVP/normal)
- To have a chance for real solutions 100% tailored to your needs
- To exploit the advantages of augmented reality

2

Financial benefits

- Less capital expenditure considering normal office building
- Less operational expenditure considering camera and data connection infrastructure
- Optional: decreased number of ATCOs
- Less cost related to the ATCO's training

3

Safety benefits

- Enhanced safety
- Increased situational awareness
- Increased capacity (e.g. LVP/normal)
- High definition cameras technology to safely and securely manage air traffic

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DESIGN YOUR OWN REMOTE TOWER SOLUTION!

ONSITE AUDIT
Problem definition

LAB
Concept preparation workshop

REHEARSAL
Concept validation workshop

Objective:
Specifying business/operational needs and identifying possible solutions fitting to unique requirements
- Assessing local circumstances
- Applying decision tree technique

Objective:
Definition of the operational concept being adapted to the selected airport
- Definition and preliminary analysis of potential alternatives
- Identifying the change including implementation guideline
- Defining and setting priorities

Objective:
Validation of the operational concept defined for the selected airport
- Scenario definition
- Simulation exercises

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Experience-based advisory

1. Continuous innovation activities have positioned us at the forefront of European R&D initiatives
2. Use operational experience to support your development plans
3. Multiply your aerodrome service cost-consciously (both remote and conventional)
4. Improve situational awareness
5. Enhance safety in the most vulnerable situations
6. Get closer to new level of aerodrome ATM services

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Thank you for your attention!
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