



Open Day

PJ-05 EXE-05.02-V2-2.4 (FRQ, HC, DLR, SELEX)

Multiple Remote for three Airports

Jörn Jakobi (DLR)

DLR, Braunschweig

22 Nov 2017



Founding Members



Agenda



10:00 Welcome & Introduction

10:30 Validation Plan & Objectives

10:50 ANSP's Multiple Remote perspective

11:10 Multiple Remote Assistance functions

11:30 Validation Set-up

11:50 Live-Demo at DLR Remote Tower Lab

in a HITL Simulation controlling three Hungarian
Airports with simultaneous traffic by a single
Air Traffic Controller Position

13:00 Lunch

13:45 Q&A Session

14:30 End of Meeting

Jörn Jakobi (DLR)

Maik Friedrich (DLR)

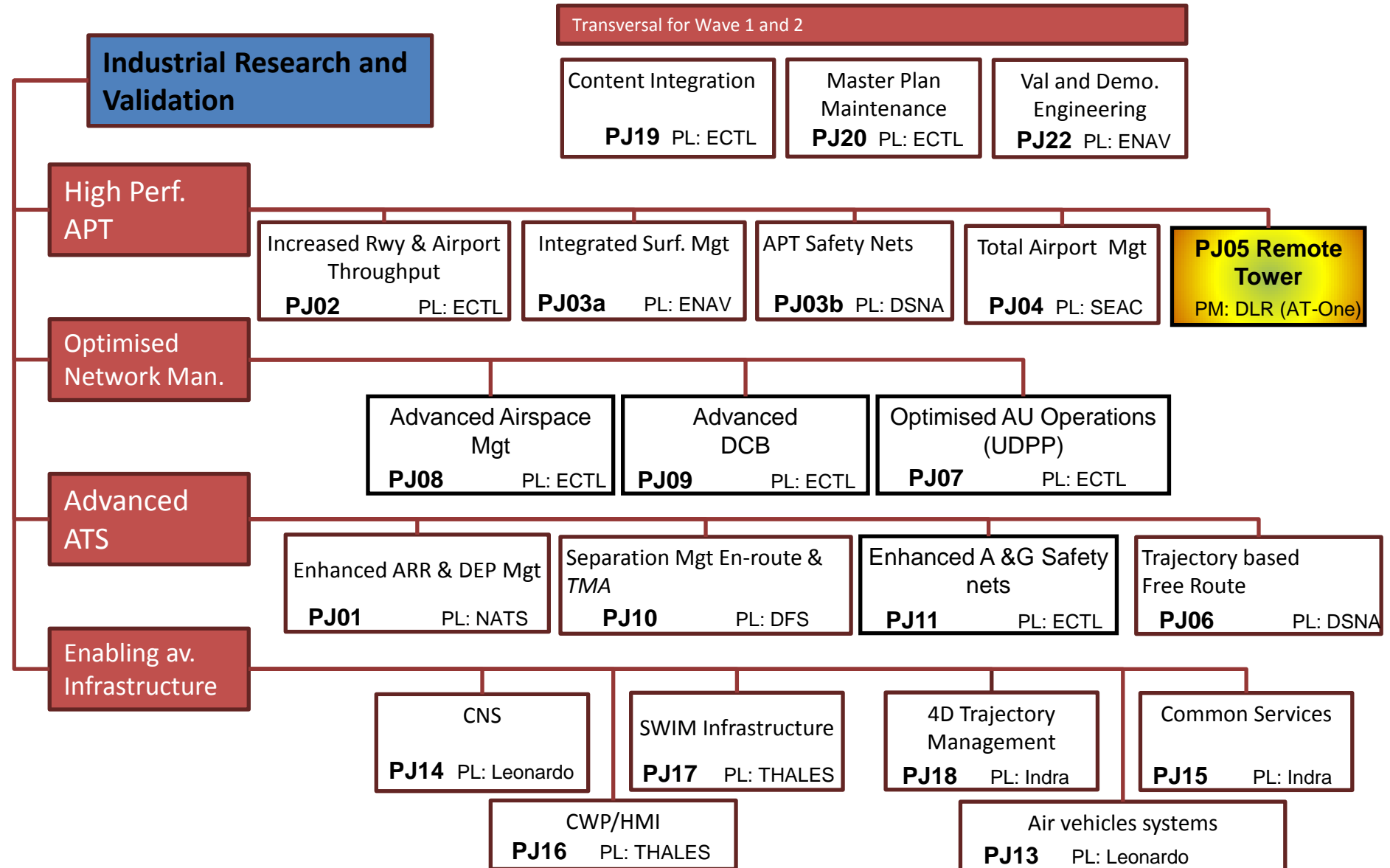
Csaba Gergely (HC)

Susanne Buchholzer (FRQ)

Sebastian Schier (DLR)

*all times UTC+1

S2020 IR Work Programme



**PJ05
Remote Tower for Multiple
Airports**

DLR (AT-One)

**WP1 Project
Management**

DLR (AT-One)

WP2 Solution PJ.05-02

Remotely Provided Air Traffic
Service for Multiple
Aerodromes for up to three
airports

LFV/COOPANS

EXE-05.02-V2-2.1_ON

EXE-05.02-V2-2.2_COOPANS

EXE-05.02-V2-2.3_INDRA

EXE-05.02-V2-2.4_FRQ

WP3 Solution PJ.05-03

Highly Flexible Allocation
of Aerodromes to
Remote Tower Modules

DFS

**WP4 Ethics
Requirements**

DLR (AT-One)

WP5 Solution PJ.05-05

Advanced Automated
MET System

LPS (B4)

German Aerospace Center (DLR)

Institute of Flight Guidance

Introduction to the Institute and Remote Tower Research

22 November 2017

Jörn Jakobi



Knowledge for Tomorrow

DLR – German Aerospace Center

National aeronautics and space research centre of Germany



- Research Institution
- Space Agency
- Project Management Agency

Research Areas

- Aeronautics
- Space Research and Technology
- Transport
- Energy
- Defence and Security

Locations and Employees

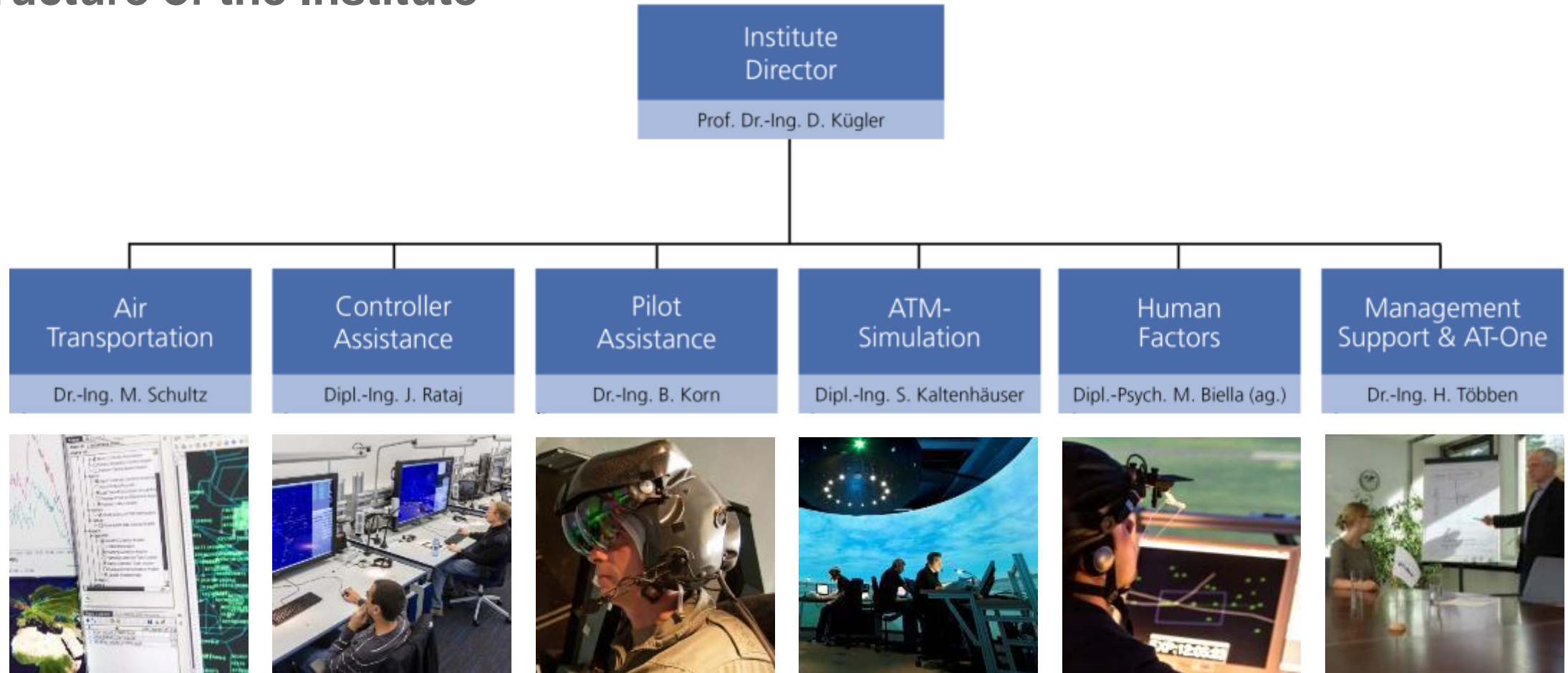
Approx. 8000 employees across
33 institutes and facilities at 20 sites.

Offices in Brussels, Paris,
Tokyo and Washington.

Institute of Flight Guidance



Structure of the Institute



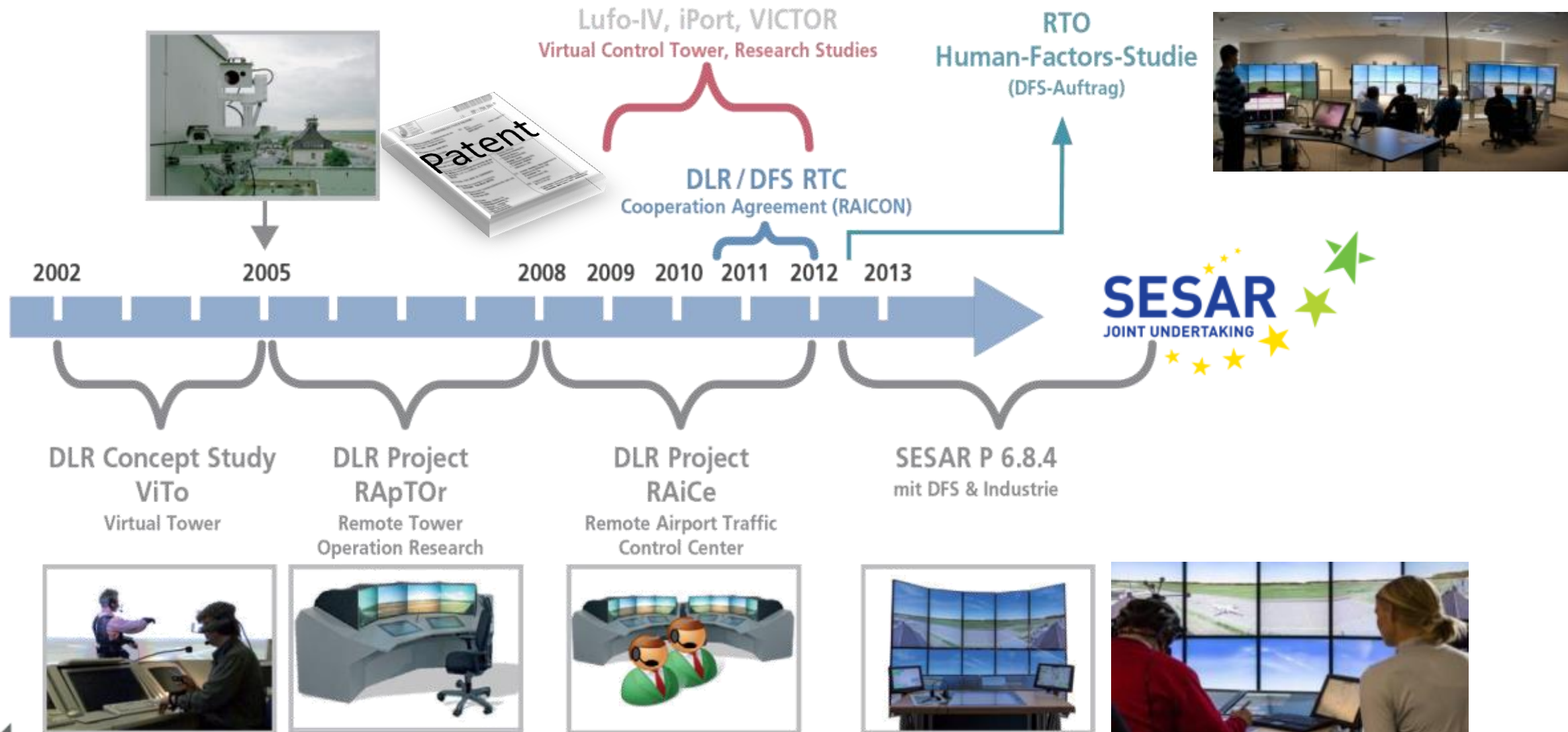
The Vision ²⁰⁰²

DLR introduced the Virtual Tower Control Concept

- Optical sensor-based video surveillance to replace the OTW Tower view
- Visual presentation by a panorama view supported by a PTZ functionality



Remote Tower Operations: From vision to reality





Most recent Field-Test-Platform, DLR Braunschweig





DLR TOWERLAB



Current research activities...



Head-Up-Only

Concept study for a multimodal RTO interface (under development):

