

Airport Mobile Applications by T-Systems

Vasile Mirea | 15.08.2023

T Systems Let's power
higher performance

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Agenda

- 01 How we started**
Airport Departure , Our global references, Airport Portfolio,
- 02 Introduction Airport Mobile Applications**
Airport Mobile Applications
Overview, Use Cases





01

How we started

Airport Departure

Challenge & Solution

T-Systems developed Airport Management System is a fully-integrated complete solution for digital airport management.

The System offers solutions for the airport's everyday business by offering a large number of modular technical components.

It fully reproduces all flight-related activities based on real-time data, enabling a more efficient cooperation between the parties involved in the flight operations.



Our Global References

The Americas

Brazil

- FOR Fortaleza
- POA Porto Alegre

Chile

- IQQ Iquique

Dominican Republic

- SDQ Santo Domingo

Jamaica

- KIN Kingston
- MBJ Montego Bay

Mexico

- GDL Guadalajara
- PVR Puerto Vallarta
- ZLO Manzanillo
- MLM Morelia
- AGU Aguascalientes
- BJX Guanajuato
- TIJ Tijuana
- MXL Mexicali
- HMO Hermosillo
- LMM Los Mochis
- LAP La Paz
- SJD Los Cabos

EMEA

Belgium

- Airport Coordination

France

- LYS Lyon

Georgia

- KUT Kutaisi

Germany

- FRA Frankfurt
- MUC Munich
- BER Berlin
- DUS Dusseldorf
- HAM Hamburg
- HAJ Hanover
- NUE Nuremberg
- DRS Dresden
- LEJ Leipzig
- SCN Saarbruecken
- BRE Bremen
- CGN Cologne/Bonn
- Airport
Coordination

Hungary

- Airport Coordination

Ireland

- DUB Dublin
- ORK Cork

Italy

- MXP Milano
- LIN Milano

Netherlands

- AMS Amsterdam
- Airport Coordination

UK

- LHR, LGW London
- MAN Manchester
- STN London

Zambia

- NLA Ndola

APAC

China

- PKX Beijing Daxing
- NKG Nanjing
- HAK Haikou
- PVG Shanghai Pudong
- NGB Ningbo
- SZX Shenzhen
- XMN Xiamen

Indonesia

- CGK Jakarta

India

- BLR Bangalore

Malaysia

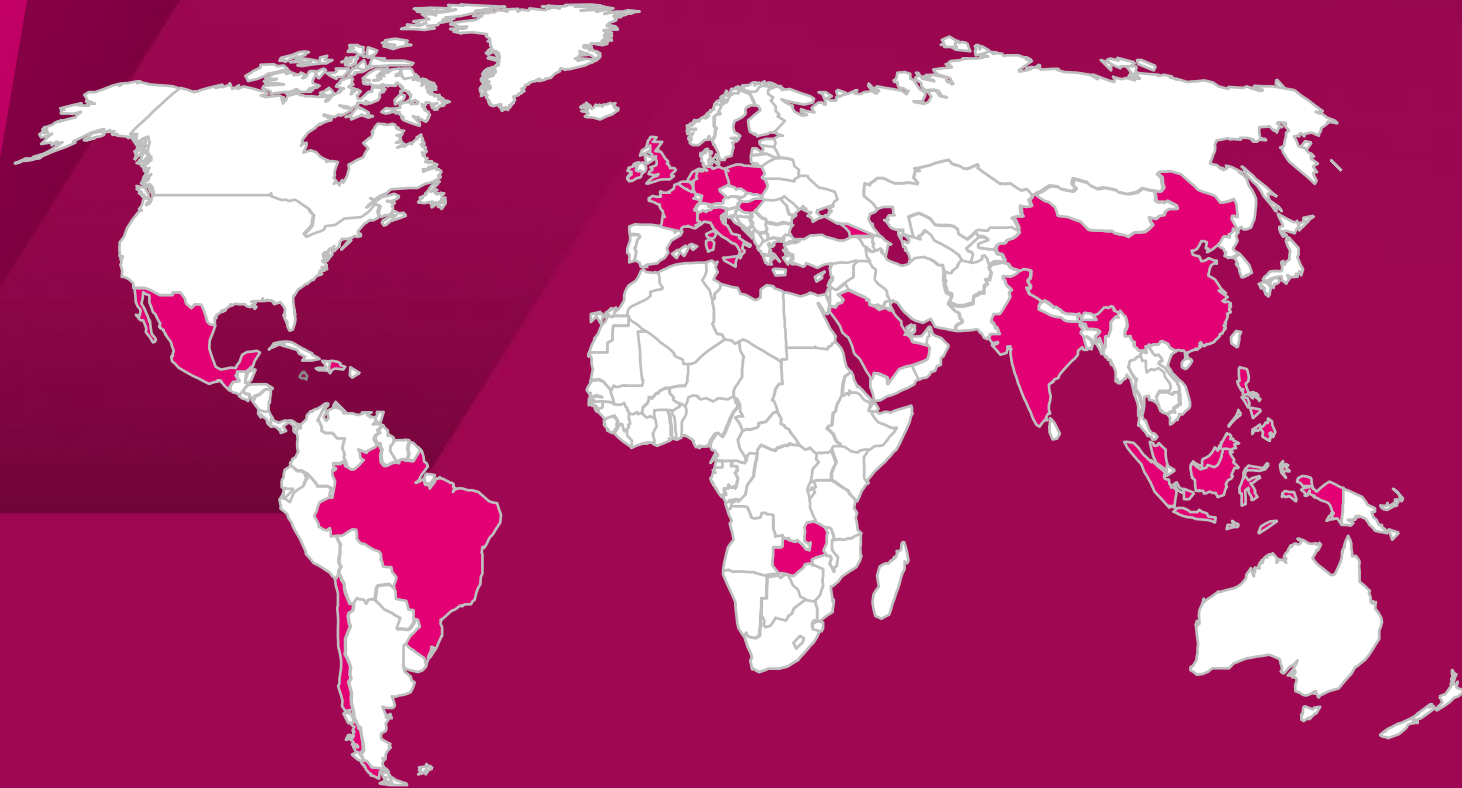
- KUL Kuala Lumpur

Philippines

- MNL Manila

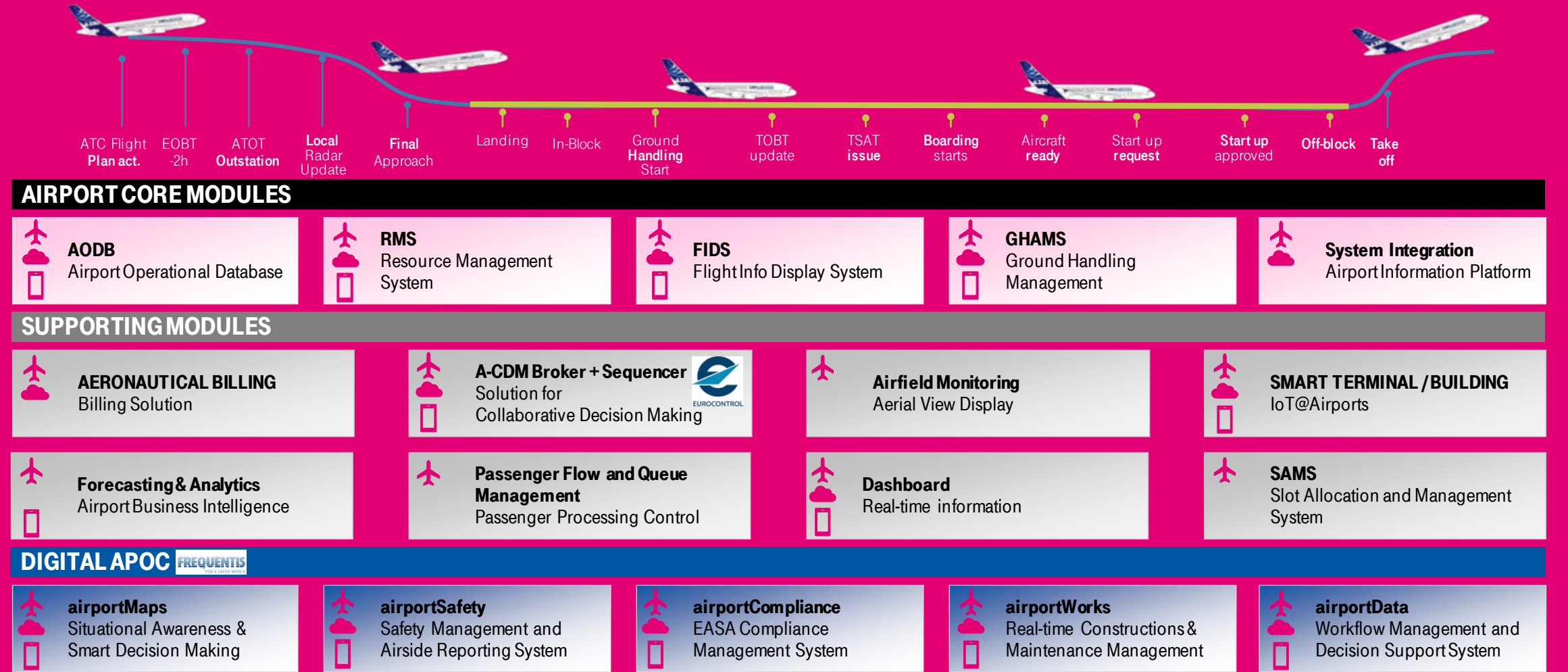
Saudi Arabia

- DMM Dammam



Our Airport Portfolio

Besides our (Multi) Airport Core Modules like **AODB**, **RMS**, **FIDS**, **GHAMS** and our **Systems Integration** package we support our clients with specific adaptable applications **Airport CDM**, **Situational Awareness Modules** like our **Airfield Monitoring** and our **Real Time Dashboard** and **Airport Analytics** in combination with our **DIGITAL APOC** applications.



✈ Standard product available ☁ SaaS enabled 📱 Mobile device support

Airport Mobile Applications Introduction

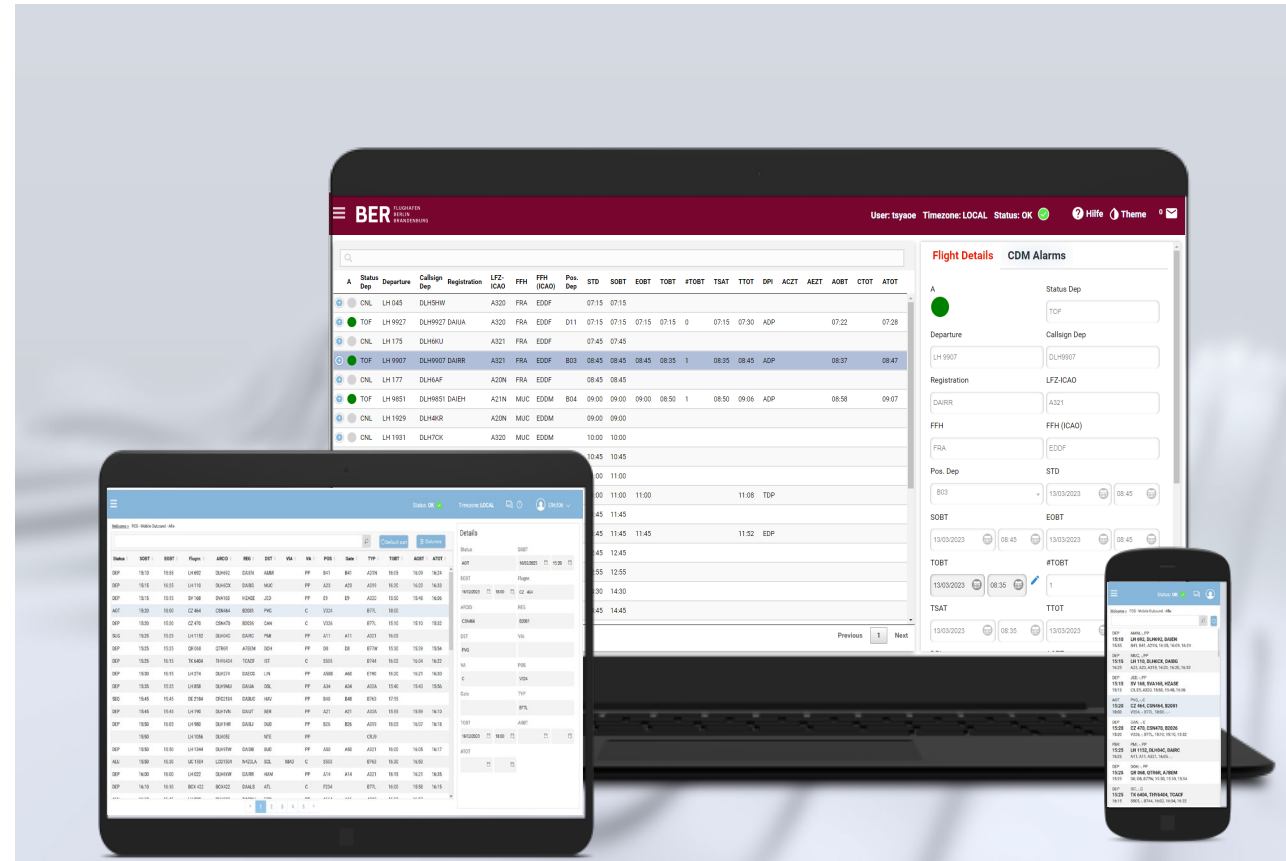
Advantages

Airport Mobile Applications displays/changes important and relevant airport information for the airport business process.

T-Systems' in-house developed Airport Mobile Applications optimize the productivity and increase the process efficiency.

Main advantages are:

- Minimize the communication between stakeholders.
- Increased usability
- Cost reduction through time savings.
- Improved security.
- Highly configurable data display.
- Integrates into the client hardware and software infrastructure.
- Supports improved accessibility: dark mode.
- Corporate design.



02

Airport Mobile Applications: Overview, Use Cases, Features

Overview AODB Mobile Applications

AOEMobile



Use Cases AOEMobile with AODB

Ground Handlers

- GH role specific flight views
- Milestone update



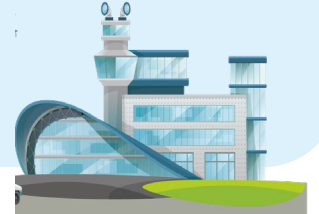
Airlines

- Load & Pax Update
- Milestone Update
- Airline Views
- Registration Updates
- PRM servicing



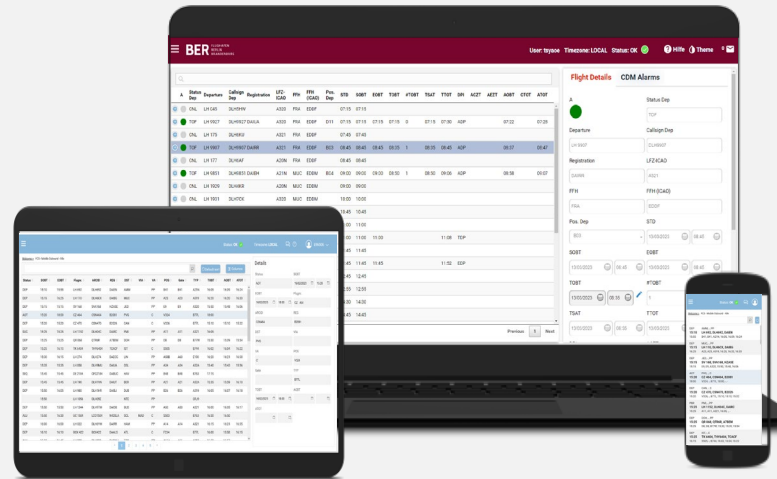
Airport Team

- Real time tracking from anywhere
- Update/view key flight information
- User role-based views
- Terminal Manager for Flight View



Other Stakeholders

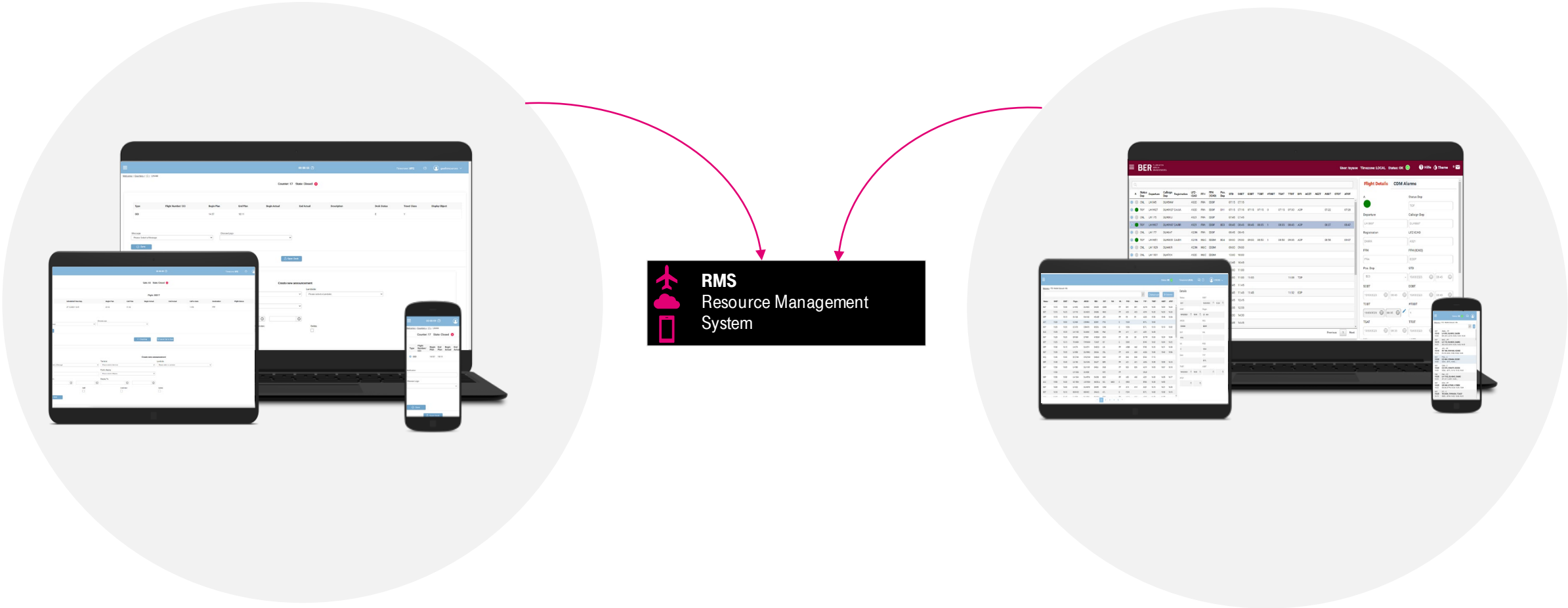
- Airside team like Follow Me gets flight information for tasks assignments
- Security Team for updates on Flights



Overview RMS Mobile Applications

ResourceApp

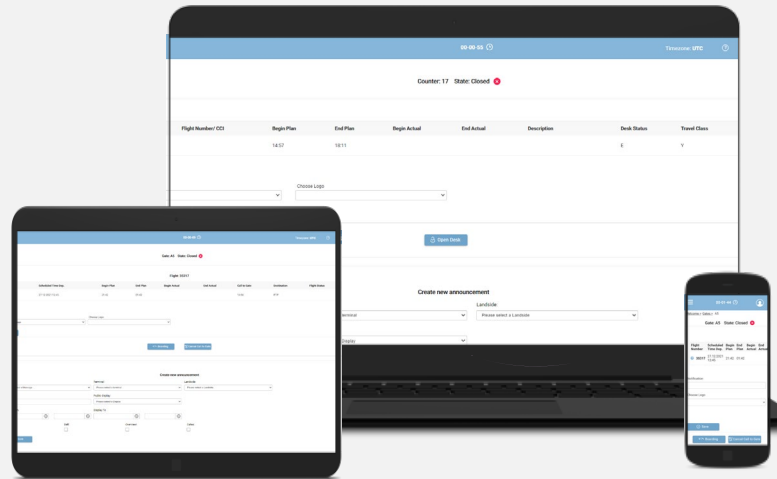
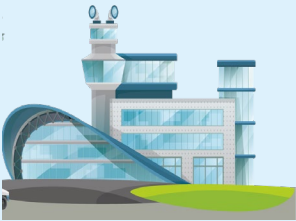
AOEMobile



Use Cases ResourceApp with RMS

Airport Team

- User role-based views for Terminal Manager by example



Airlines/Ground Handlers

- Gate Agents/Boarding process
- Check-in Agents/Check-in process
- Airline Administrator



Use Cases AOEMobile with RMS

Ground Handlers

- GH role specific flight views
- Milestone update
- Task Assignment & update for generic resources like Bus, Cleaning or L&F, Screening



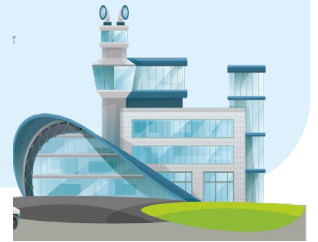
Airlines

- Load & Pax Update
- Milestone Update
- Airline Views
- Registration Updates
- PRM servicing
- Arrival/Departure Resources Tabs



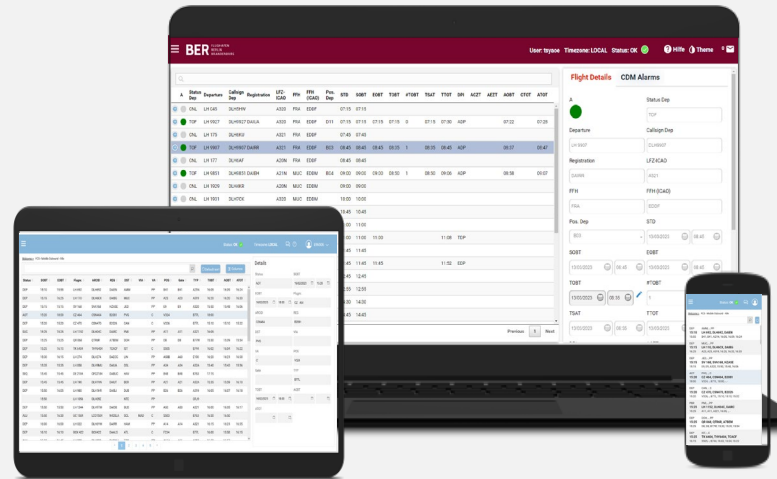
Airport Team

- Real time tracking from anywhere
- Update/view key flight information
- User role-based views
- Terminal Manager for Flight View
- Arrival/Departure Resources Tabs



Other Stakeholders

- Security Team for updates on Flights
- Airside team like Follow Me for tasks assignments



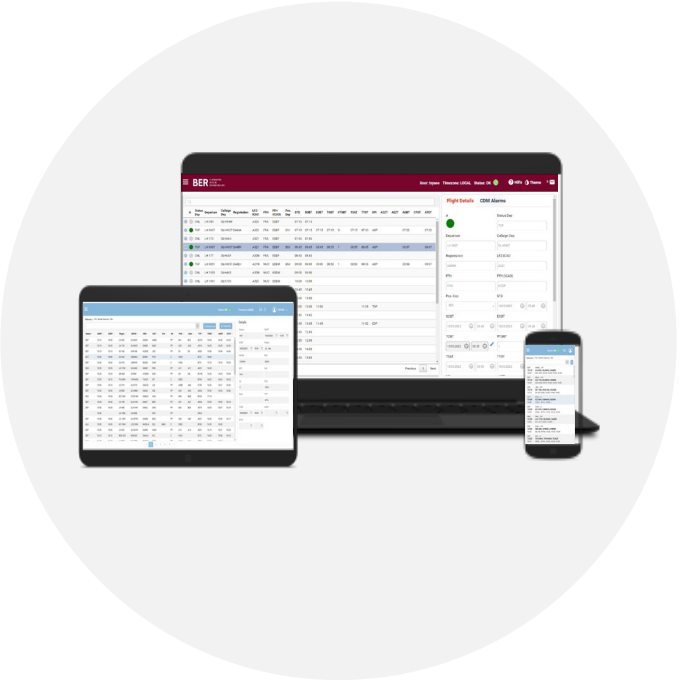
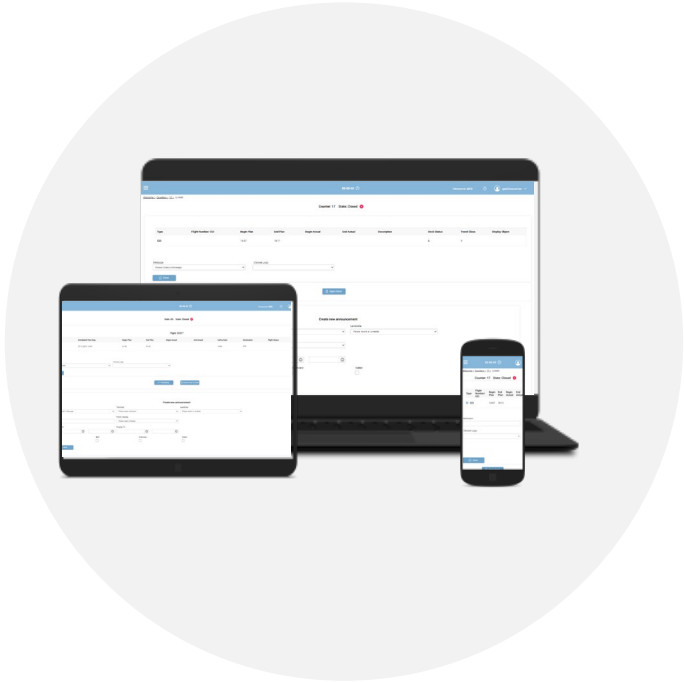
Overview FIDS Mobile Applications

ResourceApp

Webis3



AdvertisingApp



Use Cases ResourceApp with FIDS

Airport Team

- User role-based views for Terminal Manager by example



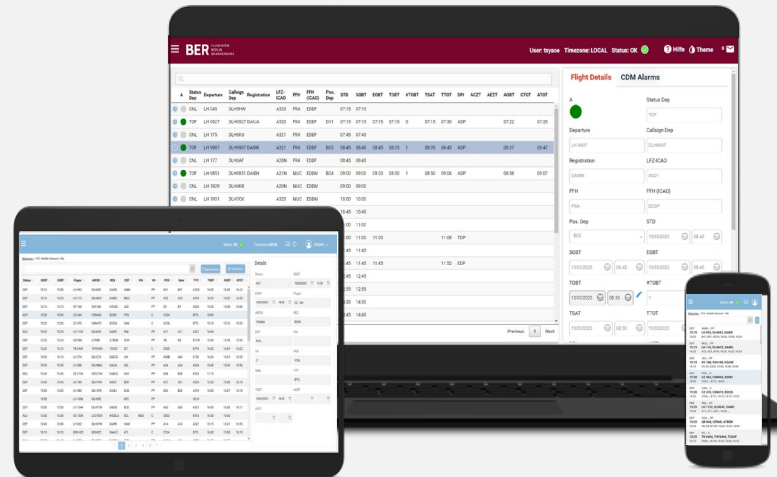
Airlines

- Gate Agents
- Check-in Agents
- Airline Administrator
- CMS, Messages, Announcements and Media



Other Stakeholders

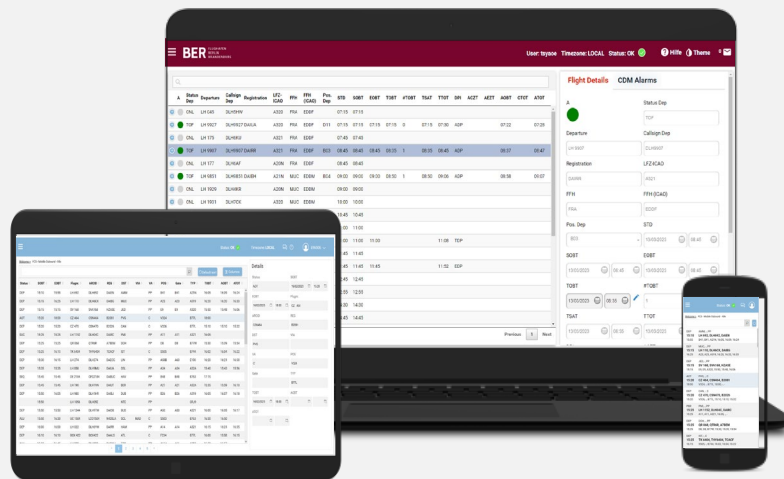
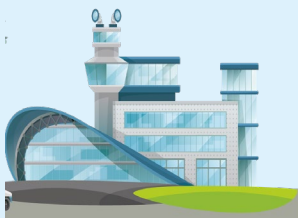
- Airport Partners which wants to make Advertising in the Airport



Use Cases AdvertisingApp with FIDS

Airport Team

- Airport Advertising Manager



Other Stakeholders

- Airport Partners which wants to make Advertising in the Airport
- Third-party



Use Cases Webis3 with FIDS

Ground Handlers

- GH role specific flight information



Airlines

- Airline Views for Arrival&Departures
- Realtime CDM Milestones information



Airport Team

- Staff information
- Passenger information
- Airport Service Providers
- Gate&Counter states
- Terminal Manager for flight view
- Departure Sequence information



Other Stakeholders

- Airport Partners which want see any relevant flight information
- Security Team for updates on Flights
- Parkplaces information
- Tourist information

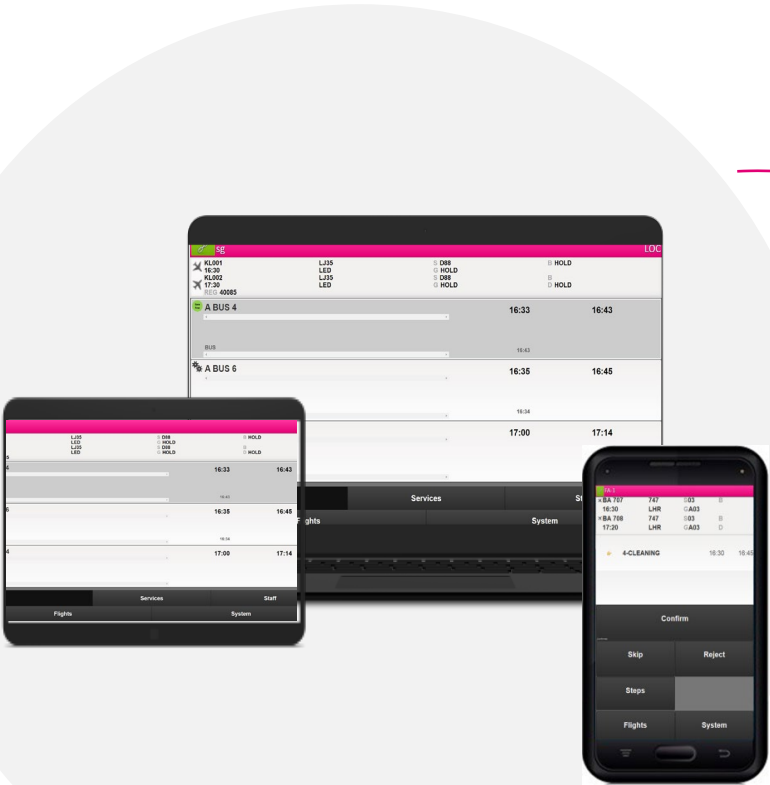



The central graphic shows three devices (laptop, tablet, and smartphone) displaying flight information. A large pink circular arrow surrounds these devices, indicating a continuous flow of data between the different user groups.

Arrival											
Flight	From	ETA	A/ATA	AT/ON	TA	HB	POS	HB	Type	MT	Note
RETR337	LOW	0910	1047	1054	C1	C1	184	HEIDR	A320M	OKL	
UL 1115	MDL	0940	1056	1100	A2	A2	184	ELDTY	B738M	OKL	
EZ 1202	MDL	1045	1120	1129	C2	C2	184	ELDTY	A320	OKL	
EW 1200	MDL	1110	1210	1214	B1	B1	111	ELDTY	A320	OKL	
1B 3130	MDL	1110	1211	1215	B1	B1	117B	ELDTY	A319	OKL	
WY 3040	MDL	1200	1304	1304	B2	B1	121	ELDTY	A320	OKL	
1B 1807	PCO	1225	1240	1240	B1	B1	107A	ELDTY	A321		
1B 123	CDL	1230	1222	1222	C2	C2	185	ELDTY	B738M	145	
			1313	1312A	B2	B2	201	ELDTY	A319		
			1325	1324A	B2	B1	221	ELDTY	B190	OKL	
			1356	1356A	B1	B1	208	ELDTY	A321	OKL	1545
			1404	1403A	B1	B1	208	ELDTY	A320M	OKL	
			1443	1443A	C2	C1	111	ELDTY	A320	OKL	
			1716	1716	C2	C2	112	ELDTY	A321		
			1816	1816A	B1	B1	114	ELDTY	A320	OKL	
			1816	1816	B2	B2	113	ELDTY	CRJ9	OKL	
			1705	1705	B2	B1	115A	ELDTY	B738M		
			1710	1710	B2	B2	117B	ELDTY	B190		
			1715	1714	B1	B1	119	ELDTY	A320		
			1738	1738A	C2	C2	112	ELDTY	A320		
			1825	1825	B2	B2	120	ELDTY	B738M		

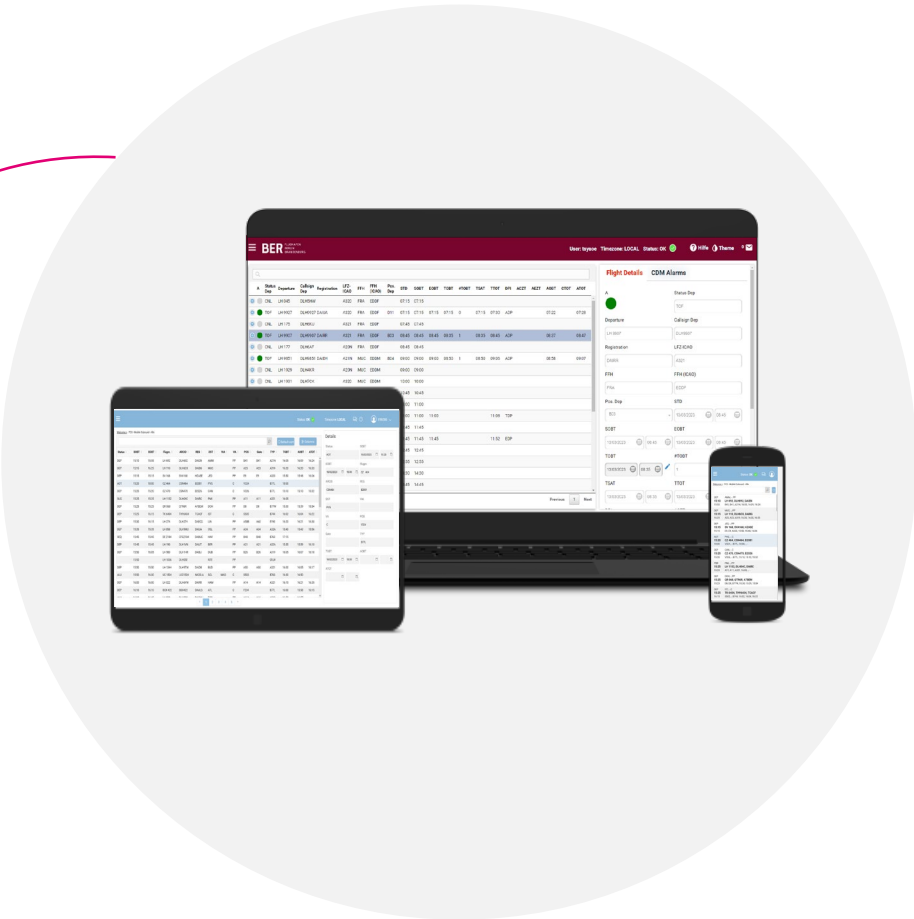
Overview GHAMS Mobile Applications

GHAMS Mobile



 **GHAMS**
Ground Handling

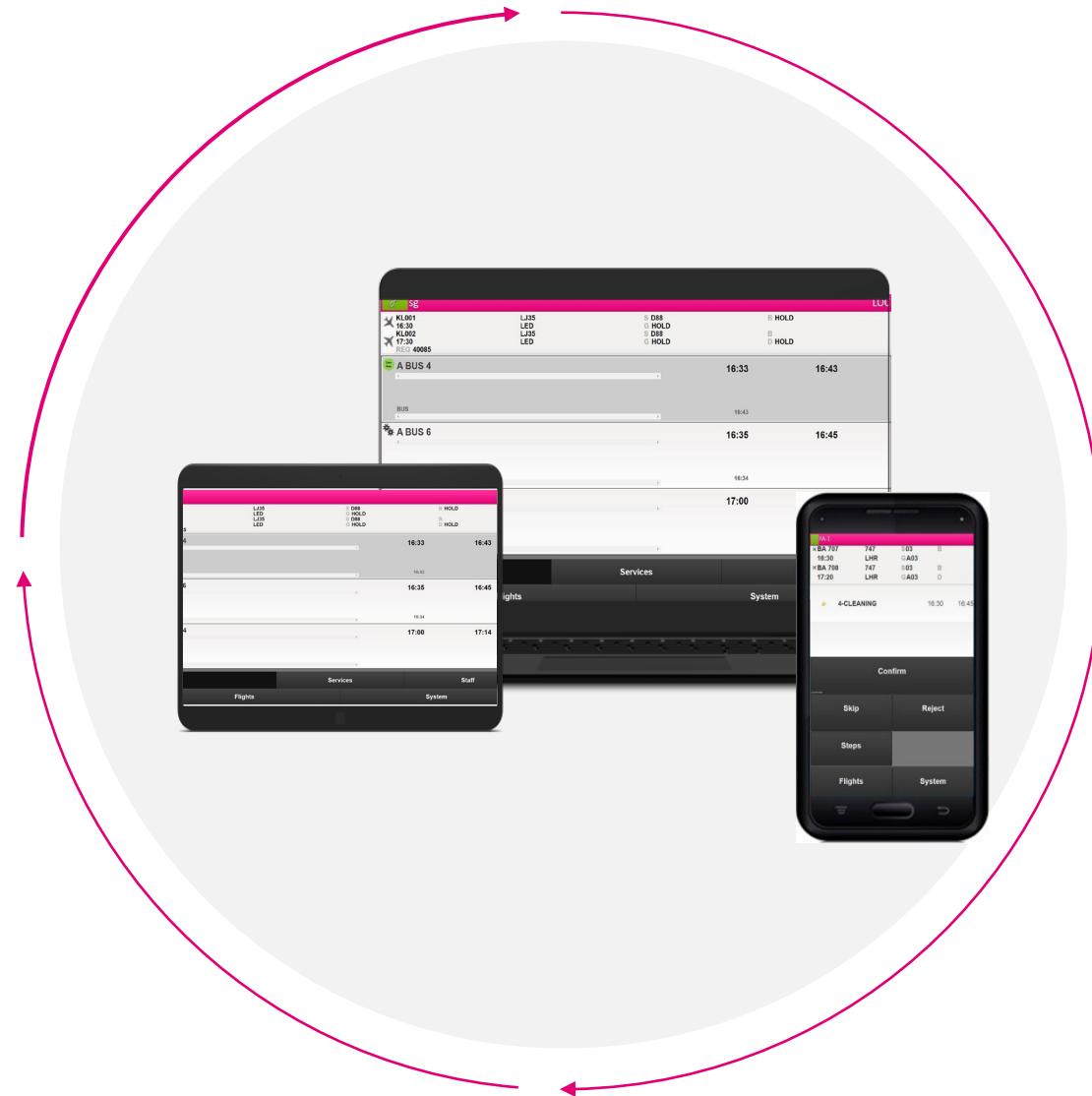
AOEMobile



Use Cases GHAMS Mobile

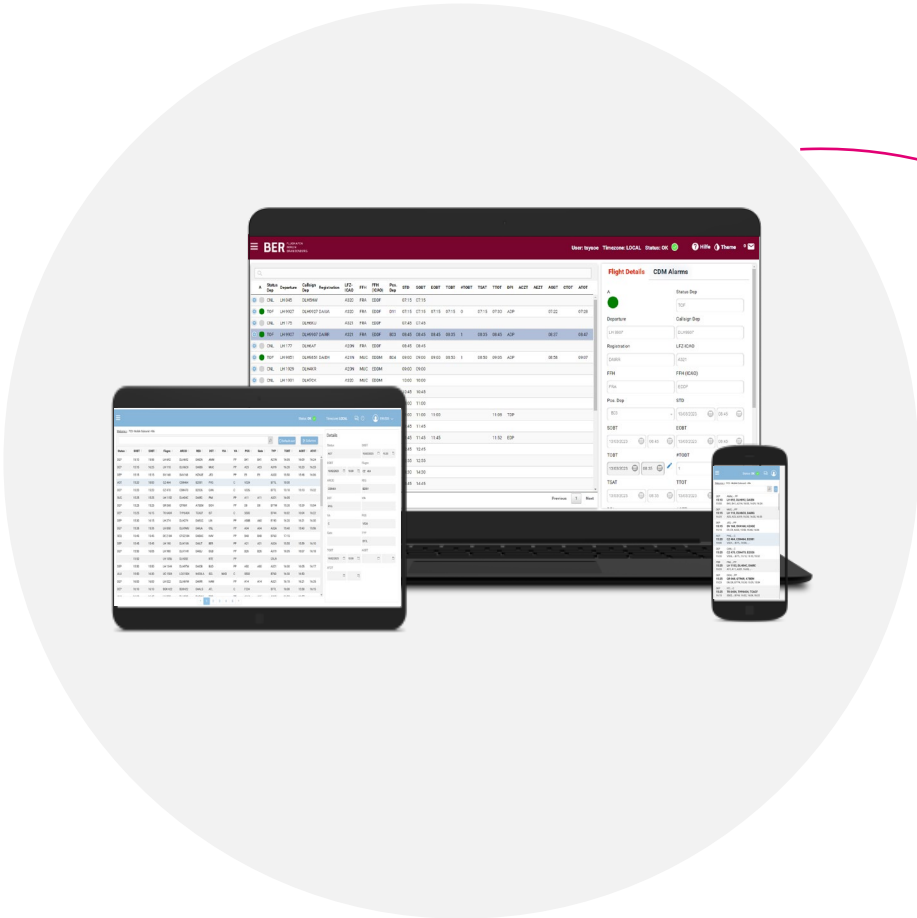
Ground Handlers


- Loading staff
- Gate Agent
- Ramp Agent
- Baggage driver
- Bus driver
- Cargo driver
- Task management
- Progress recording(task status & time stamps)
- Service recording
- IATA Messages
- TOBT, ARDT




Overview CDM Mobile Applications

AOEMobile





A-CDM Broker + Sequencer
Solution for
Collaborative Decision Making



Use Cases AOEMobile with CDM

Ground Handlers

- GH role specific flight views
- Milestones (TOBT, IBK, OBK) update
- Task Assignment & update for generic resources like Bus, Cleaning or L&F, Screening



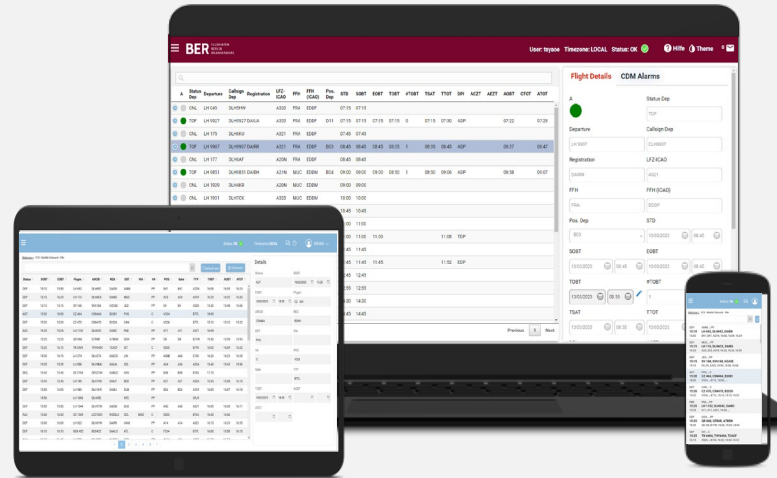
Airlines

- Load & Pax Update
- Milestone Update
- Airline Views
- Registration Updates
- PRM servicing



A-CDM

- TOBT Management
- Operational A-CDM Alarms
- Information Sharing



Airport Team

- A-CDM views including CDM Alarms
- Real time tracking from anywhere
- Update/view key flight information
- User role-based views
- Terminal Manager



Other Stakeholders




- Airside team like Follow Me for assignments
- Security Team for updates on Flights






Overview AirportMaps Mobile Applications

WebRadar





 **airportMaps**
Situational Awareness &
Smart Decision Making



 **AODB**
Airport Operational Database

Use Cases WebRadar

Ground Handlers

- Ground Handlers can check positions of aircrafts, stands and vehicles
- Operations center
- Winter operations (Positions of winter operation vehicles)
- Construction layer



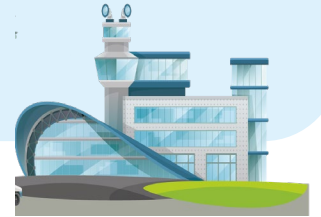
Airlines

- Airline employees to check positions of aircrafts, stands and vehicles



Airport Team

- Airport operations control center
- Airport employees, security, hub-airlines
- Stand Status indicators, Conflicts & Closings



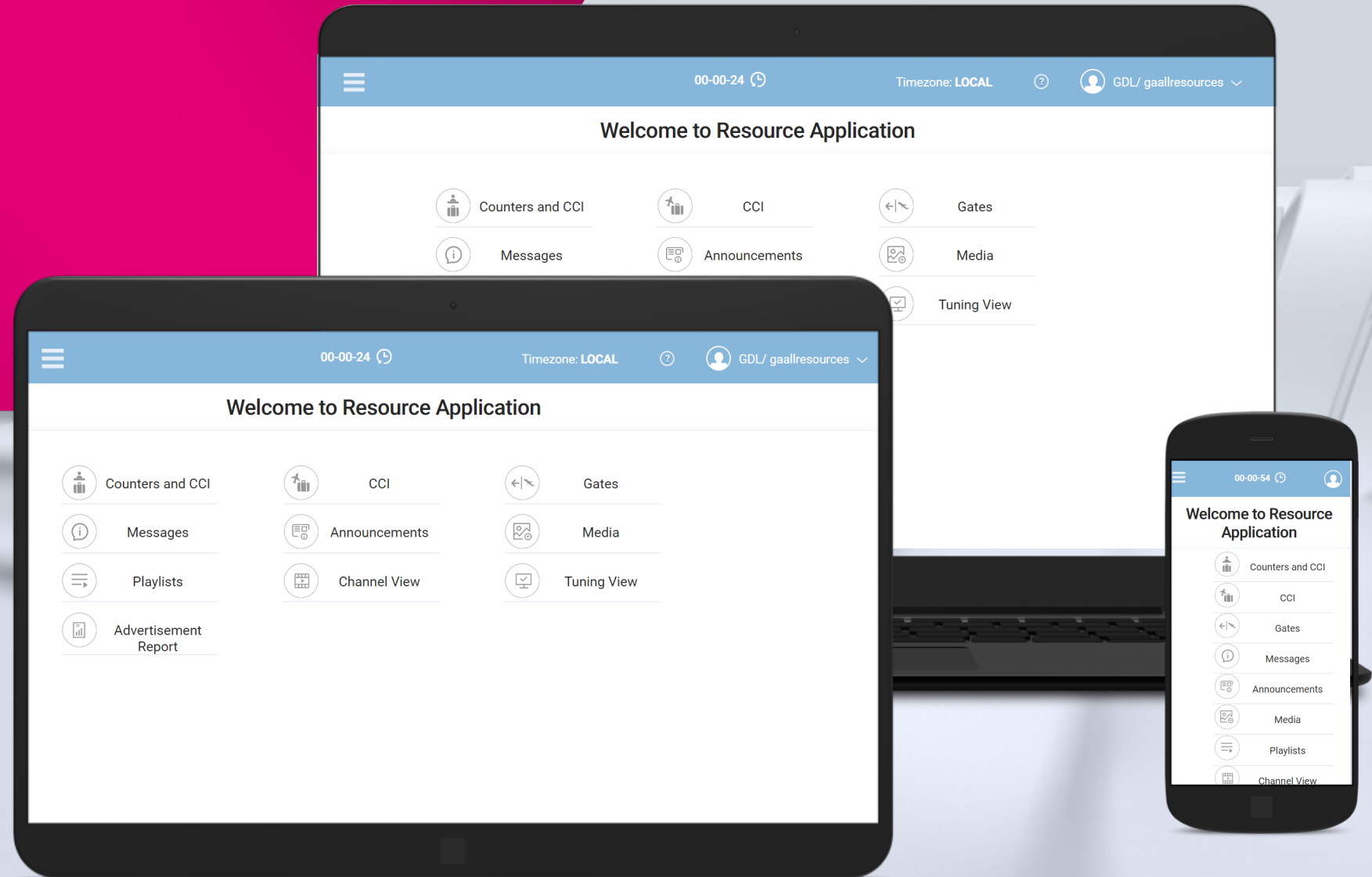
Other Stakeholders

- Airside operations team
- Airfield monitoring



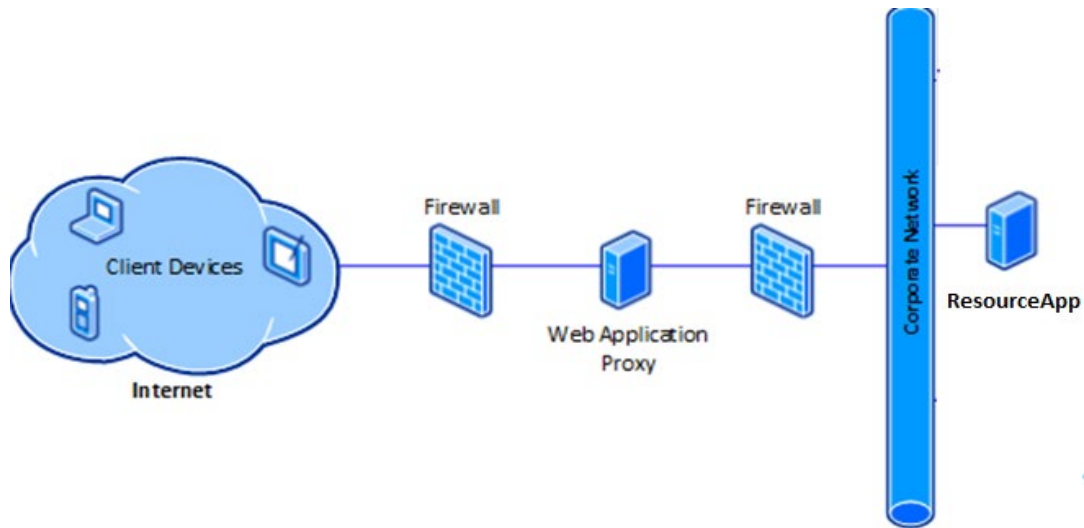
Tech features

Crossover Platform



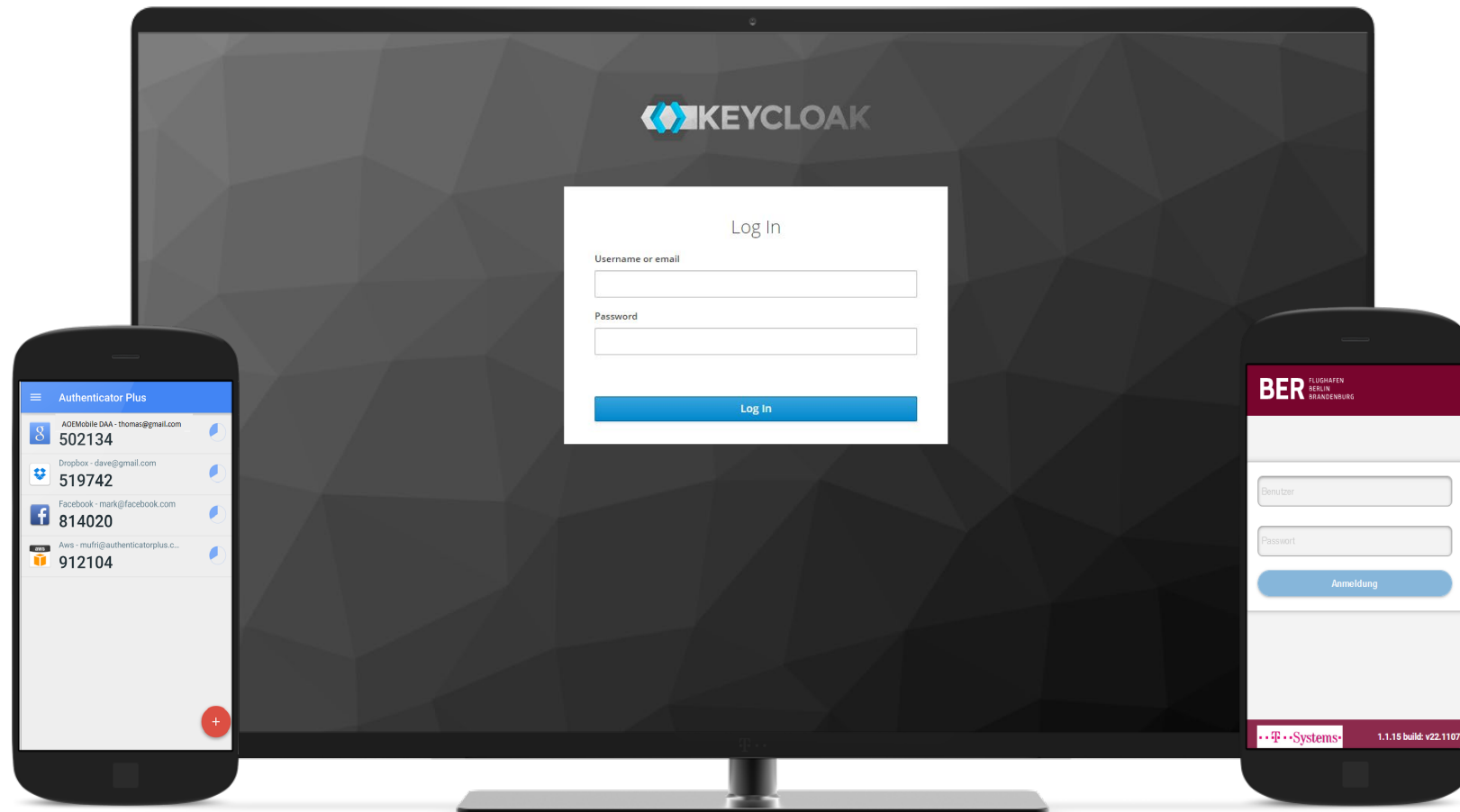
Internet access - Architecture

Airlines and Airport partners can access the system from everywhere



Tech features

Single Sign On (SSO) with two factor authenticator or User Login(with or without AD)

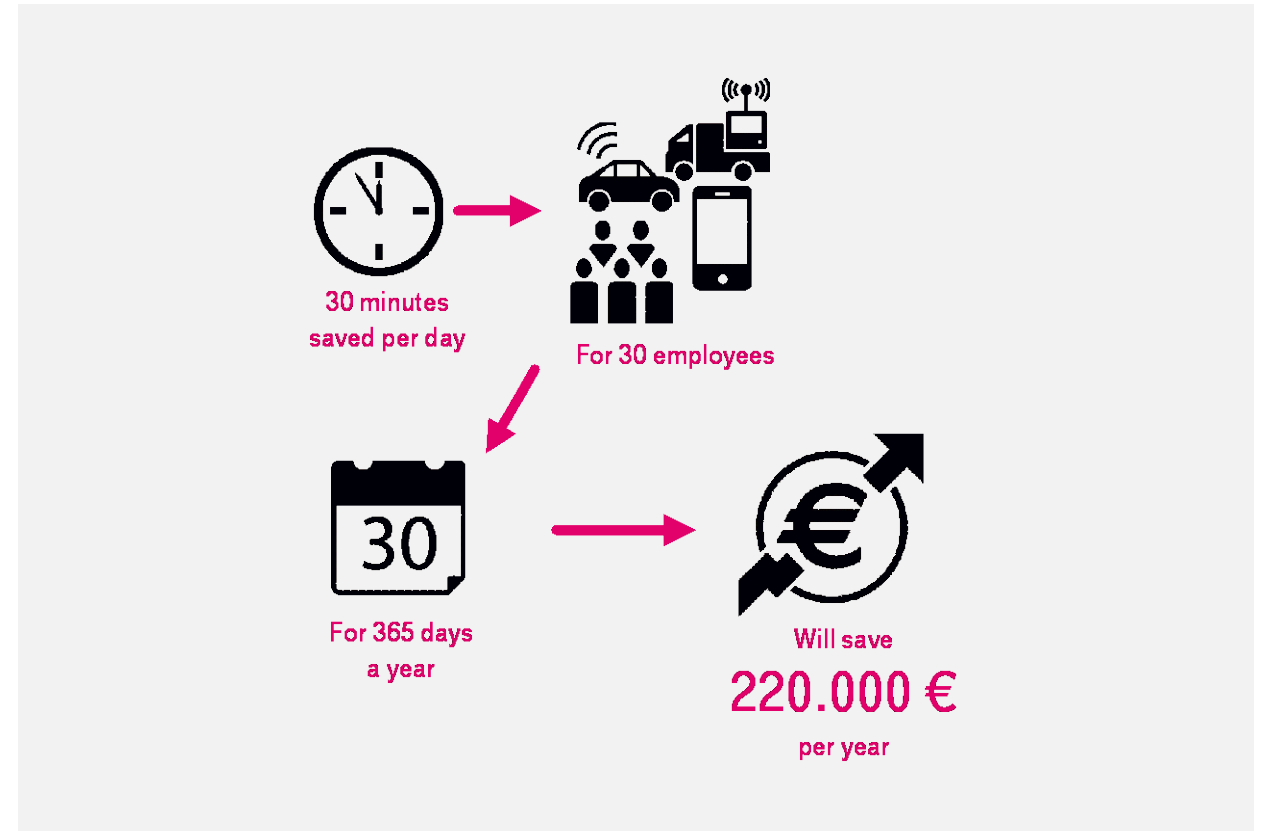


Cost saving

With the web framework we use, T-Systems is able to develop mobile applications to support dedicated airport business processes in a cost saving and efficient manner.

For maintenance and system operations, the use of a common web framework for diverse mobile applications reduces the overall system complexity and training requirements, and thus allows for additional cost savings over the complete lifecycle of the applications.

The applications run in a standard web browser; software deployment on mobile devices is not necessary. The overall invest is protected by the use of up-to-date technologies like HTML5 and the support of the latest browser technologies.



Questions ?

Thank you!



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