Kepler Project: IBAS Turnaround 3.0

Kepler: What & Why
Kepler modules overview
Kepler value for IBAS and for our customers: Vueling case

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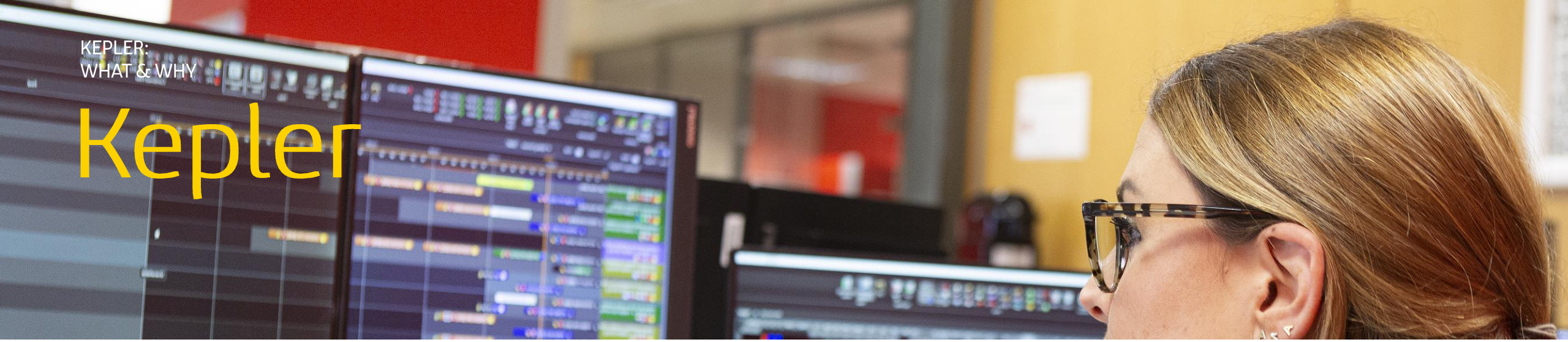


KEPLER:
WHAT & WHY

Kepler

What is Kepler?

KEPLER is the new IBAS operational management tool that will unify the 22 apps historical used in the company on a single one, to connect all business units in only 4 modules: resource planning, real time operation, billing services and data analysis.

The main Kepler capability is its ability to share and receive information from internal and external systems - such as airlines DCS, airport data, aircraft data, telegraphy and other operational data in real time, totally customizable from a ground handling agent point of view, to manage any process of a ground turnaround.

**Kepler is a AMS commercial product owned and developed by SITA: https://www.sita.aero/resources/videos/better-decisions-with-ams*

Why Kepler?

Because KEPLER will let us deploy a complete digital turnaround – **IBAS Turnaround 3.0** – thanks to:

- Integrate and connect of all management tools in a single one: employees, airline SLAs, operation, and billing
- Provide a better access to operational data and a more agile way of communication between all turnaround stakeholders in real time
- Allow high level of tool setting customization to each of our airline customers and operational standards
- Possibility to explore all data recorded from a new holistic perspective

IBERIA AIRPORT SERVICES

Why Kepler?

From a ground operation perspective:

- Improves communication with hub control console thanks to mobility devices
- All operational data Integrated in real time
- The functionalities of Kepler are adapted to the needs of airports: same system adjusted to activity and staff size
- Greater agility and autonomy in making decisions and solving incidents
- Tasks optimization, avoiding duplication and manual record of information
- We carry out tasks from a single mobile device: no papers, no radios

From an IT perspective:

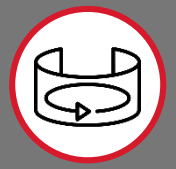
- From 22 in-house systems, "old-fashioned" and with high costs of maintenance, to a 1 single solution: KEPLER by SITA (AMS)
- Collaborative developed by IBAS & SITA to adapt AMS solution to ground handling needs
- Configurable & simple architecture
- Scalable for different airport models and sizes

Kepler modules overview

RESOURCE PLANNING: optimize our resources levels to activity with AI algorithms.

REAL TIME OPERATION: Module composed by Gantt charts and flight tables for consoles and mobile devices for front line workers on terminal and ramp. All turnaround stakeholders connected for receiving and updated real time data, aligned to make the best decision on time in front of any incident.

BILLING SERVICES: Possibility to record on mobile devices any ad-hoc services as well fully control airlines standard contractual SLA.



DATA ANALYSIS: All operational data available for the first time to achieve a 360º vision of the operative with simple dashboards. We and our customer get the right Information to put focus in operational target.

Module 1
RESSOURCE PLANNING

A more efficient way to contract working hours

User: **IBAS (Internal)**

Module 2
REAL TIME OPERATION

Better Access to operational data to anticipate decisions

User: **IBAS + VUELING**

Module 3
BILLING SERVICES

Full control and tracking of services contracted

User: **IBAS (Internal)**

Module 4
DATA ANALYSIS

Global visibility of IBAS operation in a single database

User: **IBAS + VUELING**

Kepler Overview

Module 1: Resource Planning

Inputs: *(non-exhausted)*

- Flight schedule (seasonal)
- Airlines contracts with task standards (Example: 2 boarding agents per flight from STD -50 to STD+5)
- CBA Parameterization (Collective Business Agreement): shift rules by contract
- Staff data: skills and type of contract by agent (agent profile)

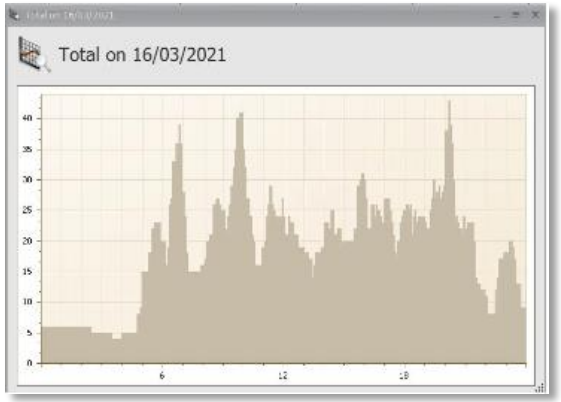
Outputs:

- Automated workload calculation
- Automated staff roster: shift hours, bank holidays, furlough, etc. by employee
- People engagement through better shifts rostering

Business value:

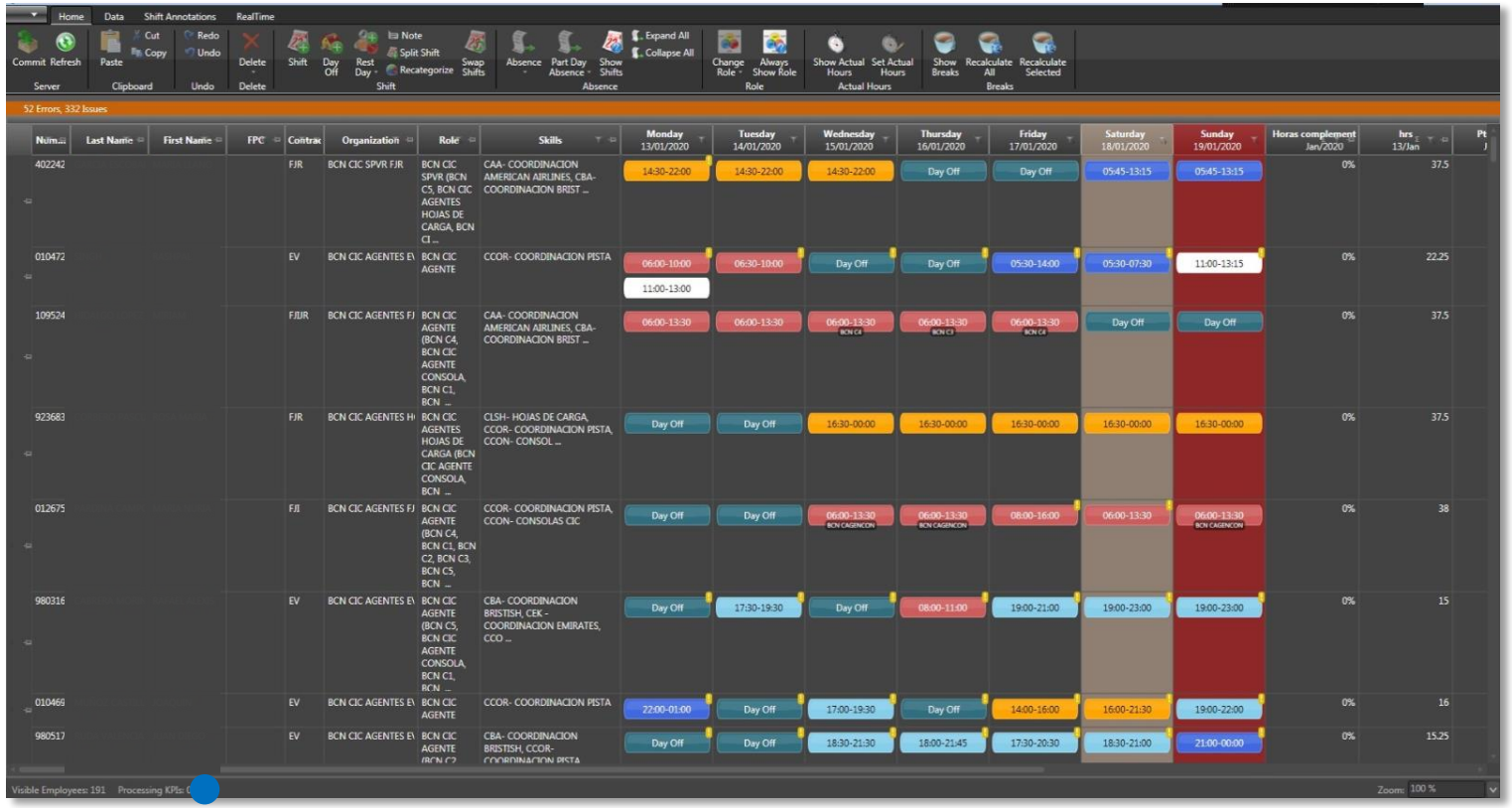
Resource coverage according to services defined for each airline at each airport, consistently and homogeneously

Workload view:



Workload (red) & roster coverage (green + grey):

Roster. Shifts population by agent:



Kepler Overview

Module 2: Real-Time Operation

Inputs: *(non-exhausted)*

- Staff Roster: Shift, Employee skill
- Airlines DCS (Check In and Load Sheet data): Resiber, Go Now, Altea, Fly
- AENA (Infrastructure data): stands, gates, check in desks, baggage belts allocation
- CDM data: TSAT, TOBT, CTOT, etc.
- TELEX data (Arr/Dep): LDM, CPM, ASM, PSM, MYT (Arr/Dep) + SITA address book
- Crew data: Merlin & VY daily
- Fuel data: Nimbus system
- IBAS operational data

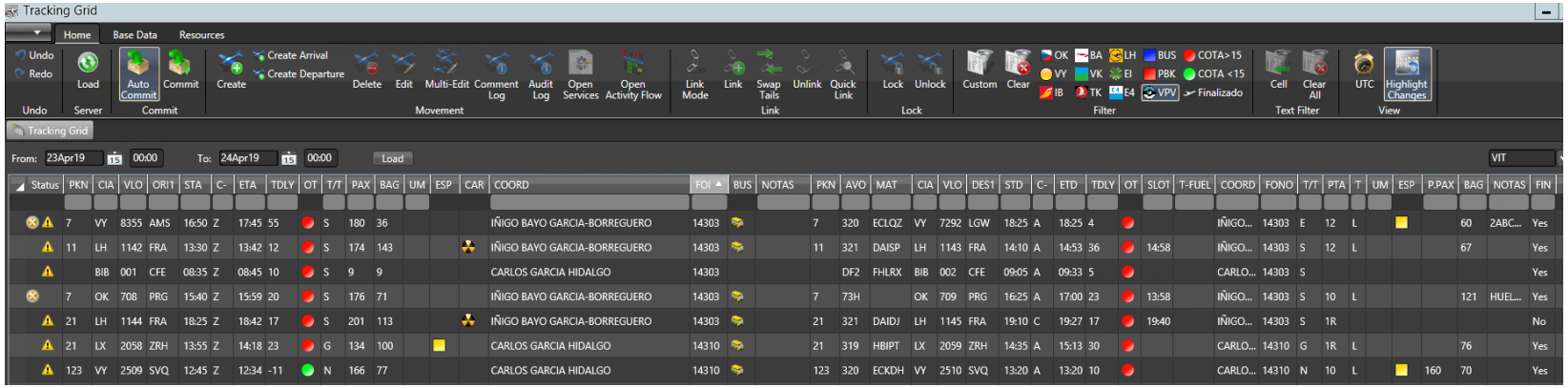
Outputs:

- Tracking Grid: customized flight tables
- Gantt Panel: task allocation
- Mobility: integrated information at the aircraft

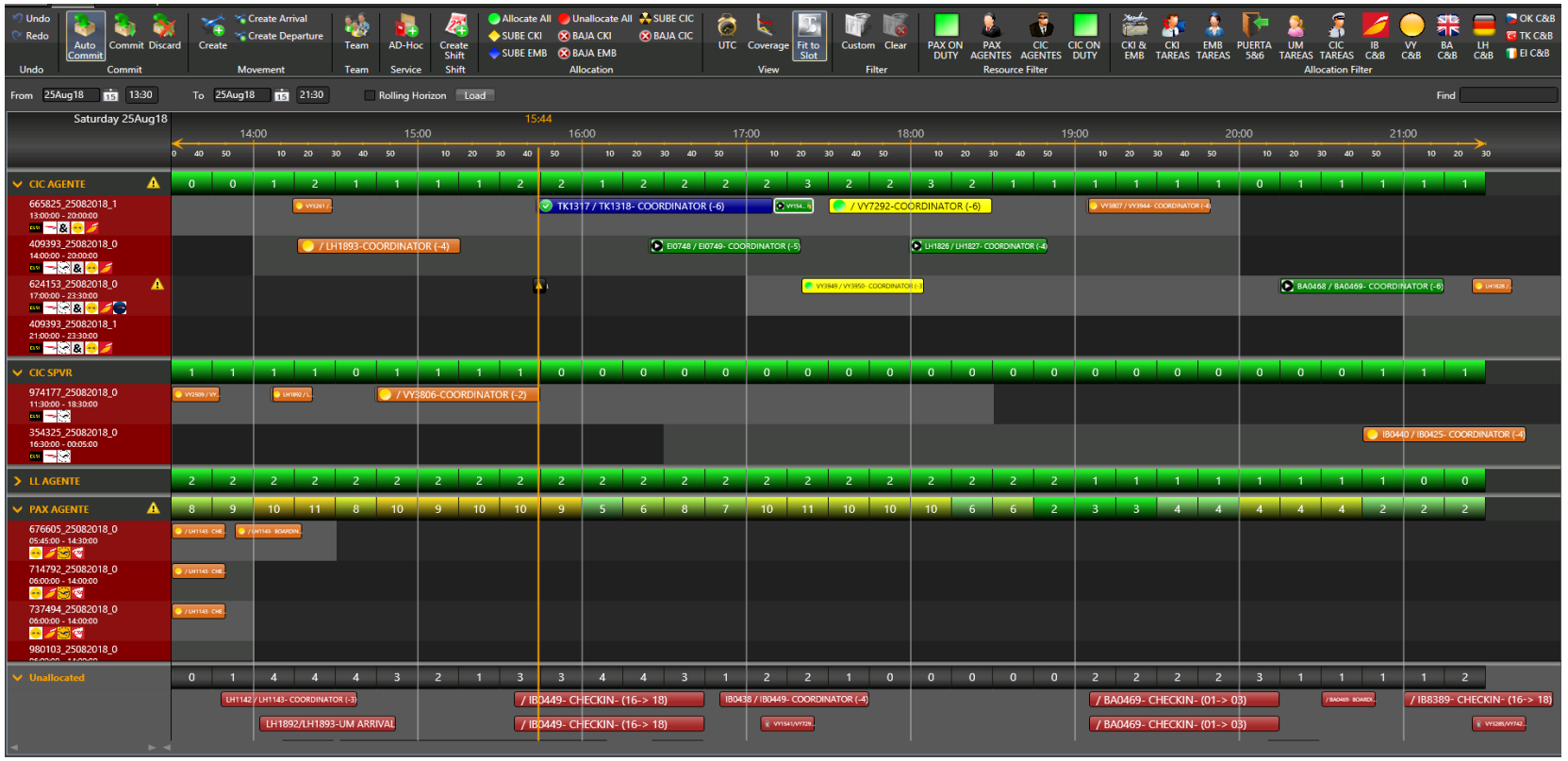
Business value:

All operational data integrated in real time, designed for each team and airport needs. Dynamic control of tasks and staff on duty

Tracking Grid (flight table): 100% customizable for each console. Adapted to each airport and user



Gantt Panel: timeline (x-axis), employees on dutty (y-axis), allocated tasks (grid)



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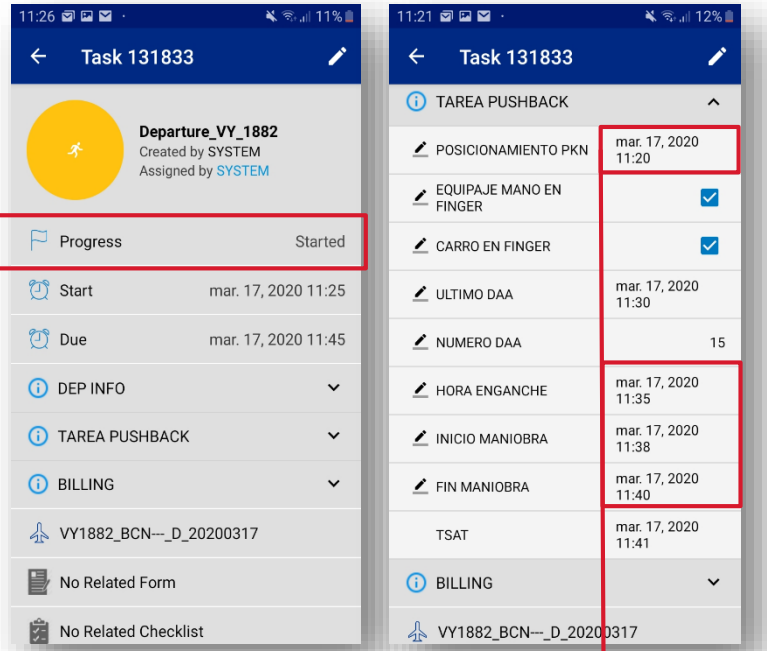
Outputs:

- Tracking Grid: Customized flight tables
- Gantt Panel: Task allocation
- Mobility: Integrated information at the aircraft

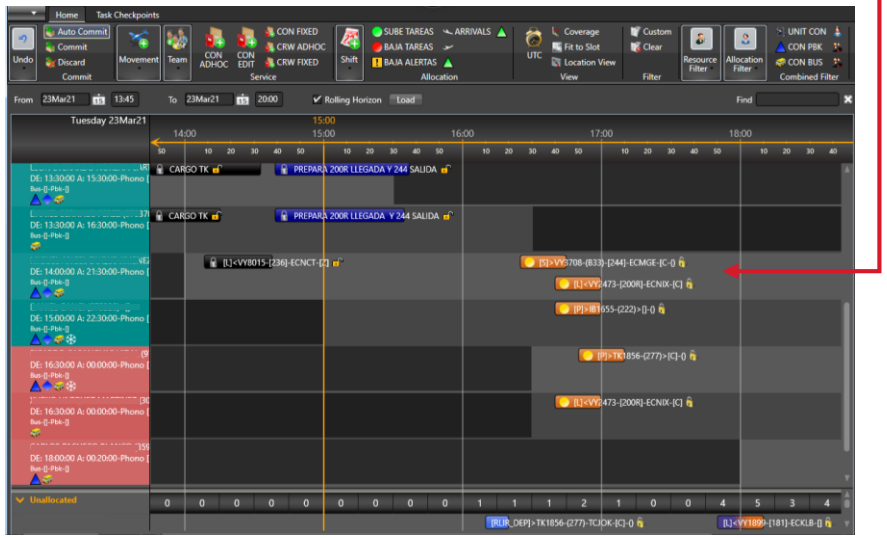
Business value:

Better communication with real time info in mobile devices. Total control of tasks status and employee availability. First system to record and control process milestones (remotely)

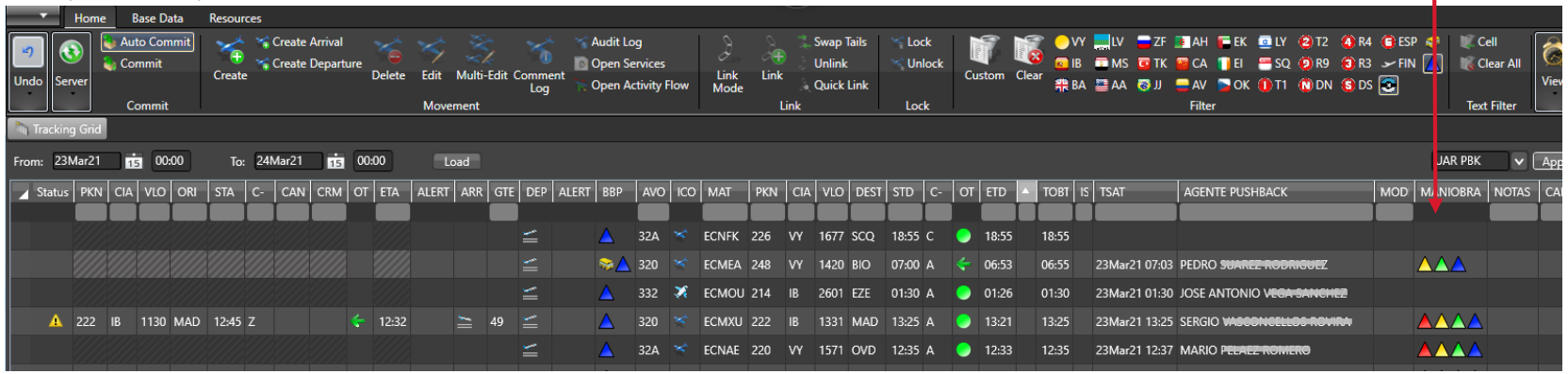
1) Mobility: Agents on Terminal and Ramp are provided with a mobile device to look up flight information, update tasks status and record process milestones (Example: Pushback task)



2) The agent update task status (Gantt Panel) on the phone (black = ended, blue = started, orange = planned)



3) Process follow – up in hub control consoles draw from mobility inputs.
(Example: state of pushback maneuver: arrival to stand, connection, movement start, end: ▲▲▲▲)



Kepler Overview

Module 3: Billing Services

Inputs: *(non-exhausted)*

- Flight Schedule
- Mobility: ADHOC services performed by flight (ex. rear stairs, towing, AC connection)
- Airline contracts: including basic handling services and ADHOC services to be billed if performed
- Automated rules by service

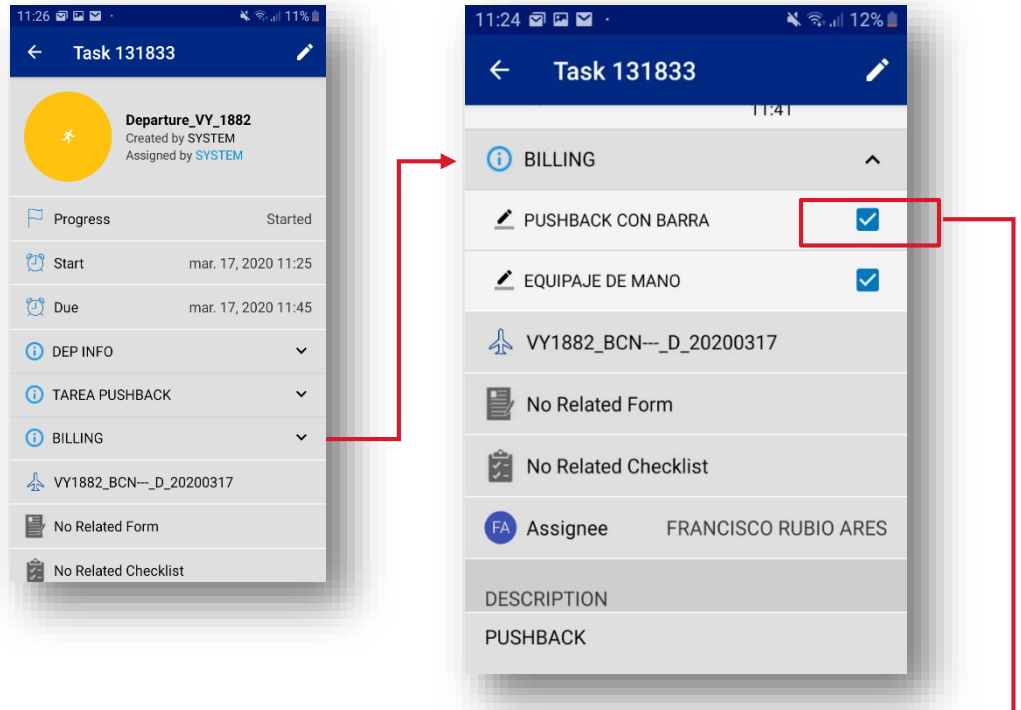
Outputs:

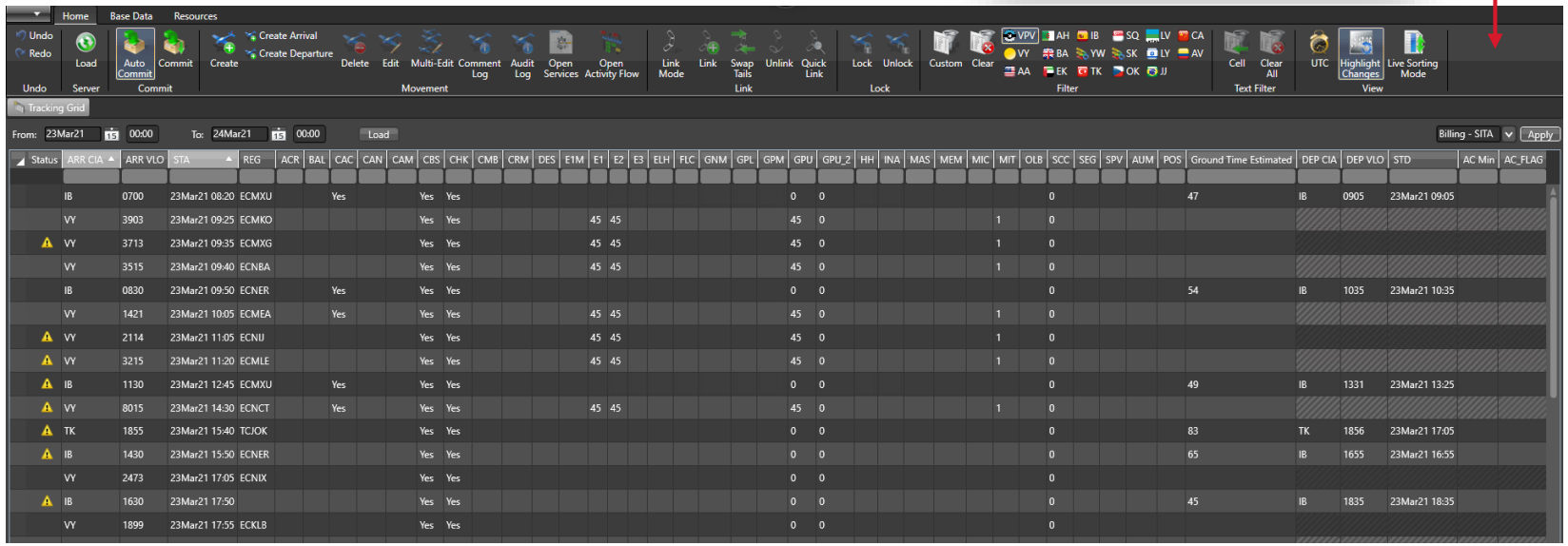
- Record of all services provided
- Services to be billed directly integrated in IBAS invoice system
- SAAP Integration - *Pending*

Business value:

Billing procedure fully defined and parameterized by contract, service, client and airport

Services recorded on mobility based on airlines contracts. Available on Billing Tracking Grid per flight:





Kepler Overview

Module 4: Data Analysis

Inputs: *(non-exhausted)*

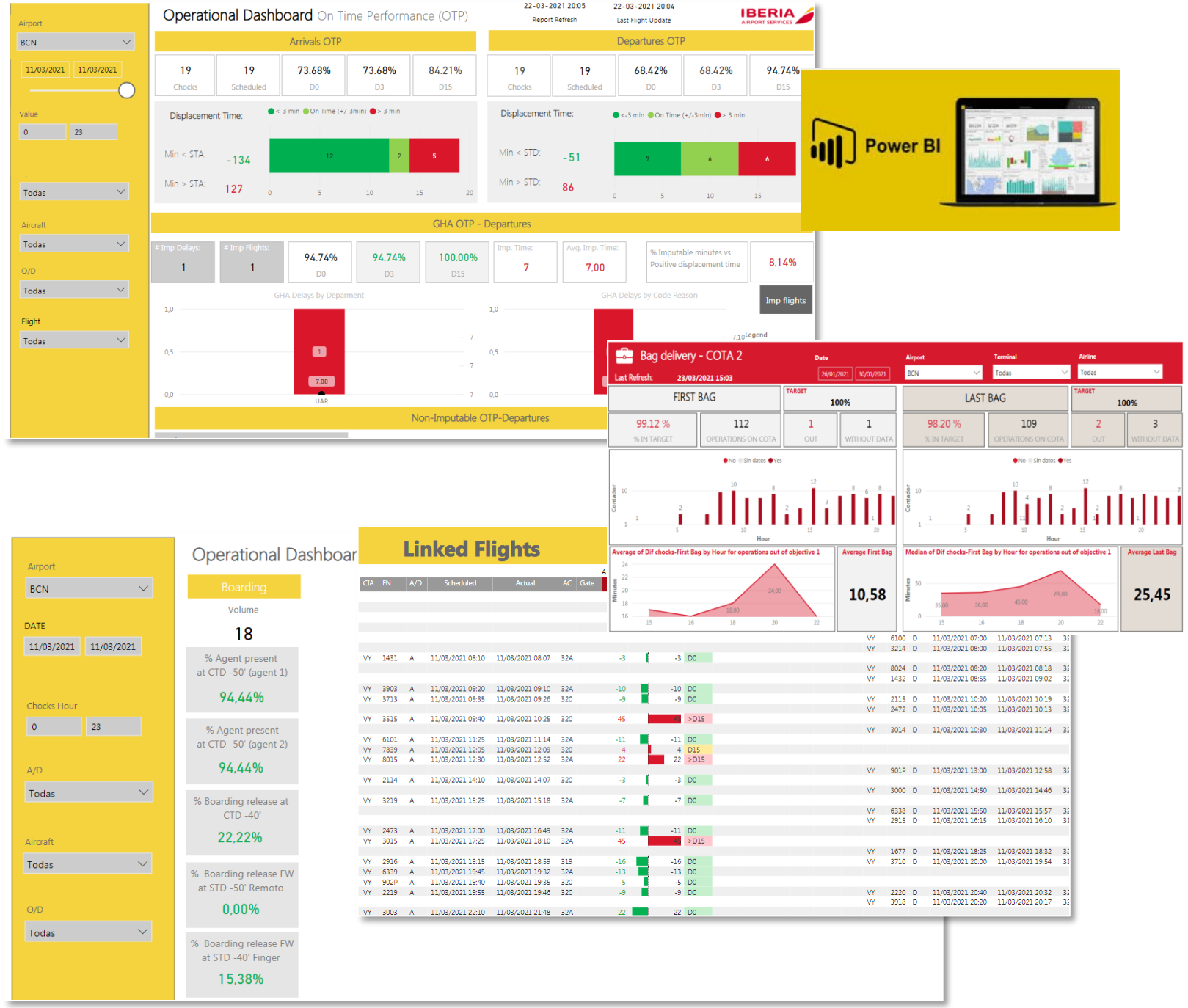
- Data form Kepler Module 1, 2, and 3: flight schedule, airline standards, staff data, roster, DCS, AENA infrastructure, flight information, crew & fuel data, telegraphy, tasks status, operational inputs from mobility (process times, incidents, delays codes, check list, etc.), billing

Outputs:

- Operational dashboards (historic and real time data)
- Quality service & performance assessment
- Workload and staff data. Profitability analysis
- Pricing analytics

Business value:

Business analytics. 360 vision of the operation, with consolidated and accessible information on a single database

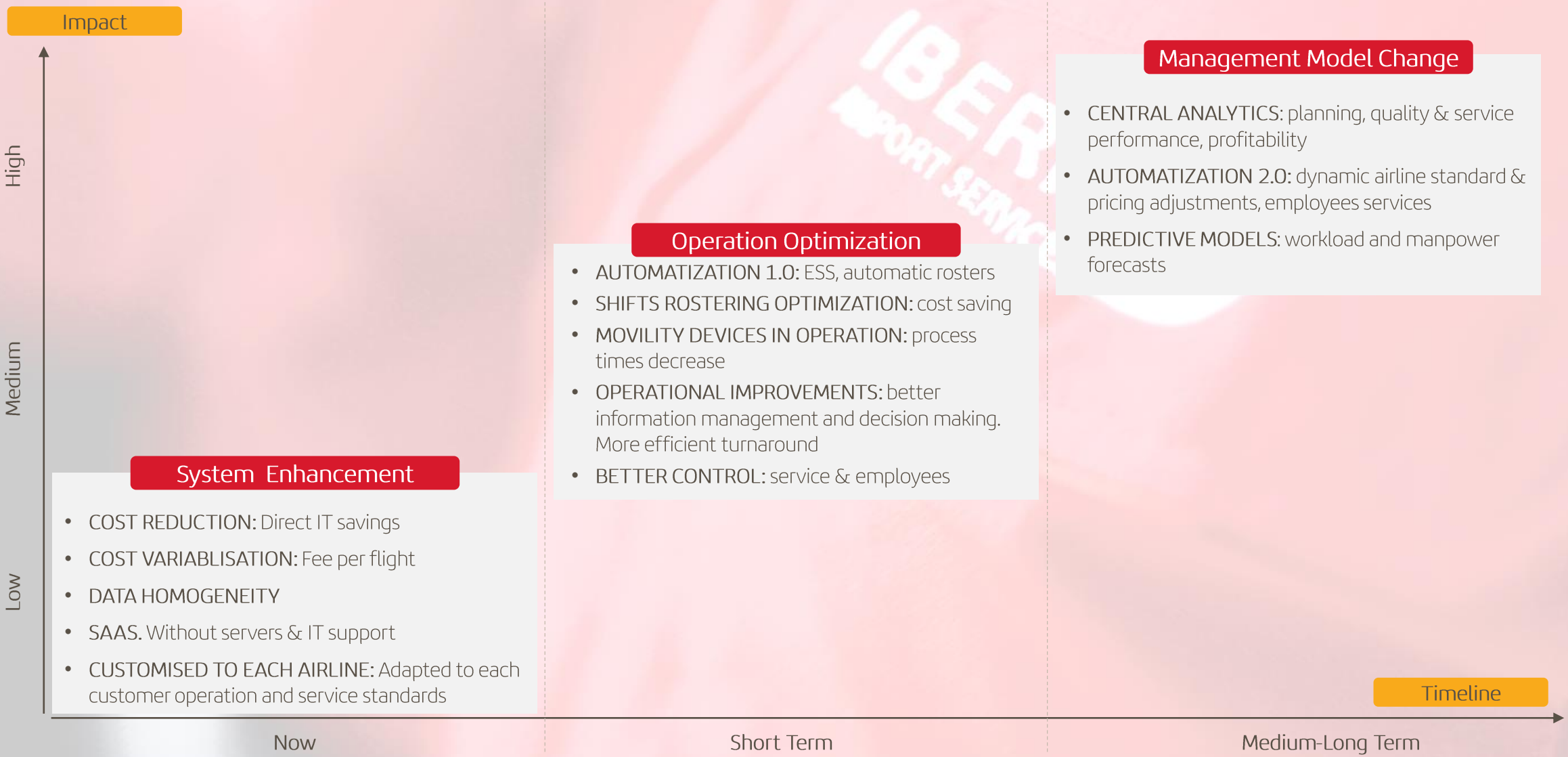


What do we want to achieve with Kepler deployment on the short and long term for our customers?

Deliver IBAS Turnaround 3.0!

IBERIA AIRPORT SERVICES

Kepler is IBAS future tool to achieve the new turnaround 3.0 operating model



Added value for our customers

Airlines customization

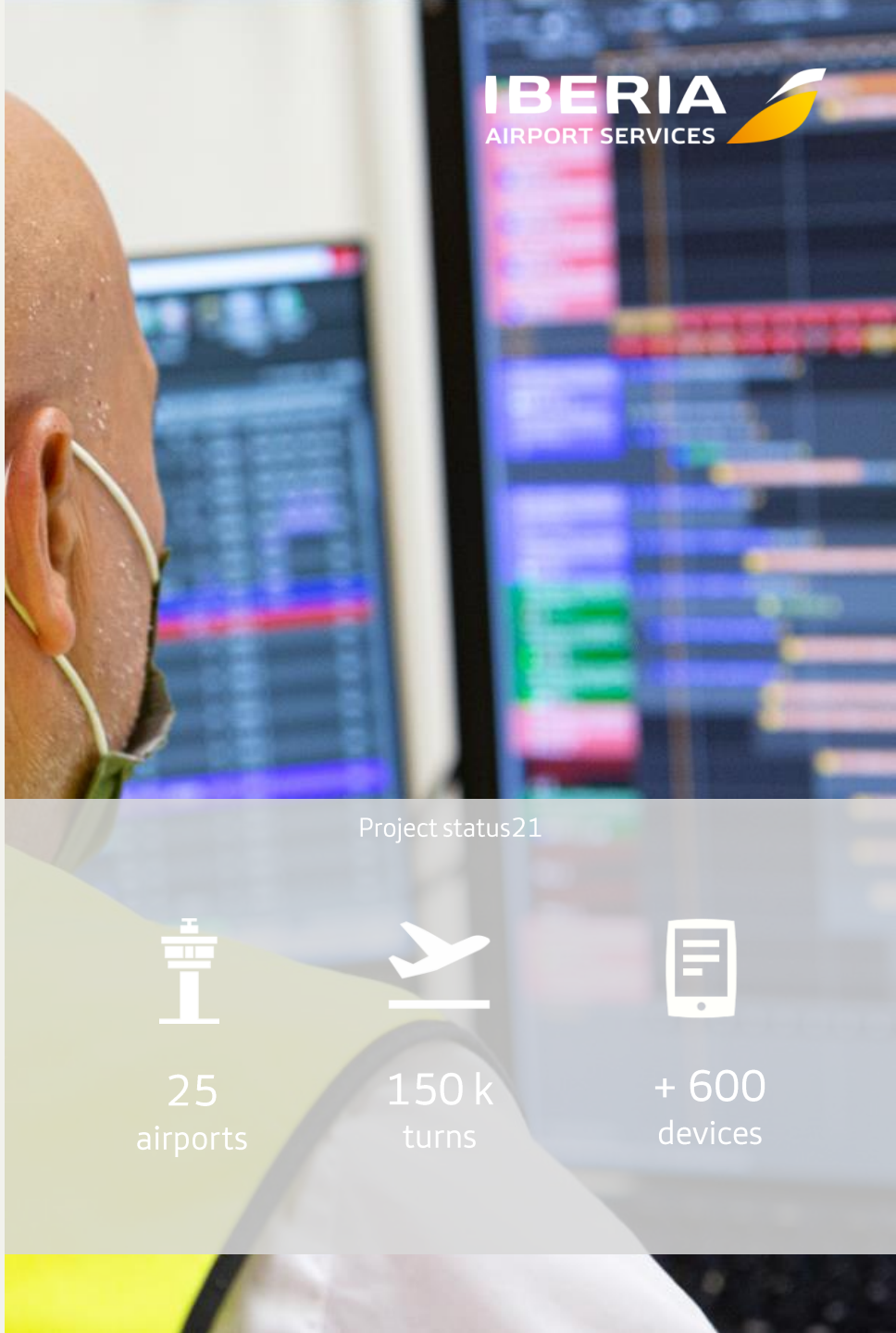
- Consoles fully dedicated to each airline operation with dedicated teams.
- Remote control of staff form HQ in real time, with possibility to track airline SLAs and procedures
- Boarding control process totally integrated with VY DCS system

Real time process tracking

- Digital track of process defined (passenger, dispatchers and ramp)
- Specific consoles for bags tail to tail service in connections with critical minimum ground time
- Crew schedule changes also integrated

Without on-site calls

- Access to the most updated flight information from a mobile phone
- Data input on the ground available in remote consoles for duty managers

Business analytics

- Access to new KPI's to asses performance & quality in terminal and ramp processes
- Customized dashboards