

Post Pandemic Supply Chain Challenges in the MRO Industry

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Turkish Technic

AGENDA

1

**Turkish Technic
Company Overview**

2

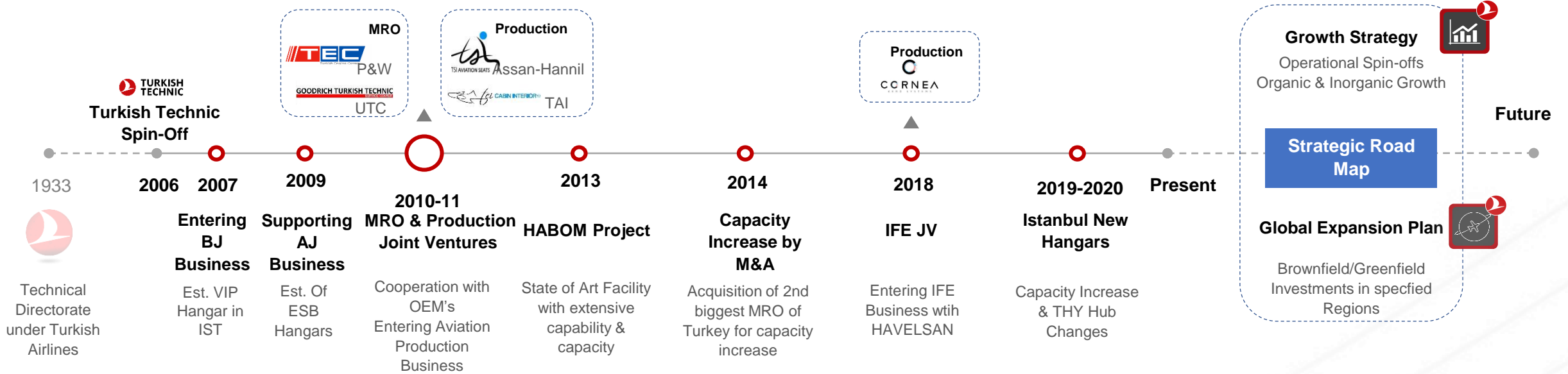
**Post Pandemic
Supply Chain Challenges**

3

**How Does IATA Smarthub
Support Our Procurement**

TURKISH TECHNIC

History & Future Perspective



1
AIRFRAME SERVICES

2
ENGINE&APU SERVICES

3
LANDING GEAR SERVICES

4
COMPONENT & POOL

5
TRAINING SERVICES

6
ENGINEERING SERVICES

TURKISH TECHNIC

The **Most Hangar Capacity** in One City

4 AIRPORTS
11 HANGARS
16 WIDE 40 NARROW 2 PAINT

CLOSED AREA 647k m²

A320FAM, A330, A340, A350
B737NG, B757, B767, B777, B787
Gulfstream GIV, G450, GV-SP, G500, G550



TURKISH TECHNIC


33 WORKSHOPS
24/7 AOG SUPPORT


**1.100+ SPECIALIZED
TECHNICIANS**


**16.000+ AIRCRAFT
COMPONENTS**


**113.000 COMPONENT
MAINTENANCE**

EXPERIENCE

90 YEARS

**WORLD-WIDE
CERTIFIED**

Certified through 36+
authorities



TURKISH NACELLE CENTER



***MRO JV's**



***Production JV's**

EMPLOYEES

10.000

TYPES **A/C**
A320 Fam.(inc. NEO)
B737 CL/NG
A330, A350,
B777, B787



1000+

A/C under pool services
including THY

TURKISH TECHNIC

1

CABIN INTERIOR SERVICES

- Modification
- Refurbishment
- IFE Seat Overhaul (5 Star Cabin)
- STC Implemented Services Manufacturing (TCI)

2

PAINTING SERVICES

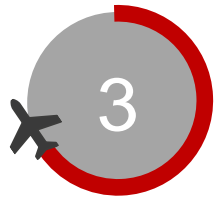
- Designated Paint Hangar
- Highly Skilled Technicians
- Inspection for Defects
- All Types of Aircraft



Panasonic

THALES

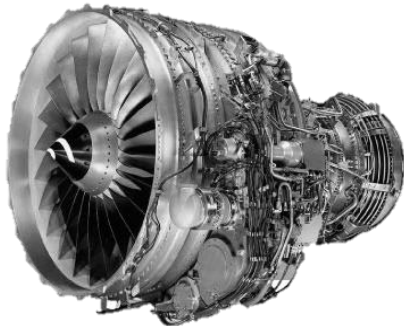




ENGINE



CFM
B737NG
CFM56-7B

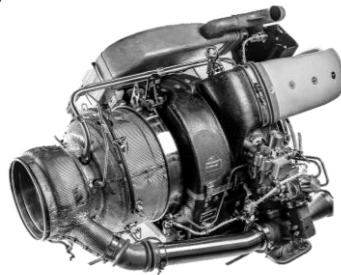


IAE
A320 FAMILY
V2500-A5 SERIES

***Our JV – Turkish Engine Center**



APU



A320 FAMILY
P&W CANADA
APS3200 SERIES



B737NG
B737 MAX
B737NG
131-9A (Upcoming for A321NEO)



LANDING GEAR



NARROW BODY
A319, A320, A321, B737NG



WIDE BODY
A330, A340, B777



COMPONENT SHOPS AND SERVICES

- 113.000 Component Maintenance
- 33 Workshops
- 24/7 AOG SUPPORT
- 16.000 Aircraft Components
- 1100 Specialized Technicians



DESIGN AND PRODUCTION

- Design
- Production & Cabin Reconfiguration
- Major and Minor STC Changes
- STC Implemented Services Manufacturing (TCI)

COMMUNICATION & NAVIGATION COMPONENTS	FLIGHT CONTROL SYSTEMS COMPONENTS	FUEL SYSTEM COMPONENTS	APU	LANDING GEAR	ENGINE	IFE SYSTEM & COMPONENTS
HYDRAULIC	BRAKE	CALIBRATION	CABIN INTERIOR & EQUIPMENT	MECHANICAL	ATE	IDG
TEST-CELL	PNEUMATIC	WHEEL & TIRE	STRUCTURAL COMPONENTS	RADIO	ELECTRICAL	HARNESS
BATTERY	SANITARY	SPECIAL PROCESS	SANITARY	ELECTROMECHANICAL	METAL PLATING	





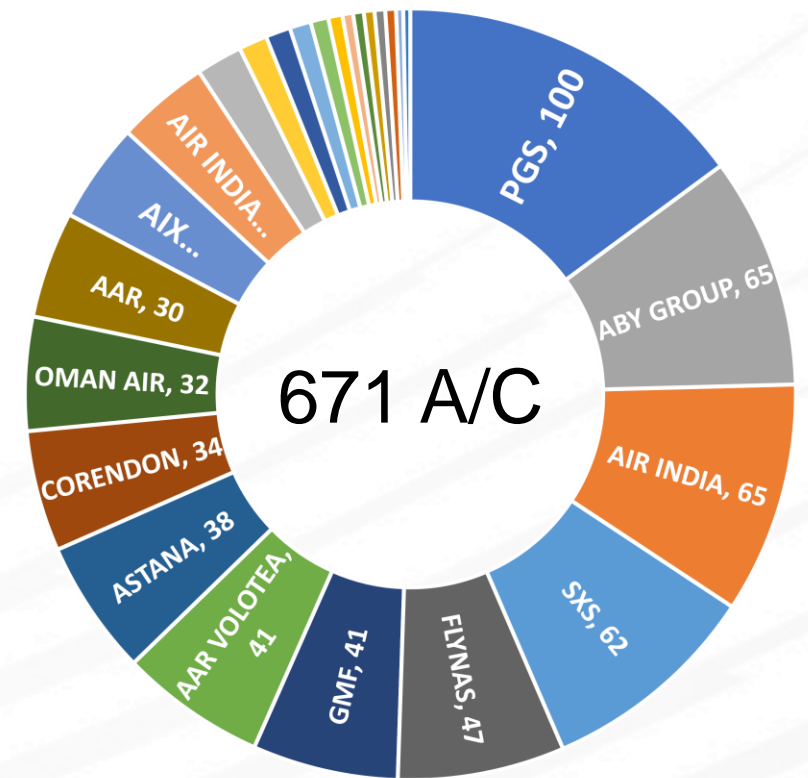
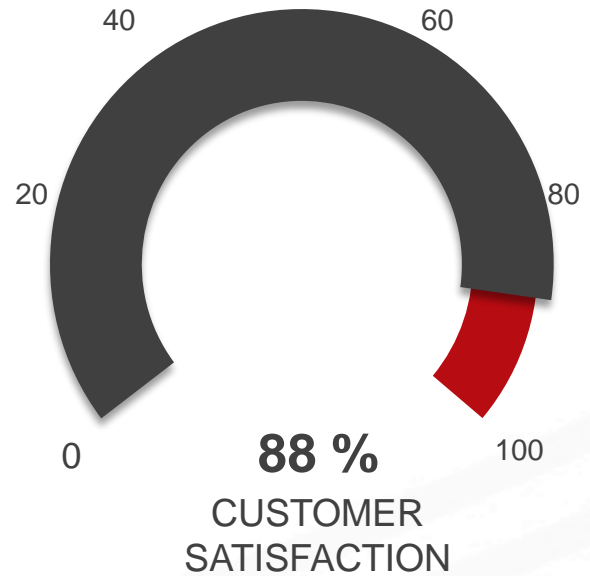
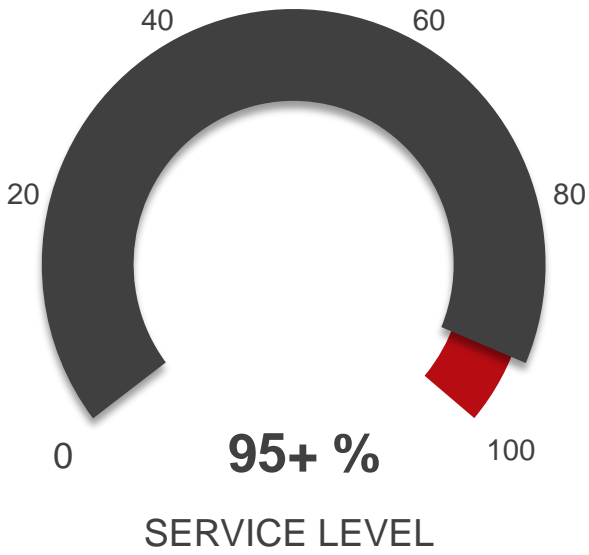
POOL (PBH) SERVICES

- 24/7 AOG Support
- Turkish Cargo as Global Partner
- Web Suite Portal for Customers
- 12.500+ PN Capability

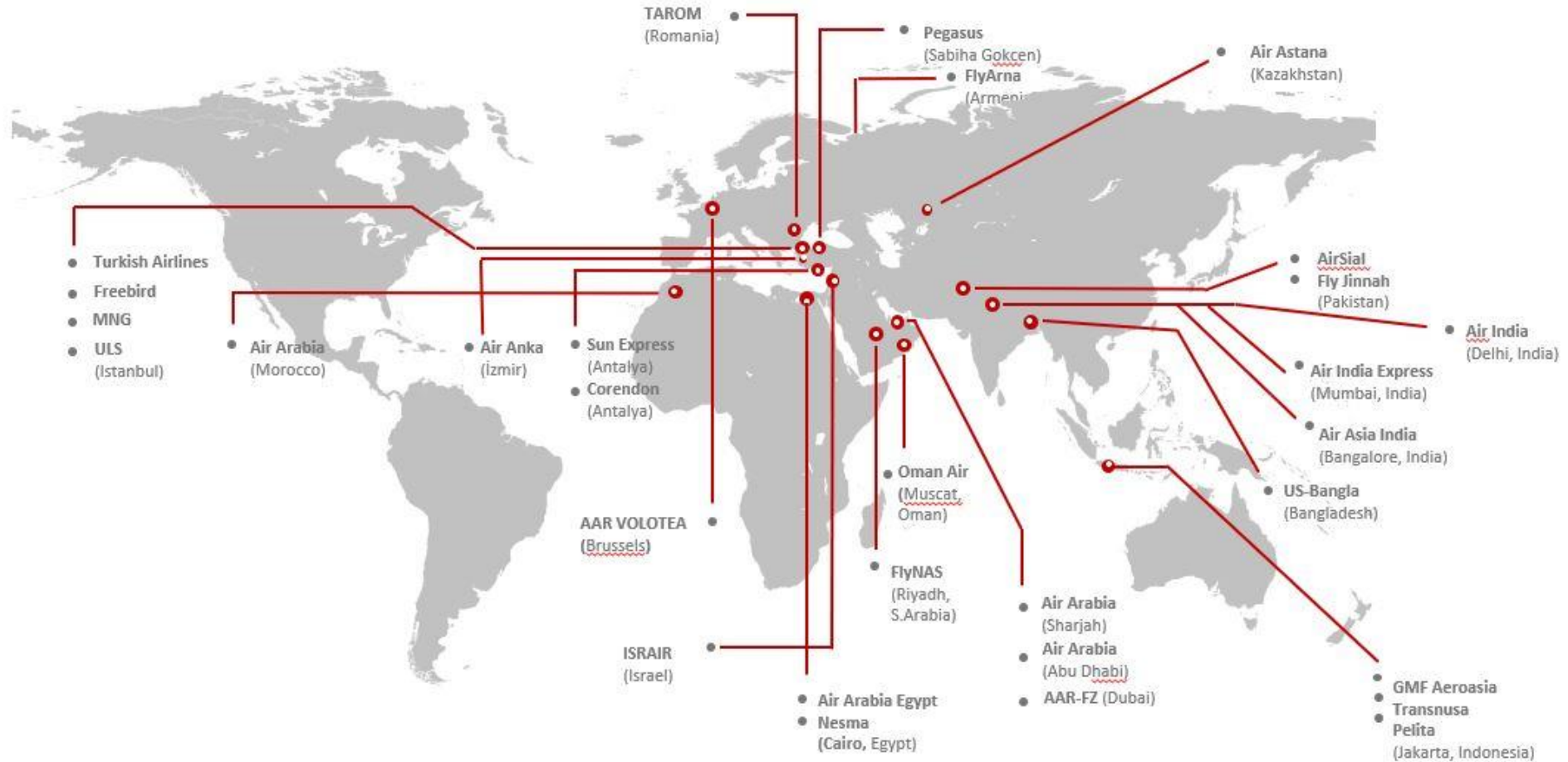
- 3 Continent, 15 Countries
- 95+ % Success in Service Level
- 25.000+ Components Supplied per year
- Max.30 Minutes Response Time

- A320FAM
- B737 CL/ NG
- A330

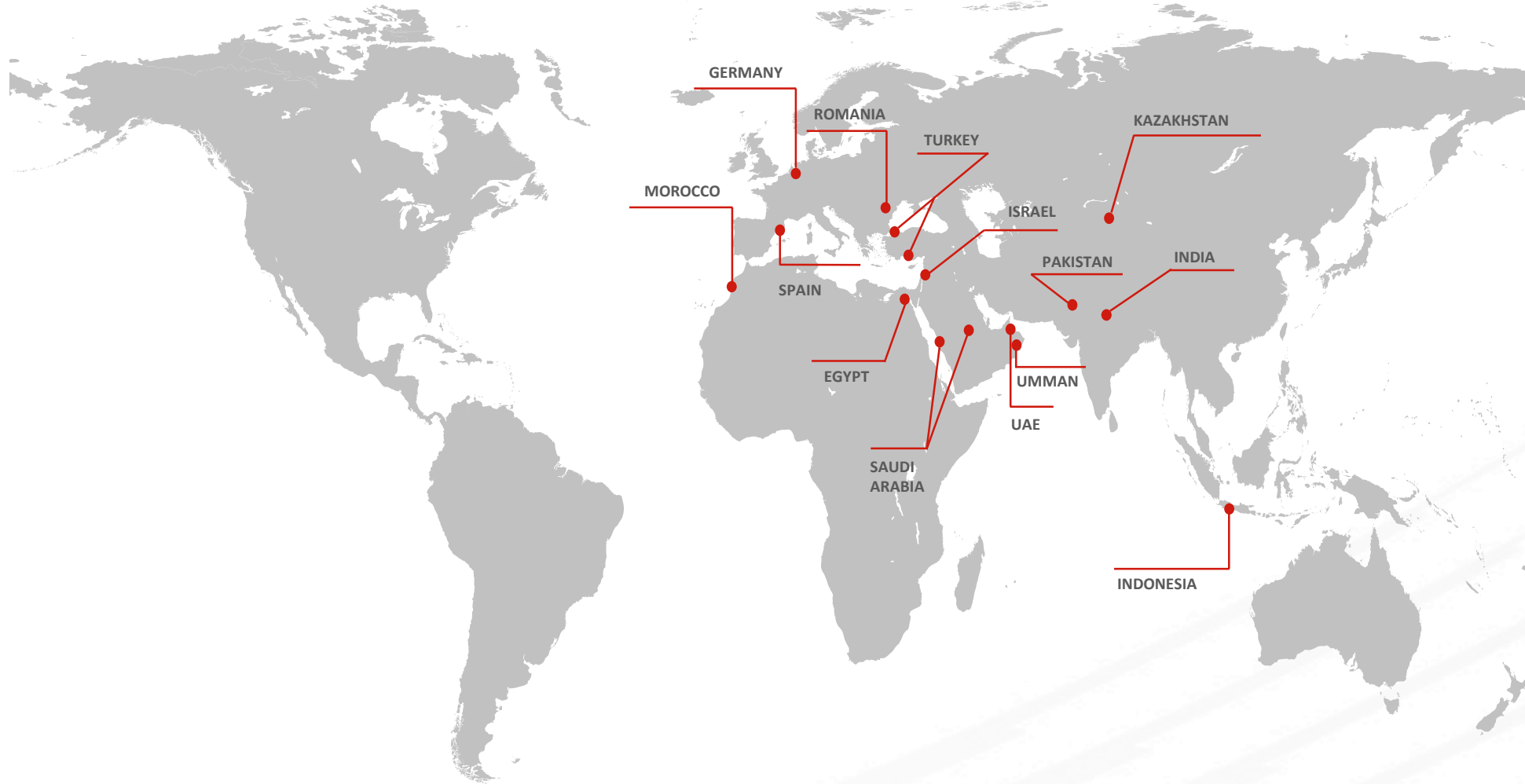
- 29 Customers
- 31 Contracts



OUR CUSTOMERS



On Site Component Stock In 3 Continents and 15 Countries



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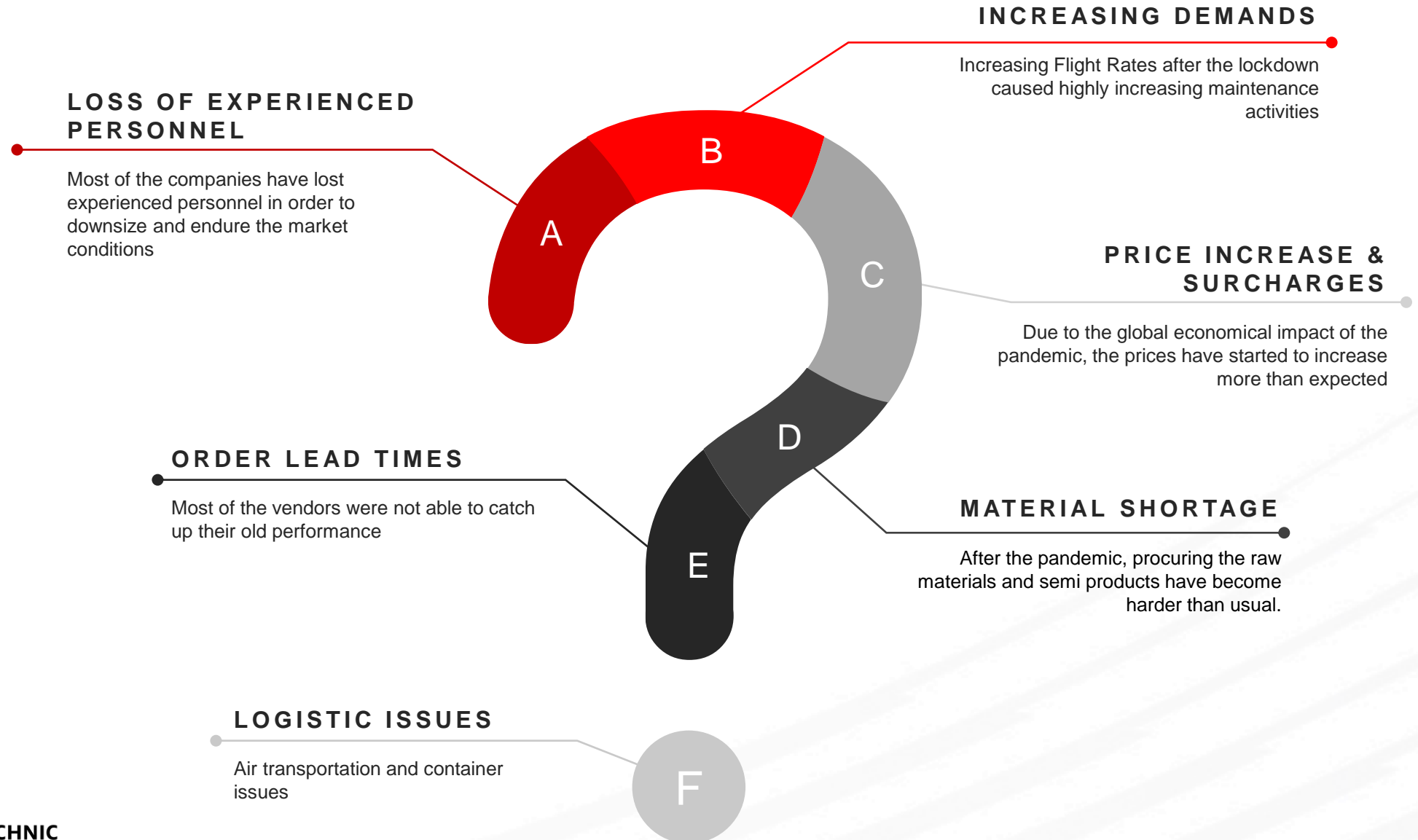
2

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How Does IATA Smarthub
Support Our Procurement

SUPPLY CHAIN CHALLENGES



COVID-19: Fostering continuity of the air cargo business – the transportation lifeline that matters more than ever

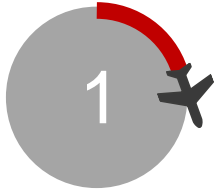
ACI WORLD UPDATE
**COVID-19
PANDEMIC**
ACI INSIGHTS ARTICLE

Your package was delivered on time? You've got this supply chain workaround to thank

Air cargo must maintain momentum

Cargo continues to post positive figures

TRIGGERING EVENTS



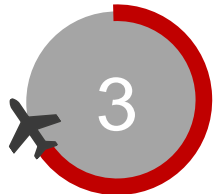
Single Supplier Issues

By not having alternate suppliers can't burndown the backlog



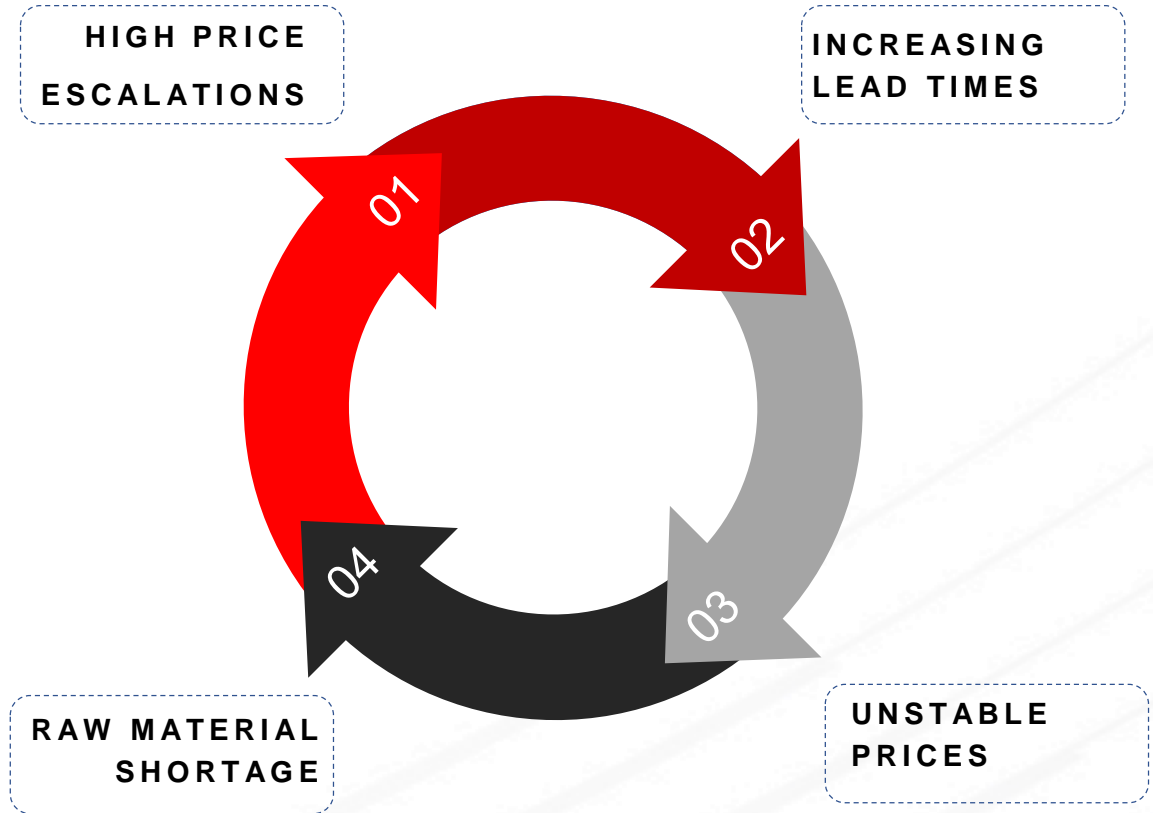
Increasing Re-Order Levels

Since there is an increase in demand and lead time, Re-Order levels are increased as well

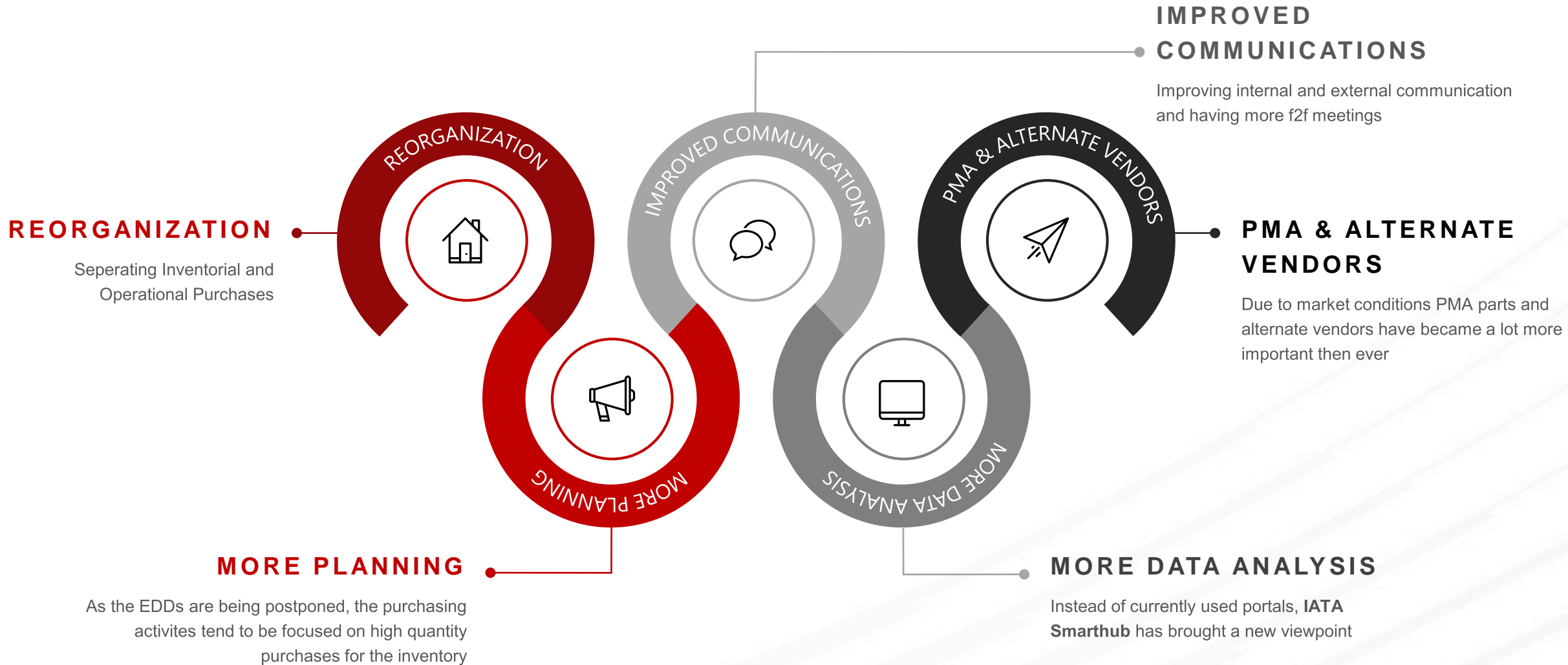


Decreasing Rate of Catalogues

Uncertainty in procurement lead us change the style



NECESSARY IMPROVEMENTS



Vendor Evaluation System (VES)

➤ Fully data oriented evaluation.

➤ Prepared to share with OEMs and Vendors

➤ LT Performance: 60 % ➤ Disputes: 10%

➤ Pricing: 30% ➤ Customer Support will be Included

➤ Calculating risk factors

➤ Aims to follow up the improvements or drop backs

RISK FACTORS

x: Total Risk

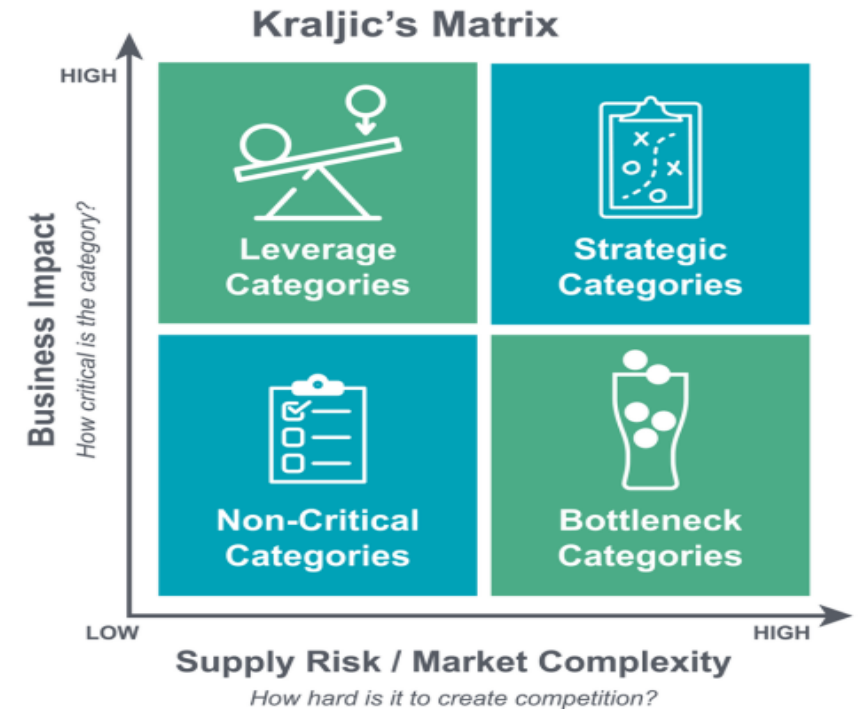
→ **x1:** Unsufficient Stock Risk

→ **x2:** Priority Risk

→ **x3:** Single Vendor Risk

→ **x4:** Long Lead Time Risk

y: Order Volume



ACTIONS TO BE TAKEN

- Sharing results with all the vendors and OEMs
- Corrective / Preventive actions to be determined
- Weekly / Monthly review until improvement

KEY FACTORS

- Regularly postponing EDDs
- Changing prices within the same year
- Too many disputes unresolved



VENDOR EVALUATION RESULTS

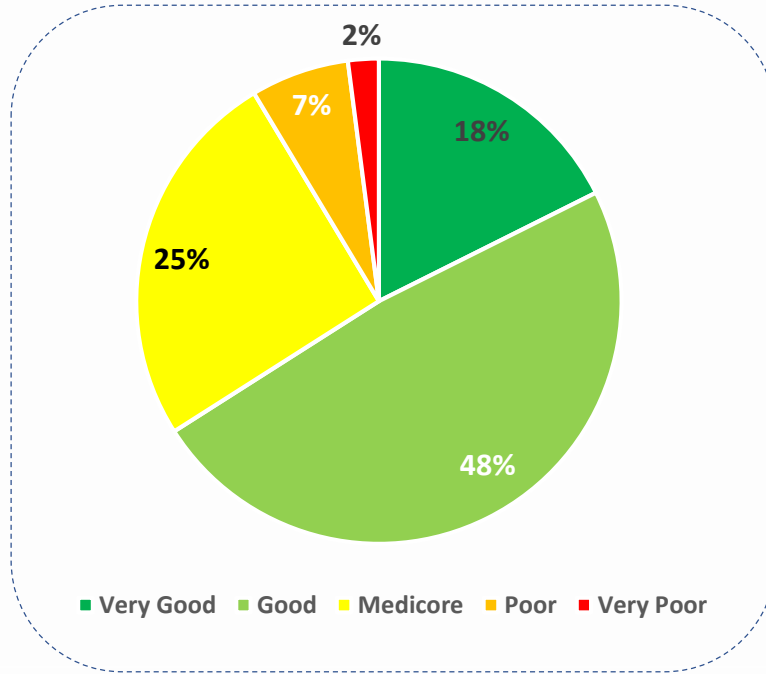
➤ 2021 vs 2022

➤ Drastical changes in 2022

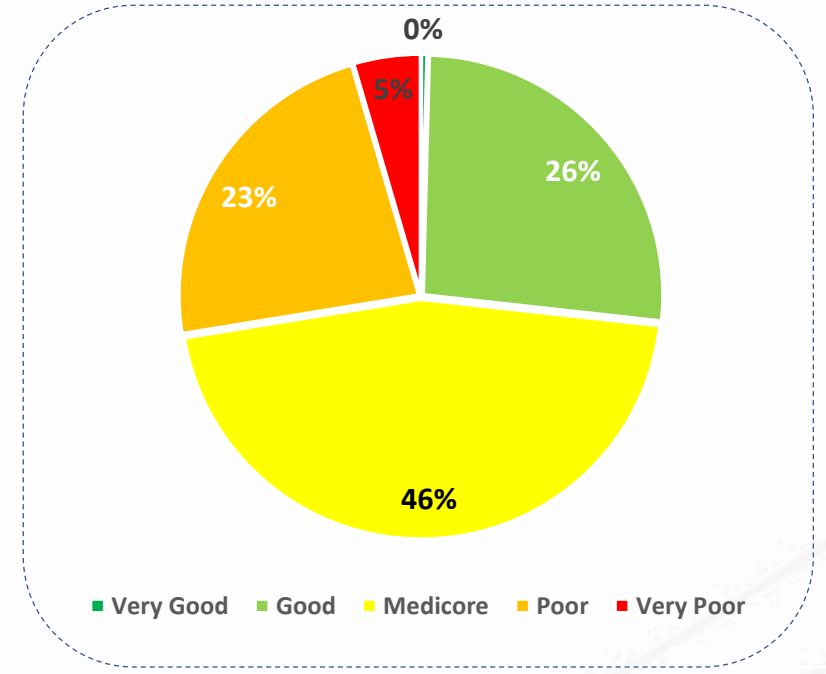
➤ New precautions for 2023 and 2024 required



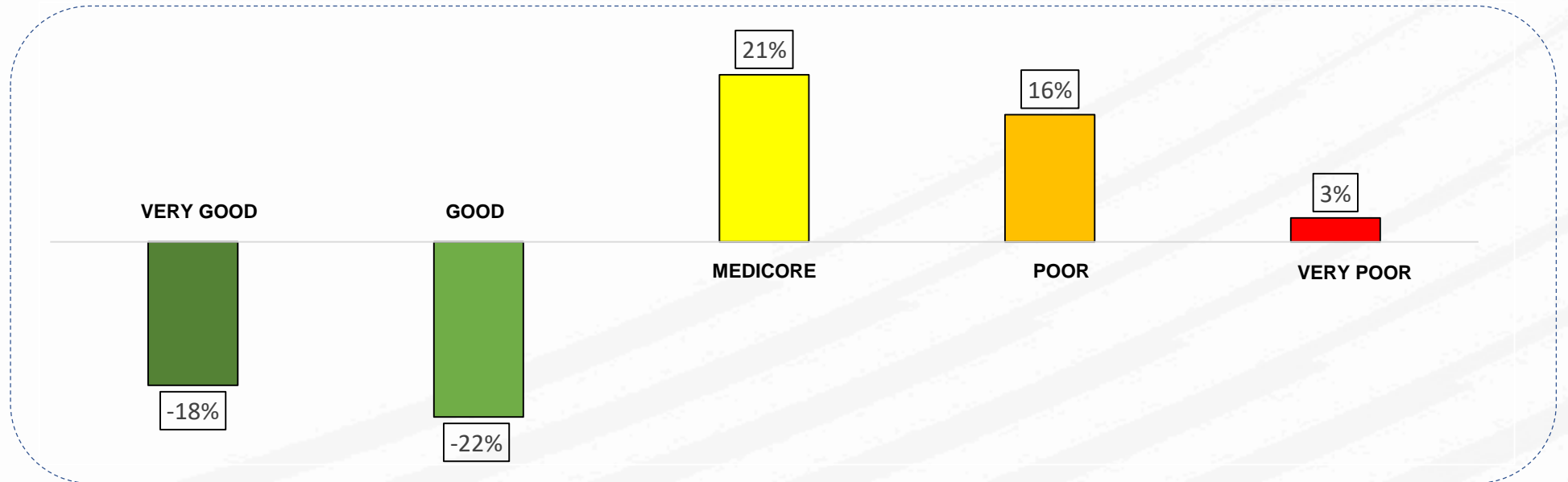
2021



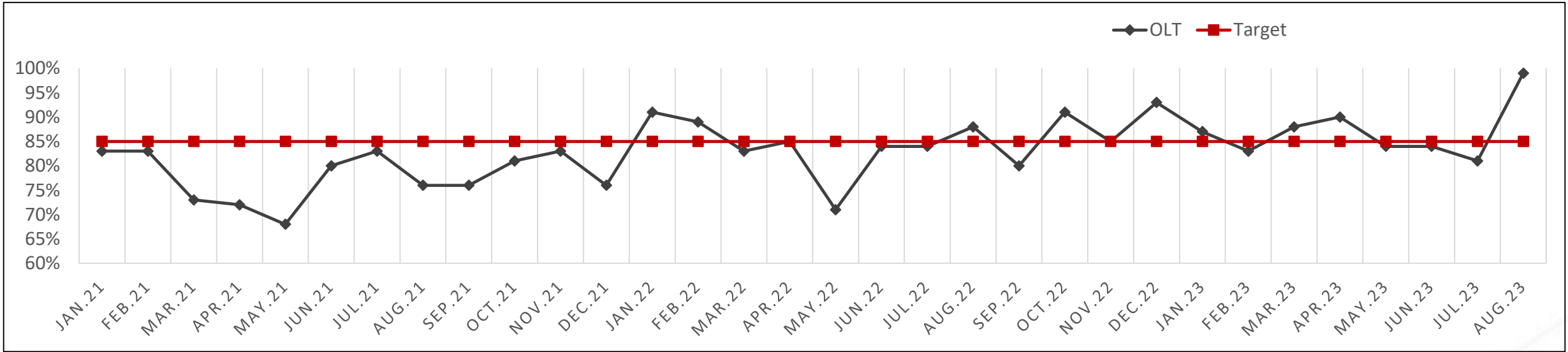
2022



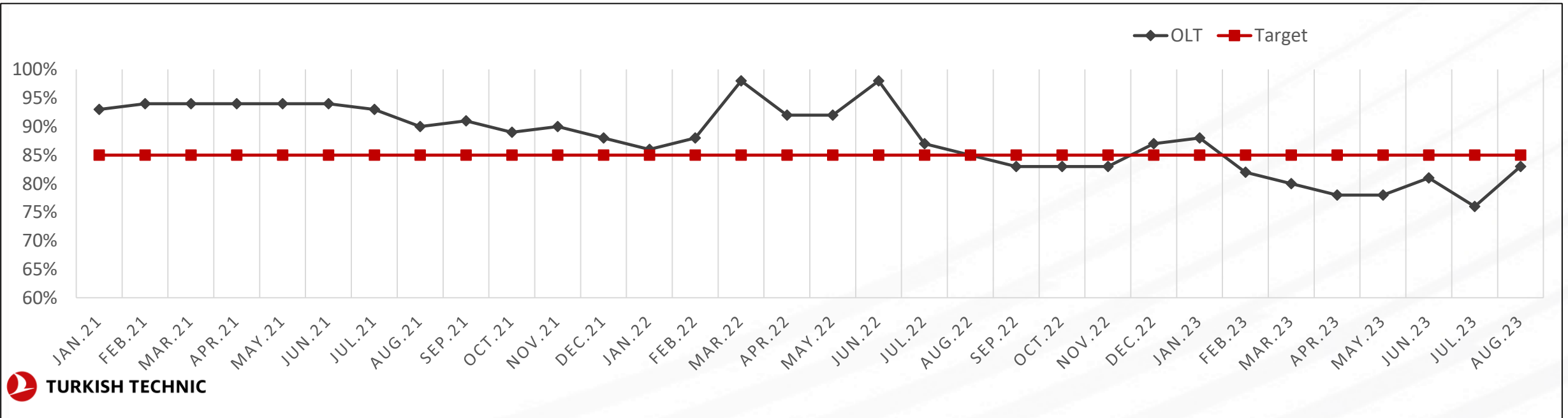
VS



Scheduled OLT Performance



Routine OLT Performance



NECESSARY IMPROVEMENTS



Increasing Contracted Order Rates

New long term agreements which are mutually more beneficial are being offered to the vendors



Backlog Burndown Plans

The increased backlog orders are planned to be closed in shorter duration by the help of better planning



More Reporting & Digitalization

Inventory Levels, increasing order rates, backlogs, EDDs, Priority Levels of order and especially pricing informations are now processed with deeper analysis.



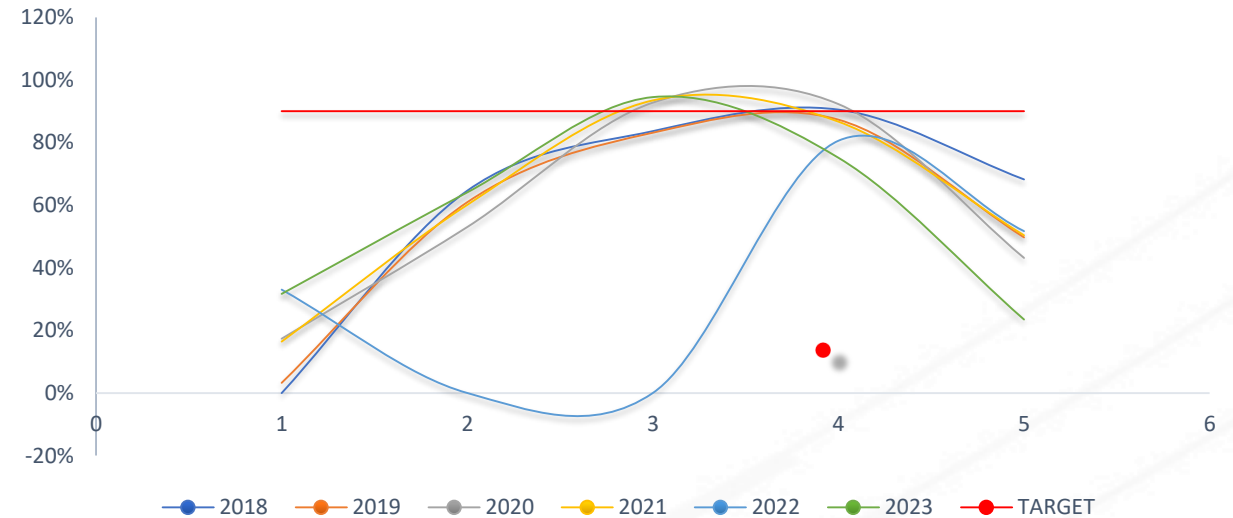
New Capabilities & Agreements

Single sourcing vendors face production and backlog issues, as TT, we offer limited production agreements by receiving the capability via a mutually beneficial business models.



More Catalogues & Planning & Bulk Orders

New catalogues combined with extensive planning and plans made to by-pass possible supply chain issues via sending bulk orders to cover 6 months to 1 year. Critical issue is receiving the catalogues.



Strategic Sourcing and Vendor Support

As a part of Strategic Sourcing, detailed VES activities have taken place. In this manner we were able to monitor and provide more significant feedback to our vendors. This has also led us find different ways to support them.

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How Does IATA Smarthub
Support Our Procurement

HOW DOES **IATA SMARTHUB** SUPPORT OUR PROCUREMENT

01 **BENCHMARKING**

Procurement and repair prices used as data source

02 **BER DECISIONS**

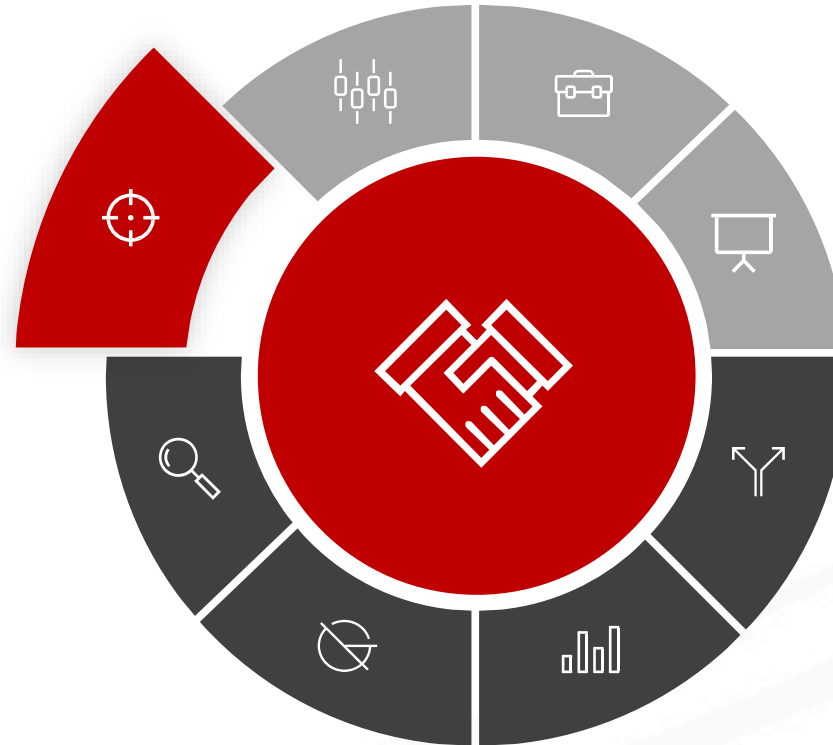
Repair and FMV rates are included for analysis

03 **PURCHASING via CONNECTOR**

Purchasing activities to be started

04 **DATA INTEGRATION ENABLED**

IATA Smarthub Flexibility to create web services for internal reporting systems



05 **FEEDING VES DATA**

New datas to be included through IATA Smarthub

06 **BIDS via AUCTIONEER**

Sales or Sourcing is available via Auctioneer System

07 **COST EFFECTIVE**

IATA Smarthub is a very cost effective solution when compared to other products

FUTURE PLANS WITH IATA SMARTHUB



MRO SmartHub

Connector

Evaluator

Auctioneer

Consignment

SOURCES

- PROVIDE REFERENCE VALUES TO DECIDE FOR PURCHASING, REPAIR AND SALES
- HELPS FOR DECISION SUPPORT
- FMV, REPAIR OR MARKET PRICE

AVAILABILITIES

- MONITORING AVAILABILITY RATES
- MONITORING PRICE LEVEL CHANGES
- COMPLETE MARKET TRANSACTION VOLUME

PLANS

- LIVE CATALOGUE CREATION
- CREATING NEW KPI CALCULATIONS BY USING PRICE INFORMATION
- PROVIDE A NEW PERSPECTIVE TO VENDOR EVALUATION

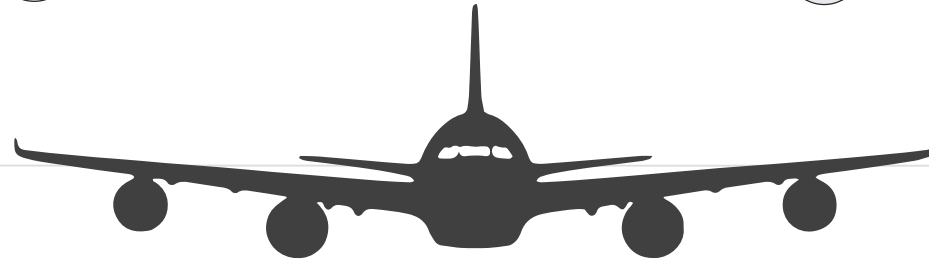
REQUIREMENTS

**NEED MORE
STAGE 1 DATA**

YOU ARE INVITED

**MORE DATA
CONTRIBUTION** 

**CREATING NEW SOLUTIONS
FOR NEW CHALLENGES** 



BENCHMARKING



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THANK YOU