

# **AEROSPACE INDUSTRY**

Bu belge, 5070 sayılı Elektronik İmza Kanununa göre Güvenli Elektronik İmza ile imzalanmıştır.

Eyrak sorgulaması https://odaborsaebys.tobb.org.tr/tso-kutahya-envision/Dogrula/Validate\_Doc.aspx?eD=BSE64H7Z2&eS=1115 adresinden yapı

OCTOBER 2021



## WHY MOROCCO?



## World class aeronautics platform...

- Morocco emerged as a prime aeronautics platform with annual growth rates of 20% over the last years
- The country is ranked among the world's most dynamic aerospace ecosystems
- Diversified and highly integrated supply chain

## ...appealing to major international players...

 Top OEMs are using parts produced in Morocco and many key industry players have built successful long-term partnerships in the country



## ...attracted by a geostrategic location and a unique set of competitive advantages...

- A unique combination of competitive advantages
- Well-trained Human Resources and dedicated training institutes ensure access to a top qualified and competitive labor cost
- Closest African country to the US, Canada and Europe ensuring on time delivery, and easy access to the main aerospace industry markets

### ...long term vision to enhance the competitiveness of the Moroccan aerospace

- Target to grow more complex capabilities
- New opportunities: Space industry, Composites, Interiors...
- Vision to support the decarbonization of the industry



## HIGH VALUE-ADDED PARTS PRODUCED USING THE LOCAL SUPPLY CHAIN





## THESE AIRCRAFT FLY WITH PARTS MADE IN MOROCCO















### THEY TRUST MOROCCO





## **DIVERSIFIED SUPPLY CHAIN** WITH ENHANCED CAPABILITIES (1/2)



#### **AERONAUTIC EQUIPMENT**

Equipment, final assembly & test ( Actuators, Cockpit & Cabin Equipment)

### **AEROSTRUCTURE AND ENGINE PARTS**

Assembly work packages (fuselage, nacelles...) Composite structural & non-structural

#### **MACHINING**

CNC machining /aluminum/ steel/titanium metal analysis/ mechanical testing

### **SPECIAL PROCESSES**

Anodizing (OAC,OAD,OAS,OAT...) Plating, coating, phosphating, passivation

#### **SHEET METAL WORKS**

Cutting metals stamping, bending, shot peening, or welding processes







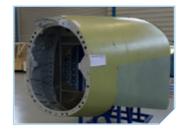
























## **DIVERSIFIED SUPPLY CHAIN** WITH ENHANCED CAPABILITIES (2/2)



#### **ELECTRICAL WIRING**

Wiring /technical harnesses electronics systems testing





### **ENGINEERING**

Mechanic, Electric, Electronic, Hydraulic Study, design, FEA, Simulations, 3D Printing













### **MRO**

Heavy/line engine support services interiors













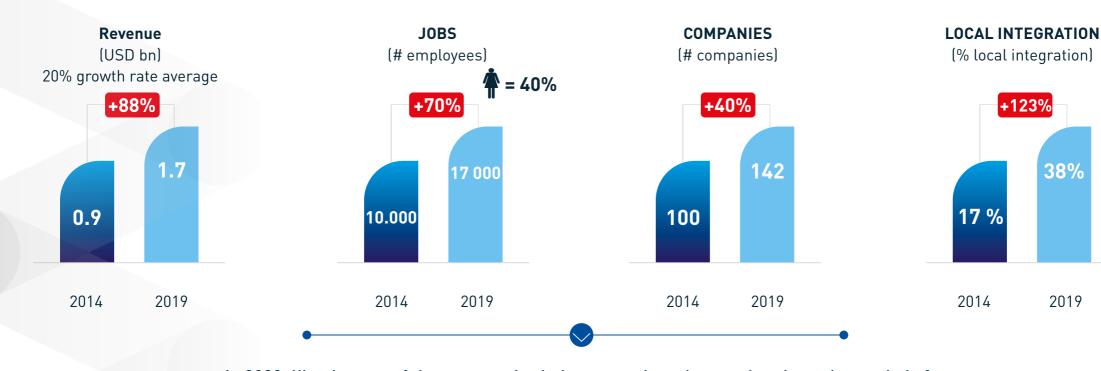
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38% OF LOCAL INTEGRATION RATE

## THE FUTURE OF AVIATION WILL BE MADE "WITH" MOROCCO



### **Key figures**



Bu belge, 5070 sayılı Elektronik İmza Kanununa göre Güzelli Elektronik İmza ile inizalanmıştır aeronautics industry, we have been going through a period of Evrak sorgulaması https://odaborsaebysatomb.org.tr/tsa-kutahya-fixision/Bogrula/Xalidate-Doc aspx3cDyBSF64H772&fS=0115.adresinden.wapılabilistion this strategic choice.



Olivier Andriès, CEO, Safran

## **BOEING SUCCESSFUL SOURCING ECOSYSTEM IN MOROCCO**





- Memorandum of Understanding signed 2016/27/9 by BCA former CEO Ray Conner and The Kingdom of Morocco (KoM).
- The Kingdom of Morocco, as part of the MoU, will provide a variety of critical parts to the Boeing production system with good quality and on-time delivery performance.



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1. Yearly expected exports, in-country direct and indirect revenues 2. Expected number of direct jobs Sources: Institutional sites, AMDIE



This MoU has been a great success as we have been able to integrate 11 suppliers including 2 that supply Boeing directly. These early successes have demonstrated that the Kingdom of Morocco offers excellent value for money and sets it apart from many other countries. We believe that together we can meet the objectives of both Morocco and Boeing. Stan Deal, President & CEO **Boeing Commercial Airplanes** 



## **PILATUS PC12- ASSEMBLY TO BE COMPLETED IN MOROCCO**



### **TPILATUS**

- Pilatus Aircraft and Sabca Maroc have signed a contract for the assembly of PC12- aerostructures in Casablanca.
- The first fuselage and wing structure assembled at the new Sabca facility will be ready for delivery by the end of 2022.
- The training required will be completed in collaboration with IMA.



Pilatus trusted us after an international competition, in which we were able to demonstrate that Sabca Maroc was the most competitive, the most qualified in terms of quality, work capacity achieve this goal.

Thibauld Jongen, CEO, SABCA



### TALENTED PEOPLE YOU CAN RELY ON



### HIGHLY TRAINED WORKFORCE

#### SPECIALIST TECHNICIANS AND OPERATORS

- Ad hoc training programs jointly developed with investors to address industry specific needs (e.g. soft skills with, middle management training)
- Subsidized by the government







### **AERONAUTICS ENGINEERS TRAINED** IN MOROCCO AND ABROAD

- **2,500 engineers** to be trained per year in Moroccan specialized engineering schools

• A growing number of partnerships with leading

Bu belge, 5070 sayılı Flektronik İmza Kanınuna görre Güvenli Elektronik İmza ile imzalanmıştır.

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### COMPETITIVE PRODUCTION COSTS

Cost, Morocco, \$/ months









ASSEMBLY/FABRICATION

**MECHANICS** 

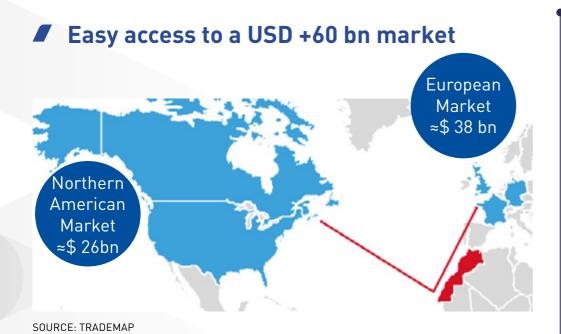
QUALITY CONTROL

### **TURNOVER RATE IS LESS THAN 5%**

Our Spirit Casablanca site is strategically important to us. It provides a very competitive cost base, a highly skilled workforce, it gives us access to a very strong ecosystem and it is ideally located logistically for our customers in the UK and Europe and for other destinations around the world. Scott Mclarty, SVP Spirit Aerosystems

## PROXIMITY AND FREE OF DUTIES ACCESS TO MAJOR AEROSPACE MANUFACTURING HUBS







- 1st worldwide market: USD 15.1 bn imports in 2019
- 2 days transportation by land
- Free Trade Agreement (EU)



- 2nd worldwide market: USD 20.3 b imports in 2019
- 10 days transportation by sea
- Free Trade Agreement



- 3rd worldwide market: USD 8.2 b imports in 2019
- 3 days transportation by land
- Free Trade Agreement (EU)



- 5th worldwide market: USD 5.6 b imports in 2019
- 3 days transportation by sea
- Association Agreement, with free of duties access

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10 days transportation by sea

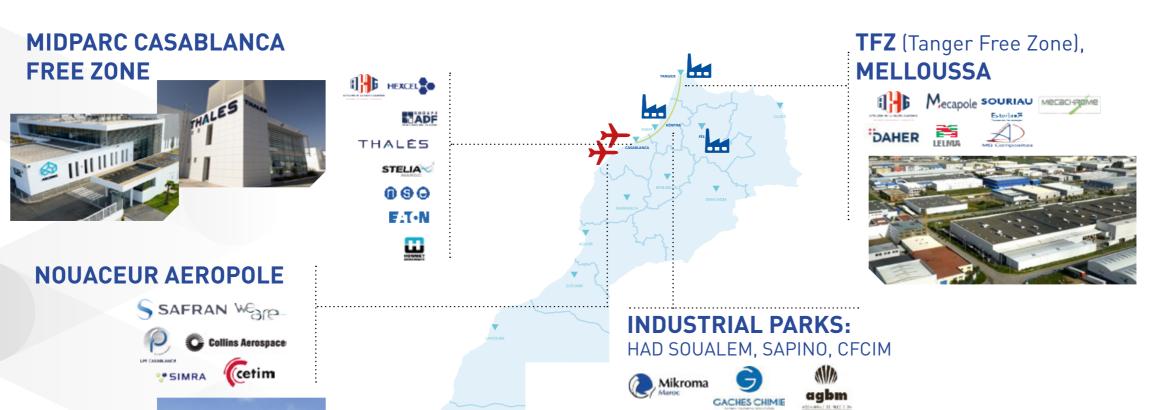


6th worldwide market: USD 5.3 b imports in 2019

CANADA

## YOUR WORLD-CLASS FACILITY **READY IN LESS THAN 12 MONTHS**





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INDUSTRIAL PARK



AEROSPACE DEDICATED PARK

## A COMPREHENSIVE INCENTIVE PACKAGE AVAILABLE



**Direct Capital Expenditure Subsidies** for investment in aeronautics

Direct Capital Expenditure Subsidies for aerospace activity, based on investment's level, added value and job creation.

Tax incentives & Industrial **Acceleration Zones advantages** 

One stop shop services for customs and administration requirements.

### Free on-demand training

On-demand and tailor-made training: Workers are trained in advance,

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## THE FUTURE OF AVIATION WILL BE MADE "WITH" MOROCCO





 Reinforce existing capabilities with a focus on : Engineering, MRO

> Develop new ecosystems: Space, Interiors, Engine, Composites

Export revenue x2,5

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• Decarbonization of operations





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