

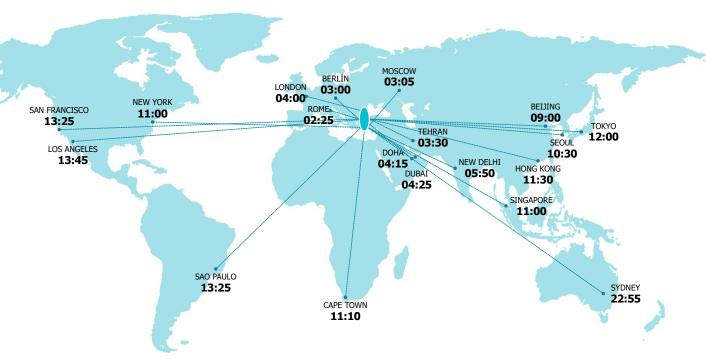




ISTANBUL IN AVIATION

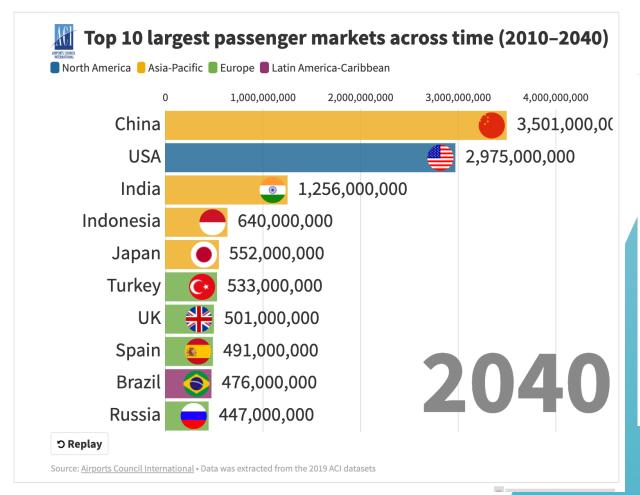
Major hub at the intersection of Asia, Europe and Middle-East



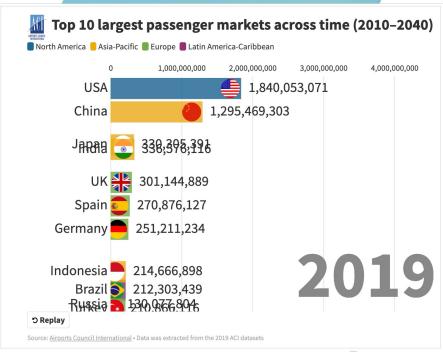




AVIATION & TÜRKİYE











ISTANBUL AIRPORT



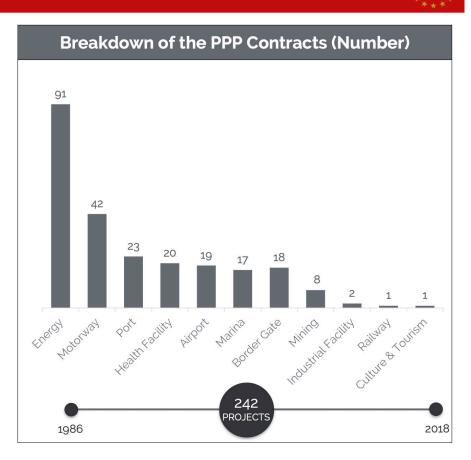
PPP Experience in Türkiye

Turkish PPP Market

Transportation and energy infrastructure projects dominate the PPP market in Turkey,







Source: Presidency of Strategy and Budget 'Fees to the government for the transfer of operating rights "2019 prices



PPP Experience in Türkiye

Opportunities in Transportation

Investing in transportation has remarkably transformed Turkey's infrastructure landscape, yet Turkey is determined to improve it further..





	2002	2018
DUAL CARRIAGEWAY	6,101 km	26,655 km
HIGH SPEED RAILWAY	o km	1,213 km
MARITIME CONTAINERS TRANSPORT	2 million TEU	10.8 million TEU
NUMBER OF AIRPORTS	26	56

Source: Ministry of Transport and Infrastructure



PPP Experience in Türkiye

Showcase Projects

Turkey has implemented a variety of mega projects with BOT model and continues to do so..











Istanbul Airport

PROJECT TIMELINE



Won the Concession Tender for 25 years

Concession Fee 22.152 billion EUR + VAT

Investment 10.247 billion EUR

First Phase To be Completed in 42 months

T.C. Ziraat Bankası A.Ş.

Türkiye Vakıflar Bankası Türk Anonim Ortaklığı

Türkiye Halk Bankası A.Ş.

Türkiye Garanti Bankası A.Ş.

Finansbank A.Ş.

Denizbank A.Ş.







The IGA Challenge: Responding to a truly unique project context





The delivery challenge

Achieving quality at unprecedented construction speed



The issue of scale

Creating great passenger experience in a building of such epic size



The sense of place

Establishing an identity that befits Türkiye and Istanbul



DIMENSIONS





Perimeter

45 km



N-S Direction

9 km





is T

DIMENSIONS

Airport	Area	MPPA
İstanbul Airport (IST)	76.5 Million m ²	150
Atlanta	19 Million m²	104
Beijing	23 Million m ²	96
London Heathrow	12 Million m ²	78
Amsterdam Schipol	20 Million m ²	68
Frankfurt	21 Million m ²	64
İstanbul Atatürk Airport (ISL)	12 Million m ²	68

Atatürk Airport



Frankfurt Airport



Istanbul Airport ____

Beijing Airport



Schiphol Airport





MASTER LAYOUT & PHASING PLAN

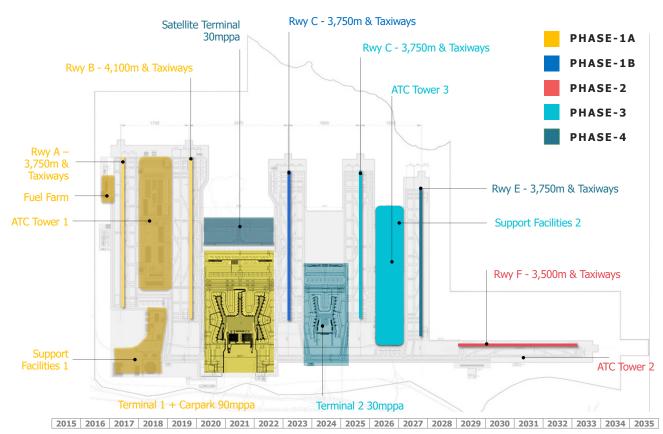
Airport Capacity

MPPA



PHASE 1 PHASE 3 PHASE 4

Facilities	Area
Terminal Building (90 Milyon passenger/year)	1.370.000 m ²
Multistorey Carpark (5 blocks, 7 floor, 18.000 cars)	624.000 m²
Other Support Facilities	1.170.000 m ²
Phase-1 Terminal Area	3.164.000 m ²







ISTANBUL AIRPORT CONSTRUCTION FACTS



MAIN TERMINAL FLOOR AREA

1.370.000 m²

= **x 5** Empire State Building Floor Area (257,000 m²)



STEEL (Structural + Reinforcement)

645.000 tons

= **x 80** Eiffel Tower Metal Structure (7,300 tons)



CONCRET (1.250 Apron, 5.450 structural)

6.700.000 m³

= \mathbf{x} 2 Hoover Dam (3,330,000 m³)



TERMINAL ROOF

450.000 m²

= **X 18** Rome Coliseum Area (24,000 m²)



AMOUNT OF EXCAVATION

717.000.000 m²

= **x 3.5** Panama Canal (205,000,000 m³)



AMOUNT OF FILL

350.000.000 m³

= **x 135** Great Pyramid of Giza (2,600,000 m³)



ASPHALT PAVEMENT

6.150.000 tons

= **x 10,700** A380 (575 ton)



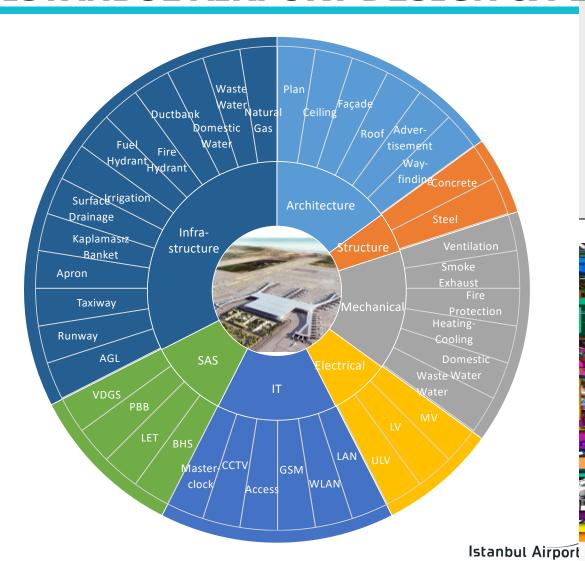
TOTAL LENGTH OF DUCTBANKS

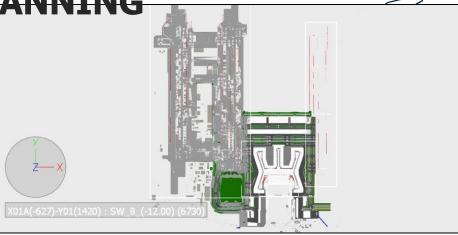
550 km

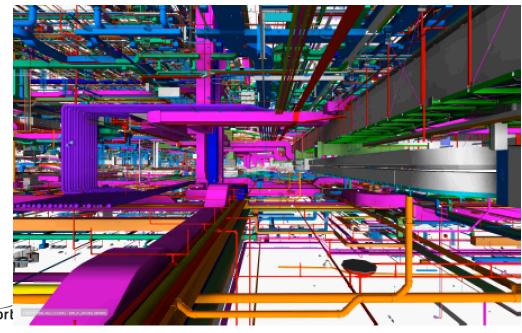
> From London to Paris (apprx. 450 km)

Istanbul Airport ____

ISTANBUL AIRPORT DESIGN & PLANNING









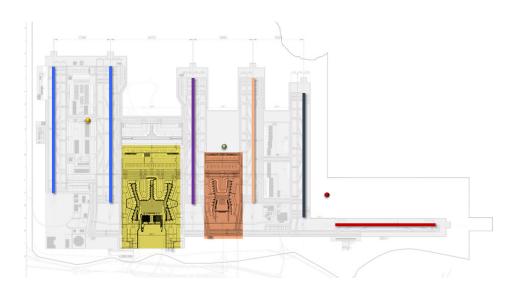
AIRSIDE



















High Intensity Runway Operations with 3 ATC Towers (HIRO)



> CAT IIIb operation on overall air side



Runway / taxiway / apron system enabling Code F (A380-800) operations



Auxiliary runways supporting main runways (9 runways in total)



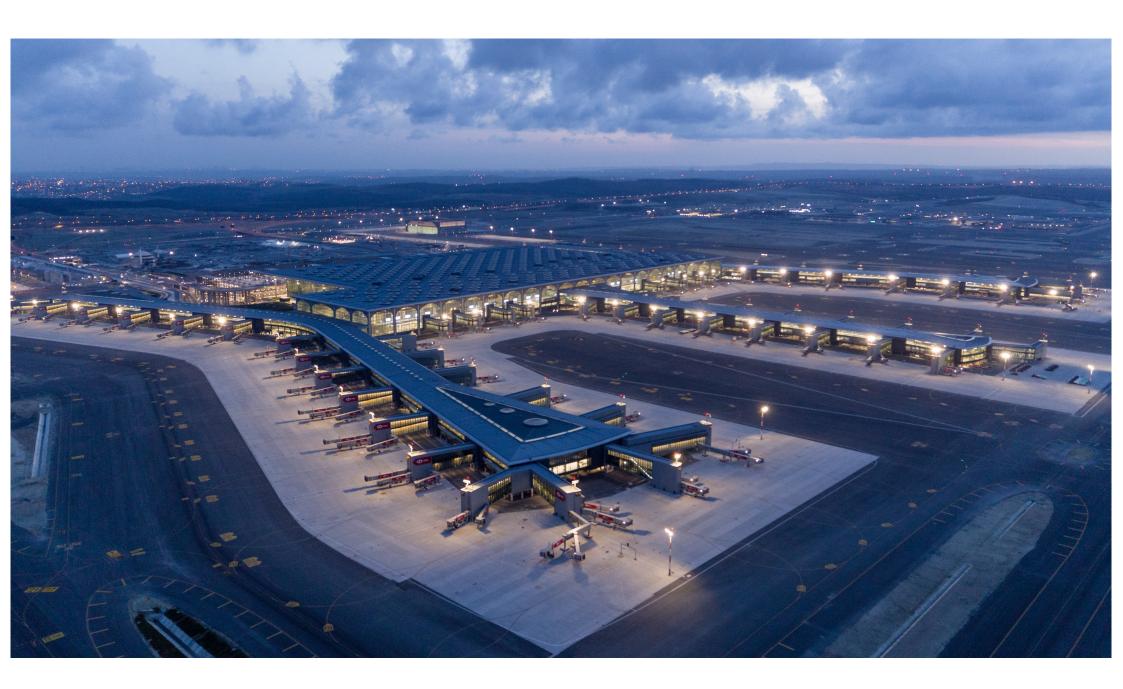
End-Around Taxiway system

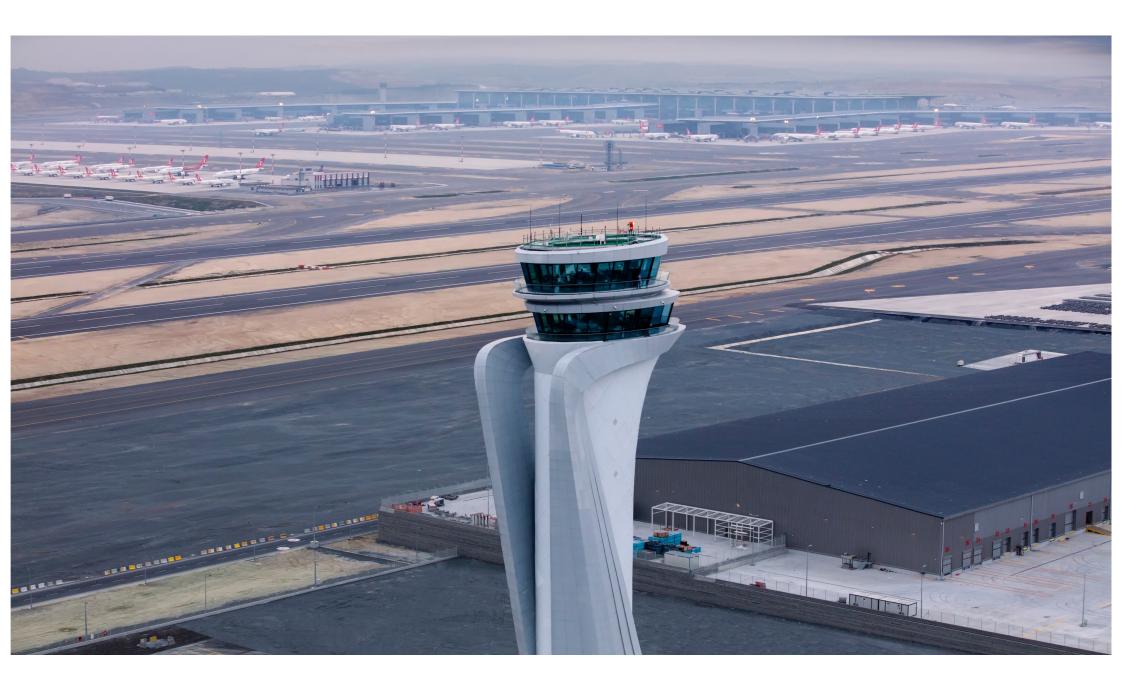


A-SMGCS Level 4 & Follow the Greens









ATC Tower

Design by Pininfarina & AECOM

- H=90m
- 2 levels ATC cab
- 16 positions with ICWP & A-SMGCS Level 2
- DFAC, sports facilities, resting facilities, meeting rooms and offices





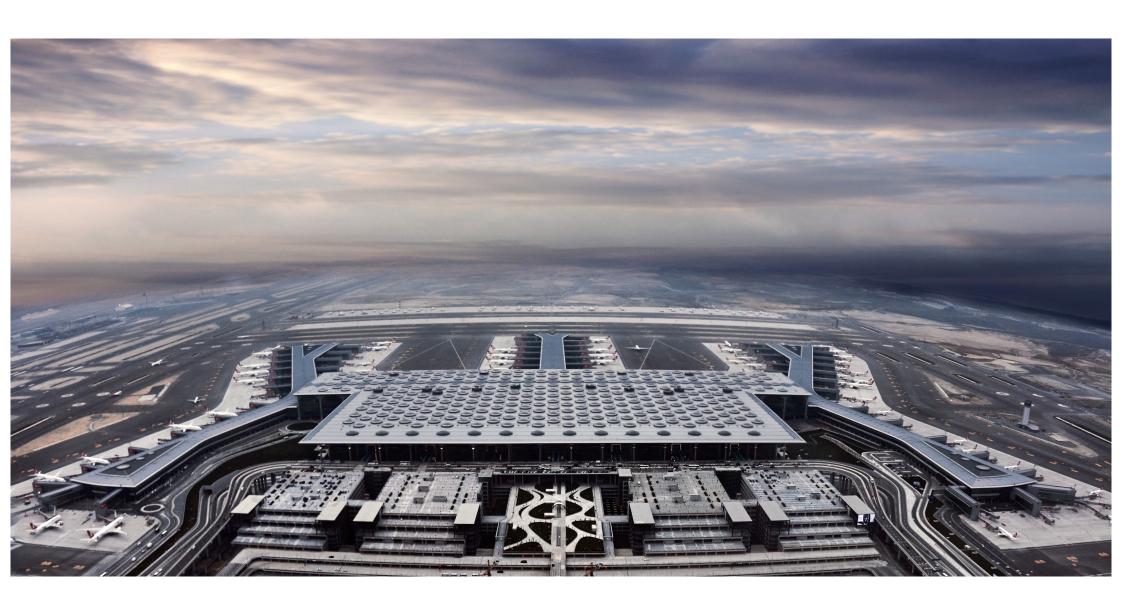






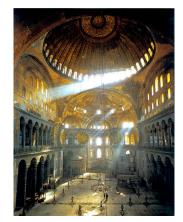
TERMINAL BUILDING







TERMINAL BUILDING

















ist

TERMINAL BUILDING — MAIN FACILITIES

1.4 million m2 Terminal building under one roof with 5 piers (4 for int and 1 for dom), providing 114 contact gates (114 Code C&E, 77 Code E&F) thru 143 PBBs, with a capacity of 120million pax/year.

Information

- 10 information desks in total
- 12 info touch screens
- 23 info screens with live assistant
- QMS monitors at Terminal entrances

Darken I.



Check-in Counters

- 566 check-in counters at 13 islands
- 36 bag drop counters
- 112 self check-in kiosks





Passport Control

- 228 passport control counters (departure, arrival and transfer zone)
- 30 e-passport units (departure, arrival and transfer zone)



2 healthcare centers and 5 mobile health stations, providing 24/7 service

5 emergency ambulances

Medical & Emergency Facilities

23 automatic external defibrillators







Lounges

- 4 at international airside
 - IGA Lounge
 - Skyteam Lounge
 - THY Liunge Business
 - THY Lounge Miles&Smiles
- 2 at domestic airside
 - IGA Domestic Lounge
 - THY Domestic Lounge







*Queue Management System



AOCC & Ramp Tower

Airport Operations Control Center (AOCC) is the HQ of daily operations.





- Monitoring & dispatch
- Technical & maintenance services
- Special operations coordination center
- Planned or unplanned resource allocation
- Only Point of Contact

- AOCC houses the Ramp Control Unit, designed as a remote tower with 180° multiview screen.
- Ramp and active airside is monitored by A-SMGCS Level 2 and high-resolution special cameras located on the aprons.









TERMINAL BUILDING - IT INFRASTRUCTURE



= ·· = ··









3

Data Center

467

Server

2.500 km

Fiber Optic Cables

3257

Access Points with Card

14.549

Supported User

5.500 km

Copper Wire



81









102

Integrated System

780

ICT Rooms

102.000

Network ports

3.267

Flight Information Screens

10.000

CCTV

20.715.017

GB

Data Capability

Istanbul Airport

Istanbul Airport

There is no room for "one size fits all"

Istanbul Airport where everyone feel comfortable to travel



Disabled Guests



65+ Guests



Families with children





Premium Guests





Generation Z



Business People



Global Guests



DUTY FREE

F&B



71,696 m²

Duty Free & Retail Area



42

Duty Free Shops



142

Monobrand retail shops including



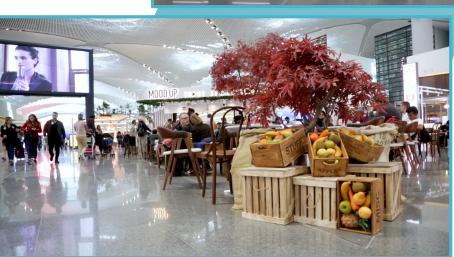
150+

Wide variety of F&B with more than



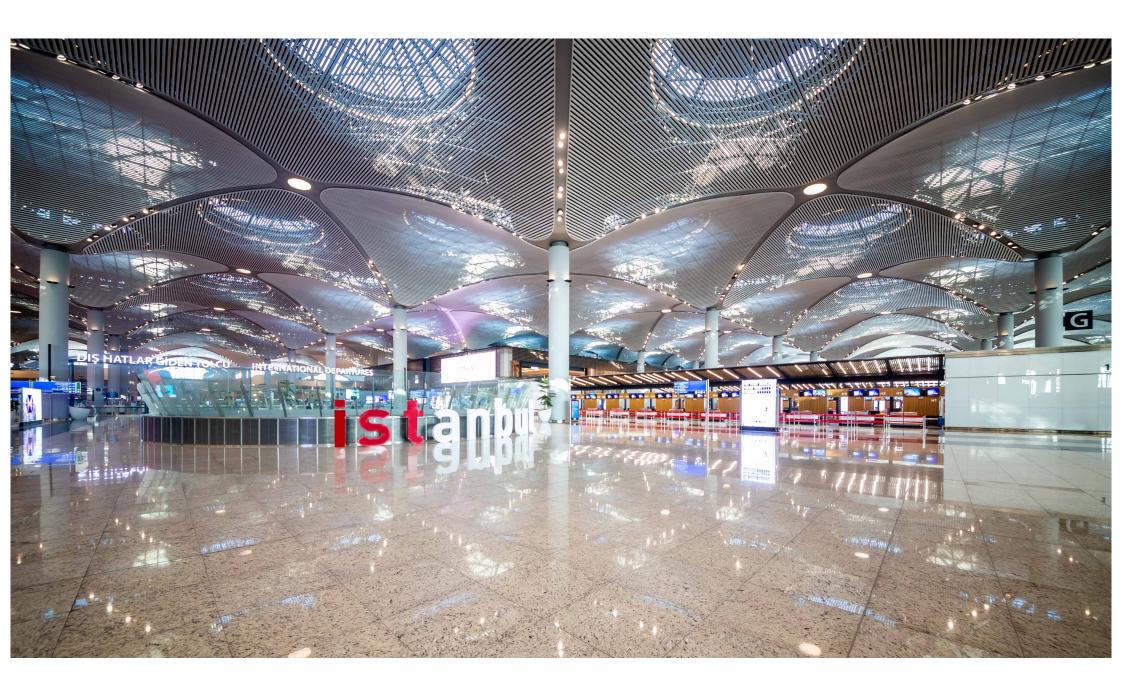
34,061 m²

Locations totaling over

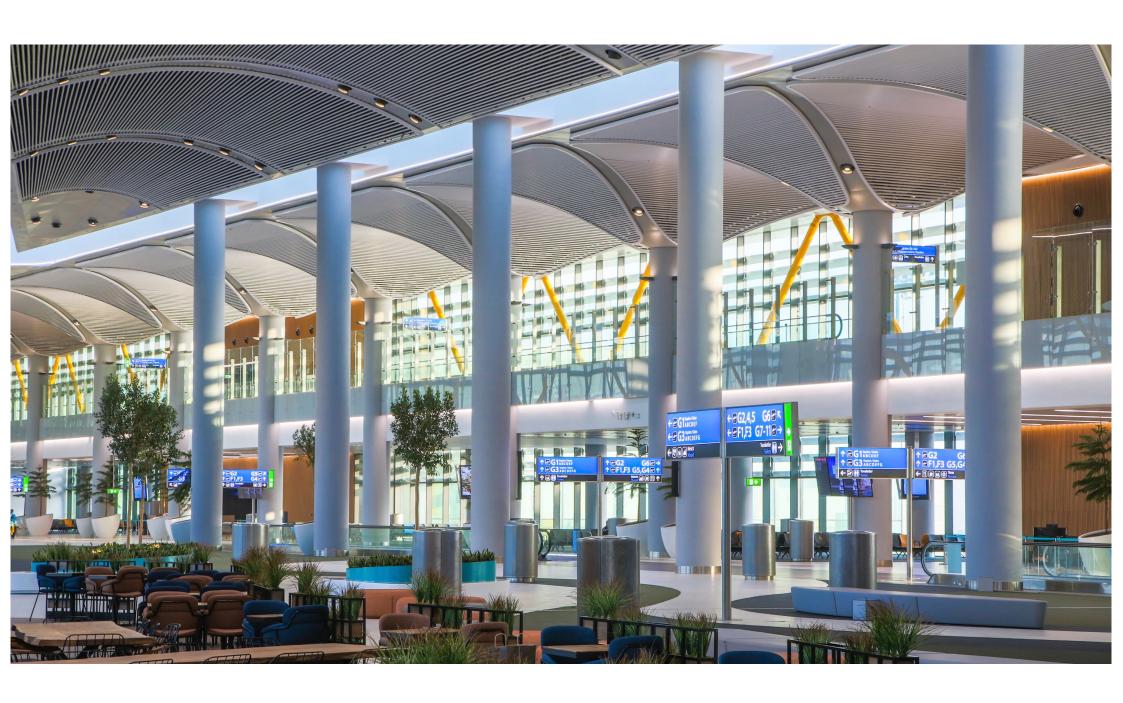


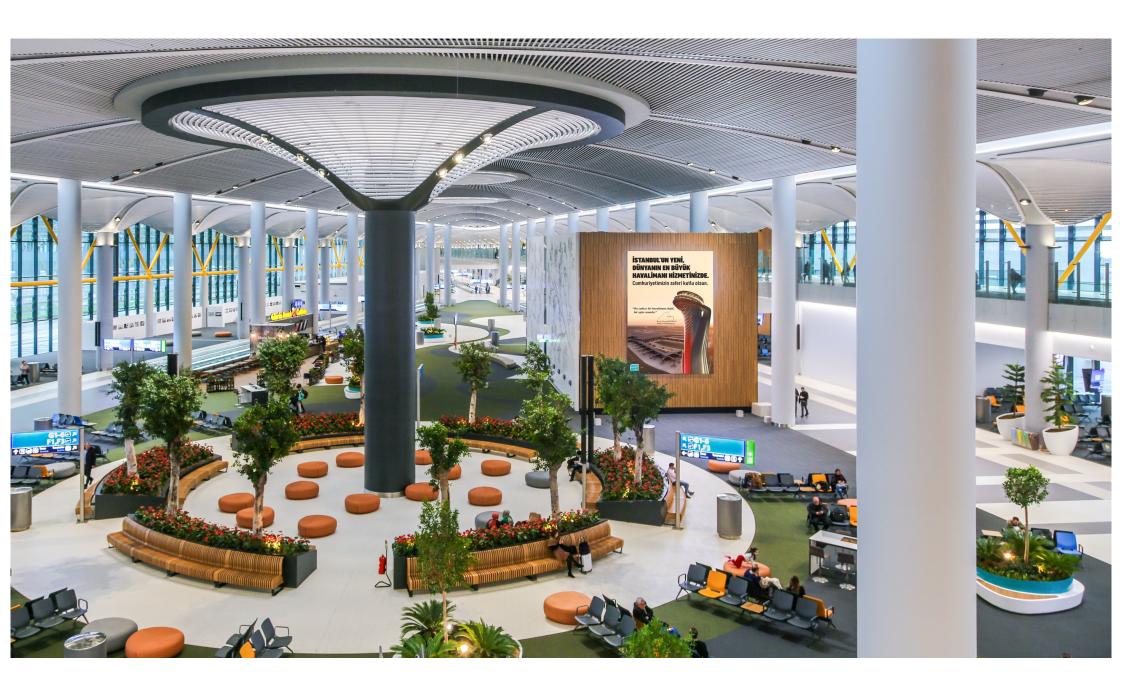
Istanbul Airport





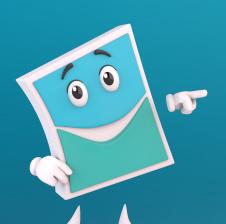








CARGO



CARGO AREA

Cargo Area Fact	ATATURK AIRPORT	ISTANBUL AIRPORT 5,5 mn. tons	
Annual Cargo Capacity	1,2 mn. tons →		
Total Cargo Space	300.000 m² →	1.400.000 m ²	
Aircraft Parking	16 aircrafts →	29 aircrafts	
Leasable Area	- →	340.000 m²	
Expansion Area	- →	60.000 m ²	
Temporary Storage Area	65.000 m² →	195.000 m²	
Carpark Capacity	750 cars →	6.000 cars	

Comparison	HONG KONG	FRANKFURT	DUBAI	MEMPHIS
Total Cargo Space	500.000 m²	1.500.000 m ²	110.000 m²	5.000.000 m ²
Annual Cargo (2017)	4.9 mn. tons	2.1 mn. tons	2.6 mn. tons	4.5 mn. tons
Aircraft Parking	43 aircraft	20 aircraft	23 aircraft	120 aircraft











CONTRIBUTION TO TÜRKİYE BY 2025





SUSTAINABILITY INITIATIVES & SCHEMES

- ✓ Energy Efficiency
- ✓ Water Efficiency
- √ Waste Management
- ✓ Green Airport Project
- √ Social Management

LEED Buildings Total Area: 2.000.000 m²





OUALITY MANAGEMENT SYSTEM - ISO 9001:2015

CUSTOMER SATISFACTION MANAGEMENT SYSTEM - ISO 10002:2018

ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

INFORMATION SECURITY MANAGEMENT SYSTEM - ISO/IEC 27001:2013

ENERGY MANAGEMENT SYSTEM - ISO 50001:2018



LEED Certified ATC Tower

- %21 Energy Efficiency
- %30 Water Efficiency



LEED Certified Terminal and Carpark

- %21 Energy Efficiency
- %21 Eno.5,
 %40 Waster Efficiency
 Istanbul Airport



LEED Certified Mosque

- %24 Energy Efficiency
- %30 Water Efficiency



LEED Certified Presidential Guest House

- %21 Energy Efficiency
- %30 Water Efficiency



CONTRIBUTION TO TÜRKİYE BY 2025

225.677

% 4.89

40.7 billion USD

4.4 billion USD

22.2 billion EUR + VAT



Employment



of the GDP



Value added



Additional household income



Concession fee to Government (over 25 years)

Source: The Centre for Economics and Foreign Policy Studies (EDAM-2016)



RECOVERY FROM COVID & CURRENT STATUS

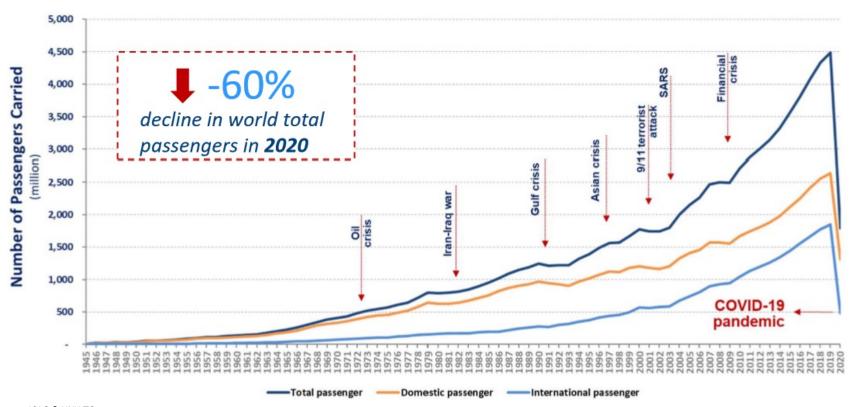






Due to COVID-19, world passenger figures decreased by 60% in 2020.

World Passenger traffic evolution (1945-2020)







Source: ICAO & UNWTO

Impact of COVID-19 on Operations & Planning



Pre-COVID-19

During COVID-19













B nes



234Destinations



714 ATMPeak Day (02.04.2021)



92.157 PAX Peak Day (02.04.2021)



45,0%Transfer Ratio

81,1%

TK Share





62Airlines

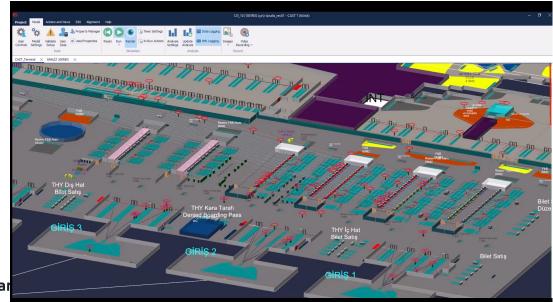
March 2020, all operations except for Cargo has stopped at Istanbul Airport.

Between March-June, planning and implementation of operational measures for public health concerns were executed.

Operations resumed starting June 1st 2020, following the inspections and certifications by Ministry of Transportation.

Due to the extensive size of the airport, Operations Planning separated into 4 phases:

- Phase 1: Daily ATM 0-400
- Phase 2: Daily ATM 400-600
- Phase 3: Daily ATM 600-800
- Phase 4: Daily ATM 800-1000 (considered as resuming of normal operations)



Istar

Impact of COVID-19 on Operations & Planning

844,271





Vidmetrica shows the density of check-in islands in terms of social distancing to observe and intervene crowded areas in timely manner

ACHIEVEMENTS DURING COVID-19







CERTIFICATE OF ACCREDITATION

Istanbul Airport

This certificate recognizes your airport's commitment to prioritizing health and safety measures in accordance with ICAO Council Aviation Restart Task Force recommendations and in alignment with the joint EASA and ECDC Aviation Health Safety Protocol and ACI EUROPE's Guidelines for a Healthy Passenger Experience at Airports.

DATE OF ISSUANCE 05-08-2020

DATE OF EXPIRY 05-08-2021



OLIVIER JANKOVEC Director General







5-Star Airport

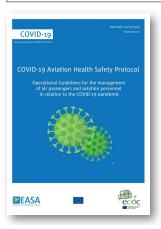
We are certified as a 5-Star Airport for facilities, comfort, cleanliness, shopping, food & beverages, staff service and security / immigration.



5-Star COVID-19 **Airport Safety**

We are certified with the 5-Star COVID-19 Airport Safety Rating for the standard of safety measures and improved hygiene processes introduced to help reduce the spread of Coronavirus.







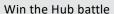


Aviation Strategy – Sustainable recovery and growth



Aviation Battlefield







Win the battle of Long-haul



Win the battle for Low Cost Carriers



Win the battle – Travellers' preference

Aviation Workstreams



Route Development Optimization



Customer Profitabilty



Cooperation



Adequate Capacity



Inbound (Part of the Hub battle)



Istanbul Airport Care

Cargo (Part of the Long-haul battle)

Airlines @ Istanbul Airport

Airlines in Operaton since 2019

		24	
1	Aegean Airlines	31	Jordan Aviation
2	Aeroflot Russian Airlines	32	Kam Air
3	Afriqiyah Airways	33	KLM
4	Air Albania	34	Kuwait Airways
5	Air Algerie	35	Libyan Airlines
6	Air Astana	36	Libyan Wings
7	Air France	37	LOT Polish Airlies
8	Air Moldova	38	Lufthansa
9	Ariana Afghan Airlines	39	Mahan Air
10	Asiana Airlines	40	Meraj Airlines
11	Ata Airlines	41	Middle East Airlines
12	Azerbaijan Airlines	42	Nouvelair Tunisie
13	Badr Airlines	43	Oman Air
14	Belavia Belarusian Airlines	44	Pegasus Airlines
15	British Airways	45	Qatar Airways
16	Buraq Air	46	Qeshm Air
17	China Southern Airlines	47	Royal Air Maroc
18	Egypt Air	48	Royal Jordanian Airlines
19	Emirates Airline	49	Saudia Arabian Airlines
20	Ethiopian Airlines	50	SCAT
21	Etihad Airways	51	Singapore Airlines
22	Fly Baghdad	52	Somon Air
23	Fly Jordan	53	Tarom Romanian Airlines
24	Gulf Air	54	Tassili Airlines
25	IndiGo Airlines	55	THY Turkish Airlines
26	Iran Air	56	Tunisair
27	Iran Airtour	57	Ukraine International Airline
28	Iran Aseman Airlines	58	UR Airlines
29	Iraqi Airways	59	Uzbekistan Airways
30	Jazeera Airways		•

New Airlines Joined in 2021/2022

- Air Arabia
- 2 Air Arabia Maroc
- 3 Air Montenegro
- 4 Air Serbia
- 5 Azimuth Airlines
- 6 Nernig Airways
- 7 Caspian Airlines
- 8 FLY OYA
- 9 FlyDubai
- 10 FlyOne
- 11 Flyone Armenia LLC
- 12 Ghadames Air
- 13 IrAero Airlines
- 14 MIAT Mongolian Airlines
- 15 Nordwind Airlines
- 16 Pobeda Airlines
- 17 Red Wings Airlines
- 18 Rossiya Airlines
- 19 SkyUp
- 20 Transavia France
- 21 Ural Airlines
- 22 UT Air Aviation

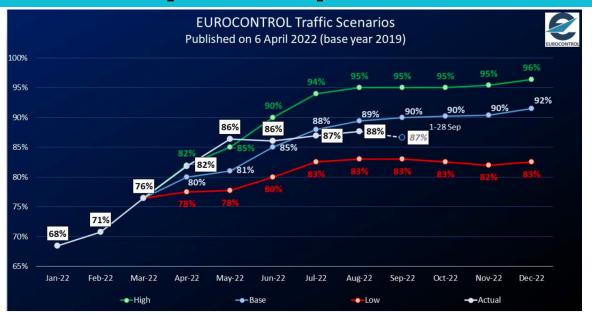


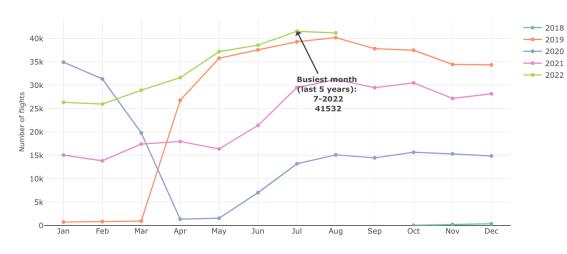
- 22 new airlines have entered IST to boost P2P potential.
- 1st ever A380 on scheduled service to IST



Total of 81 Airlines

Currently in Europe









Rank evolution	Top 10 Airports on week 22 Sep - 28 Sep 2022						
over prev. Week	Airport	Average Daily Dep/Arr Flights	∆ over prev. week	% over prev. week	% vs 2019		
→	IGA Istanbul Airport	1 293	<u>></u> -11	-1%	71 +4%		
->	Amsterdam	1 269	-18	-1%	-16%		
→	Paris/Charles-De-Gaulle	1 232	7 +66	+6%	-16%		
→	Frankfurt	1 159	71 +9	+1%	-25%		
→	Lond on/Heathrow	1 127	71 +36	+3%	-13%		
→	Madrid/Barajas	1 043	71 +9	+1%	-16%		
→	Munich	942	71 +11	+1%	-25%		
→	Barcelona	906	71 +18	+2%	-15%		
→	Palma De Mallorca	846	71 +4	+0%	7 +4%		
→	Antalya	801	-18	-2%	-5%		



Recovery Status @ IGA



International

Aug 2022 YTD Aug 2019 YTD



256 Direct Destinations 263

Direct **Destinations**



1.032 ATM Peak Day (21.08.2022) 1.061 ATM

Peak Day (18.08.2019)



175.209 PAX 181.901 PAX

Peak Day (31.07.2022) Peak Day (18.08.2019)



50.2%

Transfer Passengers

76.7% Turkish Airlines Passenger Share



80 International Airlines

51.6%

Transfer Passengers

76,7%

Turkish Airlines Passenger Share

72

International **Airlines**

Domestic

Aug 2022 YTD Aug 2019 YTD



45 Direct **Destinations** 47

Direct **Destinations**



446 ATM Peak Day (30.04.2022)

416 ATM Peak Day (05.04.2019)



65.553 PAX Peak Day (08.05.2022)

62.115 PAX Peak Day (28.06.2019)



25,6% Transfer Passenaers



Turkish Airlines Passenaer Share



Domestic Airlines

89,1%

25.8%

Turkish Airlines Passenger Share

Transfer Passengers



Domestic Airlines

Total

Aug 2022 YTD Aug 2019 YTD



301 Direct Destinations

310 Direct **Destinations**



1.411 ATM Peak Day (08.07.2022)

1.370 ATM Peak Day (09.08.2019)



236.430 PAX Peak Day (31.07.2022)

239,287 PAX Peak Day (09.08.2019)



43.8% Transfer Passenaers 45.0% **Transfer Passengers**



82,4% Turkish Airlines Passenaer Share 79,8% Turkish Airlines Passenger Share



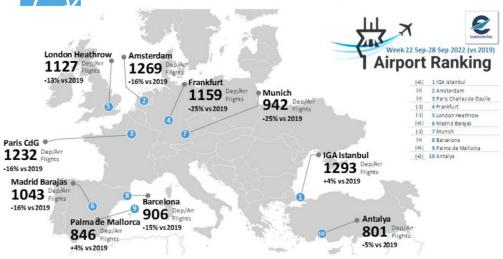
81 **Total Airlines** **73 Total Airlines**

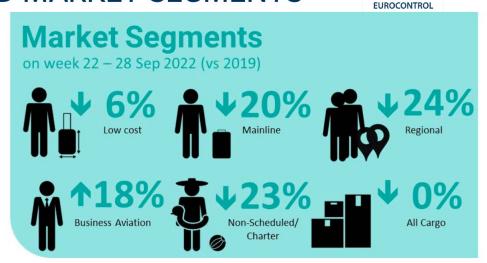
Source: iGA Istanbul Airport (IST) / Internal Data

Currently in Europe



TOP 10 AIRPORTS, FLOWS AND MARKET SEGMENTS

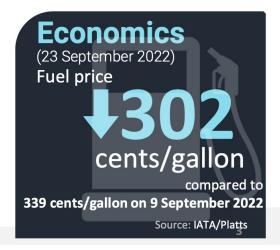




Traffic Flow

Average daily flights on week of 22 - 28 Sep 2022

	Flights	vs previous week	vs 2019
Intra-European	23 606	-0%	-10%
Intercontinental	5 213	-0%	-22%



Impacts of COVID-19 / Aviation Sector in the World





BUSINESS NEWS AUGUST 7, 2020 / 11:10 AM / UPDATED 6 MONTHS AGO

LONDON (Reuters) - Thousanthem they have lost their jobs or cut employee numbers by 29% i

Source: www.ft.com

By Sarah Young

Latest EU/Schengen

Air Travel | Statistics

193 Europe Airports May Go Bankrupt in Coming Months

< Share 1 7 60 1

Heathrow to cut jobs as UK quare measures compound 'gripe'

Frankfurt airport plans to cut as many as 4,000 job

UK's largest airport says passenger

Sta Maria State of the Automatical State of th

Lufthansa Expected To Cut Almost 30,000 Jobs By End Of The Year

by Andrew Curran · December 7, 2020 · 📽 90 shares · 🕓 3 minute read

Istanbul Airport

Source: www.theguardian.com



