

INDIA MARKET UPDATE

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Agenda

- **State of Aviation in India**
- Boeing Products and Services
- India MRO
- Summary



State of Aviation in India

Increased traffic, reduction in operating costs, and fare discipline will drive India aviation profitability.

India domestic passenger traffic is at the highest levels.

- More than 80 million domestic passengers flew by air in 2015

Capacity discipline is strengthening (2014 vs 2015)

- Domestic load factor increased from 76.4% to 82.5%
- RPKs up 21% on 9% increased ASKs

Fuel prices and the exchange rate continue to drive airline operating costs and return to profitability

- A relatively stable rupee with decreasing fuel prices reduces break-even fares
- Landing and Navigation fees are growing proportion of operating cost.
- Increased fare discipline is required to continue to industry grow profitability

Source: DGCA and Annual reports

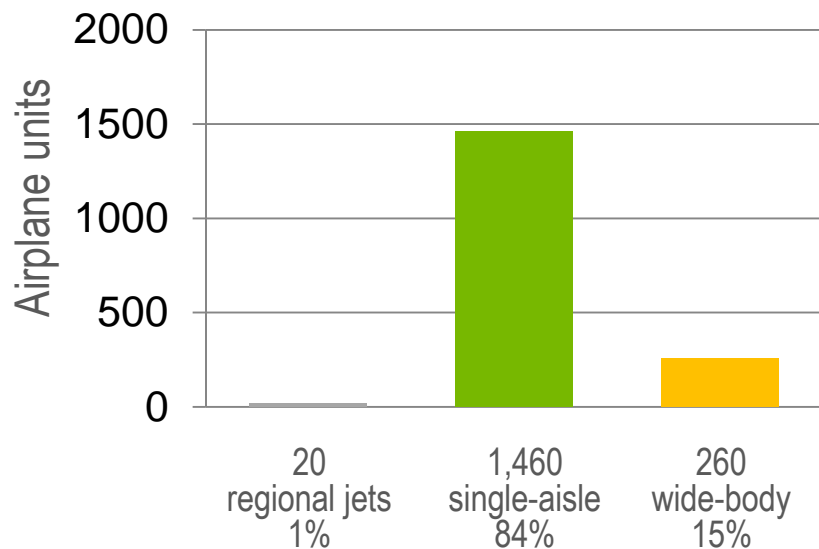
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Airlines in India will need 1,740 new airplanes valued at 240 billion US dollars



Airplane deliveries: 1,740

2015 - 2034



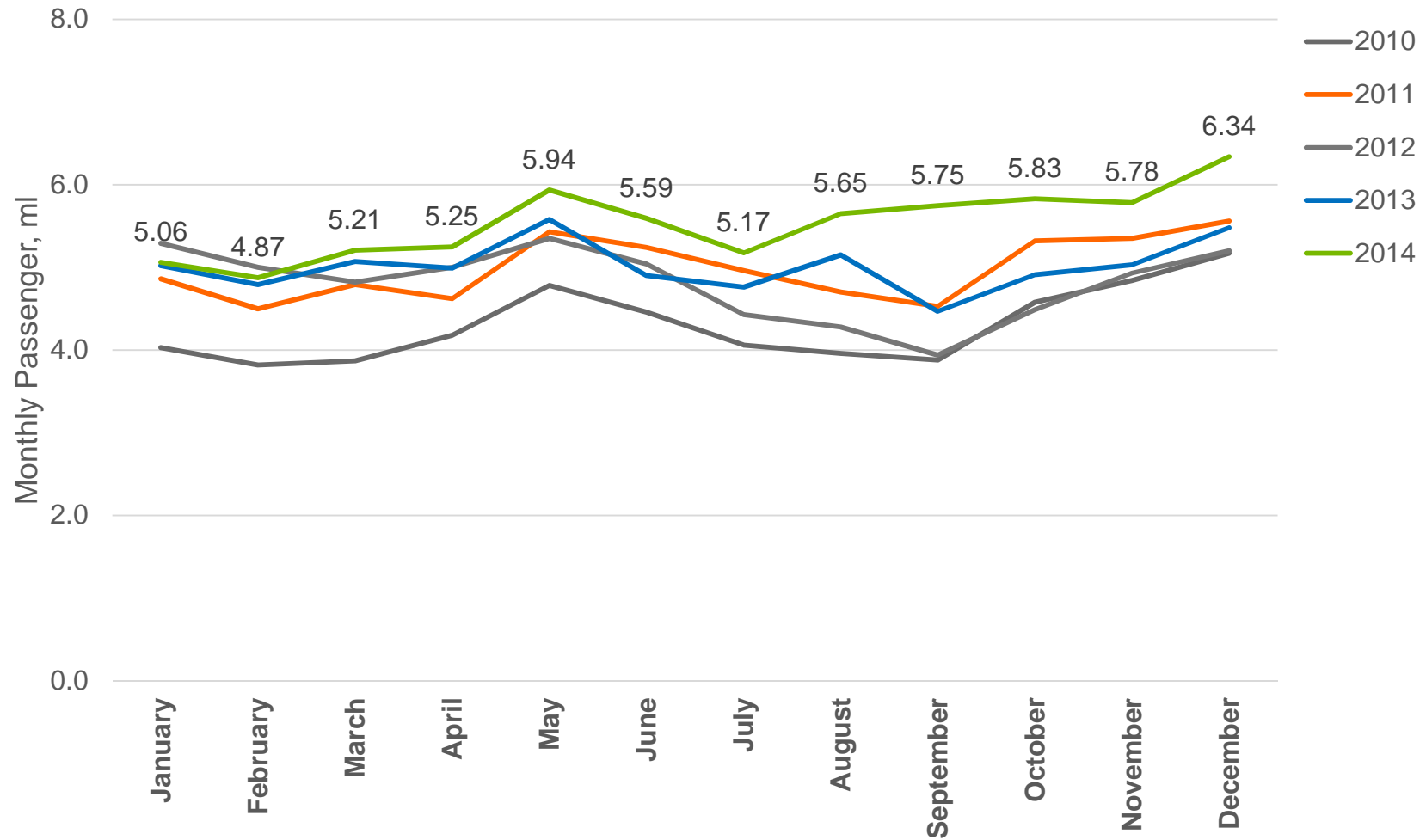
Market value: 240 billion US dollars

2015 - 2034



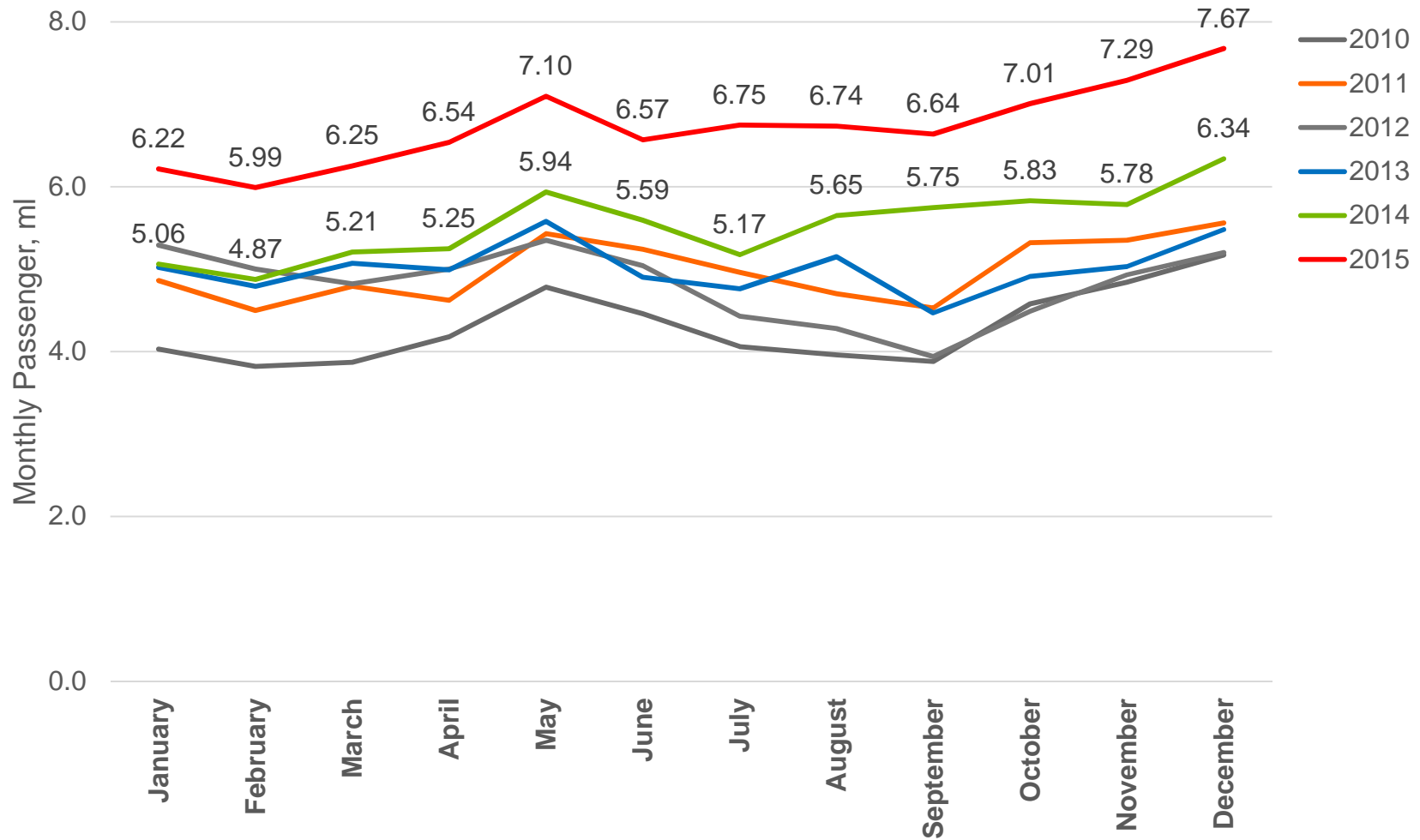
Domestic passenger traffic recovered in 2014 ...

66.4 million passengers flew in 2014



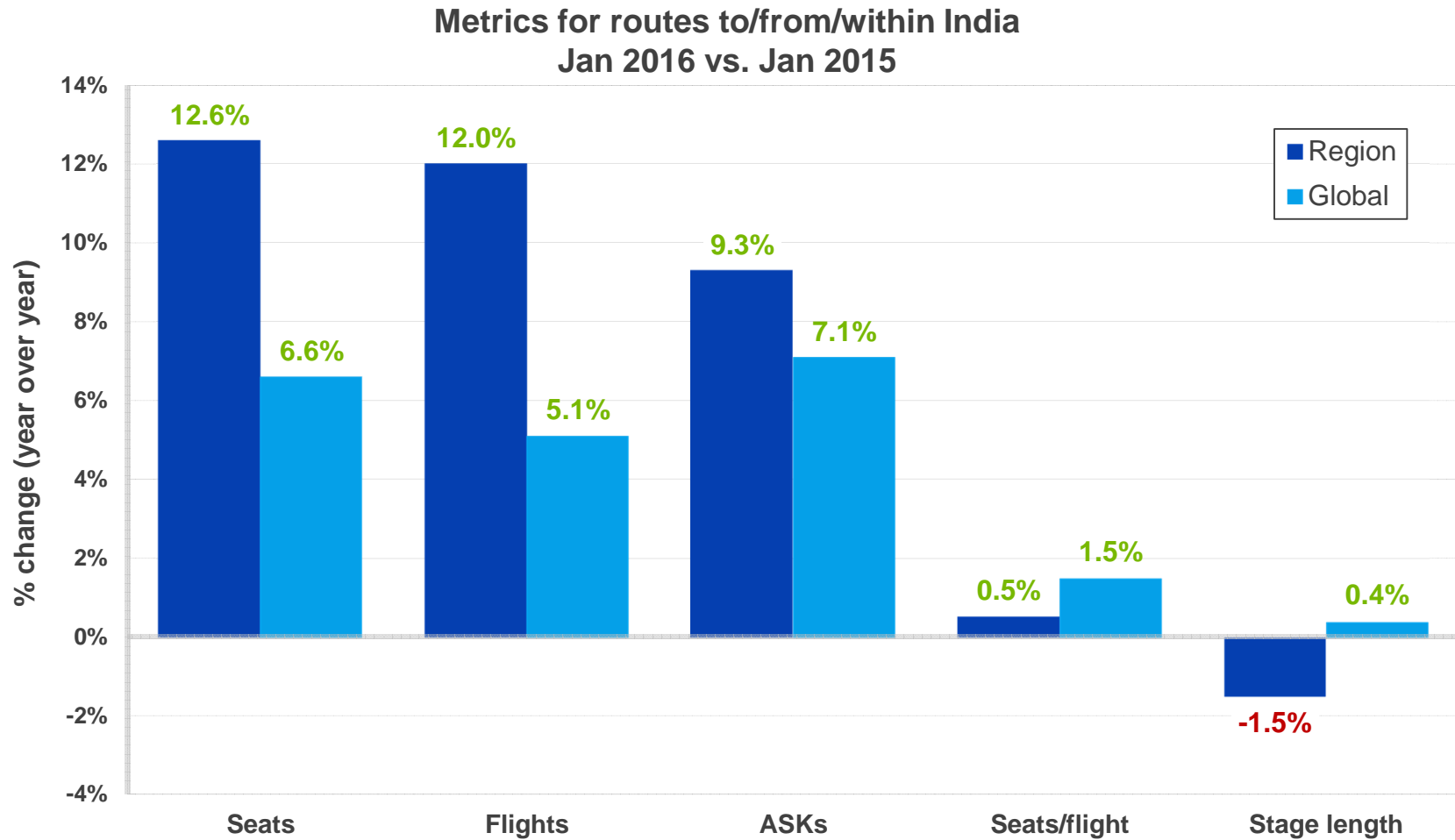
Domestic passenger traffic recovered in 2014 ...

Domestic passengers increased by 21% in 2015



India capacity metrics

Capacity being added with more flights rather than increased seats per flight

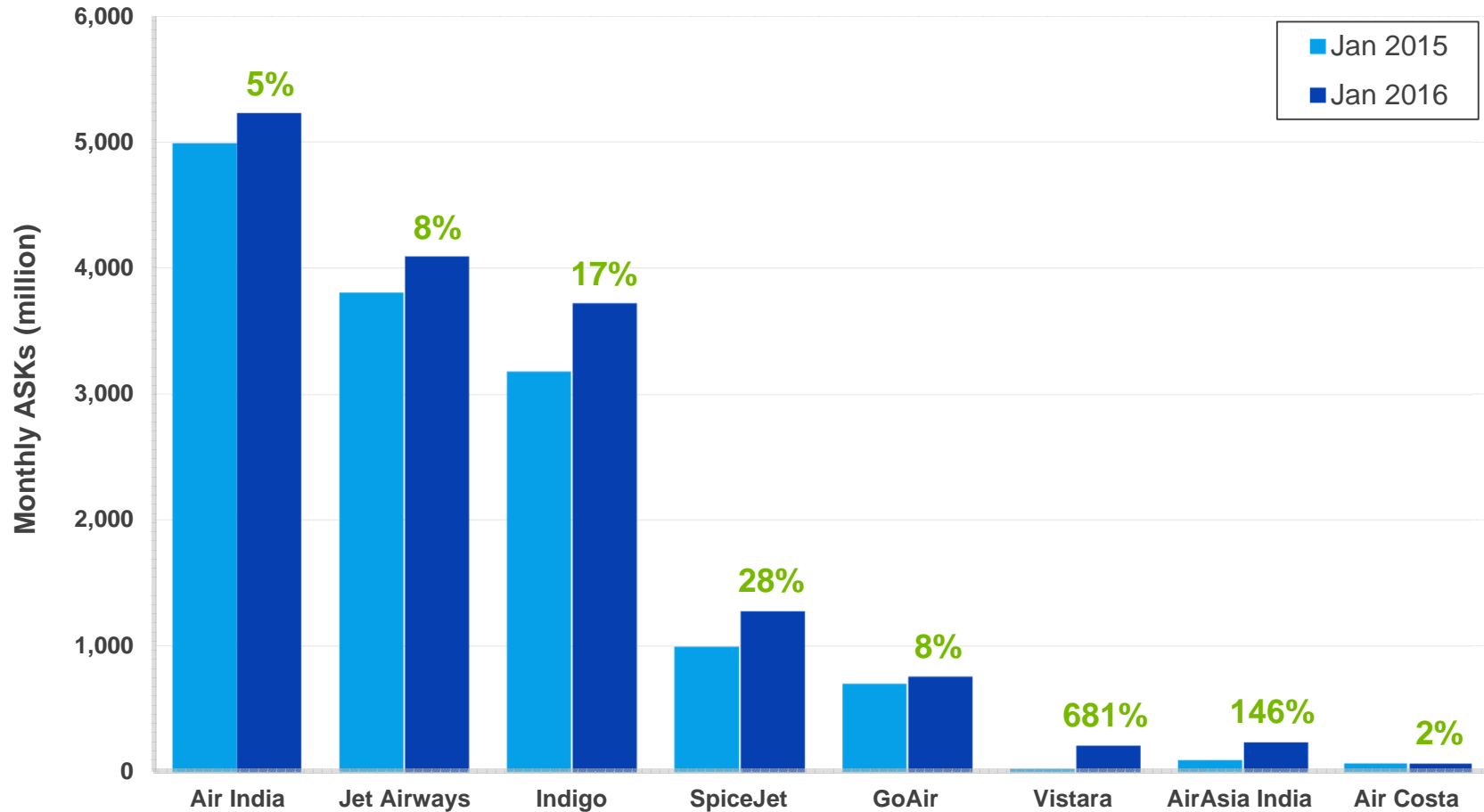


SOURCE: Innovata January 2016

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Scheduled monthly ASKs by airlines in India

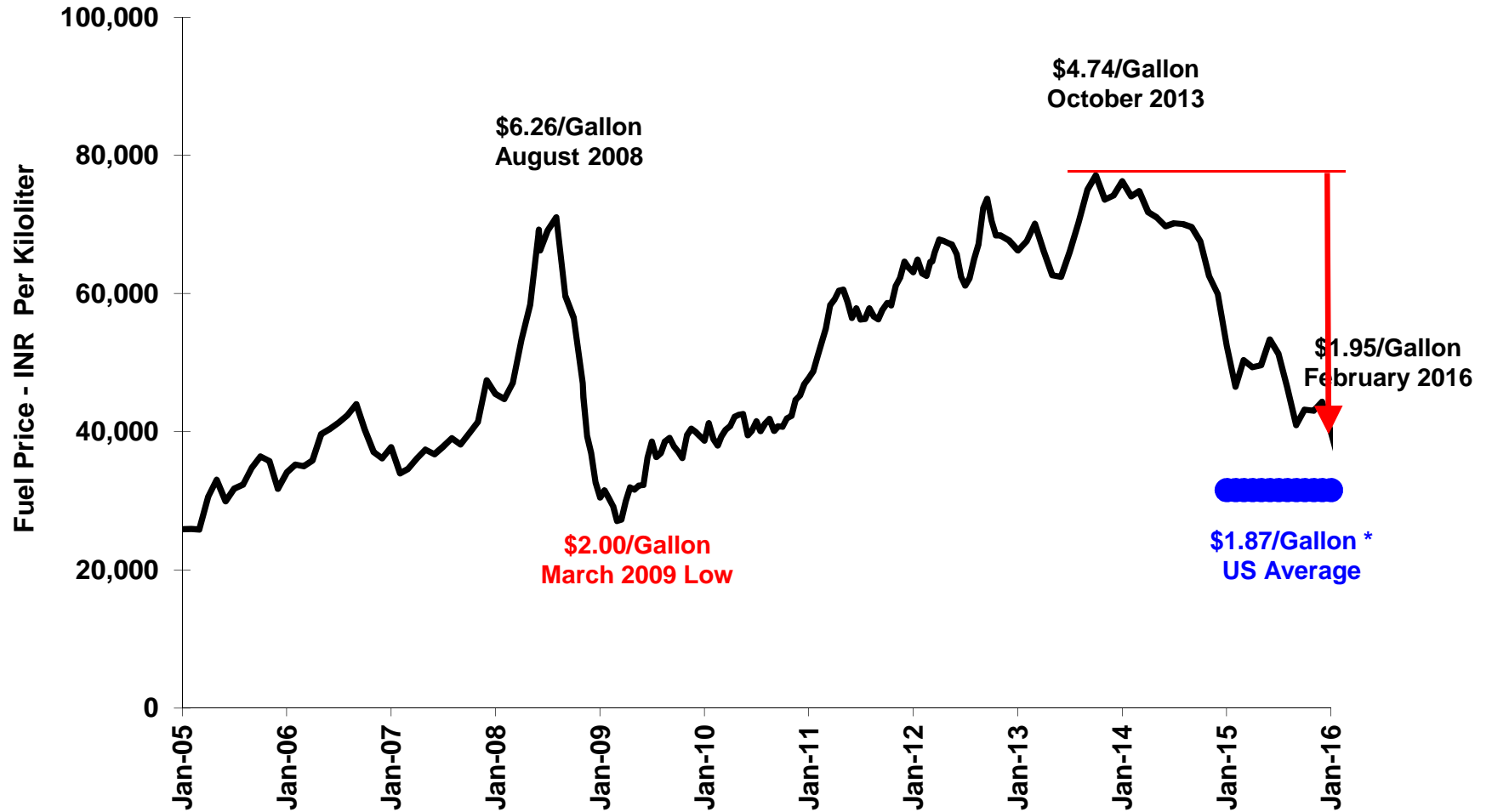
ASKs (millions) and % change to/from/within India
Jan 2016 vs. Jan 2015



Jet includes JetKonnect
Air India includes Air India Express and Alliance Air
SOURCE: Innovata, January 2016

Fuel prices have decreased 53% from the October 2013 peak

Yet Indian carriers pay over 50% more for fuel than the US carriers

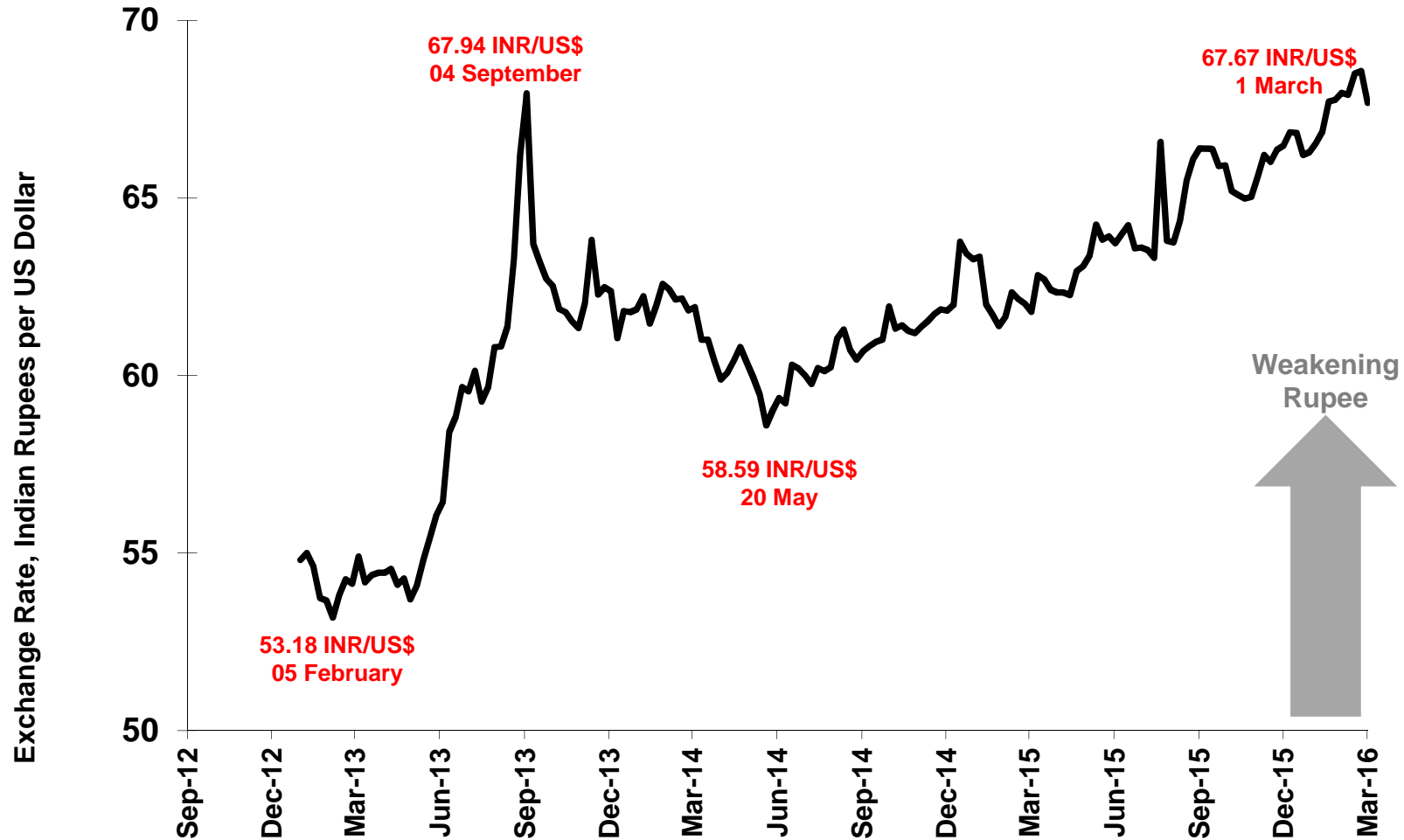


Data Source: Indian Oil Website; Price at Delhi, January 2016

* USDOT November 2015

The rupee appears to be declining steadily since mid 2014

Since Mid 2014, the rupee appears to have declined steadily

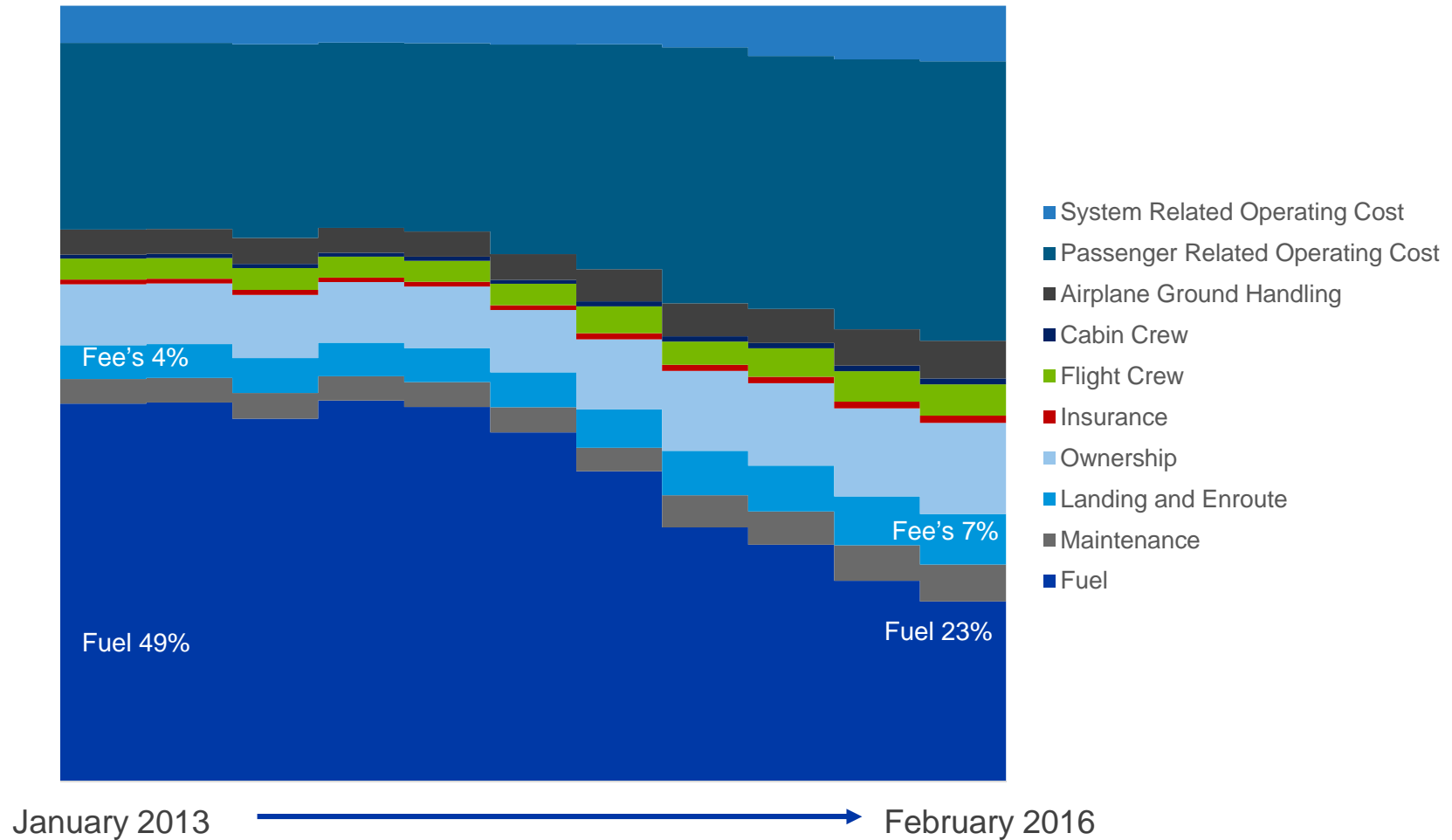


Data Source: www.x-rates.com, January 2016

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Reduction in fuel cost drives impact of landing and navigation fees on direct operating cost.

Landing and Navigation fees are growing proportion of operating cost.

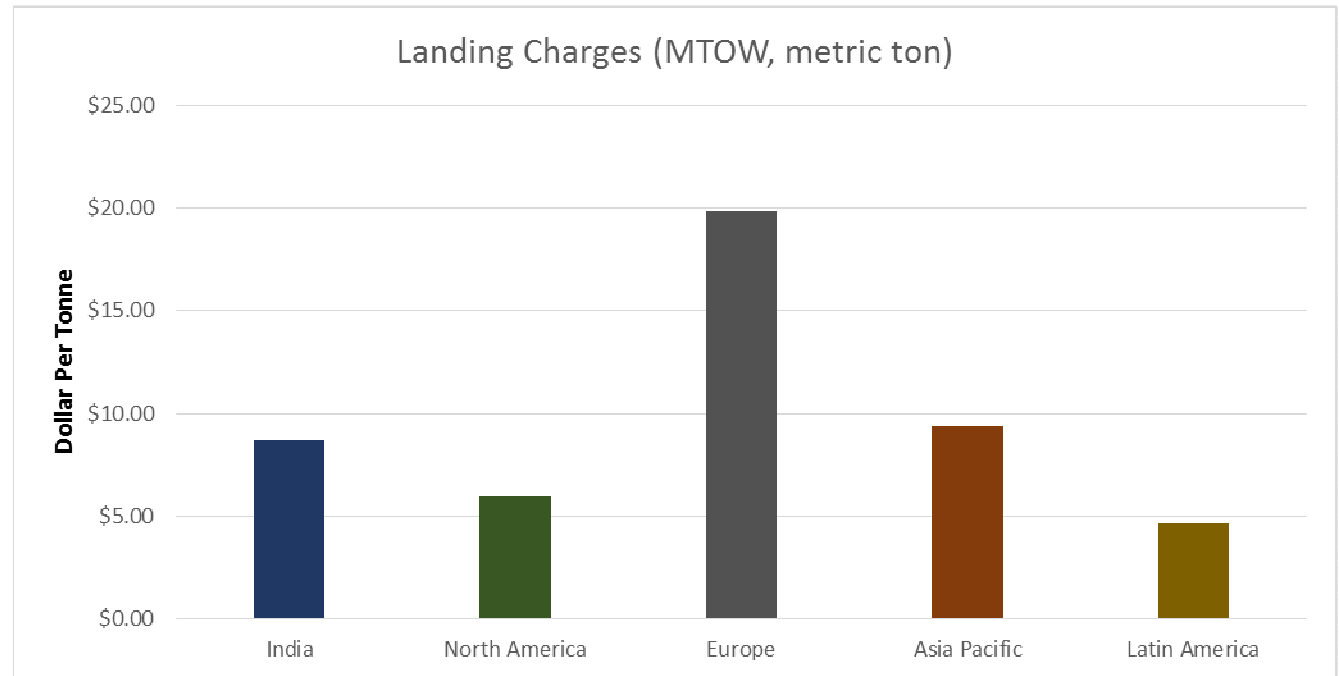


India landing fees compared to global averages.

India data represents the average of reporting major metros.

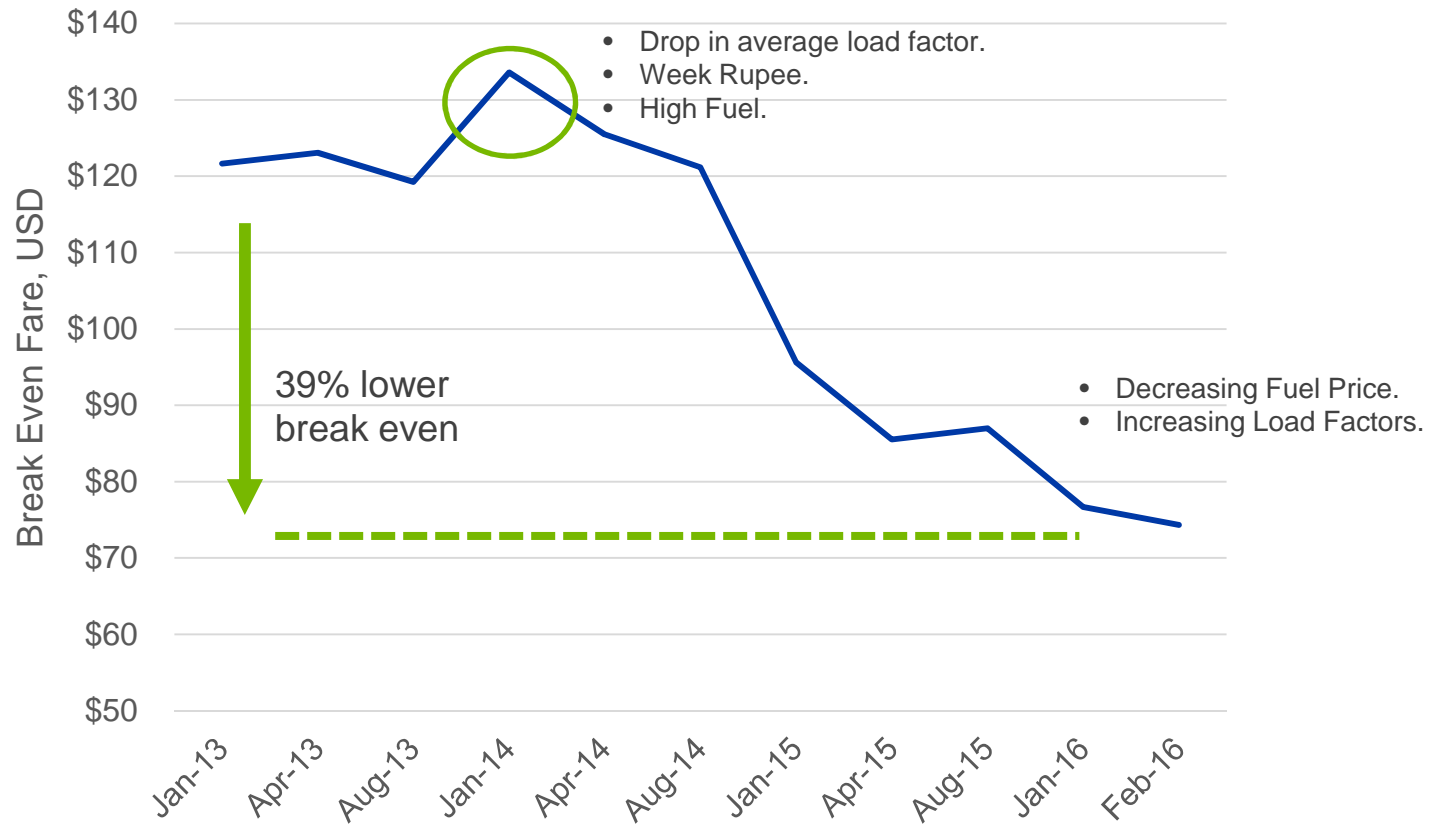
India airports included in study:

- Delhi (DEL)
- Mumbai (BOM)
- Chennai (MAA)
- Calcutta (CCU)
- Bangalore (BLR)
- Ahmedabad (AMD)
- Hyderabad (HYD)
- Amritsar (ATQ)
- Cochin (COK)
- Calicut (CCJ)



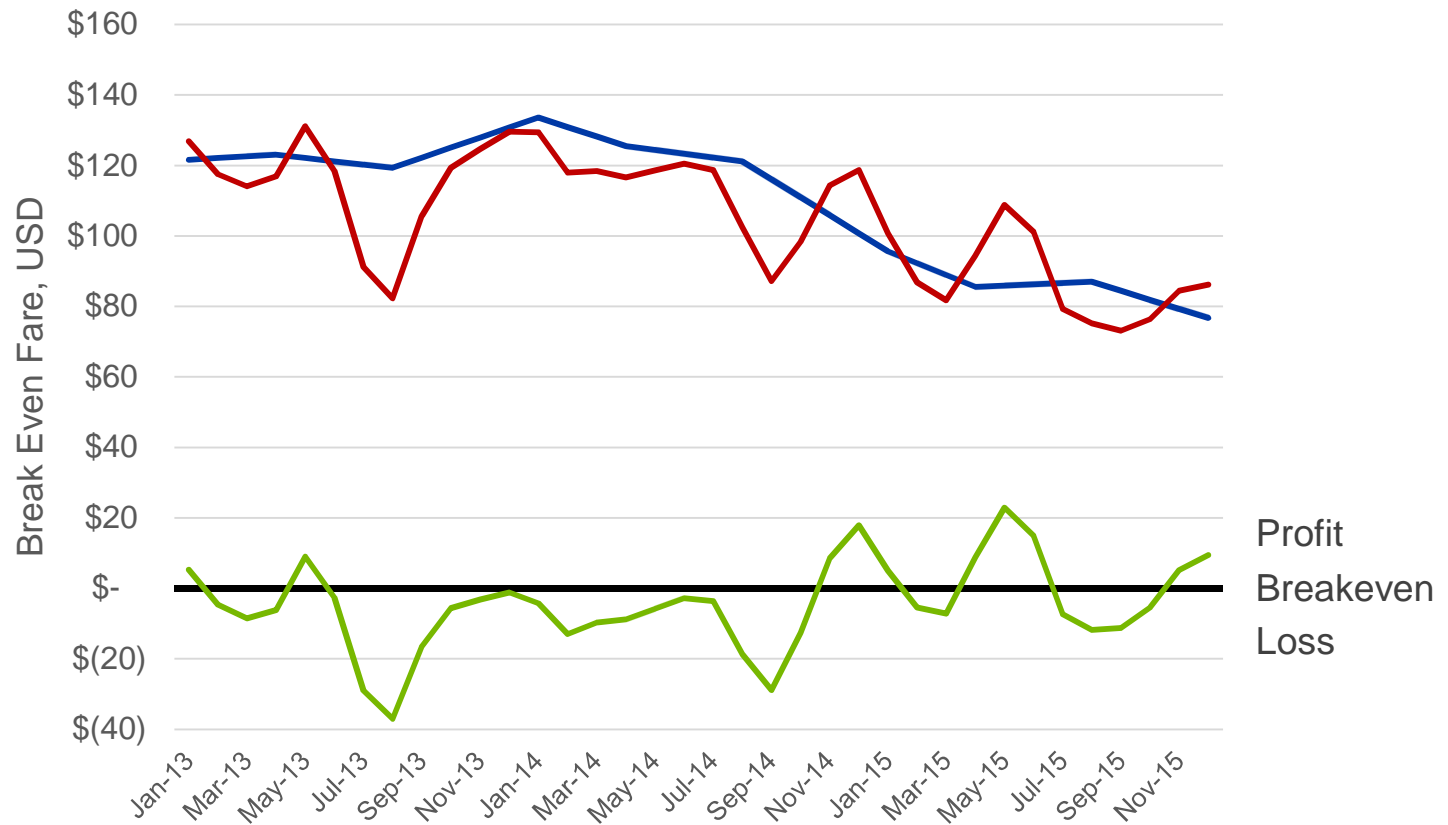
39% reduction in break even fare over last 3 years

Lower fuel prices and increased load factors are driving industry recovery.



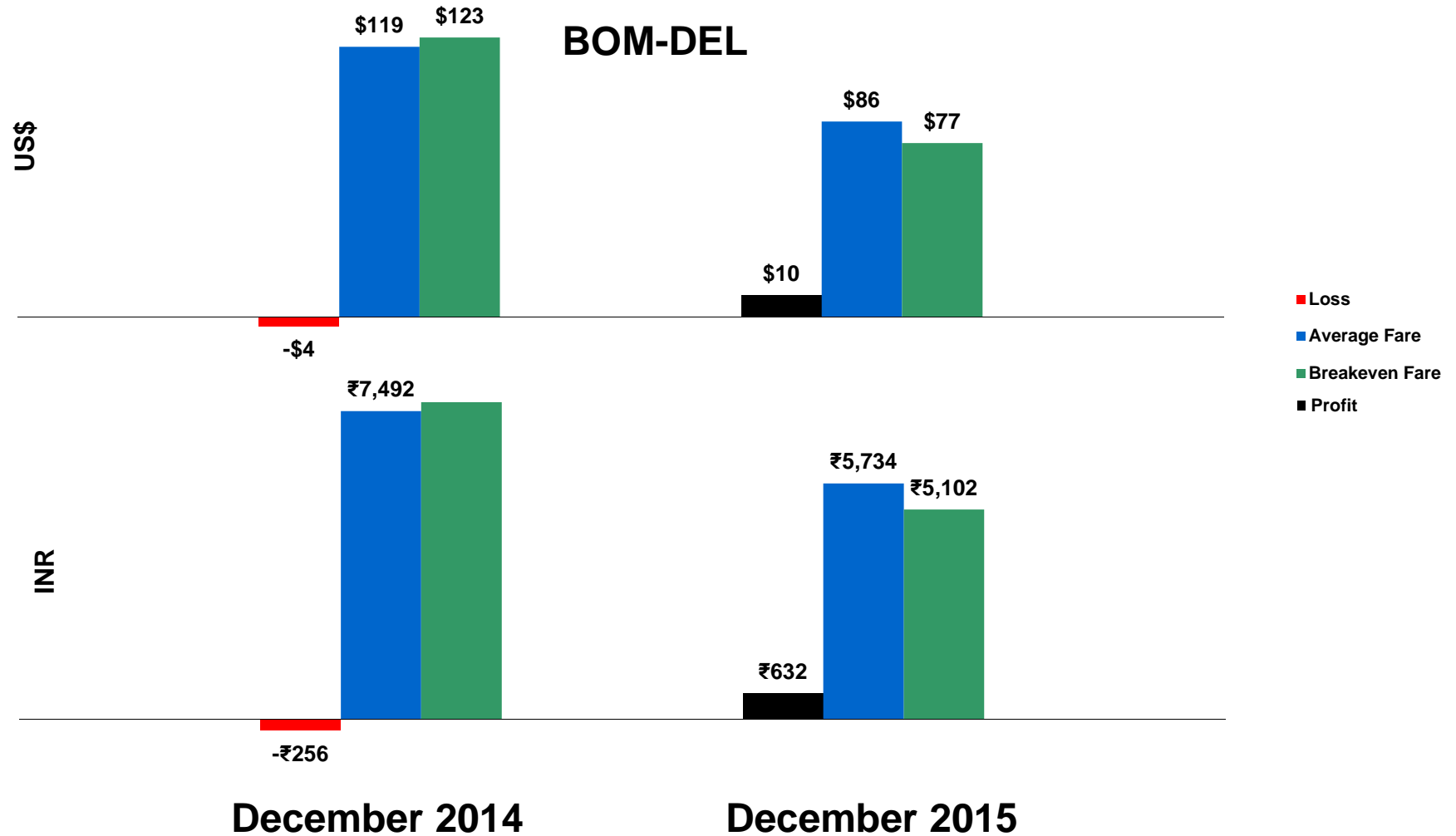
Average fare decreasing with break even fare.

Lower fuel prices and increased load factors are driving industry recovery.



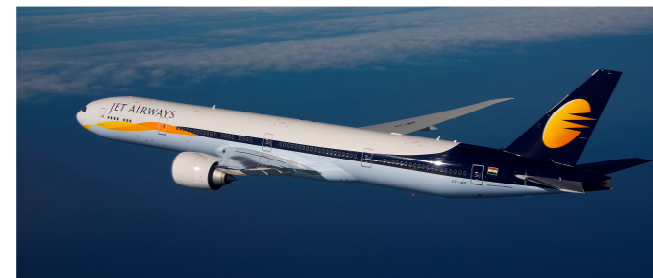
The Indian domestic market is returning to profits

Fares have decreased with fuel cost but at a slightly slower rate.



Agenda

- State of Aviation in India
- **Boeing Products and Services**
 - 737 MAX
 - 787
 - 777X
- India MRO
- Summary

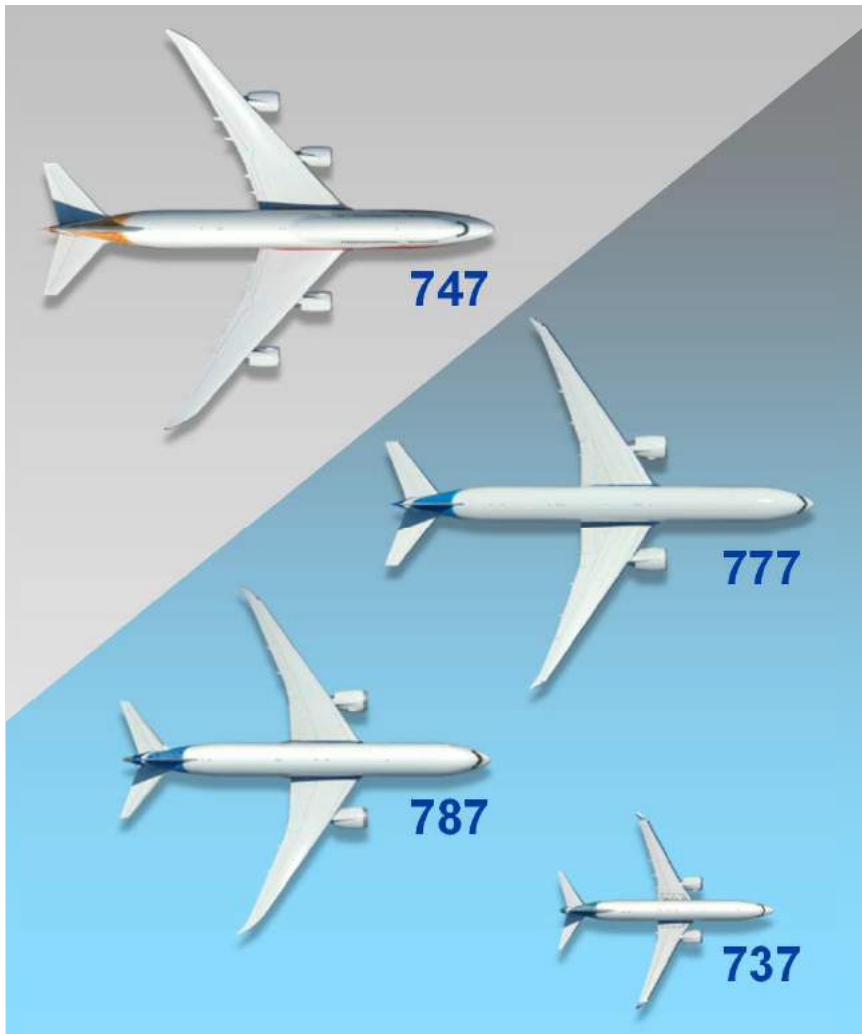




Boeing Products and Services provide more value to our customers in all markets

- Most efficient aircraft in all markets
- Most capable
- Passenger preferred experience
- Services that delivers every advantage possible

More value to our customers in all markets



Build the most **efficient** planes

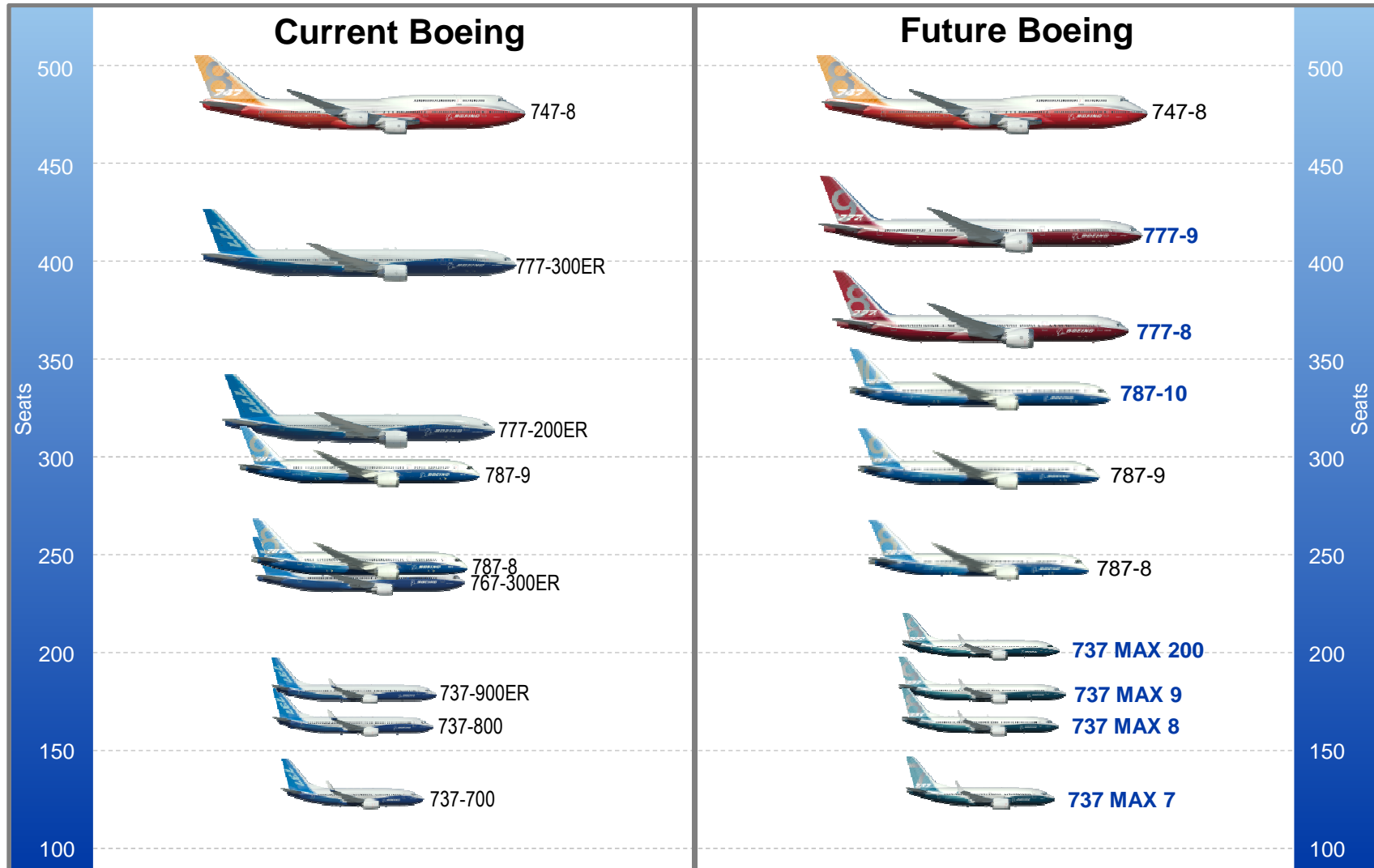
Build the most **capable and flexible** planes

Develop a **passenger preferred experience**

Offer **services** that deliver every advantage possible

Boeing product line-up

Superior value, efficient market coverage



Boeing Standard Rules seat counts

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The 737 MAX

MAX Efficiency
MAX Reliability
MAX Passenger Appeal

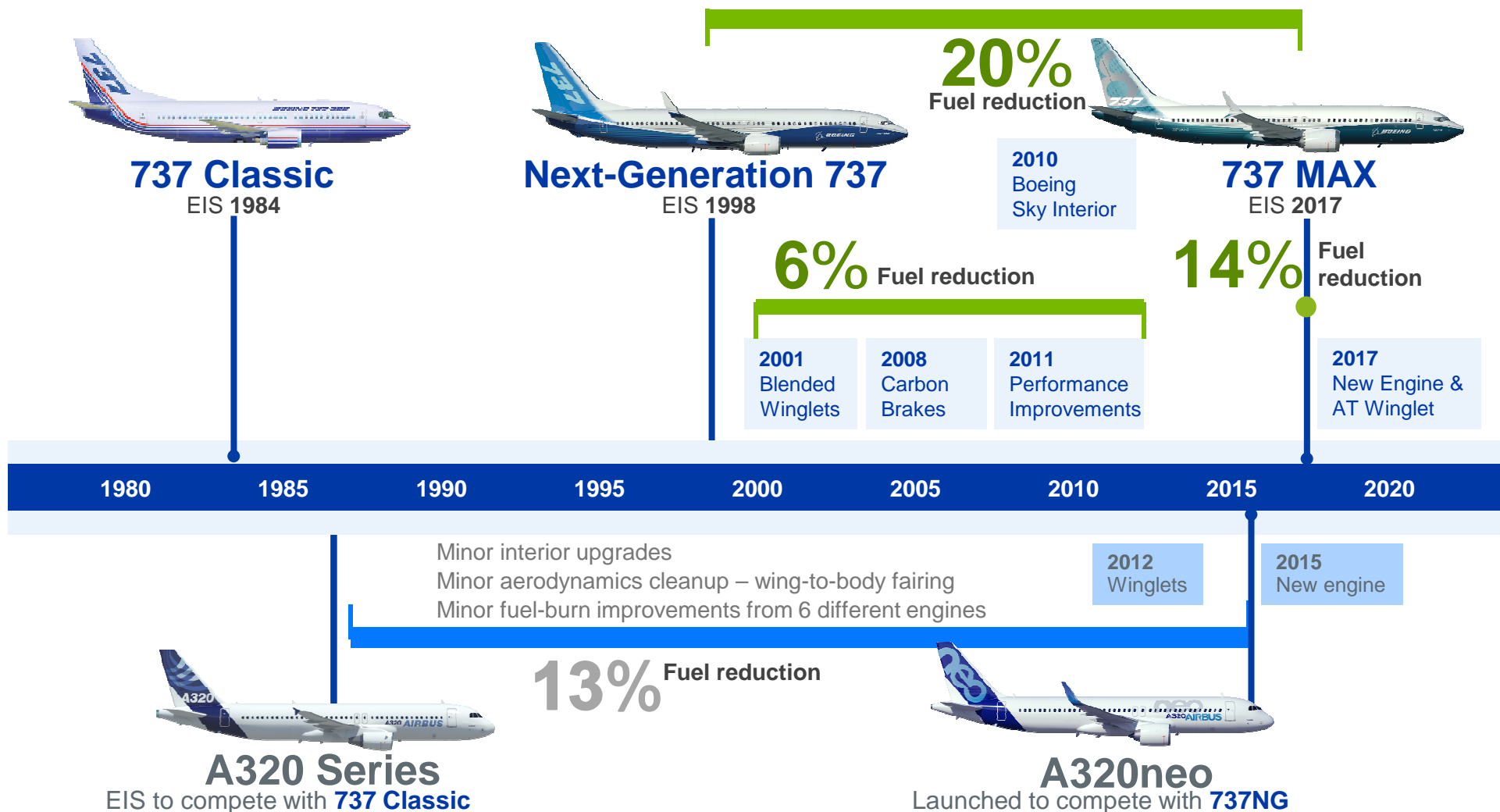
Cleaner and quieter

3.072 sold and counting



THE NEW 737 MAX

737 MAX extends the Boeing advantage



737 MAX has strong market appeal

3,072 firm orders from 62 customers

Unmatched operating economics, passenger experience

Game-changing efficiencies for the environment

Enabling expansion of route networks



- As of January 31, 2016
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737 MAX

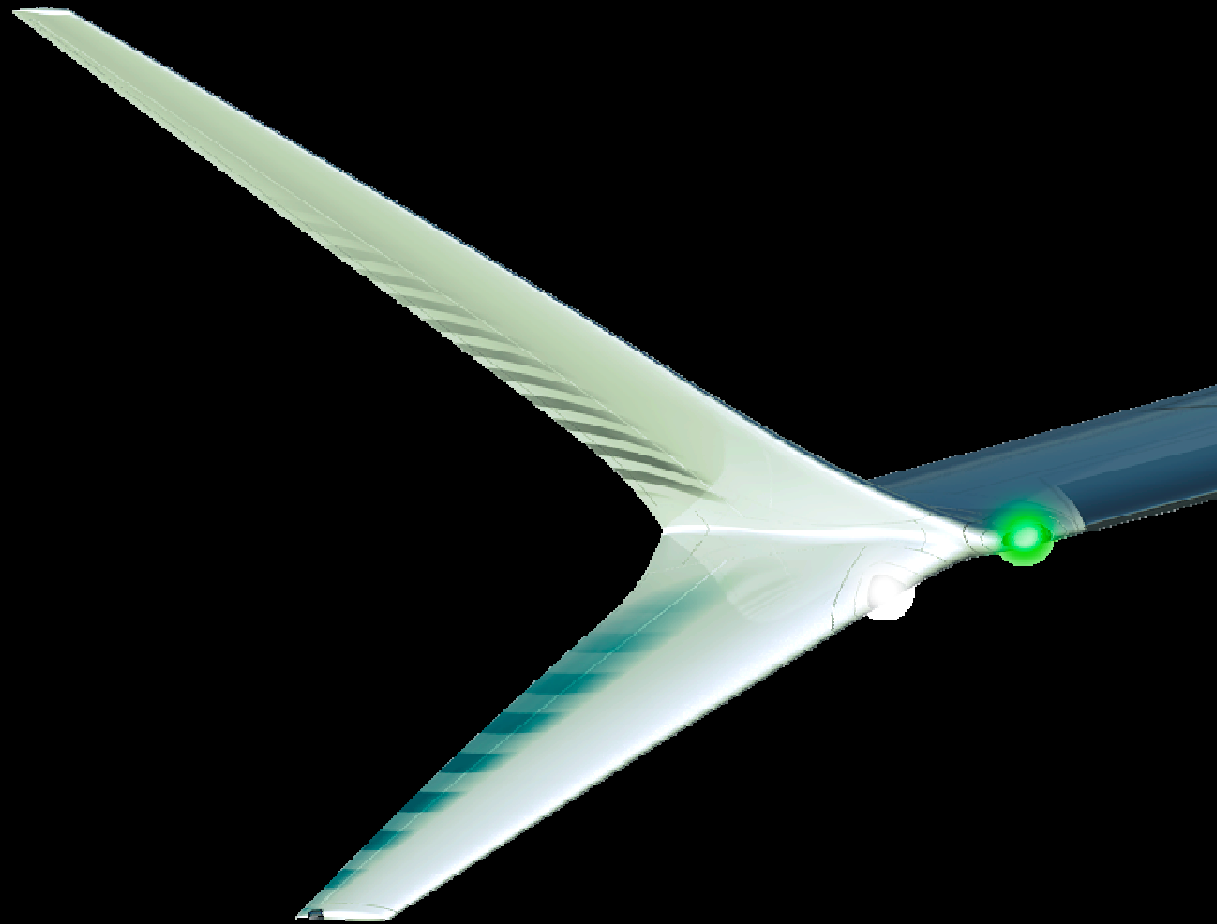


Exceeding operating expectations

New 737 MAX Advanced Technology Winglet

Up to 1.8% less fuel*

Natural laminar flow



* Compared to blended winglets

737 MAX flight deck



Boeing Sky Interior



New sculpted sidewalls and ceiling
New window reveals
Color-LED lighting
Brighter color and décor



New Pivot Bins with greater
bag capacity



New PSUs with LED reading
lights and intuitive controls

The 737 MAX flies farther

Range capability from Delhi

Full passenger payload

737-800W

174,200-lb (79,010-kg) MTOW
162 passengers

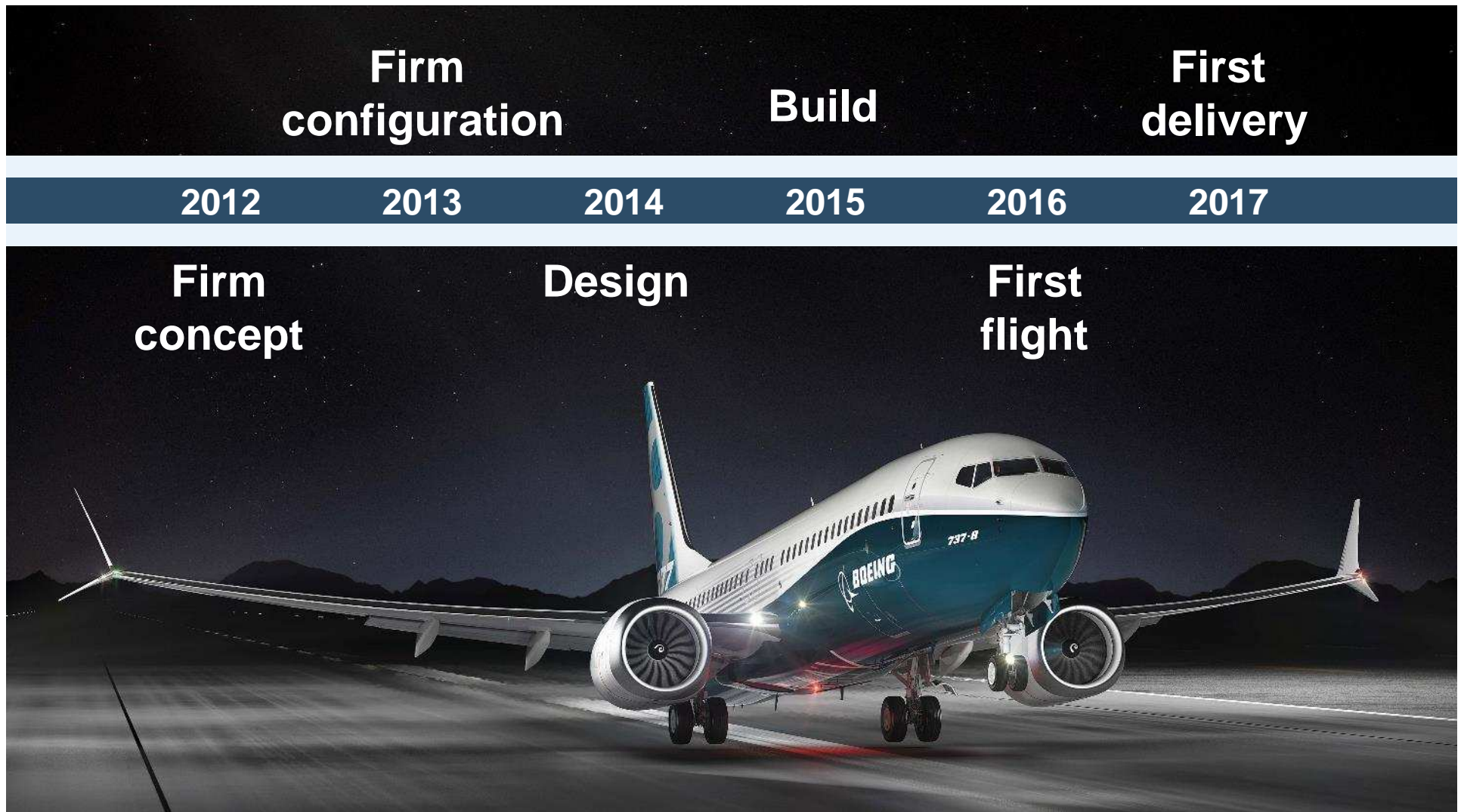
737 MAX 8

181,200-lb (82,200-kg) MTOW
162 passengers

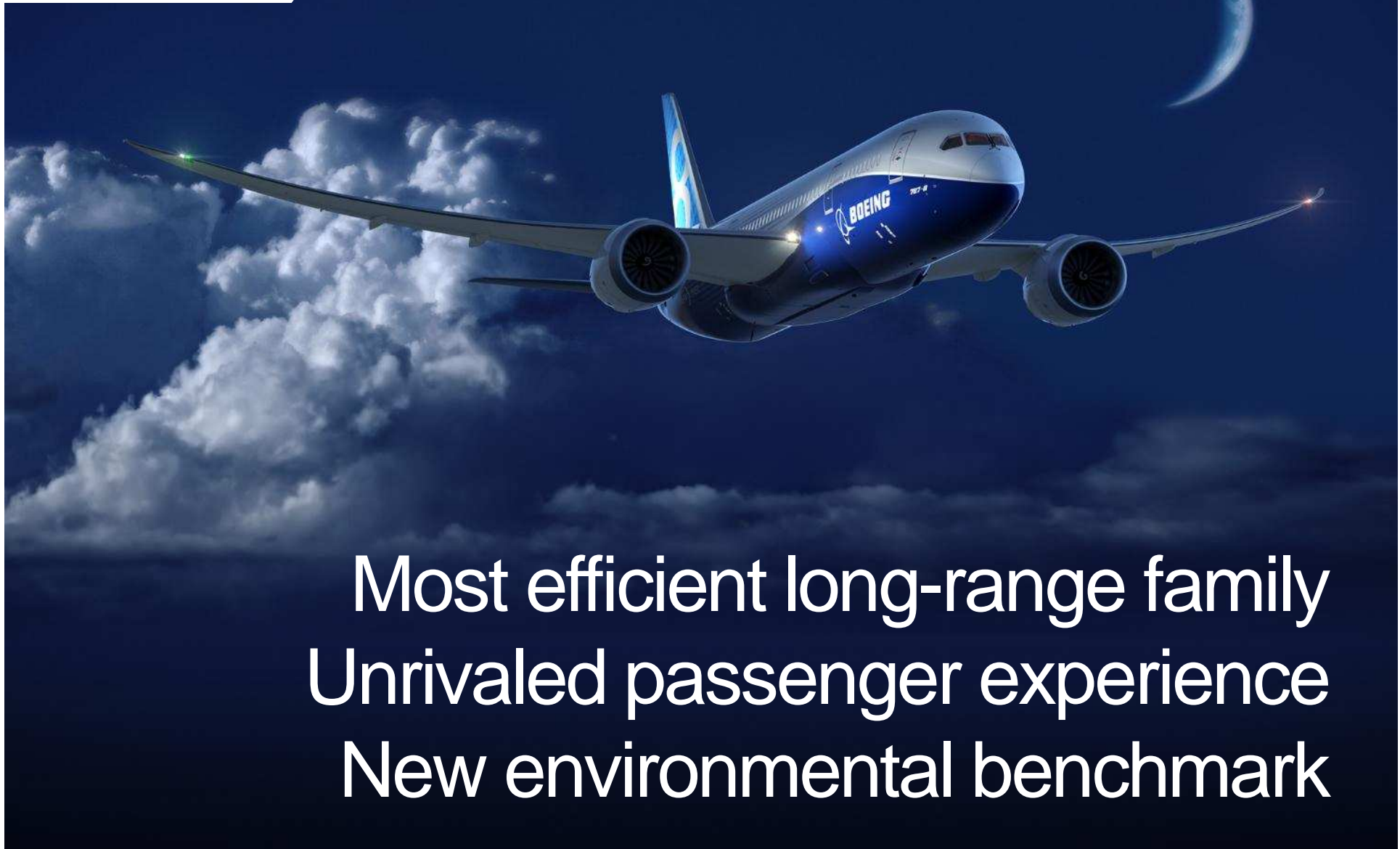


Typical mission rules
Nominal fuel burn
85% annual winds Limiting Direction
102 kg per passenger
Nominal Airways allowances

737 MAX schedule



787



Most efficient long-range family
Unrivalled passenger experience
New environmental benchmark

Continued strong demand with broad market coverage

- 1,143 firm orders to 62 customers



As of February 5, 2016

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787-10: Broadening Dreamliner fleets



Improvements passengers can see

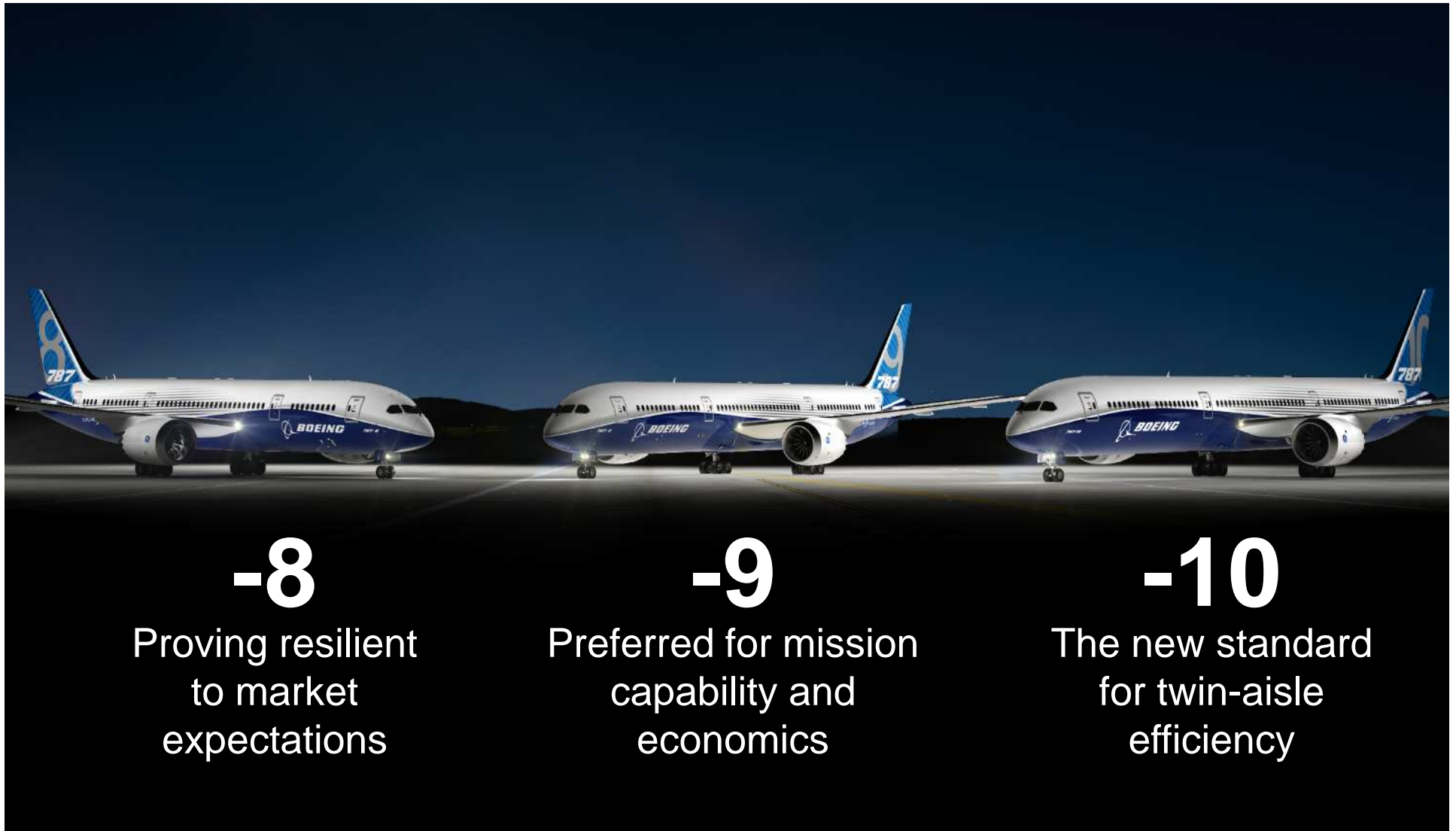
A more comfortable travel experience



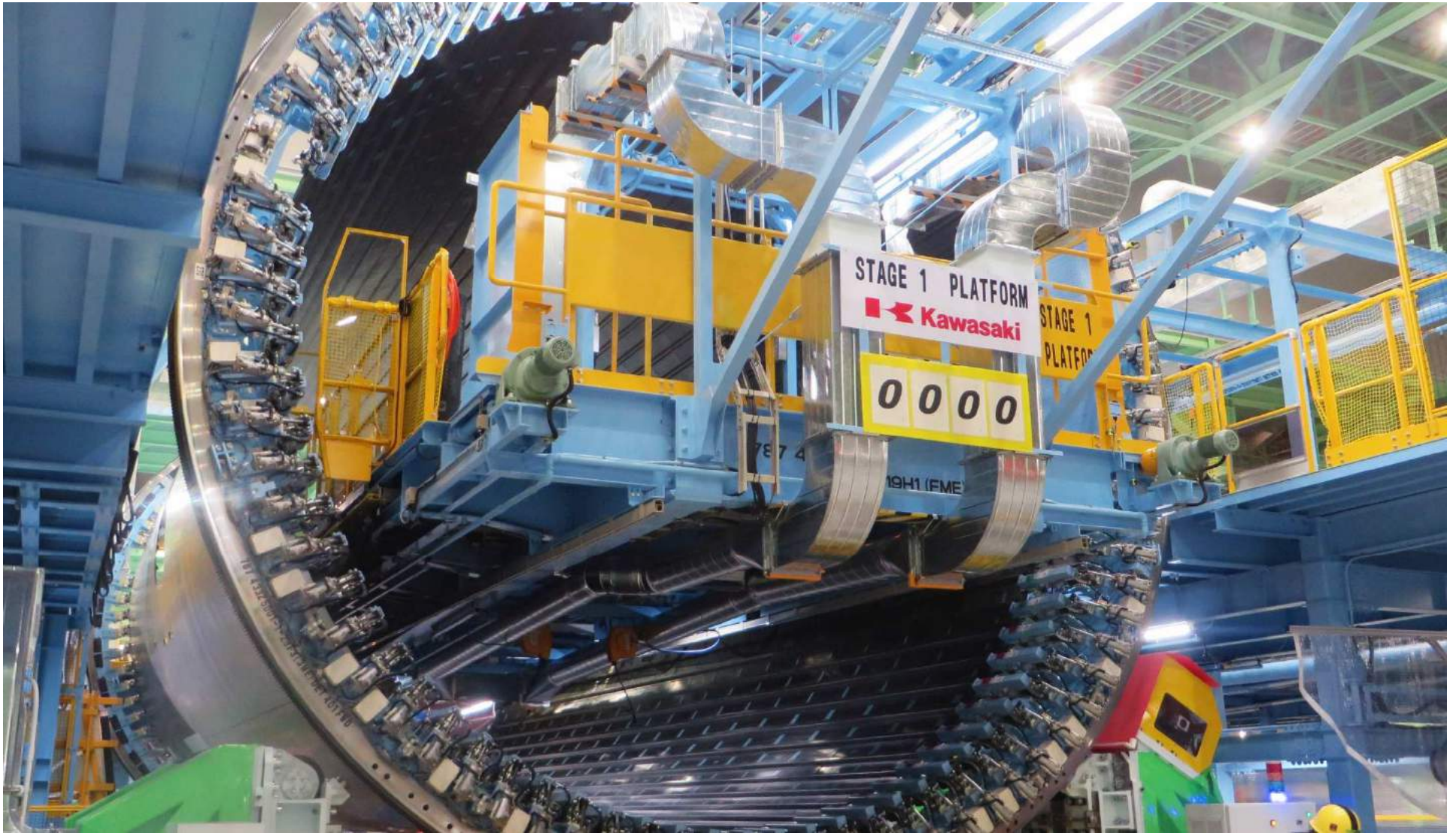
Everyone arrives feeling better



787 Dreamliner family



787-10 Dreamliner Begins Major Assembly



The 787 opening new point to point routes

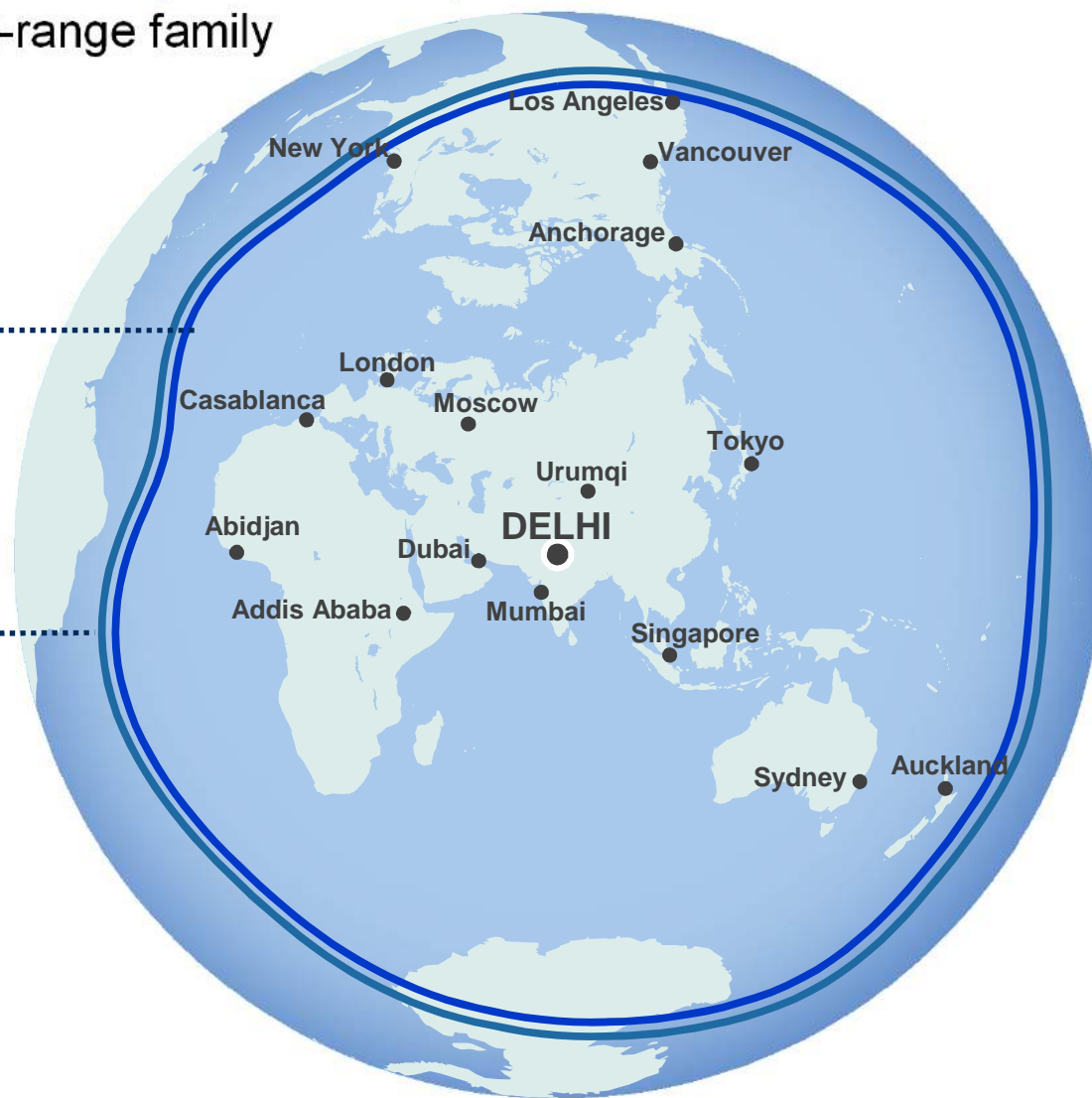
The newest, most efficient long-range family

787-8

227,950-kg (502,500-lbs) MTOW
242 Two-Class Passengers

787-9

254,000-kg (560,000-lbs) MTOW
290 Two-Class Passengers



Range Capability from Delhi
Standard Rules
225-lbs/passenger
85% Annual Winds
Airways and Traffic Allowances included

MapTrack Output
08/04/2015

Opening new markets

Over 90 new nonstop markets now connected with the 787



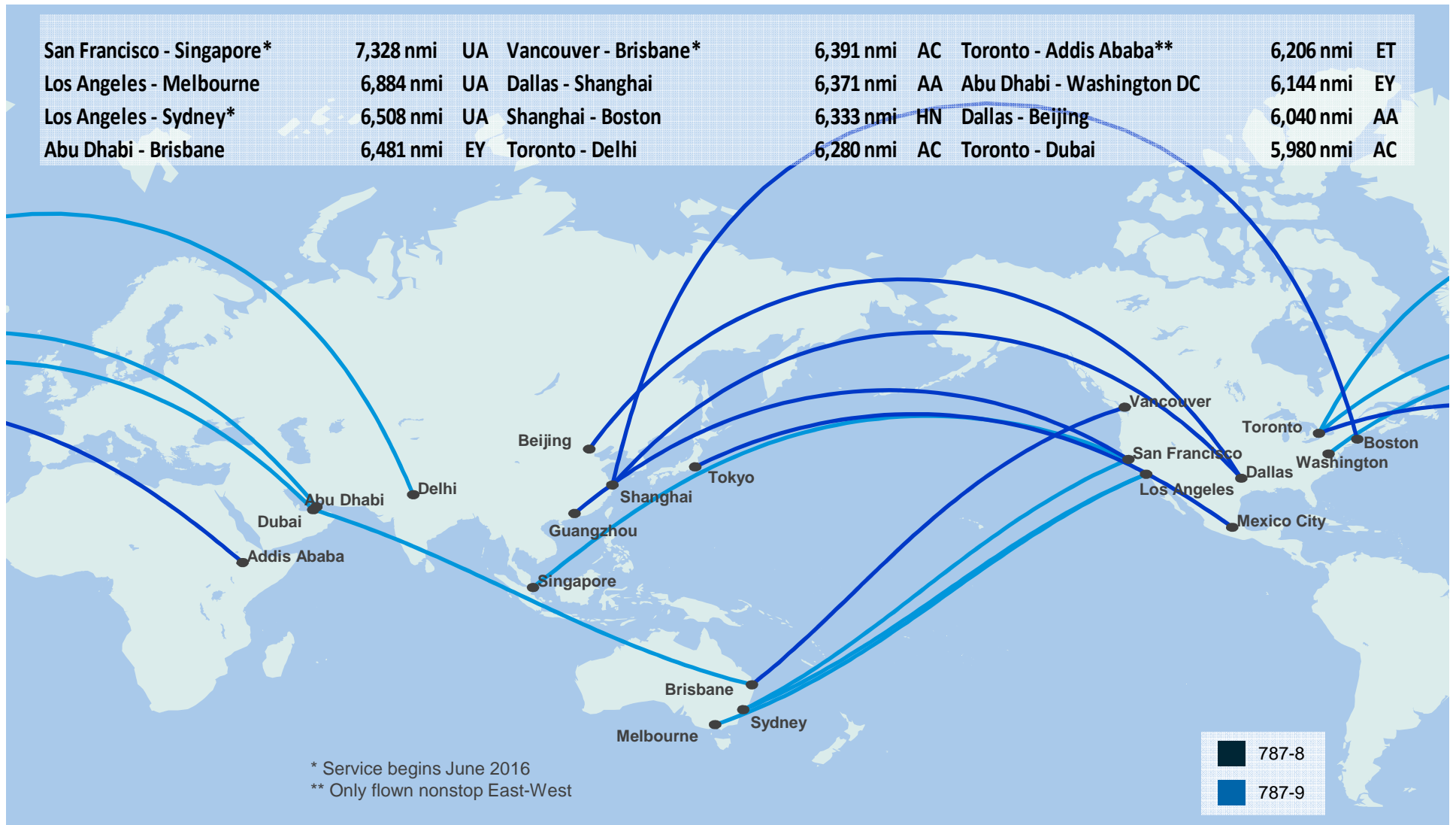
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787 Dreamliner connecting people around the world

Top 15 longest nonstop routes flown with the 787

San Francisco - Singapore*	7,328 nmi	UA	Vancouver - Brisbane*	6,391 nmi	AC	Toronto - Addis Ababa**	6,206 nmi	ET
Los Angeles - Melbourne	6,884 nmi	UA	Dallas - Shanghai	6,371 nmi	AA	Abu Dhabi - Washington DC	6,144 nmi	EY
Los Angeles - Sydney*	6,508 nmi	UA	Shanghai - Boston	6,333 nmi	HN	Dallas - Beijing	6,040 nmi	AA
Abu Dhabi - Brisbane	6,481 nmi	EY	Toronto - Delhi	6,280 nmi	AC	Toronto - Dubai	5,980 nmi	AC



As of February 5, 2016

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787 Dreamliner hitting its stride

As of February 5, 2016

291
787-8
deliveries

2.29M
flight
hours

>99%
fleet schedule
reliability

90+
NEW
markets



80
787-9
deliveries

80.8M
passengers
flown

>12
hours daily
utilization

370+
nonstop
routes

• SOURCE: ARMS and Ascend Flightglobal

777



More range, more payload, more profit
Unmatched dispatch reliability
Preferred by passengers

777 is the most popular twin-aisle aircraft of all time

1,885* firm orders, 1,361 delivered, 69 customers



• December 31, 2015

* Order totals include 777X

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777X: Providing maximum versatility



777X value proposition

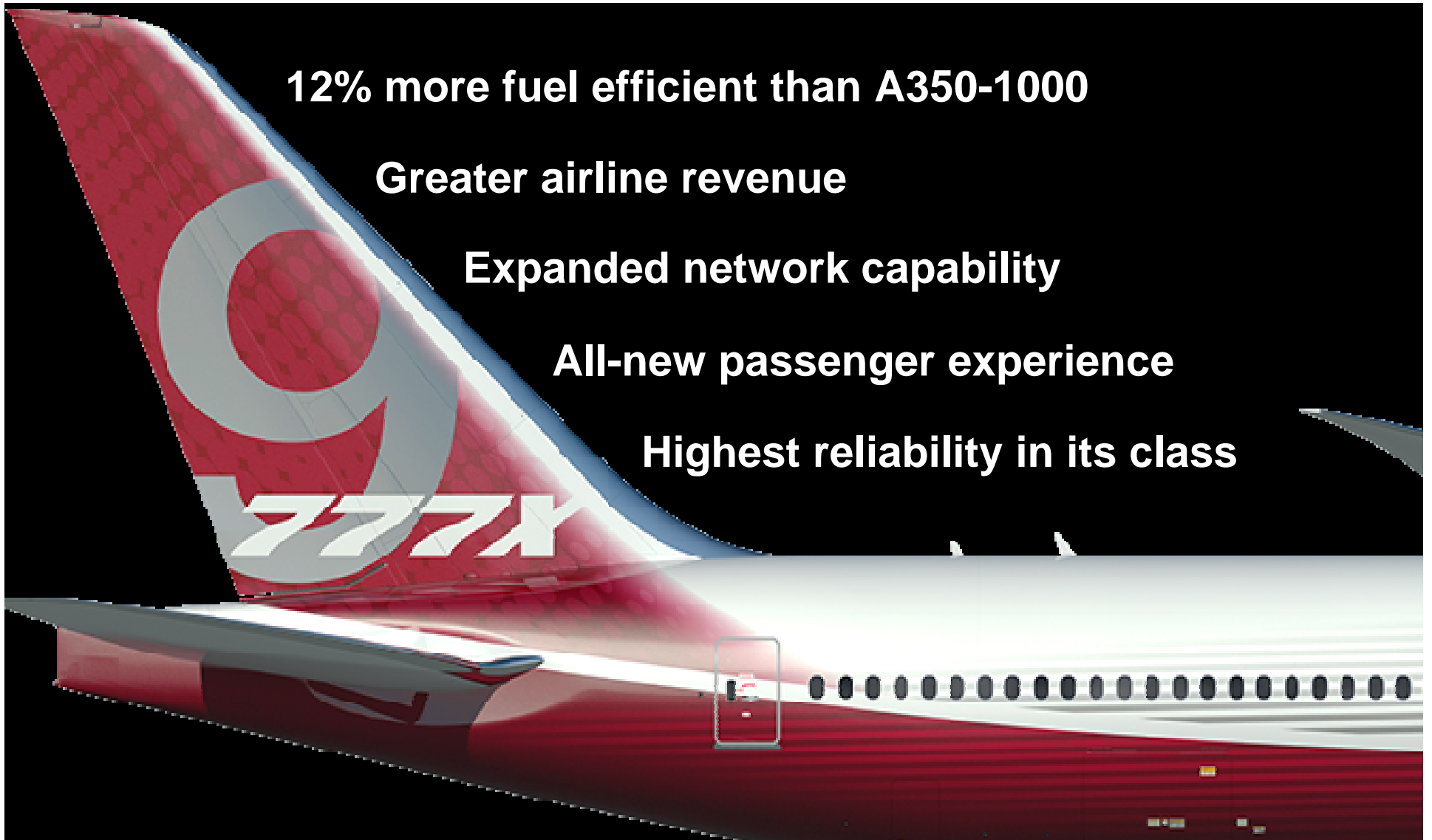
12% more fuel efficient than A350-1000

Greater airline revenue

Expanded network capability

All-new passenger experience

Highest reliability in its class



All-new advanced GE9X engines

5% more efficient than any other engine

Newer,
exclusive
technology

Composite
fan blades

High bypass
ratio

Equivalent
maintenance
cost to GE90



A new level of passenger experience

Exploring new technologies and architectures

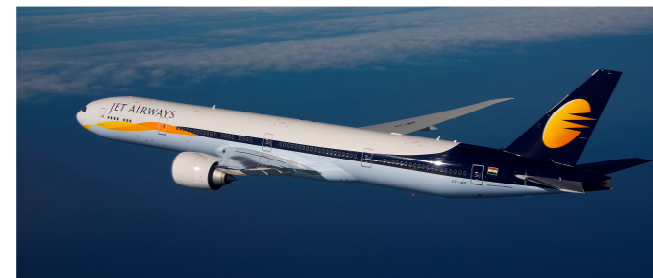


777X timeline



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Boeing has met its MRO commitment in India

- Boeing has built a state of the art Maintenance, Repair & Operations (MRO) facility in Nagpur, India
- MRO completed and handed over to Air India
- Capacity
 - (2) 777 size wide body aircraft
 - (6) 737 size narrow body aircraft
 - Provisions for a major component overhaul shop



Photo credit: Air India

Boeing has met its MRO commitment in India



Successful taxi to bring a Boeing 777 into the MRO has been completed

Photo credit: Air India

Boeing has met its MRO commitment in India

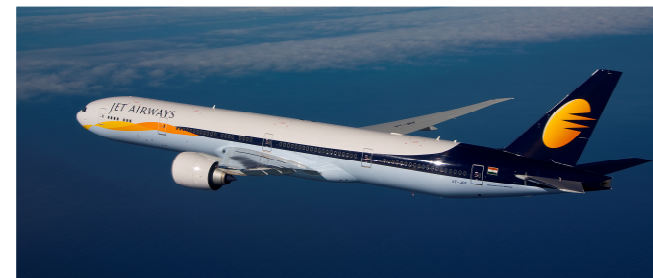
First major 777 Phase Check with DGCA approval completed (by Air India) in June 2015



Photo credit: Air India

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Summary

- Airlines in India will need 1,740 new airplanes valued at 240 billion US dollars, over the next 20 years.
- While India domestic passenger traffic is at highest levels over past 5 years, fuel prices and the exchange rate continue to drive the airline operating costs and profitability.
- Boeing is developing new fuel efficient airplanes to address the needs of our customers such as those in India.

Questions?



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