



Moving Towards a Customer Centric Approach & Performance Based Service Providers

TRANSFORMING
GLOBAL ATM PERFORMANCE

Airports and Air Navigation Charges Workshop – Rabat, 27-28 Nov 2018

About CANSO

- The global voice of air traffic management (ATM) worldwide.
- CANSO Members support over 85% of world air traffic.
- Members share information and develop new policies, with the ultimate aim of improving air navigation services.
- CANSO seeks to lead the transformation of global ATM performance.
- Types of members :
 - Full members (ANSPs – CAAs).
 - Associate members (Airlines – Airports – Consultancy firms – Manufacturers)

Members of CANSO in ME

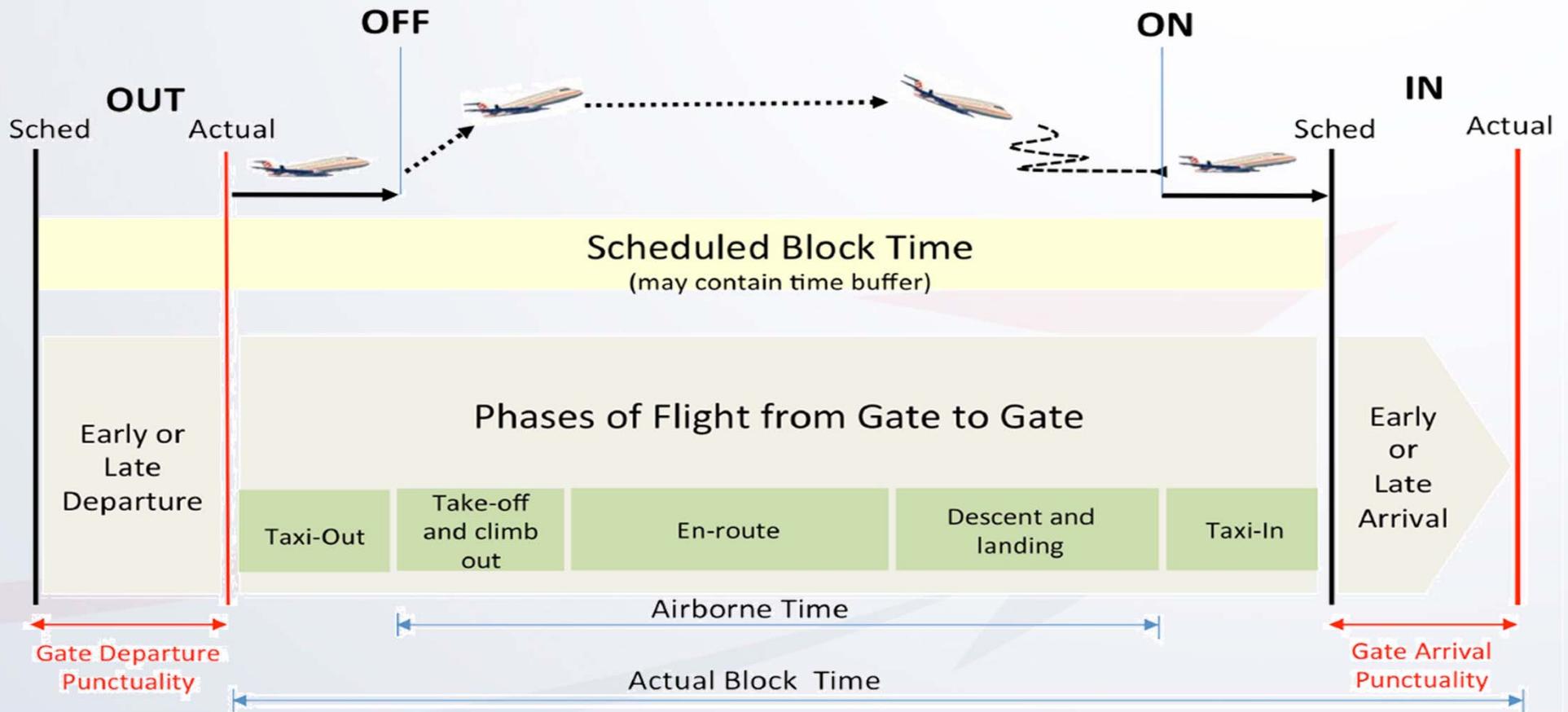
➤ Existing full members in the Middle east:

- Saudi Air Navigation Services (SANS) KSA
- National Air Navigation Services Company (NANSC) Egypt
- Sudan Civil Aviation Authority Sudan
- Presidency of Civil Aviation Authority (PACA) Oman

➤ Existing associate members in the Middle east:

- SAUDIA - KSA,
- NATS - UK,
- Airways – New Zeland.
- Helios,
- SERCO,

Measuring ATM related service quality



MEAUSE Initiatives

- Middle East ANSP, Airspace User and Stakeholder Engagement initiative.
- Platform for stakeholder engagement and collaboration in the Middle East.
- Establish a mechanism for ANSP and airspace user consultation
- Continuous engagement of stakeholders to support the development of the region's future plans.
- Evolve MEAUSE to develop and coordinate stakeholder perspectives, views and positions to support the development and implementation of the region's future plans.
- Develop guidance material and conduct seminars and workshops to share and improve overall performance. Specific focus areas are agreed at annual meetings.
- Coordinate MEAUSE with other regional activities, modernization programs and workgroups to avoid duplication and maximize value for the Middle East.

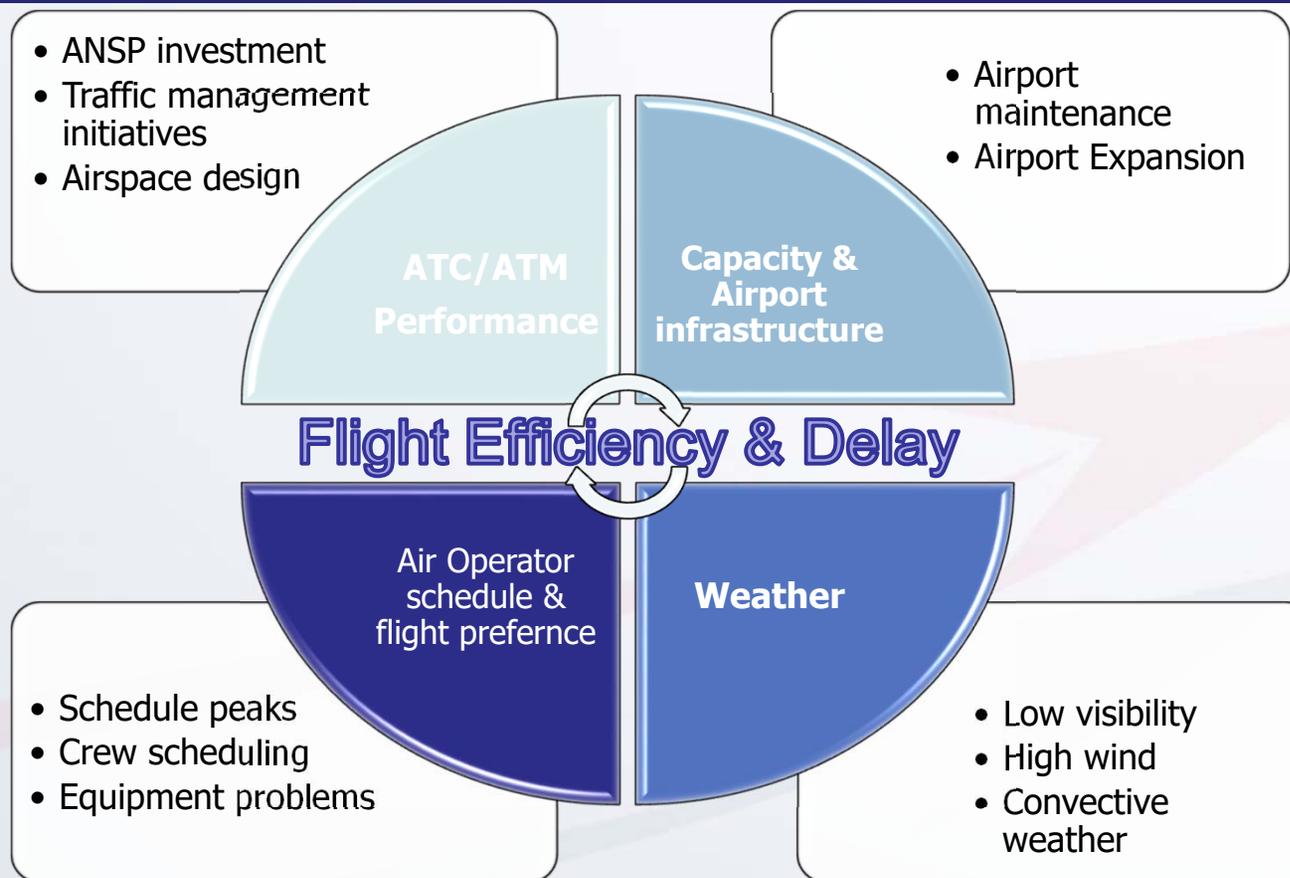
Recommended KPI for Measuring ANSP Operational Performance

- ANSPs performance focus should be on the following two primary goals:
 - **managing demand and capacity to maximise the use of available capacity;**
 - **providing the most efficient trajectories possible while meeting safety and capacity utilisation objectives.**

KPIs for Measuring ANSP Operational Performance

- In order to reach these goals, CANSO has identified **a set of 21 KPIs to measure ANSPs operation performance;**
- The identified KPIs:
 - Are fully aligned with ICAO's Global ATM Concept Report (doc 9883) and Global Performance of the Air Navigation System (doc 9854);
 - they address the inter-dependencies that have made measuring the air traffic management system so complex;
 - their use will improve significantly the alignment of ATM performance measurement on a global basis;

Understanding ATM System Interdependencies



Operational Performance KPAs and KPIs: Capacity

- To assist ANSPs, oversight bodies and other stakeholders in managing and improving system performance, CANSO recommends the following KPIs for Capacity:

Declared Capacity

Capacity Utilisation

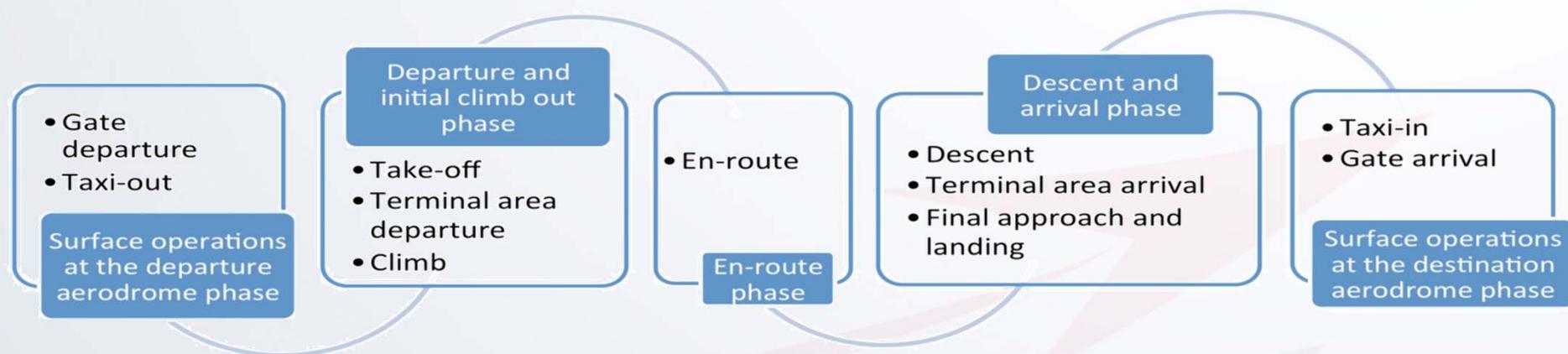
Delay Attributed to Capacity

Operational Performance KPAs and KPIs: Capacity

- Another way to measure capacity performance is by looking at ATFM delays;
- ATFM delays are caused by regulations applied by the CFMU (Central Flow Management Unit) at the request of the FMP to protect en-route ATC sectors from overload;
- In Europe this indicator has evolved so far that the delay data are used to target ANSPs capacity delivery.

Operational Performance KPAs and KPIs: Flight Efficiency

- Five phases of flight identified below (blue squares)



- Within the 5 phases of flight, there are 11 components to be considered;
- For each component, a KPI can be used to assess the corresponding flight efficiency.

Operational Performance KPAs and KPIs: Flight Efficiency

Flight efficiency KPIs	Example KPI Form Definitions
Gate Departure Delay	Number of Gate Departure Delayed Aircraft
Taxi Out Delay	Number of Taxi-Out Delayed Aircraft
Calculated Take-Off Time Compliance	Number of Early Departures
En-Route Direct Route Extension	Average or Total Actual Flight Distance/Time above that obtained from a great circle benchmark.
Filed Flight Plan En Route Extension	Average of Total Filed Distance/Time above that obtained from a great circle benchmark
Arrival Runway Occupancy Time	Average Runway Occupancy Time per Aircraft Category
Taxi-in delay	Number of Taxi-In Aircraft Delayed Or Average Taxi-In Delay per Flight

Other Efficiency Key Performance Indicators

- ANSPs attributable delays
- Operational Availability
- Capacity Variation

ICAO Performance Framework

Input

- ✓ ICAO framework
- ✓ EU-ECTL (Single European Sky and Performance Scheme)
- ✓ FAA
- ✓ Russian Federation
- ✓ ICAO EUR Workshops (Rome, Bishkek, Baku)

Pragmatic approach in developing the proposal

Output

- ✓ Development of a comprehensive framework
- ✓ Identification of 6 KPAs out of 11 ICAO KPAs
- ✓ Definition of focus areas, objectives and KPIs
- ✓ Definition of Processes, Roles and Responsibilities
- ✓ Contextual information
- ✓ Guidance material



European Performance Framework

- In Europe The Performance and Charging Schemes are the regulatory instruments through which the European Commission drives ATM performance in cooperation with the Member States, their National Supervisory Authorities (NSA), and operational stakeholders.
- The Schemes set binding targets on Member States to deliver performance-driven air navigation services leading to:
 - cheaper flights;
 - less delays;
 - outstanding levels of Safety;
 - reduced impact on the environment with reduced CO2 emissions.

European Performance Framework

KPAs	KPIs	Targets for RP2 (2015 – 2019)
Safety	Effectiveness of safety management and full application of the severity classification based on the Risk Analysis Tool methodology	Targets set to achieve high levels of effectiveness of safety management and full application of the severity classification based on a common methodology by 2019.
Environment	Horizontal flight efficiency of planned trajectory (KEP) and horizontal flight efficiency of the actual trajectory (KEA)	Reduction of KEP to 4.1 % and KEA to 2.6 %
Capacity	Average ATFM (Air Traffic Flow Management) en-route delays	The en route ATFM delay is 0.5 min/flight for each year
Cost Efficiency	ANS Determined Unit Costs (DUC)	Reduction of avg EU-wide DUC for en route ANS from €56.64 for 2015 to €49.10 for 2019 in real terms per service unit

European Performance Framework

- Main **positive outputs** deriving from the implementation of the Performance and Charging Schemes:
 - more transparent and uniform reporting of ANSP performance across Europe;
 - clear trend towards performance-based management at ANSPs;
 - positively supporting the speed of change;
 - the shift towards a more evidence-based and challenging relationship between service providers and the authorities that regulate them.

Customer Centric Approach



Real actions needed



