

# Airline Noise Performance Table – Q1 2021

Rank by ATMs	Airline name	Total movements	QC/Seat	Rank (QC)	CDO performance	Rank (CDO)	TK performance*	Rank (TK)
1	EasyJet	1,516	0.00136	2	92.94%	2	100.00%	1
2	TUI Airways	378	0.00244	4	90.32%	4	100.00%	1
3	British Airways	372	0.00306	6	92.71%	3	99.32%	7
4	Air Europa	157	0.00328	7	68.83%	7	100.00%	1
5	Vueling	136	0.00150	3	74.63%	6	100.00%	1
6	Air Baltic	132	0.00130	1	80.30%	5	100.00%	1
7	Ryanair	128	0.00267	5	98.44%	1	100.00%	1

\* Route 4 Track-Keeping performance is excluded from noise performance table.

# Airline Noise Performance Table – Methodology Statement

This page describes the methodology used to calculate the three metrics that form the Airline Noise Performance Table (ANPT) and explains some of the key terms.

Airlines with CDO or track keeping performance in the red or amber range will be considered as priority for engagement and we will work with them to improve their operational performance.

## Noise Quota Count (QC) per Seat

This metric assesses the average Quota Count (QC) per seat per flight. Individual aircraft have a defined QC value for arrival and departure, which is dependent on noise performance of the aircraft. The QC value is determined by the Effective Perceived Noise Level (EPNdB) stated on its noise certificate and may be affected by the type of engines used, certified Maximum Take-Off Weight (MTOW) and any applicable noise modifications (e.g. landing gear plugs for B787). QC/seat is a strategic metric as it can only improve in the longer term when airlines change their fleet mix, introduce newer aircraft types, or modify existing aircraft to reduce their noise impact.

Airlines operating modern and quieter aircraft will have a lower QC/seat score. For example, a typical A320 has a QC value of 0.25 for arrival and 0.5 for departure and a typical number of seats would be around 180, although this may vary between airlines. Therefore, an A320 would normally have an average QC/seat score  $= (0.25 + 0.5) / (180 * 2) = \mathbf{0.00208}$ , as each rotation of the aircraft requires one arrival and one departure. For comparison, an A320 NEO would typically have an arrival and departure QC equal to 0.125, which reflects the fact that it is much quieter than its predecessors within A320 family, but the number of seats is roughly the same. An A320 NEO's QC/seat score would therefore be  $= (0.125 + 0.125) / (180 * 2) = \mathbf{0.00069}$ .

## Continuous Descent Operations (CDO) Performance

CDO performance is the first operational metric in the ANPT and relates to the vertical profiles flown during arrival. CDO performance is equal to the proportion of arrivals that meet the criteria for CDO, i.e., no level segment longer than 2.5 nautical miles below the altitude of 7,000ft. Continuous descent approaches reduce the noise impact because they require lower engine thrust and the aircraft stays higher for longer.

RAG definition: **Green  $\geq 85\%$**  **70%  $\leq$  Amber  $< 85\%$**  **Red  $< 70\%$**

## Track Keeping (TK) Performance

Track keeping performance is the second operational metric in the ANPT and applies to the lateral departure track. All departures are required to stay within the Noise Preferential Routes (NPRs) defined by the Department for Transport to avoid more densely populated areas. Track keeping performance is equal to the proportion of departures that stay within the NPRs until they reach an altitude of 3,000ft or 4,000ft depending on the route. Note that the Route 4 NPR has been excluded from the ANPT statistics for the time being due to the more challenging flyability and its inclusion would unfairly penalise airlines with higher proportion of Route 4 departures.

RAG definition: **Green  $\geq 95\%$**  **90%  $\leq$  Amber  $< 95\%$**  **Red  $< 90\%$**

