

Appendix 10 – Noise Contour Results

Noise Contour Results

Populations and households are given to the nearest 100 and based on a 2016 update of the 2011 census.

Leq 2016

| Contour Level dB(A) | Current Procedures | | | Proposed Option | | |
|---------------------|-------------------------|------------|------------|-------------------------|------------|------------|
| | Area (Km ₂) | Population | Households | Area (Km ₂) | Population | Households |
| >54 | 25.6 | 43,900 | 18,300 | 25.9 | 44,200 | 18,500 |
| >57 | 14.5 | 21,700 | 9,000 | 14.6 | 22,300 | 9,300 |
| >60 | 7.8 | 8,100 | 3,400 | 7.8 | 8,000 | 3,400 |
| >63 | 4.1 | 2,000 | 900 | 4.2 | 2,000 | 900 |
| >66 | 2.3 | 100 | <100 | 2.3 | 100 | <100 |
| >69 | 1.3 | 0 | 0 | 1.3 | 0 | 0 |
| >72 | 0.8 | 0 | 0 | 0.8 | 0 | 0 |

Leq 2018

| Contour Level dB(A) | Current Procedures | | | Proposed Option | | |
|---------------------|-------------------------|------------|------------|-------------------------|------------|------------|
| | Area (Km ₂) | Population | Households | Area (Km ₂) | Population | Households |
| >54 | 27.6 | 46,900 | 19,600 | 27.9 | 47,700 | 19,900 |
| >57 | 15.8 | 24,400 | 10,200 | 15.9 | 24,900 | 10,400 |
| >60 | 8.5 | 9,200 | 3,900 | 8.6 | 9,300 | 4,000 |
| >63 | 4.6 | 2,500 | 1,100 | 4.6 | 2,500 | 1,100 |
| >66 | 2.6 | 200 | 100 | 2.6 | 200 | 100 |
| >69 | 1.5 | 0 | 0 | 1.5 | 0 | 0 |
| >72 | 0.9 | 0 | 0 | 0.9 | 0 | 0 |

Leq 2023

| Contour Level dB(A) | Current Procedures | | | Proposed Option | | |
|---------------------|-------------------------|------------|------------|-------------------------|------------|------------|
| | Area (Km ₂) | Population | Households | Area (Km ₂) | Population | Households |
| >54 | 27.4 | 46,200 | 19,200 | 27.6 | 45,900 | 19,200 |
| >57 | 15.7 | 24,400 | 10,100 | 15.8 | 24,800 | 10,300 |
| >60 | 8.5 | 8,800 | 3,800 | 8.5 | 9,100 | 3,900 |
| >63 | 4.6 | 2,500 | 1,100 | 4.6 | 2,500 | 1,100 |
| >66 | 2.6 | 200 | 100 | 2.6 | 200 | 100 |
| >69 | 1.5 | 0 | 0 | 1.5 | 0 | 0 |
| >72 | 0.9 | 0 | 0 | 0.9 | 0 | 0 |

SEL Footprints

Estimated areas, populations and households within Runway 33 departure SEL footprints for the A321 with EAV321V engines (most frequent type)

| Runway 33 SIDs | SEL (dBA) | Area (km2) | Population | Households |
|---------------------------------|------------------|-------------------|-------------------|-------------------|
| Southbound (current) | 90 | 3.3 | 3,700 | 1,600 |
| TRENT (current) | 90 | 3.3 | 3,600 | 1,500 |
| MOSUN (current) | 90 | 3.3 | 3,700 | 1,600 |
| Proposed Southbound | 90 | 3.3 | 3,700 | 1,600 |
| Proposed BIMBA (replaces TRENT) | 90 | 3.2 | 3,300 | 1,400 |
| Proposed MOSUN | 90 | 3.3 | 3,600 | 1,500 |

Estimated areas, populations and households within Runway 33 departure SEL footprints for A321 with EA321C engines (noisiest type)

| Runway 33 SIDs | SEL (dBA) | Area (km2) | Population | Households |
|---------------------------------|------------------|-------------------|-------------------|-------------------|
| Southbound (current) | 90 | 3.9 | 5,000 | 2,100 |
| TRENT (current) | 90 | 3.9 | 5,200 | 2,300 |
| MOSUN (current) | 90 | 3.9 | 5,000 | 2,100 |
| Proposed Southbound | 90 | 3.9 | 5,100 | 2,200 |
| Proposed BIMBA (replaces TRENT) | 90 | 3.9 | 5,100 | 2,200 |
| Proposed MOSUN | 90 | 3.9 | 5,100 | 2,200 |