

Appendix 4

Breakdown of Emissions
Inventory for the Baseline

Breakdown of Emission Inventory for the Baseline

Appendix 4 Table 1: Comparison of Emissions (te/y) from the base and development case in 2015

Emissions (te/y)	Baseline			
	NOx	PM10	PM2.5	VOC
Airport-related	1,603.1	69.8	45.9	237.1
Aircraft	1,006.6	12.0	10.7	232.7
<i>Ground level exhaust (plus brake/tyre)</i>	<i>336.4</i>	<i>8.1</i>	<i>6.7</i>	<i>204.9</i>
Start-up				118.3
Taxi-out	50.1	1.2	1.2	38.9
Hold	17.6	0.4	0.4	15.5
Take-off roll	142.8	0.7	0.7	1.0
Landing roll	12.3	0.1	0.1	2.6
Brake and Tyre		2.7	1.3	
Taxi-in	37.6	0.7	0.7	23.4
APUs	71.8	2.2	2.2	4.9
Engine testing	4.2	0.0	0.0	0.3
Push Back	0.0	0.0	0.0	0.0
Ground level fugitive				2.6
<i>Elevated (lto-cycle)</i>	<i>670.2</i>	<i>3.9</i>	<i>3.9</i>	<i>25.1</i>
Initial-climb	182.4	0.8	0.8	1.0
Climb-out	209.5	0.9	0.9	1.6
Approach	278.3	2.2	2.2	22.5
Airside vehicles	33.5	2.4	2.0	
Landside vehicles	556.1	55.2	33.0	
<i>Road network 1</i>	<i>548.8</i>	<i>54.9</i>	<i>32.8</i>	
Cars (1)	257.7	43.9	24.8	
LDV (1)	8.4	1.7	1.2	
HGV (1)	48.9	1.8	1.4	
Buses (1)	233.8	7.6	5.3	
Car parks (plus rentals), Coaches and Taxis	7.3	0.3	0.2	
Stationary sources	6.9	0.2	0.2	4.4
Heating Plant	6.9	0.2	0.2	
Fire training, fuel handling and storage	0.0			4.4
Non-airport	17,831.5	1,699.0	1,114.1	
Cars (1)	5,458.9	916.8	522.0	
LDV (1)	2,152.7	409.9	300.0	
HGV (1)	10,219.9	372.4	292.1	

(1) Emission quoted for entire road network area

