

1. ScanStep® worksheet to analyse the macro environment that Airbus faces, with particular reference to issues that may affect the A380.

Scanstep® macro environmental issue summary for Airbus			
Issue domain	Event or trend	Active stakeholder(s)	Potential significance
Social	Increasing leisure time encourages air cost-conscious travel to holiday destinations. <sup>1</sup>	Consumers	Should sustain demand for new, larger aircraft combining comfort with low cost. An opportunity for Airbus. <sup>2</sup>
<p><sup>1</sup> Vacation travellers (including older and retired people) are being encouraged to fly further afield to attractive new destinations. Increasing numbers of expatriates and settlers wish to visit their families in far-off countries on a regular basis. The available UK Govt. forecast was that UK air passenger traffic was expected to rise from 189m in 2002 to 500m by 2030 (source: <a href="http://www.dft.gov.uk/stellent/groups/dft_aviation/documents/page/dft_aviation_031507.hcsp">http://www.dft.gov.uk/stellent/groups/dft_aviation/documents/page/dft_aviation_031507.hcsp</a>)</p> <p><sup>2</sup> All else equal – i.e. assuming that external constraints on flying and escalating costs do not significantly inhibit market development.</p>			
Cultural	Increasing scope for cultural exchange visits by EU students and other groups <sup>3</sup>	European Commission  Students and special interest groups	Increasing transnational air travel is notably by very cost-conscious people. An opportunity for Airbus particularly if they have the budget airlines as clients
<sup>3</sup> An explicit priority of the European Commission. Also Europe to the US and to the Far East			
Authority	Planning constraints on airport expansion are becoming tighter <sup>4</sup>  International regulation of civil aviation	Airport operators e.g. BAA  Local residents  A complex mix of regulatory, safety and security agencies in host countries <sup>6</sup>	Airport operators may be barred from extending runways and expanding facilities that will be vital for aircraft like the A380 to land. A possible threat to Airbus sales. <sup>5</sup>  Extreme complexity of negotiations for change affecting the interests of many governments generally makes constructive change slow and difficult to agree. Uncertainty may cause airlines to delay new purchases or stick to what they are familiar with
<p><sup>4</sup> Owing to a combination of international governmental commitments as well as pressure groups with ecological and local concerns forcing government regulators to respond.</p> <p><sup>5</sup> New runways and longer ones will be needed at many airports (e.g. at London Heathrow) to cater for the A380. Better passenger-handling facilities are also needed. However, larger aircraft means fewer noise and pollution-creating flights, all else equal.</p> <p><sup>6</sup> e.g. nationally: US FAA, UK CAA, and transnationally: EASA European Aviation Safety Authority, IATA, WTO</p>			
Natural environment	Air travel generates large volumes of greenhouse gases,	Environment pressure groups;  Government	Probable tightening of controls on airline routes, take-off and landing slots. Rising demand for cleaner aircraft using less fuel

(ecological)	noise and possible damage to the ozone layer	agencies responsible for industry regulation	per passenger-mile. This should be an opportunity to increase sales of the Airbus A380 (but see note 5 above).
<b>Security</b>	Threat of terrorist attacks	Terrorist groups.  Regulatory and security agencies	Various challenges arise for the A380: <ul style="list-style-type: none"> <li>◦ More complex aircraft designs. <sup>7</sup></li> <li>◦ Increased scrutiny of passengers and slower boarding. <sup>8</sup></li> <li>◦ Airline bankruptcies. <sup>9</sup></li> </ul>
<p><sup>7</sup> Changes to existing aircraft have already been made e.g. bullet-proof, locked access doors to the pilots' cabin. Future designs will be required to have greater survivability in the event of explosion damage etc.</p> <p><sup>8</sup> Slower boarding will discourage the use of larger capacity aircraft such as the A380.</p> <p><sup>9</sup> Causing defaults on orders and payments. Two effects might cause bankruptcy (i) targeting of particular airlines for physical attack e.g. Islamic terrorist attack on Israel's El Al (ii) major disruption to the computer booking systems used by all airlines, causing chaos and loss of revenue.</p>			
<b>Technology</b>	Major developments in use of composite materials in aircraft production  New scanning technologies to speed passenger and baggage screening	Chemical companies Airframe contractors  IT and security industries	Bigger, lighter, more fuel-efficient aircraft, but rising development costs, which present potential threats and opportunities for Airbus  Makes super-jumbo aircraft more viable by speeding up flight boarding
<b>Economic</b>	Globalization of business operations  Economic constraints on airport expansion	Business corporations  Airport operators	Growing international air travel by business travellers, some of whom who prioritize service and comfort, others low cost and convenience. Implications for Airbus are ambiguous. <sup>10</sup>  Airport operators may be reluctant to invest in costly, longer runways and better facilities. <sup>11</sup> A significant threat to Airbus.
<p><sup>10</sup> Because the needs of business and non-business travellers generally differ, internal layouts on new aircraft will have to cater for their differing expectations.</p> <p><sup>11</sup> Since these are vital for big aircraft like the A380 to land safely and turnaround efficiently and quickly.</p>			
<b>Political</b>	The USA is politically unpopular in many countries  Countries whose governments effectively control their airlines and aircraft makers	Boeing and its contractors; the US Government.  China & Russia in particular Their aircraft makers	State-owned airlines generally buy from their own state companies where possible. Failing that, they may prefer Airbus over Boeing if they have anti-American sentiments.  Extremely difficult for external suppliers such as Airbus to break into these essentially captive markets.