Route Deviation

- Deviation of routing off the SID can be the result of positive action taken by Air Traffic Controllers when it is deemed necessary for safety. There are many reasons why sometimes this may be necessary.
- A large proportion of deviations are due to weather phenomena effecting a portion of the aircraft's intended flight path. Due to the weather phenomena associated with thunderstorms and thunderstorm formation (witnessing or reported clouds (Cumulonimbus) in the vicinity of the aerodrome) aircraft, controllers and pilots will actively avoid flying near or through such systems.
- Aircraft would also deviate from a SID if the pilot or controller deemed a confliction with another aircraft was imminent or expected. This can be instigated by the pilot or controller and can sometimes be the result of on-board systems activating a warning within the flight deck (Traffic Collision Avoidance System TCAS) or if information derived from surveillance systems (Radar) predicts that a confliction will happen and produces a warning (Short Term Conflict Alert STCA).
- Deviation can also occur due to aircraft and pilot performance. Although non exhaustive some reasons such as manually flying the SID profile, flying at a greater speed, individual aircrafts position accuracy and aircraft weight can effect aircraft performance.