

SKYRADAR-STCA-041: Suppression of STCA conflicts due to NTZ processing

SSS: ATCS-SSS-REQ-005855

Derived status partially

Derived rationale Alert inhibition on approach with NOZ and NTZ Areas

Safety impact false

Verification method Test

Verification level RL

(SDS rules HLR_10) [cmats_snp] Partial derivation shall be avoided

SKYRADAR shall flag STCA conflicts as suppressed for tracks located in NOZ if:

- The associated NTZ area is active, and
- The status of the NTZ areas manager is equal to OPERATIONAL, and
- The heading gap between each aircraft and the runway axis is lower than CSP: MAX_DELTA_HEADING, and
- The current distance between the aircraft is kept above VSP: MinimalDistance known as safety distance, and
- Each track is located within a different NOZ associated with an offline defined "parallel approach pair" of runways, and
- The "parallel approach pair" is in INDEPENDENT mode, and
- The flag STCA_PARALLEL_APP_FPL_CHECK_FLAG is set to false or the runway of each track's coupled

FPL (if assigned) matches the runway linked to the NOZ where the track is located.

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SKYRADAR-MSAW-025: Generation of Minimum Safe Altitude Warning alerts

SSS: ATCS-SSS-REQ-006142

Derived status partially

Derived rationale Terrain clearance monitoring for approach and departure operations

Safety impact true

Verification method Test

Verification level RL

(SDS rules HLR_15) [cmats_snp] Partial derivation shall be avoided

SKYRADAR shall generate MSAW (Minimum Safe Altitude Warning) alerts for tracks if ALL of the following conditions are met:

- The MSAW system status is equal to OPERATIONAL, and
- The track altitude is below the MSA (Minimum Safe Altitude) threshold defined for the current sector, and
- The track is in APPROACH or DEPARTURE flight phase, and
- The track vertical speed indicates descent or level flight (not climbing above VSP: MIN_CLIMB_RATE), and
- The track is located within a monitored airspace zone where MSAW is active, and
- The track has valid altitude data with quality indicator equal to HIGH or MEDIUM, and
- The flag MSAW_EMERGENCY_OVERRIDE is set to false or the track's transponder squawk code is NOT in the emergency range (7500, 7600, 7700).

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SKYRADAR-RVSM-033: Generation of RVSM Non-Approval Alerts

SSS: ATCS-SSS-REQ-006500

Derived status partially

Derived rationale RVSM compliance monitoring for flight operations in reduced vertical separation airspace

Safety impact true

Verification method Test

Verification level RL

(SDS rules HLR_12) [cmats_snp] Partial derivation shall be avoided

SKYRADAR shall generate RVSM (Reduced Vertical Separation Minimum) Non-Approval alerts for tracks if ALL of the following conditions are met:

- The RVSM monitoring system status is equal to OPERATIONAL, and
- The track flight level is within RVSM airspace range (between CSP: RVSM_MIN_FL and CSP: RVSM_MAX_FL), and
- The track RVSM approval status indicator is set to NOT_APPROVED or UNKNOWN, and
- The track altitude source quality indicator is equal to HIGH or MEDIUM, and
- The track is located within an RVSM designated airspace zone where monitoring is active, and
- The track flight plan indicates IFR (Instrument Flight Rules) operation, and
- The flag RVSM_EMERGENCY_EXCEPTION is set to false or the track's transponder squawk code is NOT in the emergency range (7500, 7600, 7700).