



| ICAO PARIS UNITING AVIATION

Safety Performance

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Safety Performance and CRE

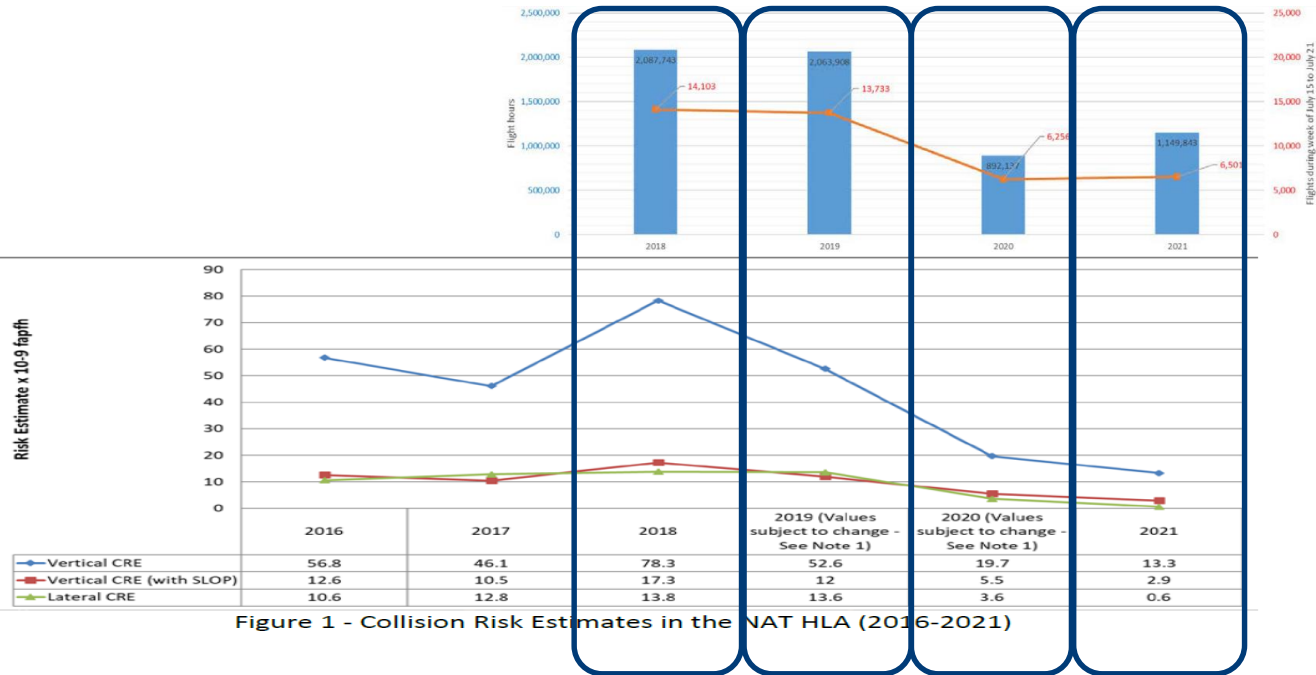


Figure 1 - Collision Risk Estimates in the NAT HLA (2016-2021)

Safety KPI	Target	Previous rolling three-year period of performance (2018-2019-2020)	2018 Performance	2019 Performance	2020 Performance	2021 Performance	
NAT SKI 01	0	n/a	0	0	0	0	
NAT SKPI 02a	Number of accidents	Reduction over previous rolling three-year period of performance	3.72 x 10 ⁻⁵	2.87 x 10 ⁻⁵	3.59 x 10 ⁻⁵	4.71 x 10 ⁻⁵	4.61 x 10 ⁻⁵
NAT SKPI 02b	Number of LED events divided by number of flight hours flown in the NAT HLA	Reduction over previous rolling three-year period of performance	7.21 x 10 ⁻⁷	6.95 x 10 ⁻⁷	9.45 x 10 ⁻⁷	5.23 x 10 ⁻⁷	6.23 x 10 ⁻⁷
NAT SKPI 03a	Overall time of LEDs at unexpected flight level divided by total duration of flight in minutes	Reduction over previous rolling three-year period of performance	3.57 x 10 ⁻⁵	4.6 x 10 ⁻⁵	5.71 x 10 ⁻⁵	6.39 x 10 ⁻⁵	4.87 x 10 ⁻⁵
NAT SKPI 03b	Number of Lateral deviations divided by number of flight hours flown in the NAT HLA	Reduction over previous rolling three-year period of performance	1.27 x 10 ⁻⁴	1.29 x 10 ⁻⁴	1.70 x 10 ⁻⁴	0.82 x 10 ⁻⁴	6.61 x 10 ⁻⁵
NAT SKPI 04	Overall time of lateral deviations on an unexpected profile divided by total duration of flight in minutes	Reduction over previous rolling three-year period of performance	1.36 x 10 ⁻⁵	1.87 x 10 ⁻⁵	1.65 x 10 ⁻⁵	0.56 x 10 ⁻⁵	5.22 x 10 ⁻⁶
NAT SKPI 05a	Number of loss of separation events divided by number of flight hours flown in the NAT HLA	Reduction over previous rolling three-year period of performance	1.87 x 10 ⁻⁵	No data	0.824 x 10 ⁻⁵	2.91 x 10 ⁻⁵	1.83 x 10 ⁻⁵
NAT SKPI 05b	Number of coordination errors divided by number of flight hours flown in the NAT HLA	Reduction over previous rolling three-year period of performance	No data	0.162 x 10 ⁻⁶	2.8 x 10 ⁻⁶	0.364 x 10 ⁻⁶	
NAT SKPI 06a	Collision Risk Estimate (CRE) in the vertical dimension	5 x 10 ⁻⁶ fap/ff	n/a	17.3 x 10 ⁻⁶	12 x 10 ⁻⁶	5.5 x 10 ⁻⁶	2.9 x 10 ⁻⁶ (with SLOP)
NAT SKPI 06b	Collision Risk Estimate (CRE) in the lateral dimension	5 x 10 ⁻⁶ fap/ff	n/a	13.8 x 10 ⁻⁶	13.6 x 10 ⁻⁶	3.6 x 10 ⁻⁶	0.6 x 10 ⁻⁶
NAT SKPI 07	Regional Effective Implementation (EI) score in ANS	Maintain 95% or above until 2026. Reach 95% by 2030	n/a	n/a	n/a	n/a	89.21%



Top contributors to errors in the NAT

- **Flight Plan vs. Clearance**
- **Did not adhere to ATC clearances in either the vertical or the lateral dimension**
- **ATC coordination** where an error occurring during the coordination between two ATC sectors or ANSPs
- **Weather** where weather conditions experienced during the flight contributed
- **ATC Clearance.** This can for example be caused by ATC not issuing a clearance to an aircraft to match the coordinated profile or by the lack of an appropriate clearance.
- **Dispatch**, where a flight plan issue contributed
- **ATC Pertinent message not actioned**
- **Crew-Other**, where a crew action contributed but there is insufficient information or evidence to allocate any of the currently scrutinized causal factors.
- **Incorrect Weather Contingency action**
- **Readback/Hear-back**, where incorrect read back or hear back of a clearance contributed
- **Incorrect application of SLOP**



NAT Vision of Safety

- Regulatory oversight of CSPs and SSPs
- Safety, Service, value and environmental benefits are measurable



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THANK YOU