

WinCon og IceCon

Background

- **WinCon** is an index on a scale from 0 to 4, assessed based on the weather forecast or present weather, intended to describe the expected impact of winter weather on airport operations, with emphasis on **snow removal and anti-icing measures** on the movement area.
- **IceCon** serves the same purpose, but with a focus on **aircraft de-icing** capacity.
- The indices are closely related, as both consider weather factors that cause surface icing and snow accumulation, such as temperature, humidity, precipitation, and wind.
- Operational disruptions due to **wind** are not included in these indices. Preparedness measures related to wind gusts on the apron are addressed in the document Adverse Weather Operations at Keflavik Airport (accessible at www.kefairport.is).

WinCon


The figures below illustrate how WinCon may escalate as weather conditions worsen.



WinCon 0


Weather conditions are not expected to cause any accumulation of snow, ice, or other contamination on the movement area. However, slippery surface conditions may persist or even worsen after WinCon 0 conditions have commenced.

WinCon 1 – Light winter conditions (Léttar vetraraðstæður)


 WinCon1 LIGHT CONDITIONS	Expected impact on service and priorities	Weather description
	Winter service expected to keep up with weather. Surface conditions may deteriorate slightly No, or minimal need for snow clearing Normal operation on runways and apron foreseen CAUTION: Possible risk of black ice on untreated areas	Model forecast $T < 3$ and $T_g < 1$ and $RH\% > 80$ or snow fall up to 0.8 mm/hr <hr/> TAF (no criteria available)

WinCon og IceCon


WinCon 2 – Moderate winter conditions (Töluverðar vetraraðstæður)

 <p>WinCon2</p> <p>MODERATE CONDITIONS</p>	Expected impact on service and priorities	Weather description
	Mostly normal operation with slower periods in between. Waiting for snow removal on apron or operating on snow covered surfaces may be expected. Temporarily: Expect minimum operating surfaces in snow clearance, RWY RETs not available	<p style="text-align: center;">Model forecast</p> Snow fall ≥ 0.8 mm/hr or Snow fall ≥ 0.5 mm/hr last 4 hours <hr/> <p style="text-align: center;">TAF</p> -SN, SN, -SHSN, SHSN RASN, SNRA, GS, GR, DRSN (optional SH and “-” included. Example: -SHRASN)

WinCon 3 – Heavy winter conditions (Þungar vetraraðstæður)

 <p>WinCon3</p> <p>HEAVY CONDITIONS</p>	Expected impact on service and priorities	Weather description
	Expect Winter service on the apron to be delayed, single stand at a time. Expect TWYs snow covered Expect minimum operating surfaces in snow clearance, RWY RETs not available Expect ATC to request aircraft holdings or increased separation	<p style="text-align: center;">Model forecast</p> [Snow fall ≥ 0.8 mm/hr or Snow fall ≥ 0.5 mm/hr last 4 hours] and mean wind speed ≥ 16 KT or Wincon 2 for ≥ 6 hours <hr/> <p style="text-align: center;">TAF</p> [SN, SN, RASN, SNRA, GS, GR (optional SH and “-”) or DRSN, BLSN or +SN, +RASN, +SNRA (optional +SH)] and mean wind speed 16KT up to 26KT

WinCon 4 – Extreme winter conditions (Yfirþyrmandi vetraraðstæður)

 <p>WinCon 4</p> <p>EXTREME CONDITIONS</p>	Expected impact on service and priorities	Weather description
	RWY crosswind, visibility, and surfaced condition may affect operation Expect only RWY winter service All Ramp operations difficult or impossible due visibility, gust strength and snowdrift accumulation Arriving aircraft may be lined up on TWY Apron stands not serviced Runway friction might be impossible to improve above RWYCC 3	<p style="text-align: center;">Model forecast</p> [Snow fall ≥ 0.8 mm/hr or Snow fall ≥ 0.5 mm/hr last 4 hours] and mean wind speed ≥ 26 KT or Snow fall ≥ 2 mm/hr last 2 hours <hr/> <p style="text-align: center;">TAF</p> [SN, SN, RASN, SNRA, GS, GR (optional SH and “-” / “+”) or DRSN, BLSN] and mean wind speed > 26 KT

WinCon og IceCon

IceCon 0

Air temperature above 8 °C. No aircraft de-icing expected.

IceCon 1 – Minimum de-icing conditions (Lágmarks afisingaraðstæður)

Aircraft de-icing condition	Expected impact on de-icing operations	Weather description
IceCon 1 Light	Light conditions foreseen, approximately 50% -100% of departing aircraft may require one-step de-icing only	Model forecast 2 °C =< T < 8 °C (air temperature in the range 2 to 8 degrees)

IceCon 2 – Standard de-icing conditions (Almennar afisingaraðstæður)

Aircraft de-icing condition	Expected impact on de-icing operations	Weather description
IceCon 2 Moderate	Moderate conditions expected, all departing aircraft require one-step de-icing Low risk of expiring holdover times On Time Performance may be slightly affected	Model forecast T < 2 °C (air temperature below 2 degrees)

IceCon 3 – Heavy de-icing conditions (Þungar afisingaraðstæður)

Aircraft de-icing condition	Expected impact on de-icing operations	Weather description
IceCon 3 Heavy	Heavy conditions during snow fall, all departing aircraft require two-step de-icing Re-treatment due to expired holdover time to be expected, On Time Performance drops considerably	IceCon 3 is issued whenever WinCon 2 takes effect

IceCon 4 – Extreme de-icing conditions (Yfirþyrmandi afisingaraðstæður)

Aircraft de-icing condition	Expected impact on de-icing operations	Weather description
IceCon 4 Light	Extreme conditions with heavy snowfall. All departing aircraft require two-step de-icing. Re-treatment due to expired holdover time to be expected. Prepare for major delays.	IceCon 4 is issued whenever WinCon 3 or 4 takes effect