# SUMMARY

The serious incident occurred during a scheduled flight from Arvidsjaur to Gällivare airport and involved an aeroplane of the model Fokker F28 Mark 0100 with the registration marks YR-FZA. The aircraft was operated by the Romanian operator Carpatair on behalf of the Swedish airline Nextjet.

During the instrument approach to runway 30 at Gällivare airport, which was performed in darkness with snow and rain, the runway threshold was crossed at approximately 50 feet with a recorded speed of 134 knots. After a hard landing in the touchdown zone with unchanged speed the aeroplane bounced and was displaced in yaw. Reported friction coefficients were 0.36, 0.34 and 0.35.

After the landing, which was performed with full flaps and extended speed brake, the lift dumpers on the wing's upper surface extended. According to interviews, maximum reverse was activated and the brakes were applied immediately after the displacement in yaw. Data from the recordings indicate that reverse rpm increased from low idle only 20 seconds after touchdown at a speed of about 50 knots. Engine reverse rpm then only reached 75 % and 65 %, while the maximum speed limitation is 95.5 %.

The aeroplane overran the end of the runway and came to a full stop on the runway strip. There were no injuries and the damage to the aeroplane was limited.

The serious incident was caused by the gradual decrease of the conditions for a safe landing, which was not perceived in due time.

Contributing factors:

- The airspeed did not decrease from 50 feet's height to touchdown.
- The reported friction coefficients were probably unreliable.
- The wheel brakes were probably not fully applied due to the initial yaw disturbance.
- The reverse rpm increased only 20 seconds after touchdown.

## Safety recommendations

## ICAO is recommended to:

• Work for the introduction of a generic Safe Landing concept including the flight phase from the runway threshold until full stop. (*RL 2017:03 R1*)

### EASA is recommended to:

• Work for the introduction of a generic Safe Landing concept including the flight phase from the runway threshold until full stop. (*RL 2017:03 R2*)

### The Swedish Transport Agency is recommended to:

• Work for the introduction of a generic Safe Landing concept including the flight phase from the runway threshold until full stop. (*RL 2017:03 R3*)