Airport Weather Preparedness and optimizing Collaborative Decision Making.
CPH is surrounded by water in 3 quadrants.
The winter 2010/2011 was very cold and november december had ~35 consecutive days of snow, frost and blowing snow.

Especially the Christmas days were hard but…

The airport was closed less than 1 hour in total.

Airport Operations Manager Dan Meincke:

“We could not have done this without the help of the DMI, The WIS-systems, and our own setup of staff and equipment”
Copenhagen Airport – resources:

Central supervision, monitoring and planning

Lots of modern equipment can deal with any challenge

~6 highly educated supervisors (Contact with DMI)

~90 well educated regular staff.

~120 supporting staff:
- Busdrivers
- Baggage-handlers
- Firemen
Copenhagen Airport – ressources:

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You need to plan how to use your staff – especially in prolonged winter weather….

Planning is done for the next…
  • 1 HR
  • 24 Hours
  • 4 Days.
Stakeholders, lines of communication:

- ATC: TWR/APP, APRON
- DMI/MET
- Deicing

Ad hoc briefings as agreed

Routine and ad hoc tel-conferences.

CPH Field Services:

Weather Info System
The WIS – Weather Information System:

Road Weather Model
- Includes ~350 stations + Airports
- Hirlam Model
- Runs every hour
- Commented by forecaster
- Forecasts and observations, including weather radar and satellite.
Observed and forecast status of sensors 5 hours ahead.
Observed Airtemp, sfc-temp and dewpoint.

Forecast Airtemp, sfc-temp and dewpoint.

Freezing point

Surface condition

Precipitation forecast, type and amount.

Wind forecast
Forecast Airtemp, sfc-temp and dewpoint.

Precipitation forecast, type and amount.

Wind forecast

24 hours ahead
"Area" forecast – all airport stations. This one 24 hours ahead.

Another displays 5 hours ahead and this is commented by forecaster.

24 hours ahead.

...Quality and uncertainties – by forecaster (5 hours).
7-day outlook.
Based on ECMWF deterministic forecast.

Uncertainties are delt with in telephone conferences.
Radar,
Including:
• Interpretation of precipitation type
• 2 hours forecasted animation.
Satellite:
Colorcoded for
• Cloud Type
• Cloud Amount.
Various animated forecast maps. (5 Hours)

• Precip type / Hour
• Accumulated precip
• Cloudcover

...Much more, - including webcams.
All of this works fine as long as…

Forecaster knows about the everyday challenges for the airport staff – and why specific weather elements are important and others are not.

Airport staff knows about weather uncertainties and capability of forecasters and weather models.

Bilateral education and "get-together" initiatives on the operational level are essential to get the best out of Collaborative Decision Making!

And…

Everyday initiatives to improve communication and technical solutions should be the standard.
Forecaster education:

COURSE CONTENTS

This course will introduce six aviation stakeholder groups:

1. Area controller and meteorology
2. APP controller and meteorology
3. Executive airline pilot and meteorology
4. Experienced balloonist and meteorology
5. Airport operation manager and meteorology
6. Airfield maintenance and meteorology
Airport / Airfield operations, winter weather and strategies.

- E-learning / Distance course.
- Interviews with Airport Operations Manager Dan Meincke CPH.
- Met-theori, methods and important knowledge.
- Online sessions, quizzes and learning material.

Thank you for your attention!