

# DATS – setting the scene

11-12 february 2019

Billy Josefsson , Manager Automation & Human  
Performance and Academic Collaboration

NORRKÖPING SWEDEN 11–12<sup>TH</sup> FEBRUARY 2019  
DIGITAL AIR TRAFFIC SERVICES

# Workshop

*on Safety and Workload*

Meeting room: TMP 55 / TP5035, Täppan building 5<sup>th</sup> floor



AMPLIFY TEAMWORK WITH AUTOMATION



**SAAB**

11:30 - Lunch at Visualization center (sponsored by SAAB)

13:15 - Billy Josefsson, LFV and Valentin Polishchuk, LIU: Welcome notes, round table, introduction

14:00 - KEYNOTE: Erik Bäckman, SAAB group, VP Operations Saab Digital Air Traffic Solutions, RTC Sundsvall: **Starting Point for the Reality**

15:00 - Coffee break

15:15 - Tatiana Polishchuk and Christiane Schmidt, LIU: **Starting Point for Research**, CAPMOD project

16:00 - Lothar Meyer, LFV: **Safety and Risk assessment**, MERASSA project

16:30 - Active discussions, work in groups

17:15 - Finish for today

18:30 - Social Event: Dinner (own cost), location to be announced

# Il cibo

VÄLKOMNA

ANTIPASTI

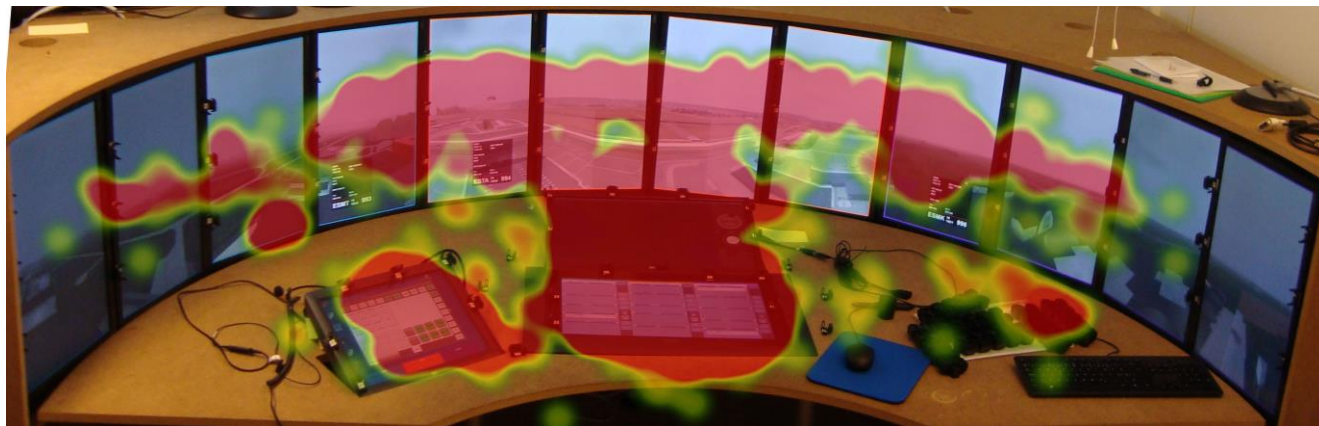
PRIMI PIATTI

PIZZA

SECONDI



1900 hours  
Olai Kyrkogata 29



# STARTING POINT

-technology

-services

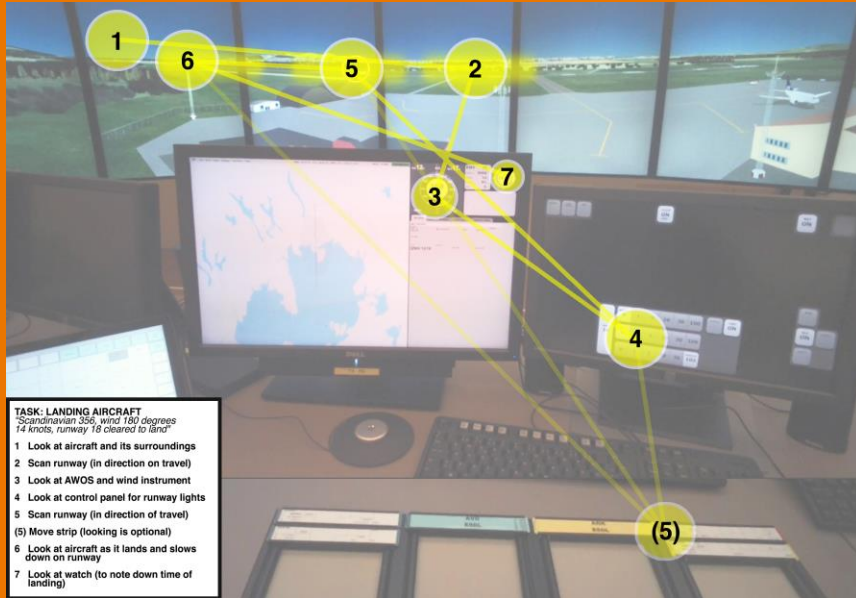
-learning

-exchange

-collaboration; industry – users - academy

# What is the RTC research challenges?

- ✓ Safety
  - Demonstration,
  - Risk and Safety Assessment
- ✓ Understanding Workload
  - detect
  - channel it
  - predict



Your conference paper reached 50 reads  
Achieved on Feb 9, 2019  
Conference paper: Scheduling air traffic controllers  
at the remote tower center

InnovativeResearch

ResearchEvaluation  
Demonstration

ValidationDemonst  
ration Evaluation

OperationsEvaluati  
on

Implementers & recievers / users

LFV & LiU et collaborators





# Observations and comments

- ✓ Progress
- ✓ Starting point ----- YES
- ✓ CAPMOD ----- on track ?
- ✓ MERASSA ----- ETRA----- on track?
- ✓ Is research fit for purpose?
- ✓ Are we doing the right research, with the right people?
- ✓ New areas?
- ✓ Specific Issues ( look at boards)

## Next

- ✓ Exchange useful?
  - Reserarchers?
  - Others / Users /
  
- ✓ Write up a short summary and way fwd... Key issues , ,keep the network.

# STARTING POINT

YES!

-technology

-services

-learning

-exchange

-collaboration; industry – users - academy

## What we re doing

- ✓ Work on **Safety & risk assessment** is high priority ( MERASSA →ETRA)
- ✓ Work on **workload management and optimisation of staff** (CAPMOD)

What about....

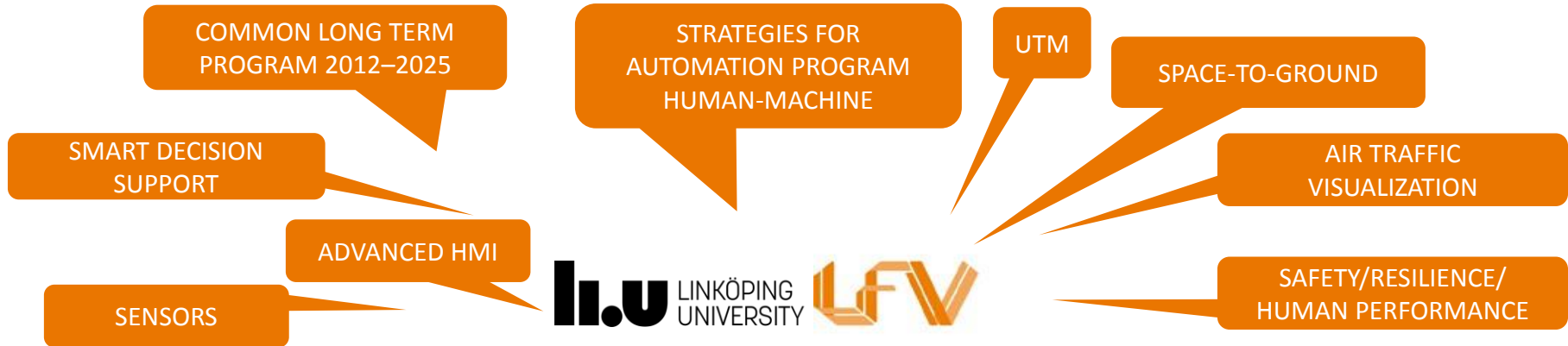
- ✓ Change Management
- ✓ Training
- ✓ Social Dialogue
- ✓ Standardisation

# What's in the Research pipe for DATS, 3,4,5-10 yrs ahead

- ✓ Labelinteraction (less or no need for e strip)
- ✓ Workload monitoring
- ✓ Automatic Speech Recognition
- ✓ New sensors
- ✓ Augmented Reality
- ✓ Attention Guidance supported by AI
- ✓ Automation support for training and verification of competence
- ✓ Resilient Strategies for multiple information sources ( RE5 → X10 → hybrid i/f)

# Collaboration LFV and LiU

## Linköping University – Science for the aviation of tomorrow



## Day2

09:00 - Eamonn Wylie: Remote Tower Operations: A Professional Staff Organisation's Perspective

09:30 - Steve Burchill: Adaptive Automation: Status, Current Applications and Emerging Considerations

10:00 - Jarkko Hirvonen: Probabilistic Snowcasting Methods used in Finnish Meteorological Institute

10:30 - Outlook, closing notes

10:45 - Coffee break

11:00 - Walk to the city center

11:30 - Open Repetition with SON (Norrköping Symphony Orchestra) at Louis De Geer Concert and Congress Centre

12:30 - Lunch at De Geer(sponsored by LFV Research& Innovation)