



**COMBITECH**

**IRIS**

**Integrated Real time Information System**

# The purpose of IRIS

Originally developed for AVINOR, Norwegian CAA, with the purpose to:

- Create a real time information system, that integrates the surrounding systems on a site to one common flexible presentation.
- The system shall contribute to a efficient information support to ATS personnel at both TWR, APP, TMC and ACC positions and units.
- The system shall work as a "common baseline" for future ATS projects.

## Current IRIS sites.

IRIS is currently installed at  
ATCC, TMC and airports.  
Approximately three hundred  
h24 operator positions



# Efficient information support

## Static information

- Maps, Publications (AIP, AIC e.g.), Manuals
- Site specific information and regulations
- Conversion tables and tools
- Quick reference cards
- Sunset/night and sunrise/day

## Dynamic information

- AFTN messages (*METAR, SPECI, TAF, TAF/AMD, SIGMET, NOTAM, SNOWTAM, WINDSHEAR, LLF, QNH, ICE, IGA*)
- Wind Indicator
- Weather sensor values
- Graphical weather charts
- Video (snapshot and streaming)
- Information about current status of navigation aids
- Airport and flight information
- Status of external equipment

## Internal communication between operators

- Briefing, simple or extended
- System messages and alerts

## Flight plan information

- Flight plan support system, monitoring of terminated flight plans.
- Search and print
- Tailorised alerts on incoming data

## Statistics

- Logging of operational time for each operator.

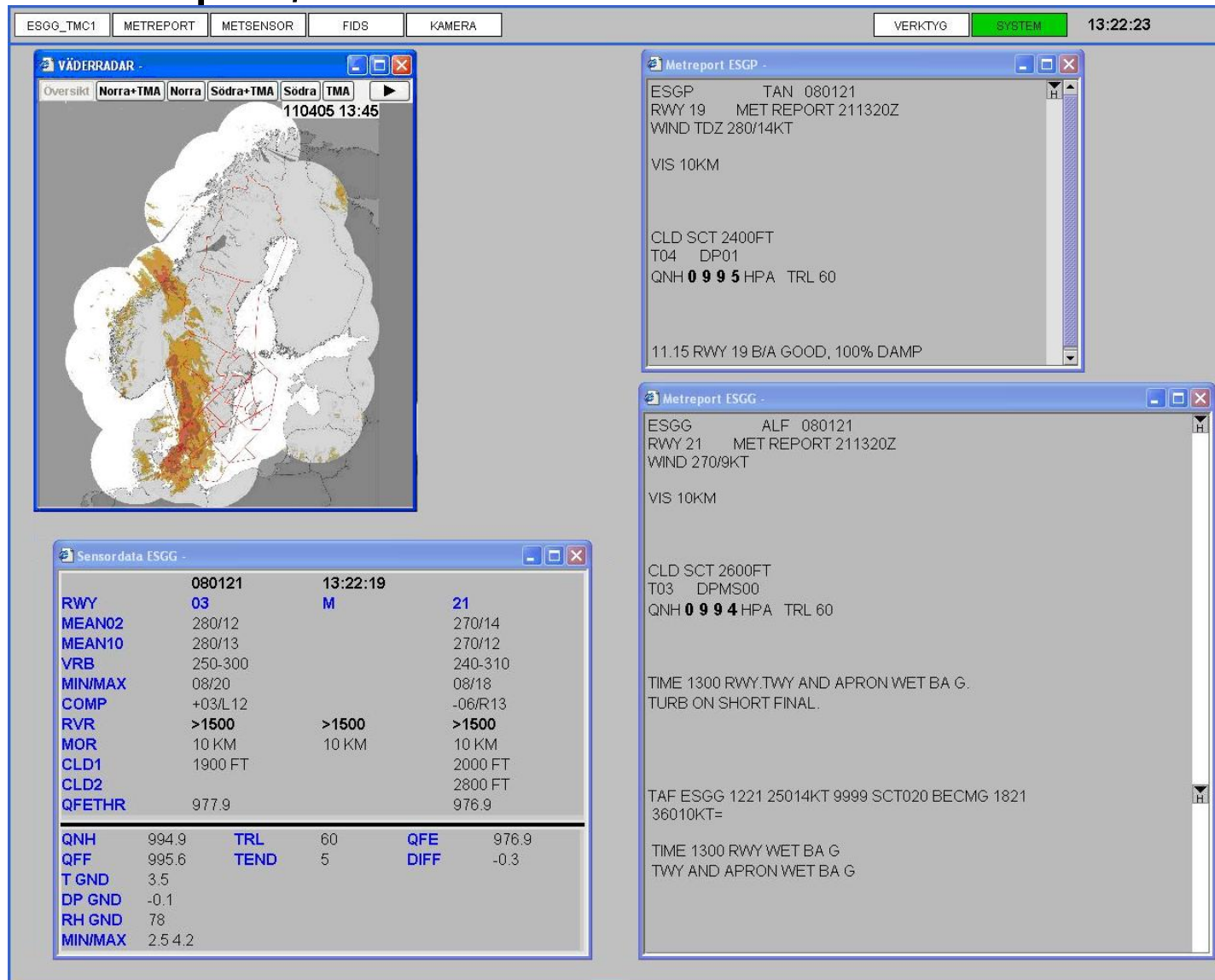


# IRIS HMI

- Component-based layout tailorised for each position.
- Configurable by the customers system administrator.
- Placements colors, fonts, sizes and more is controlled by “Variable System Parameters” database.
- Operating system independent
- Module based and easy to integrate with legacy systems.



# HMI example, Landvetter TMC



# HMI example, Status of external equipment.





# System technologies

- Open standards
- Open source, license free or commercial COTS can be used.
- Vendor-independent COTS software

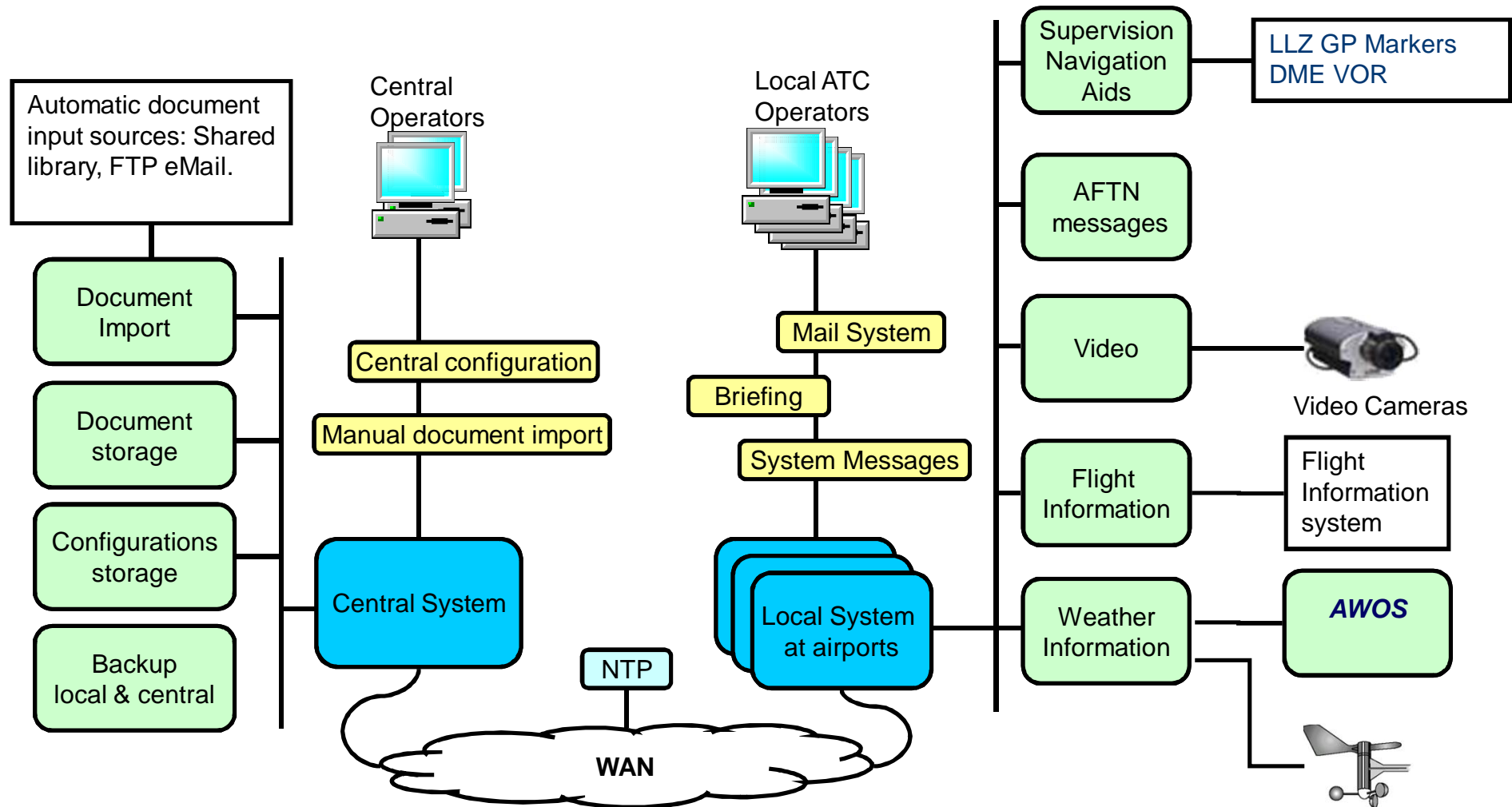
## Operating system independent

- Servers and clients is tested with:
  - Windows XP / 7 / 10
  - Windows 2003 / 2008 / 2012 Server
  - Linux RedHat 4 / 7 Enterprise

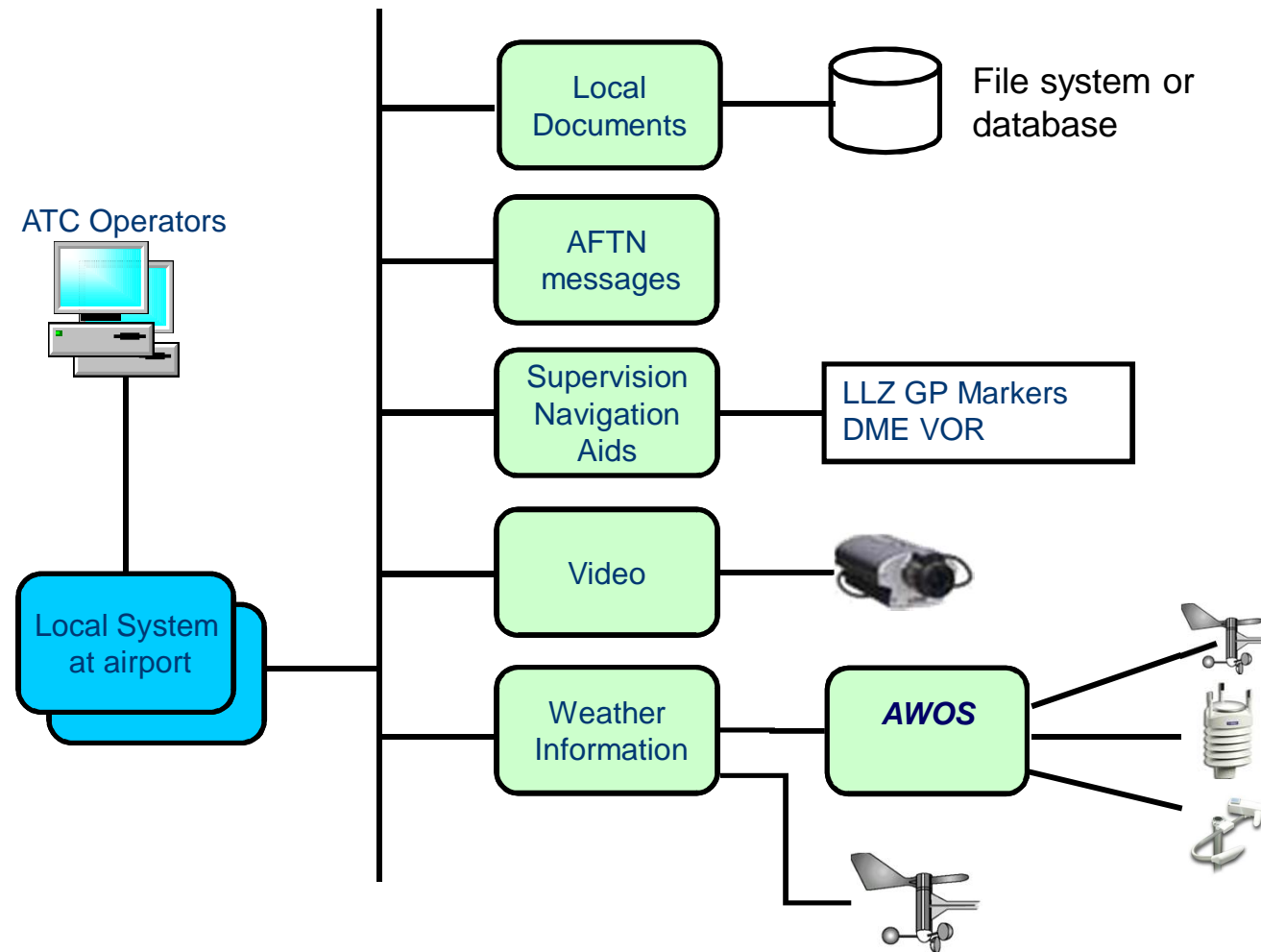
## Open standards

- TCP/IP, Transmission Control Protocol
- XML, Extensible Markup Language
- HTML, HyperText Markup Language

# Example of nationwide system



# Example of stand alone airport system



# IRIS in action...

Landvetter APP



Landvetter TWR





## IRIS in action...

Stockholm ATCC  
54 working positions



Malmö ATCC  
52 working positions







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