

***SPS Smoke Removal  
Control System Re-engineering  
STATUS REPORT***

by  
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# Outline

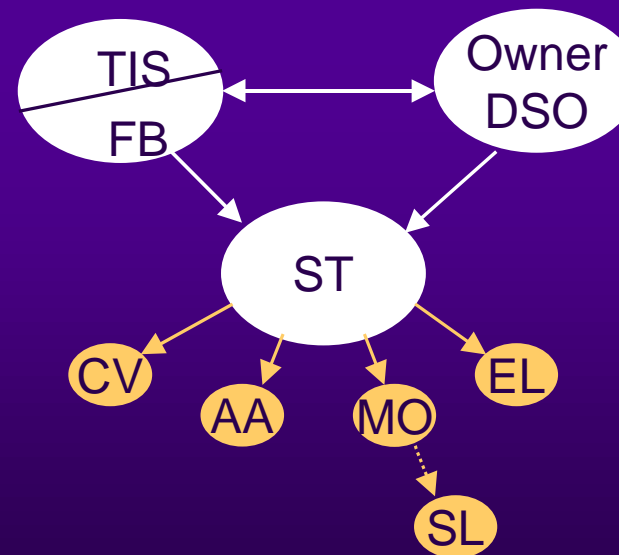
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- ◆ Introduction
- ◆ Status Report
- ◆ Schedule
- ◆ Conclusions

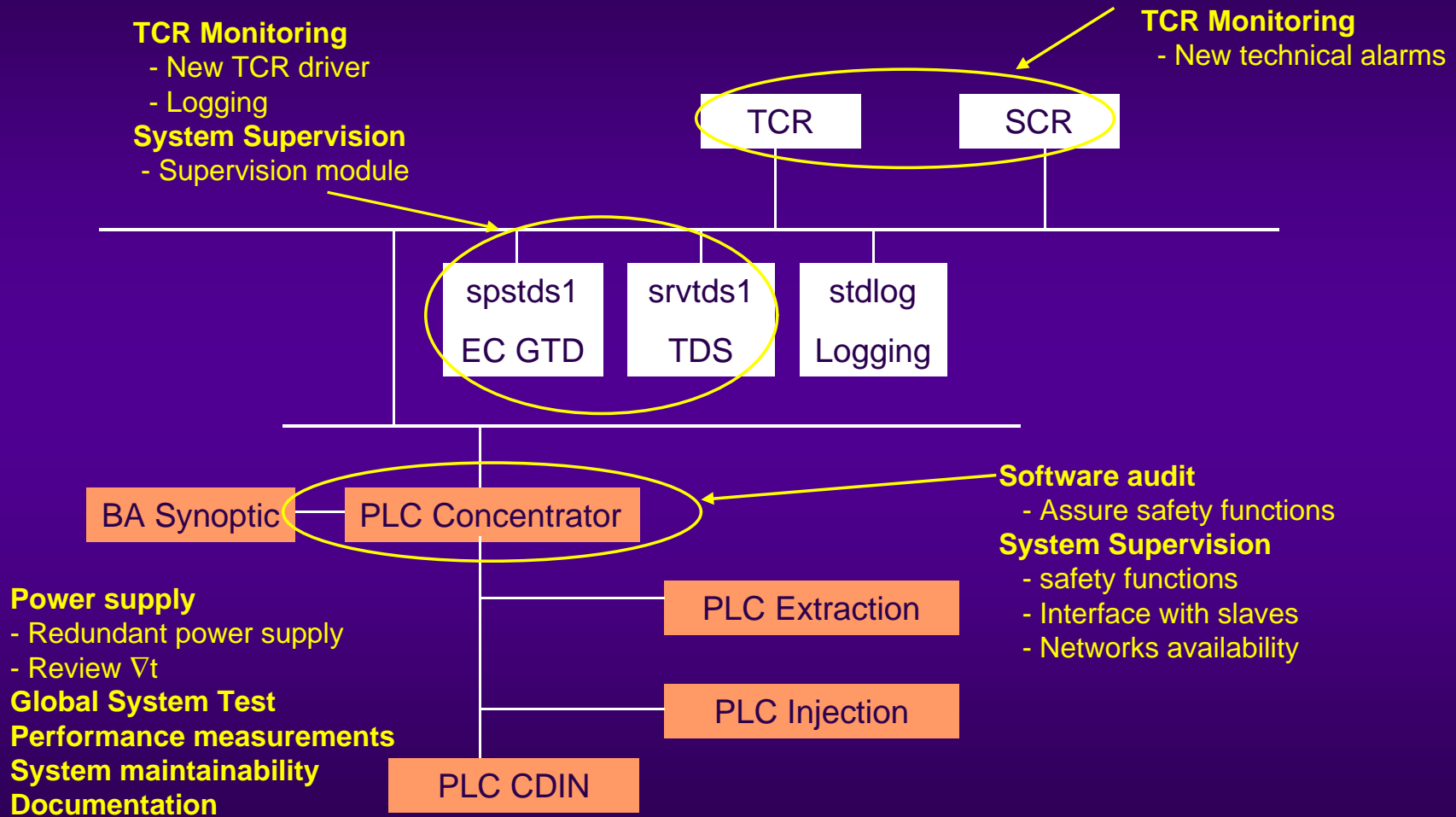
# Introduction

## Responsibilities, mandate

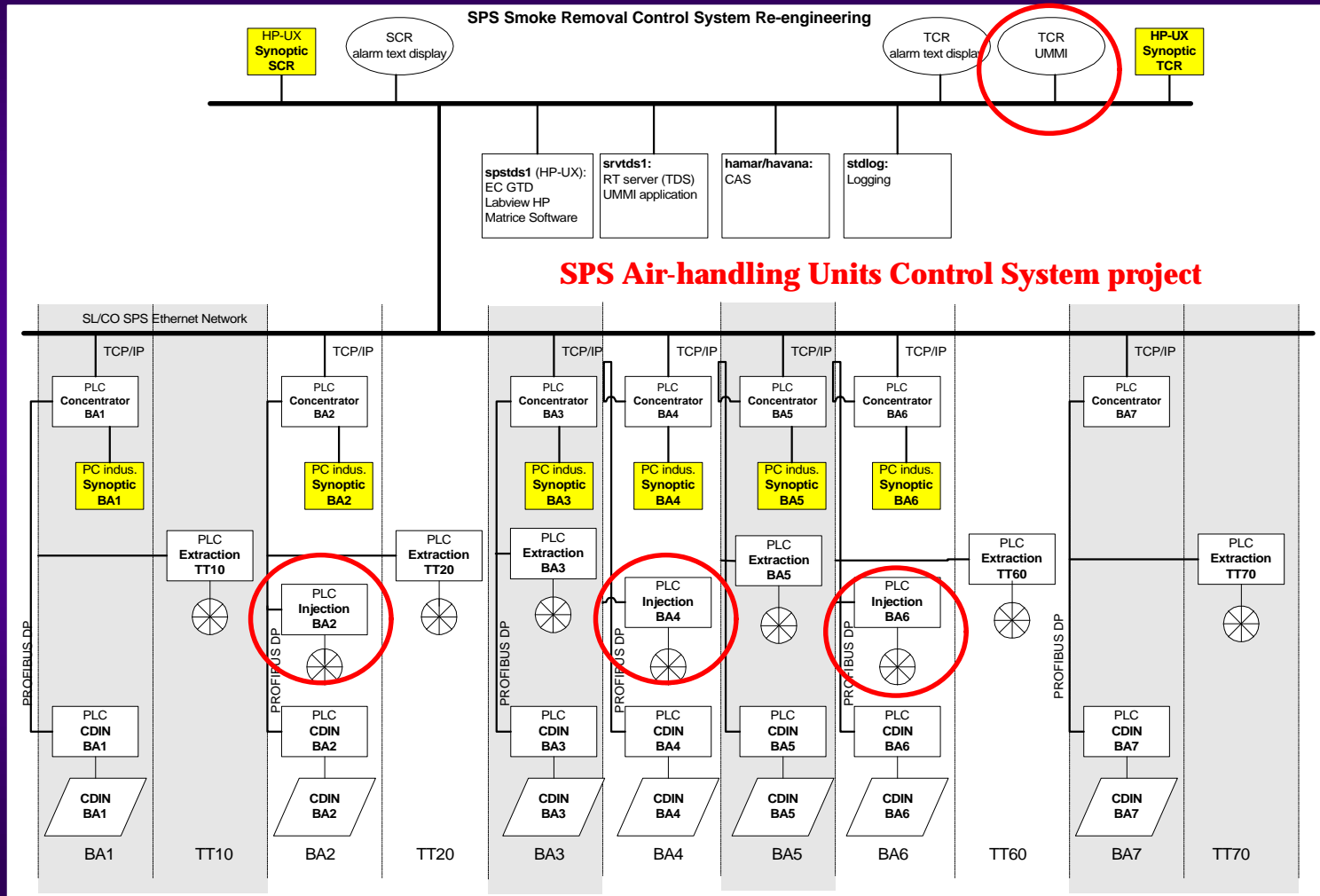
- ◆ Winter 2000 - SSU performance test not satisfactory
- ◆ 2000 - Mandate from A. Scaramelli to P. Ninin to perform the re-engineering of the SPS Smoke Removal Control System
- ◆ System responsibilities



# Introduction



# Introduction



# Status Report

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## ➤ TCR Monitoring

- **New communication driver to TCR**

**Under test**

## ➤ System Supervision

- **Autotests module (Watch-dogs)**

**Offer received**

## ➤ System Test

- **Acceptance test defined**

**Under approv.**

## ➤ System Performance

- **Performance measurements module**
- **Integration to the TCR environment**

**Offer received**

**Offer received**

# Status Report

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## Electricity

- Redundant power supply ✓
- Not cut by emergency stop ✓
- UPS installation Started

## System Maintainability

- Maintenance types and periods identified ✓
- Equipment responsible identified ✓
- Logging module Offer received
- System test platform Offer received
- Corrective maintenance procedures Open

# Status Report

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## 👉 Documentation

- **EDMS**

**Started**

**ST Division / Engineering / Control-Monitoring**

- **Web page**

✓

[http://stmoin.home.cern.ch/stmoin/projects/SPS\\_desenfumage/DEFAULT.htm](http://stmoin.home.cern.ch/stmoin/projects/SPS_desenfumage/DEFAULT.htm)

## 👉 Commands Redundant paths

**Open**

## 👉 Commands from SCR and TCR

**Open**



# Schedule

May						June
18	19	20	21	22	23	
30	7					
Labour D		CAS update	UPS	BA4 Validation	ACCEPT.	
	Smart Gateway (no CAS)	CAS update (with CAS)	Ascension			
			BA4 Validation	Equipment Tests		

SPS Security Patrol

09.-11. May: TCR driver test without CAS

14.-17. May: CAS update

18. May: TCR driver test with CAS

25.-31. May: Ventilation BA4 validation  
Ventilation acceptance test

06. June: Smoke Removal Control  
System integration and acceptance test.

21.-23. May: UPS installation

# Conclusions

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## ➡ Goal

- Overall system should work in case of incident

## ➡ Several improvements done

- TCR new driver
- Electricity revised
- Documentation and tests
- New air injection units (SPS Air Handling units Control system project)

## ➡ Full test with firemen when the ventilation is ready

- Complex system and mandatory to be globally tested

# Conclusions

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## Open issues

- ◆ **Global responsible of the system for next years ?**
- ◆ **Adequate project name ?**