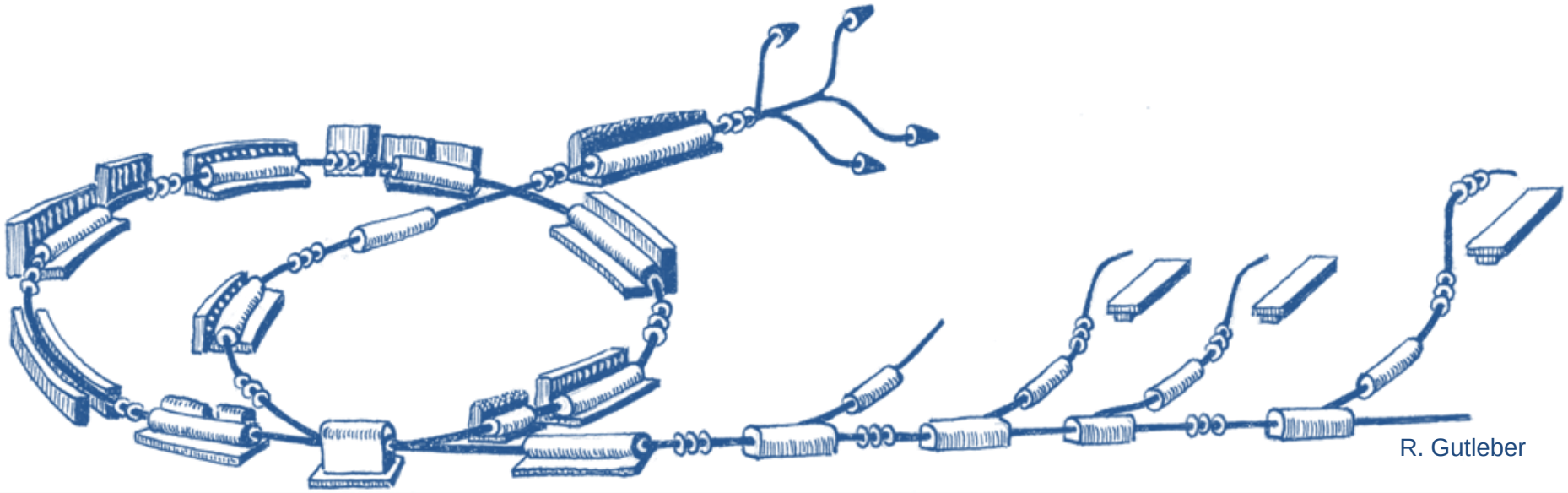
ebg MedAustron

WP CO

Column Status and Progress

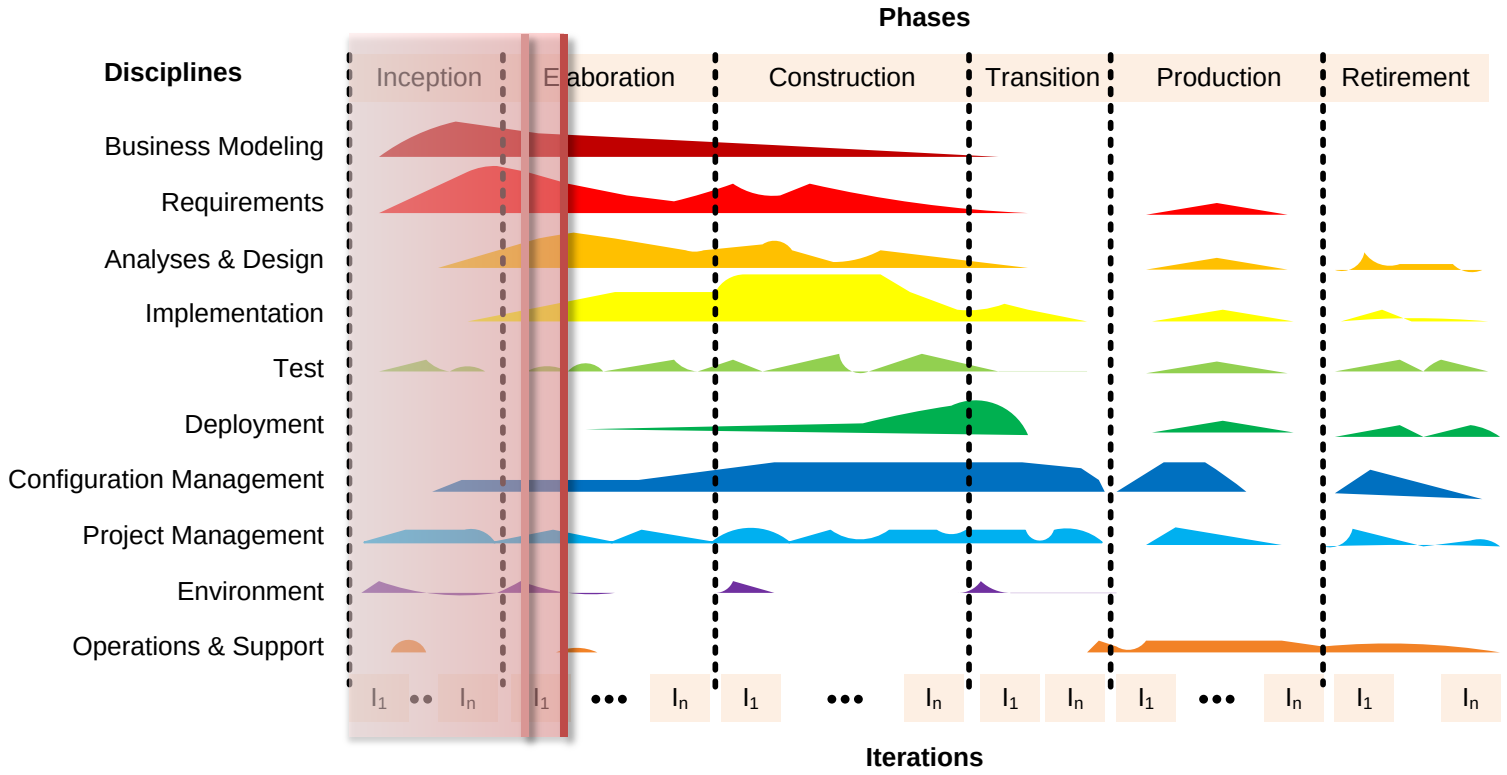
October 7th, 2010

Johannes Gutleber



R. Gutleber

Current Phase (Elaboration)



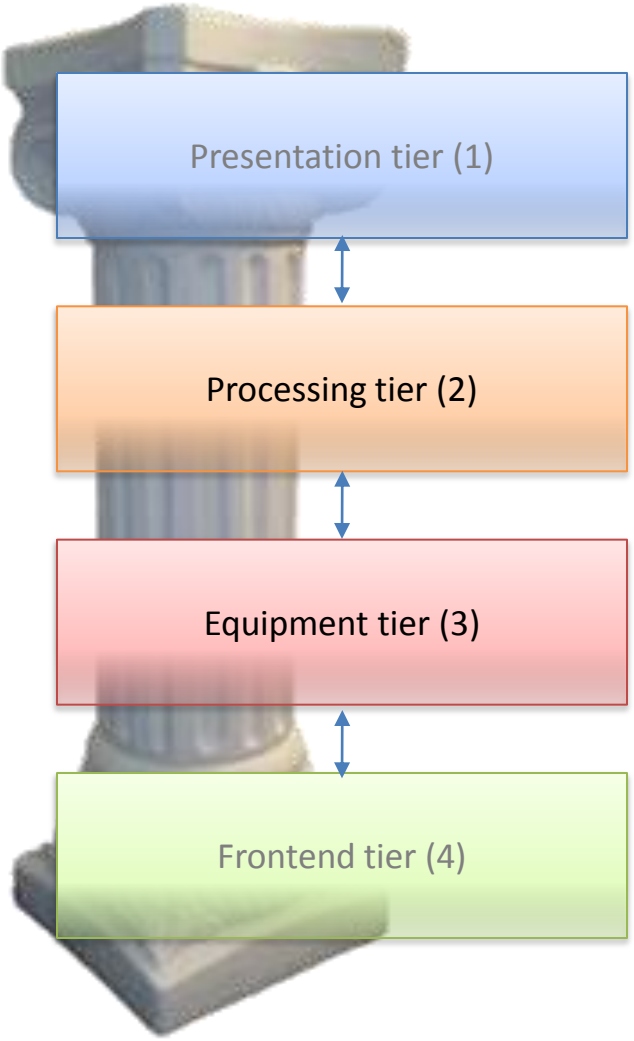
- Focus on **requirements, architecture, design**
- **Prototype** implementation and technology evaluation
- Prepare **development setup**

Goals for 2010 (Reminder)

- Complete **architecture** and **implementing** first **components**
- Complete and **MTS** design and demo core functionality
- Complete **PCC** design and demo core functionality
- Make PCO **FED** ready for production
- Elaborate **ProShell** design and API skeleton
- Demonstrate **use of RMS**, database filler, PVSS filler
- Have development infrastructure (HW, SW) operational

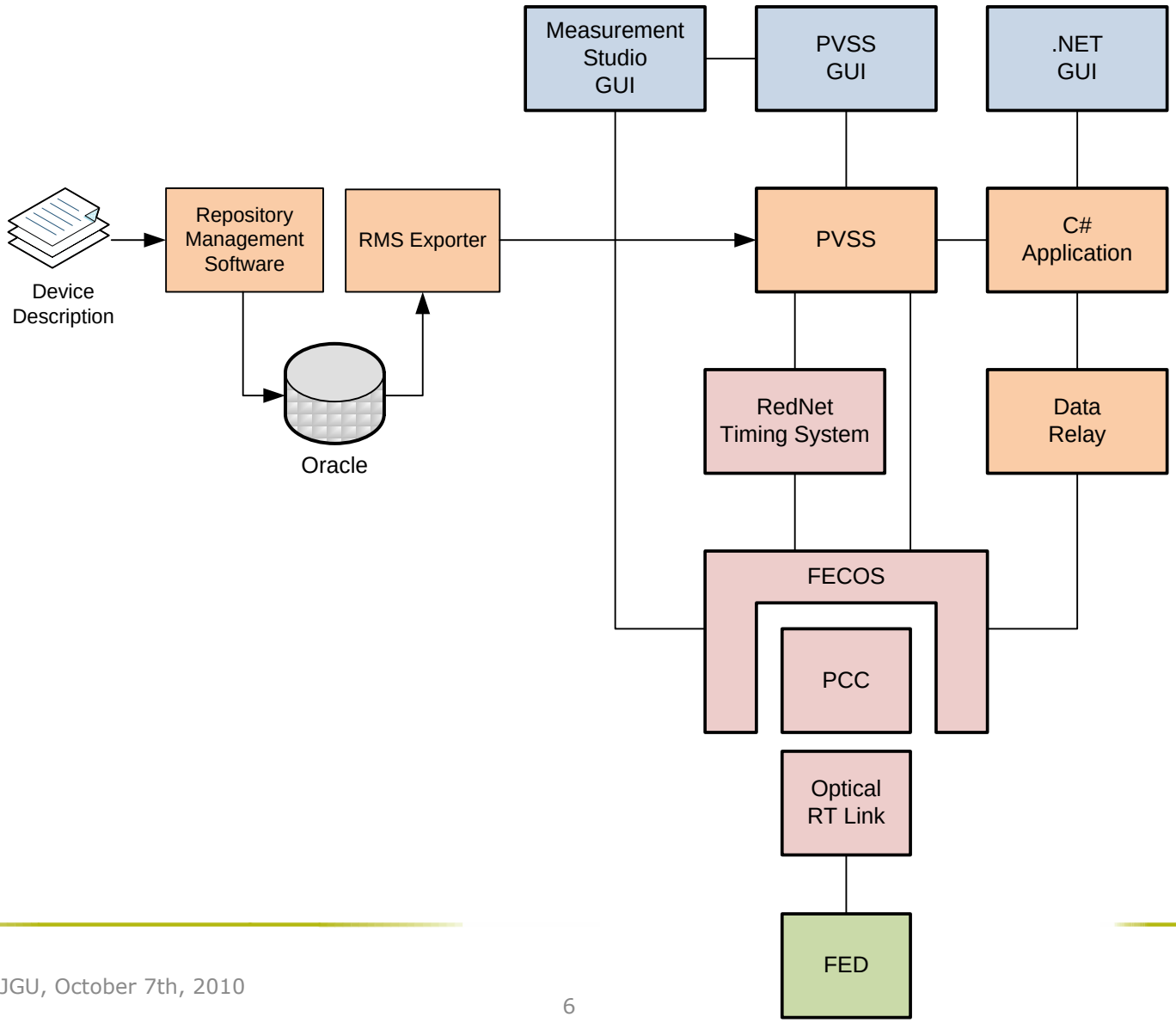
MACS COLUMN 2010

Column Overview

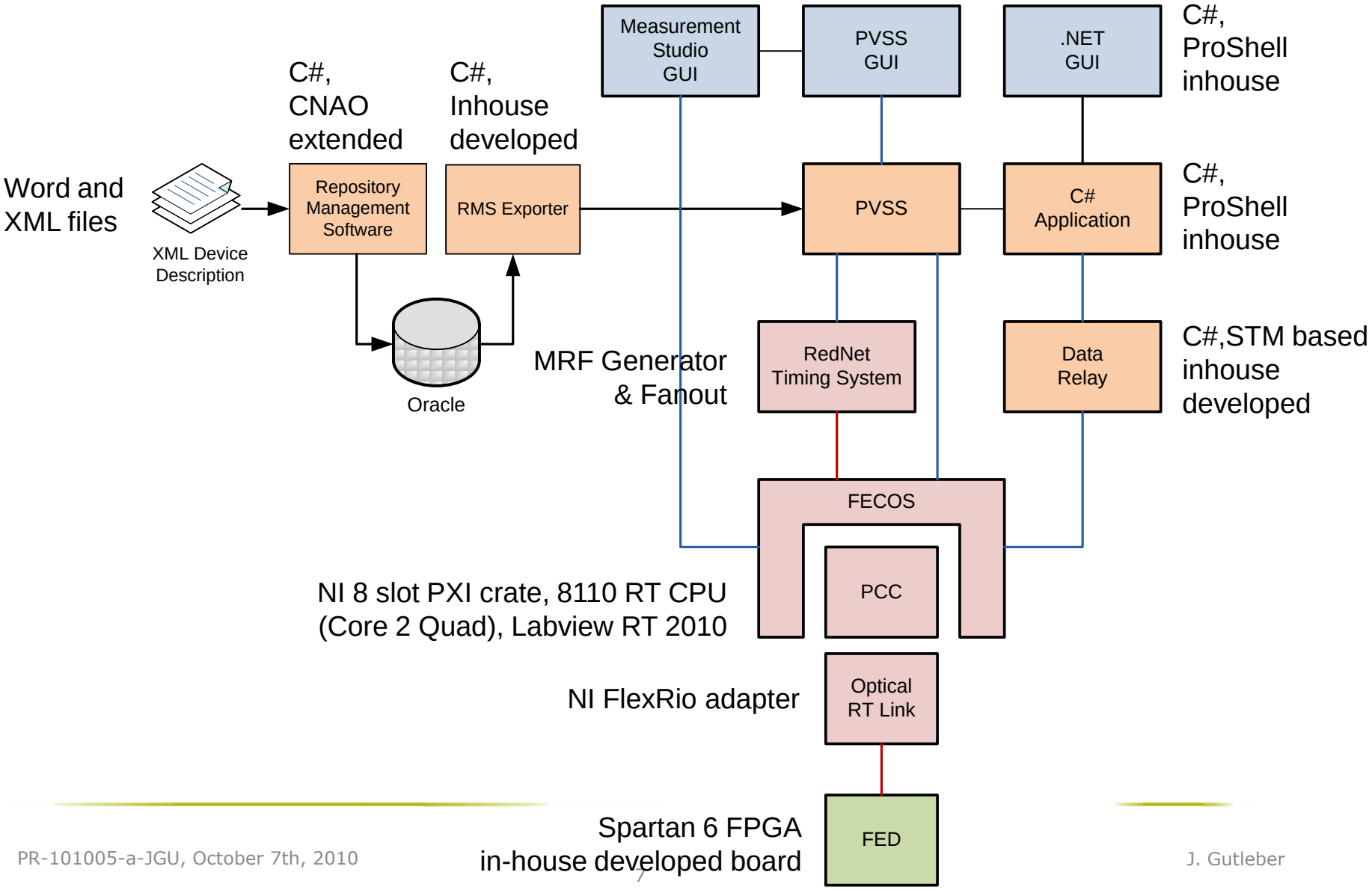


- Functional **vertical cut** through the control system architecture for
  - confirming technology choices
  - Refining the design
  - Improving project cost/time estimate
  - Providing users with a working infrastructure skeleton
- To be **replicated** for each subsystem
- Leads to a **scalable** system
  - In terms of performance
  - In terms of management

Column Scope



Column Scope

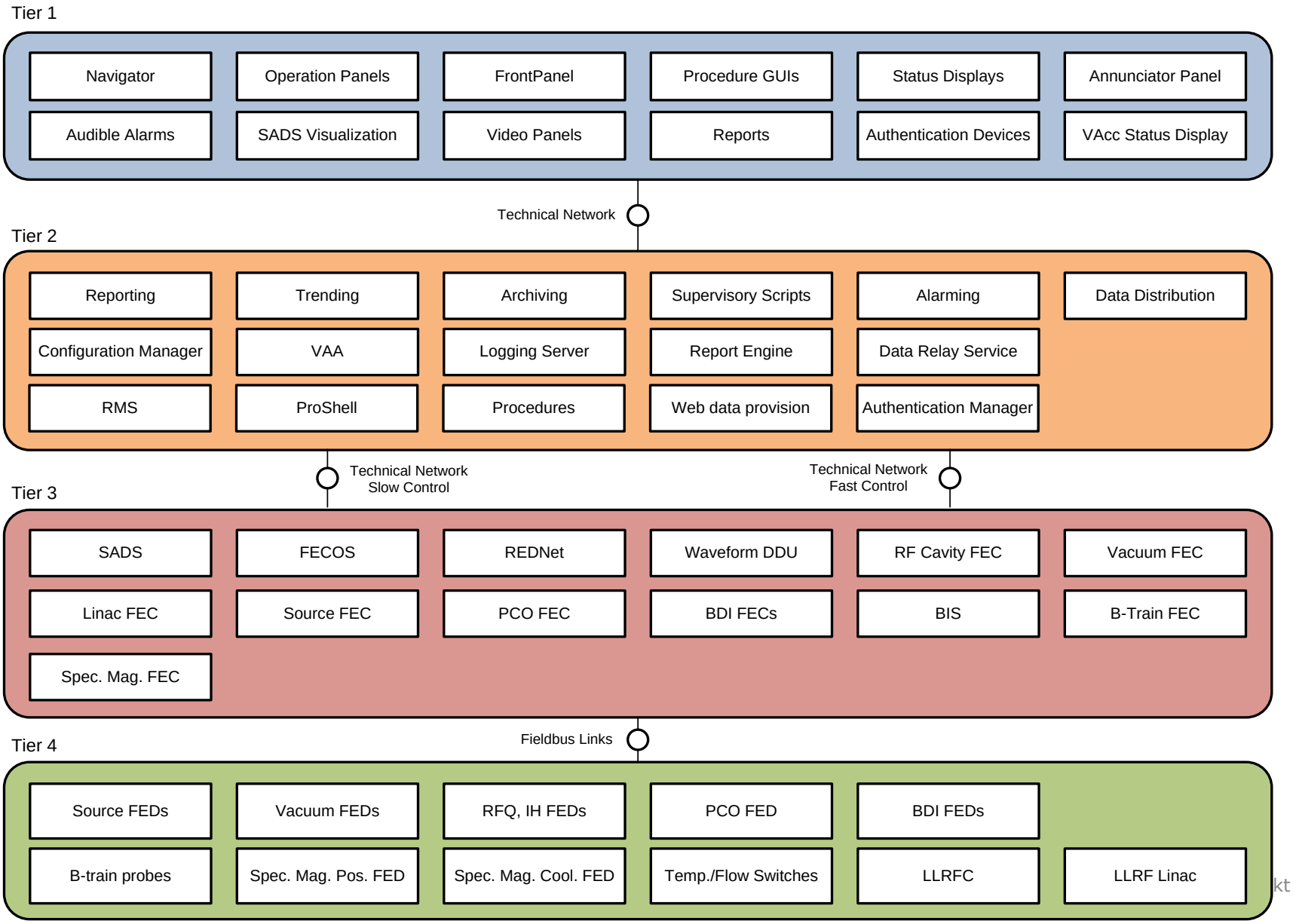


STATUS REPORT

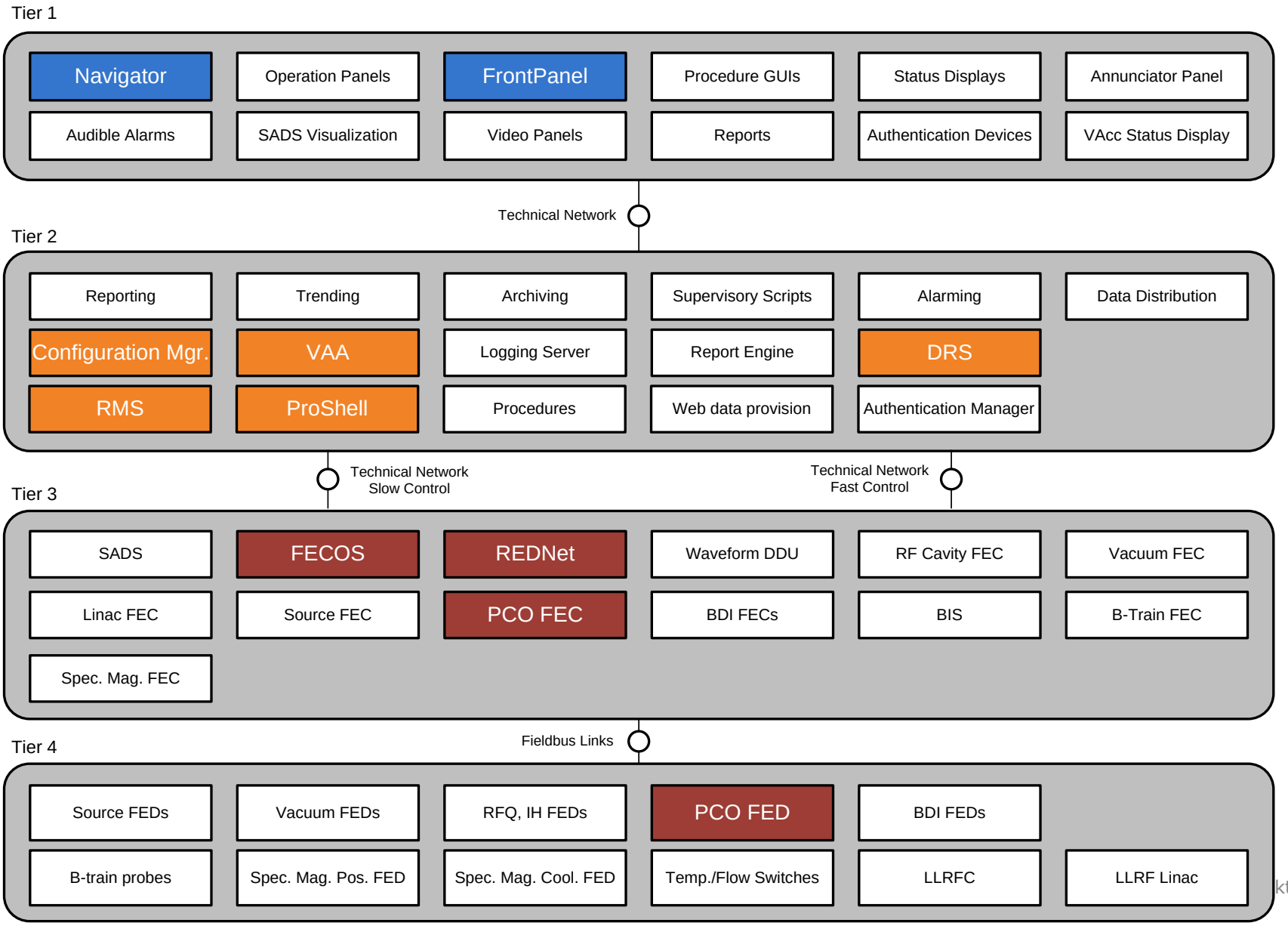
Plan Adaptations

- Provide **FECOS earlier than foreseen** (January 2011)
  - Beam Diagnostics and Instrumentation
  - Suppliers to implement with FECs with the framework
- SADS postponed
  - lack of manpower
- **ProShell**
  - Provide showcase earlier than foreseen (January 2011)
  - ProShell design slowed down due to lack of manpower
- Beam Interlock System technology evaluation
  - slowed down due to lack of manpower

Architecture Overview



Current Activities



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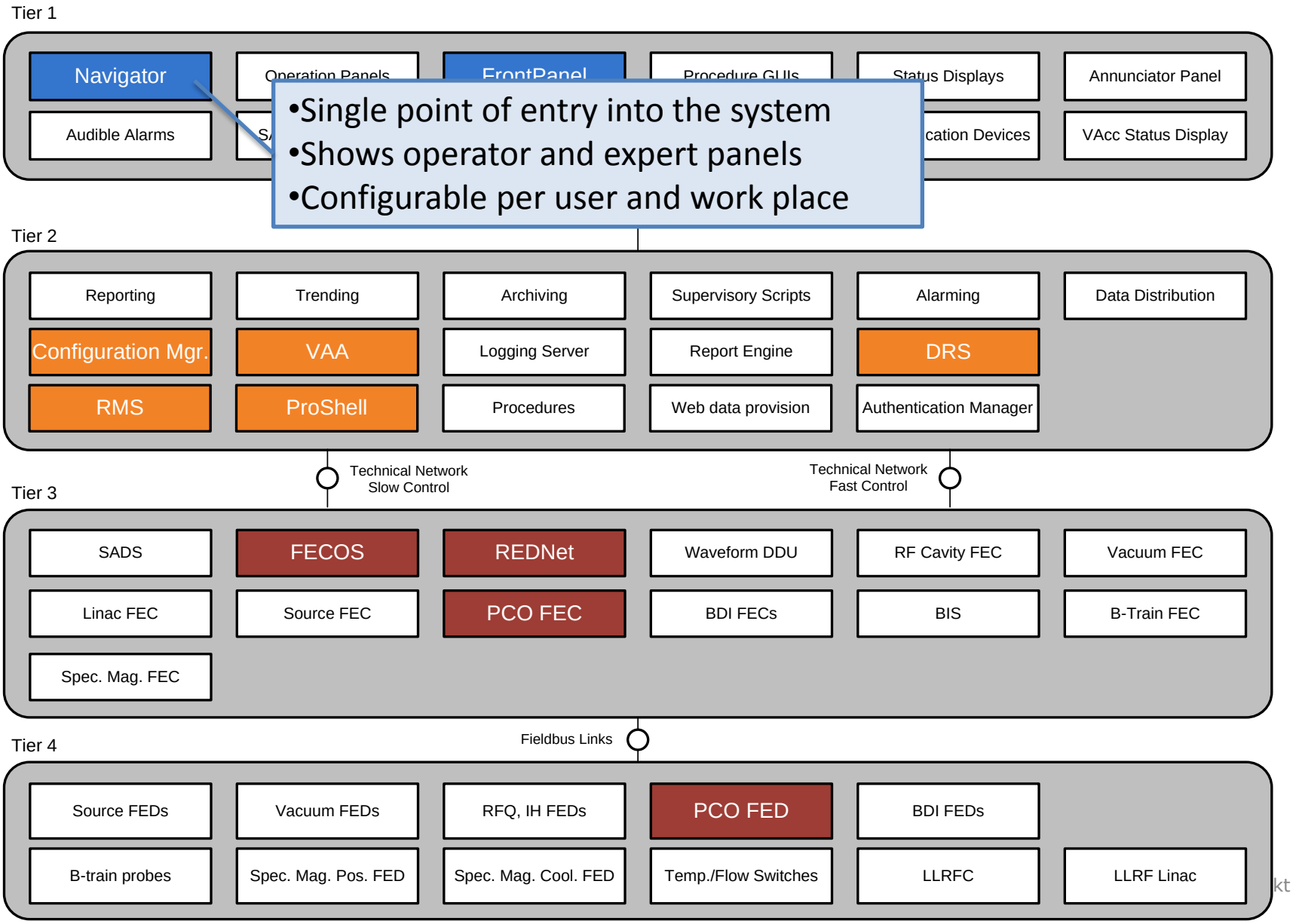

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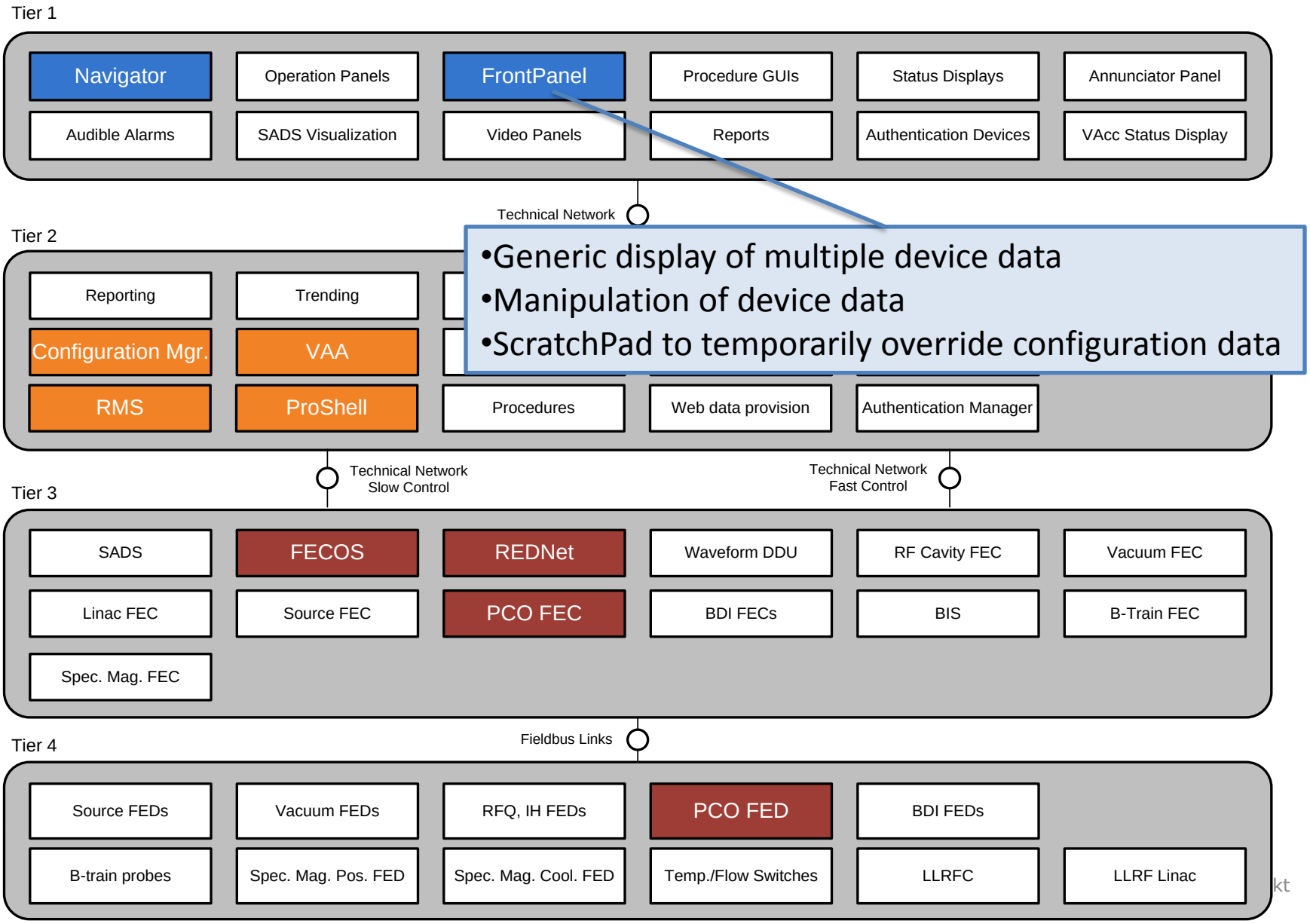

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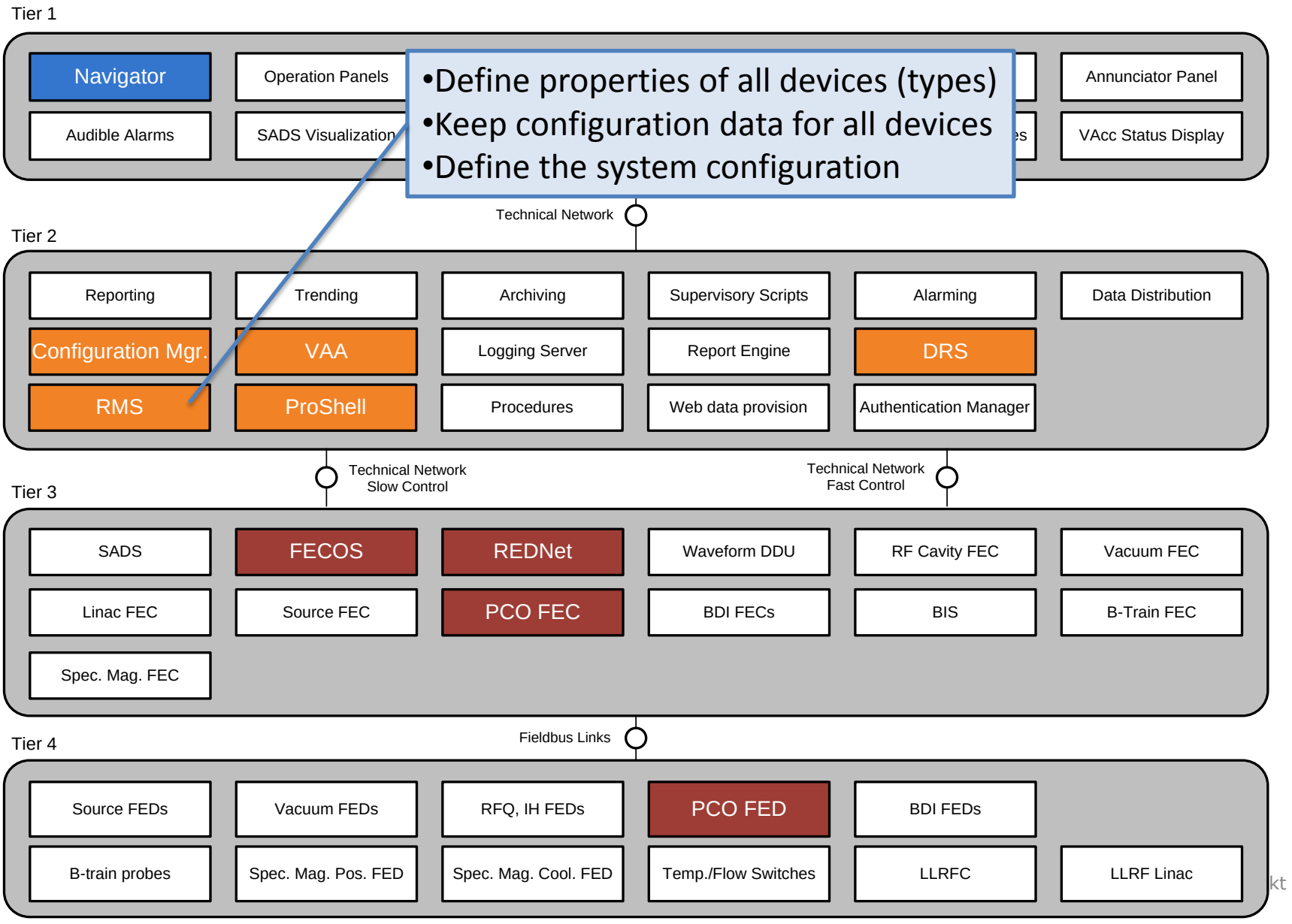

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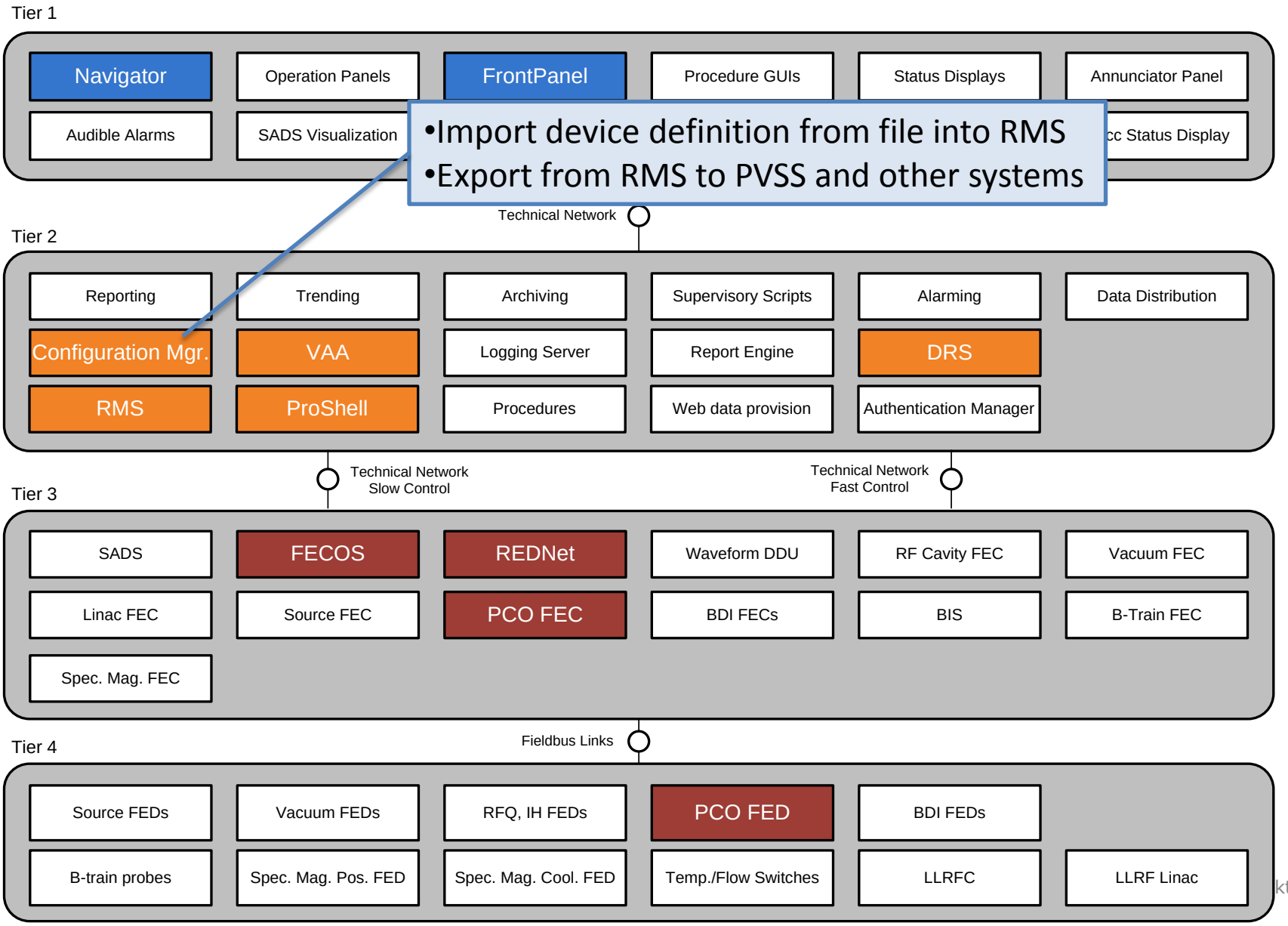

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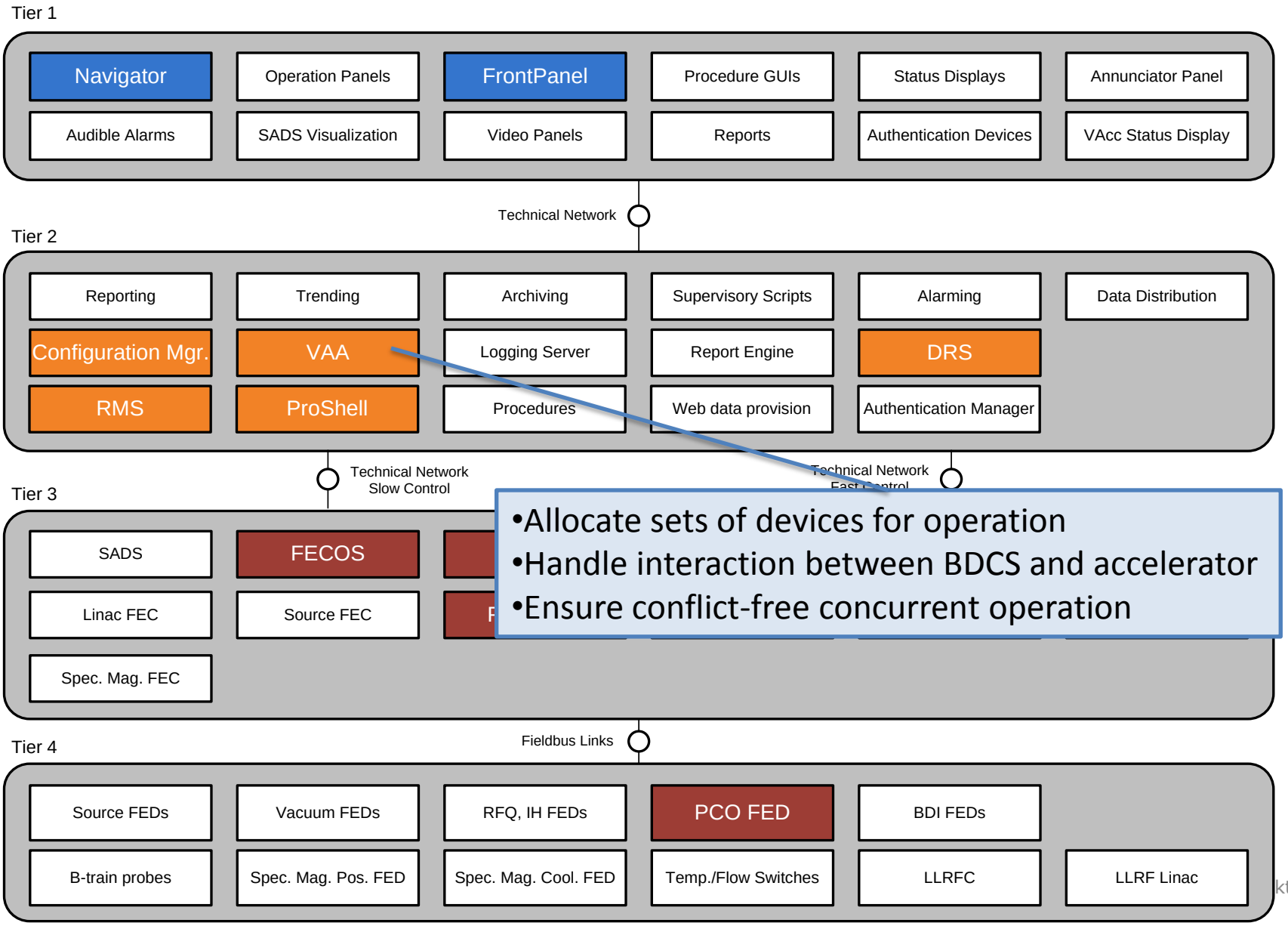

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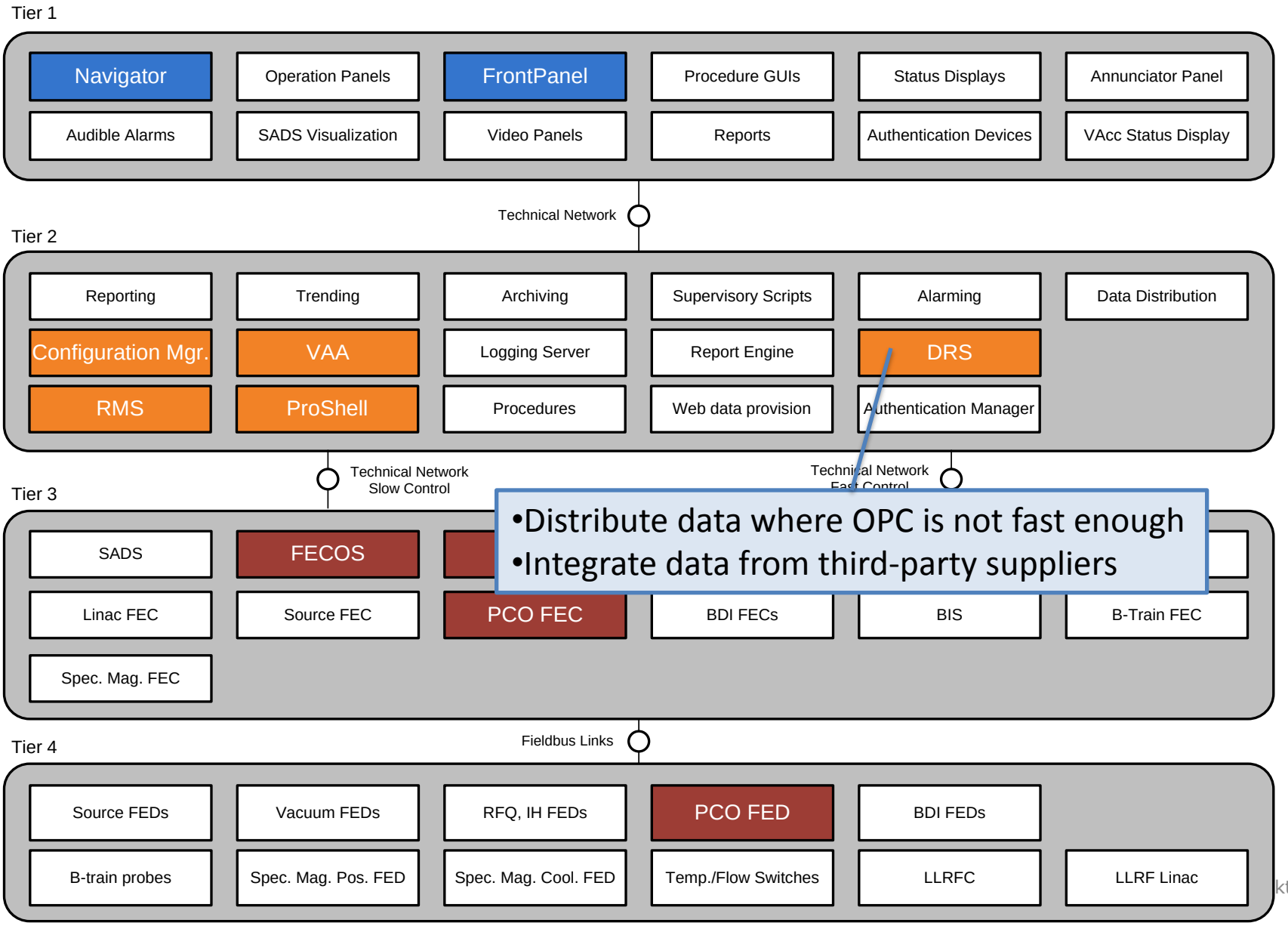

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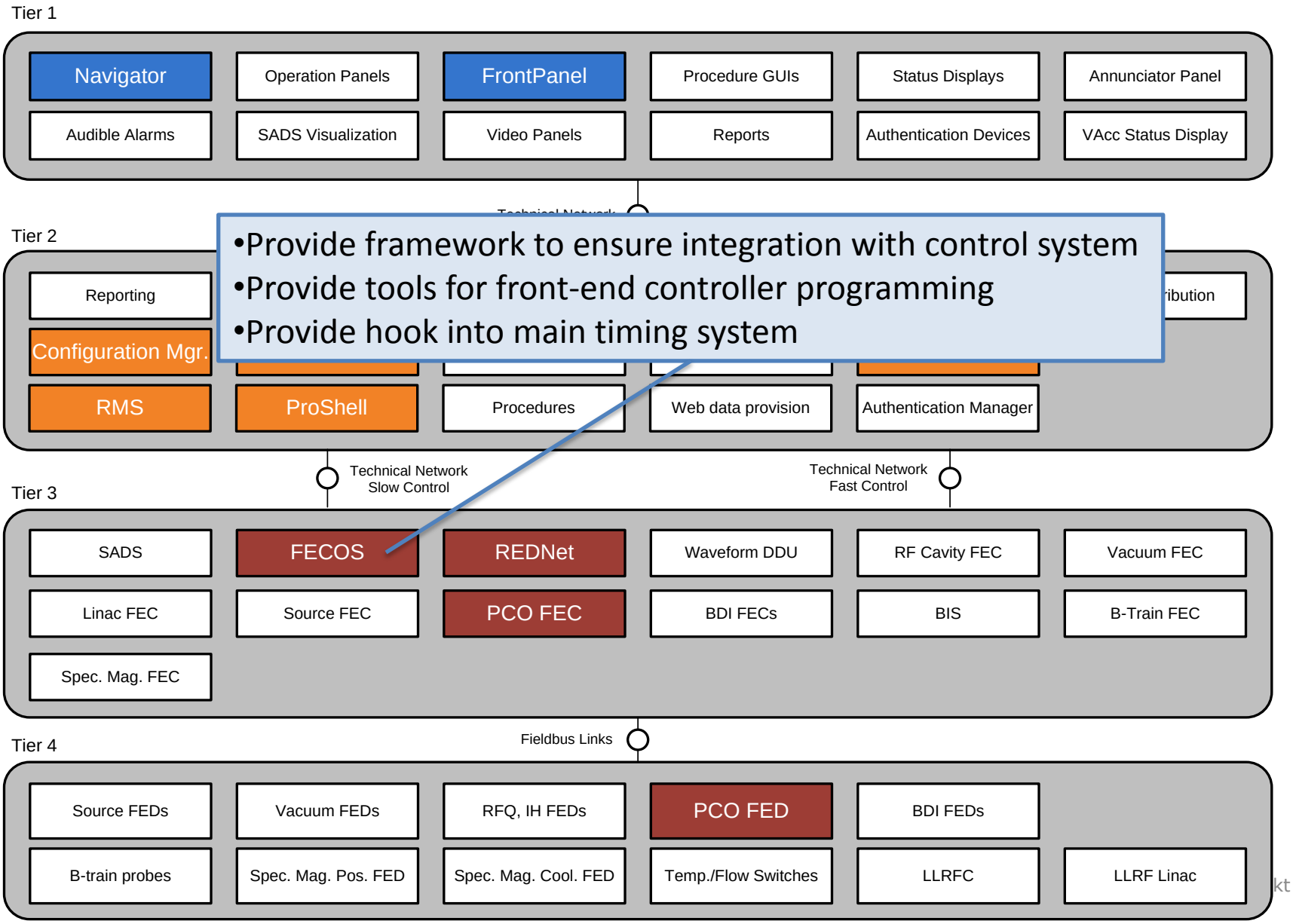

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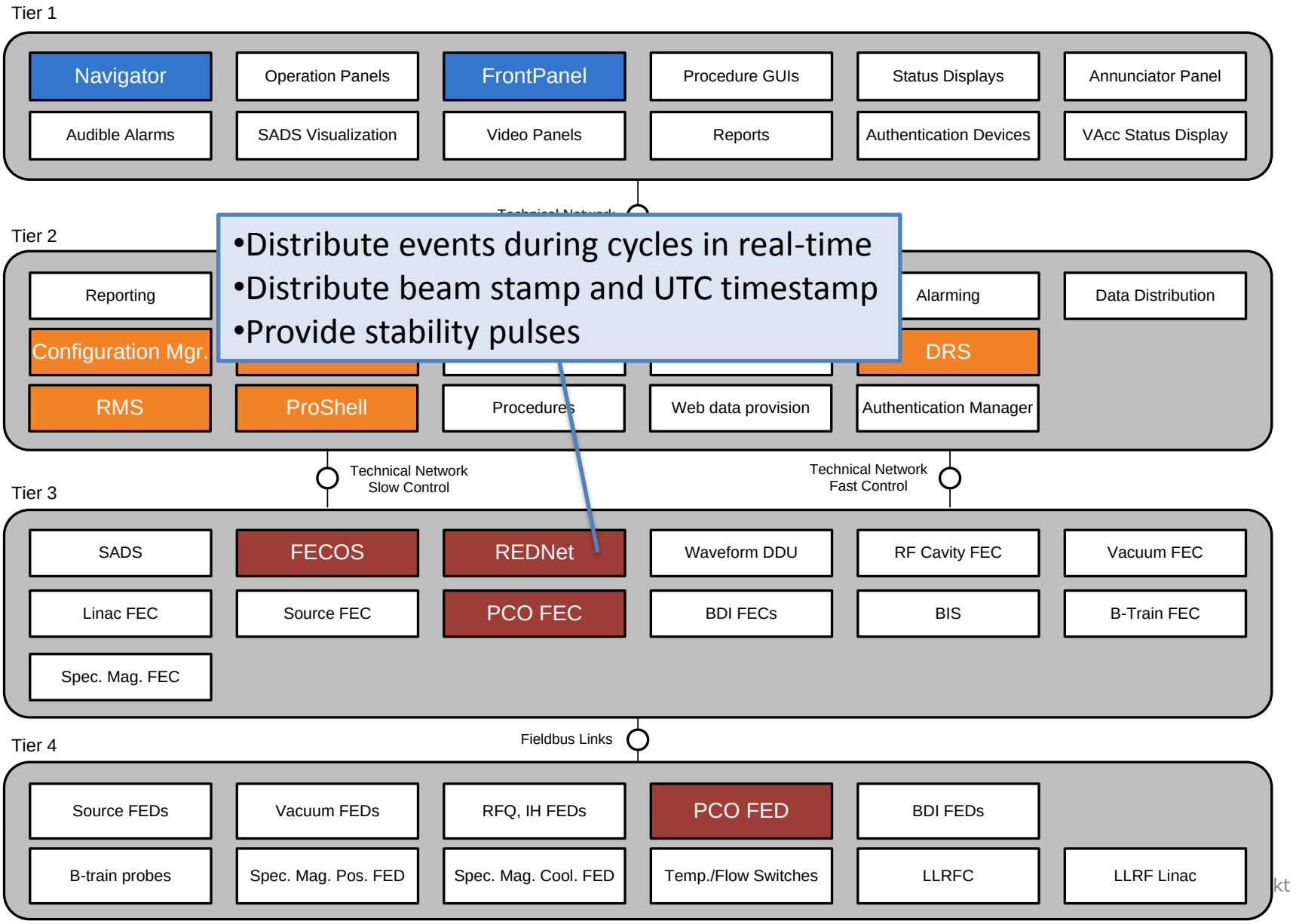

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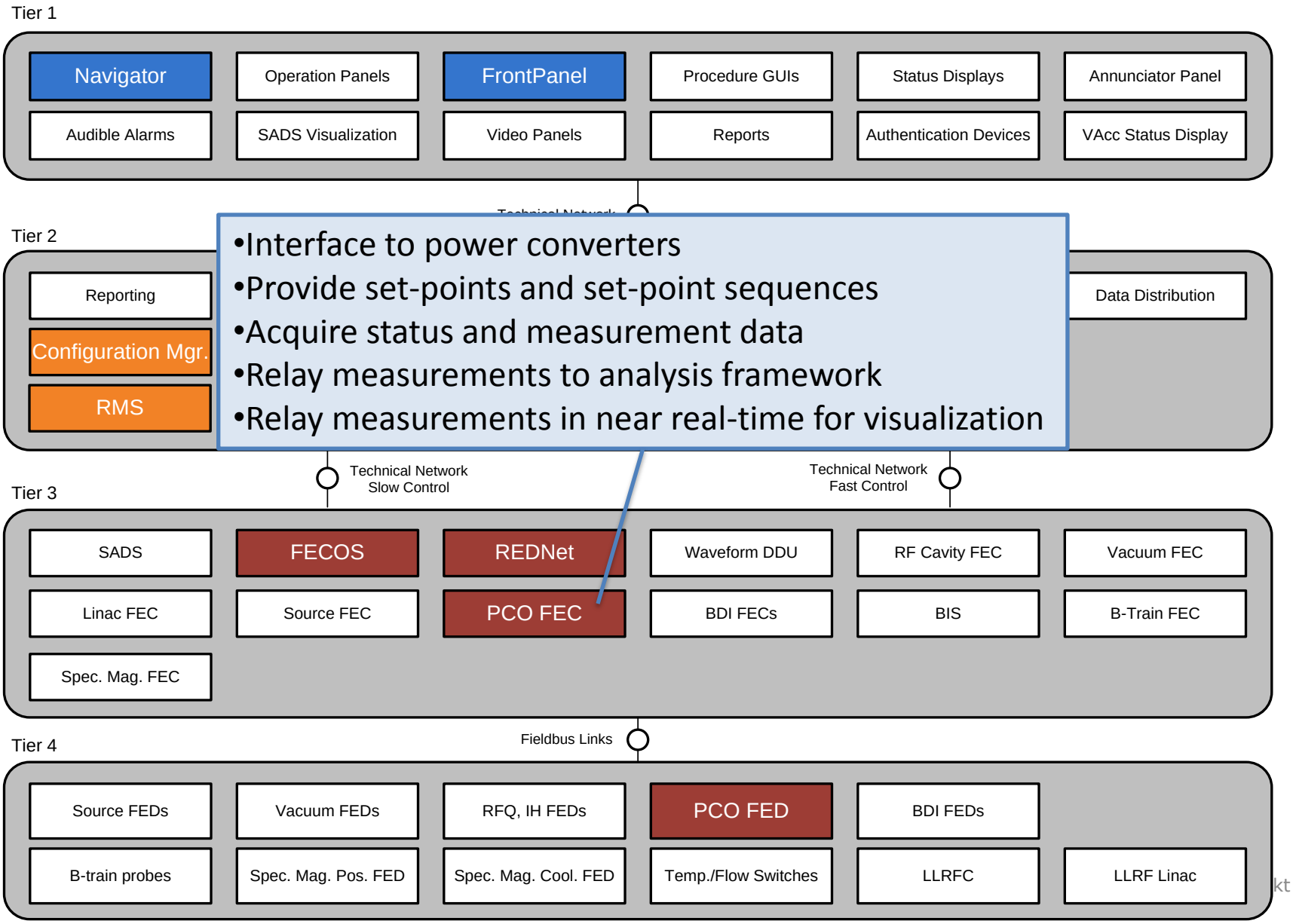
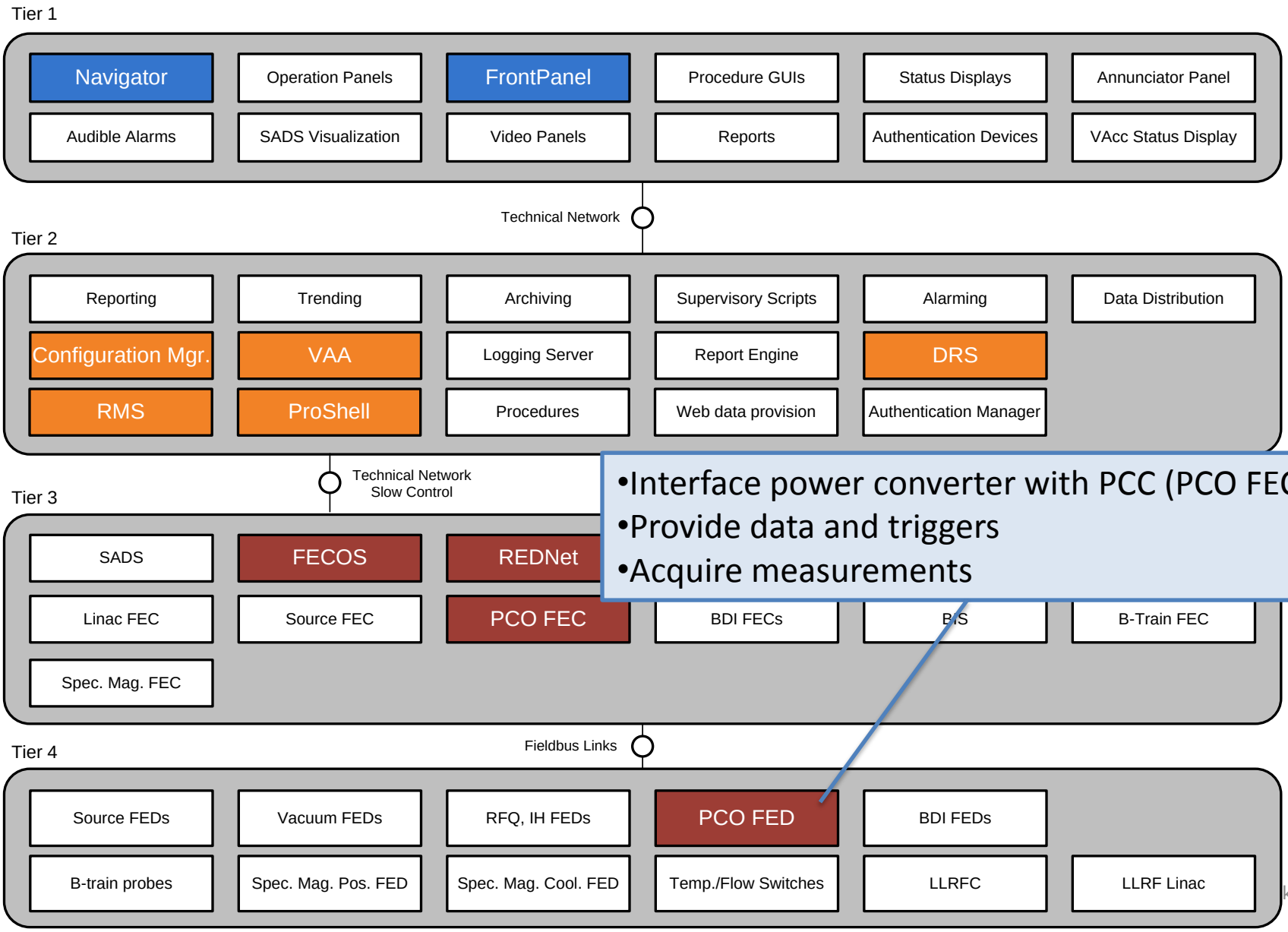
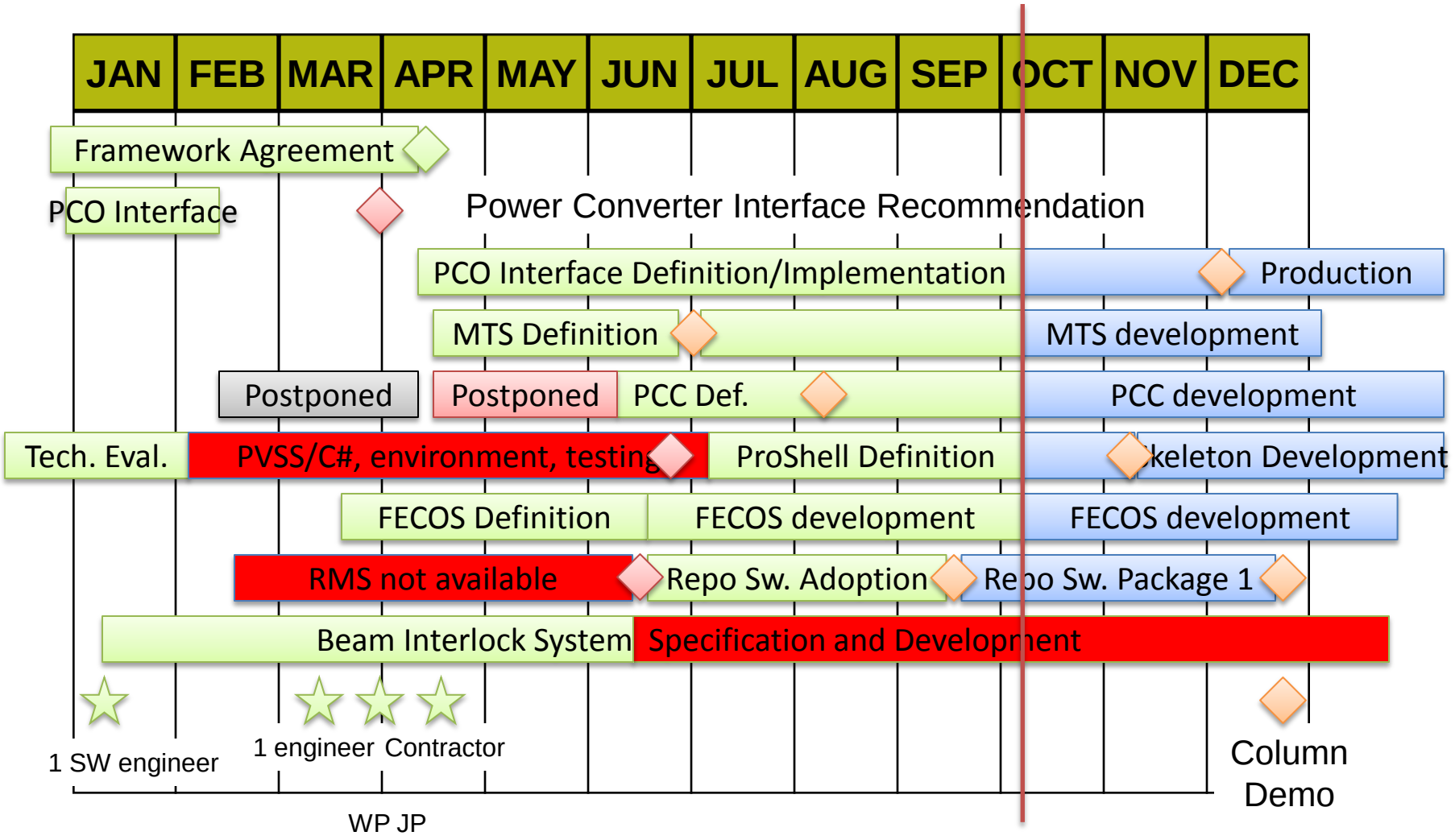


Current Activities



- Interface power converter with PCC (PCO FEC)
- Provide data and triggers
- Acquire measurements

Column Time Frame 2010



SUMMARY AND OUTLOOK

Summary

- Ahead of Time
  - FECOS development and documentation
- In Time
  - Main Timing System
  - Power Converter Controller
  - Power Converter Controller real-time link
  - ProShell development
- Behind Schedule
  - Beam Interlock System
  - Using RMS (database entry, integration of GUI in PVSS)
  - ProShell design

Outlook

- Presentations should clarify where we are
  - Identify showstoppers
  - Where do we lag behind
  - Where are we in time
  - Where are we doing well!
- Identify synchronization points with other WPs
  - What are WP plans
  - Where do they stand
  - Need to elaborate common schedule