



AB/CO review



CERN Control Centre

D.Manglunki / AB-OP 19.09.2005

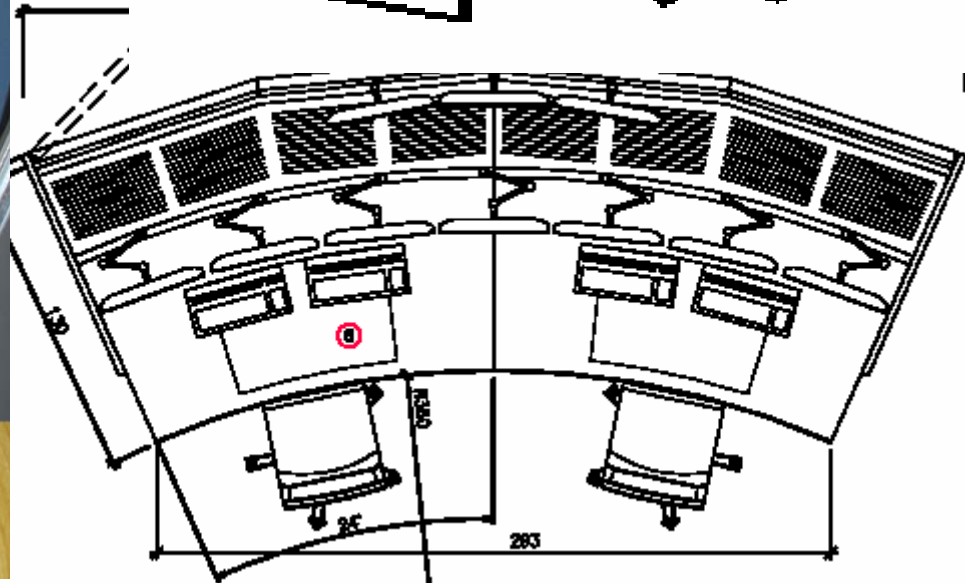
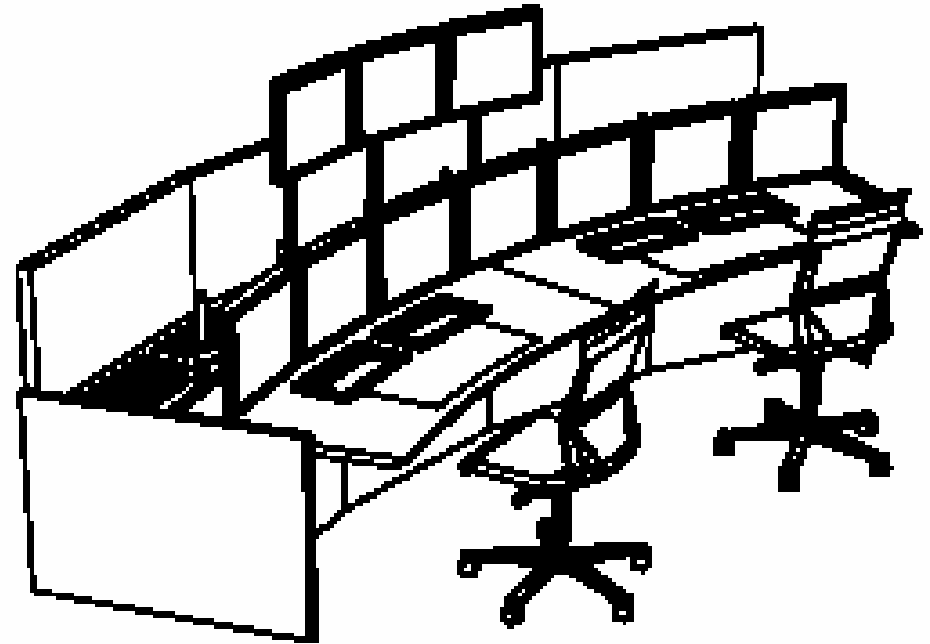
- Introduction: Presentation of the project
 - CCC-WG
 - Staff
 - Consoles and room layout
- A few issues concerning CO
 - Fast analogue signals
 - Video signals
 - Communications
- Conclusion: Wishful thinking

- Composition:
 - R.Bailey AB/OP
 - J.L.Baldy TS/CE
 - B.Frammery AB/CO
 - D.Manglunki AB/OP
 - R.Saban TS/HDO
 - L.Serio AT/ACR
 - P.Sollander AB/OP
- Chamonix 2004:
Operate “Anything from anywhere”

- Regime: 12 people on shift
 - 7 Accelerators: 1 PSB, 2 PS, 2 SPS, 2 LHC (1 Tech + 1 EiC)
 - 2 TI
 - 3 Cryo
 - ... plus numerous specialists!
- 2006 startup: 6 people on shift
 - 5 Accelerators: 1 PSB, 2 PS, 2 SPS
 - 1 TI
 - ... plus numerous specialists!
- Estimated average population ~30
 - Room dimensions > 600 m²
 - Special care for acoustics

CONSOLES

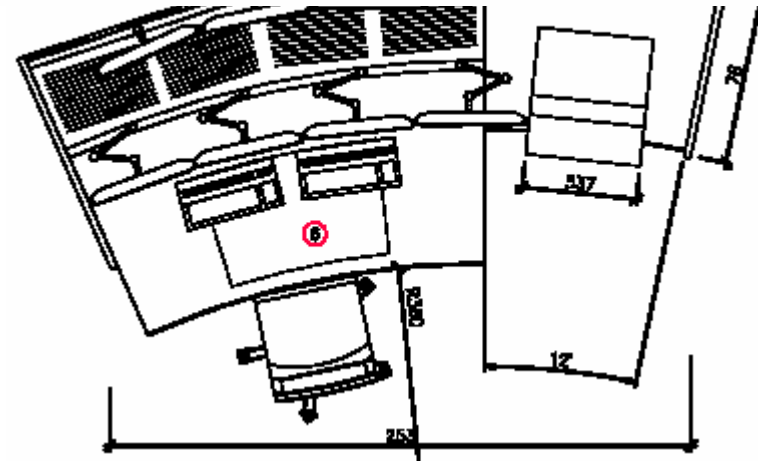
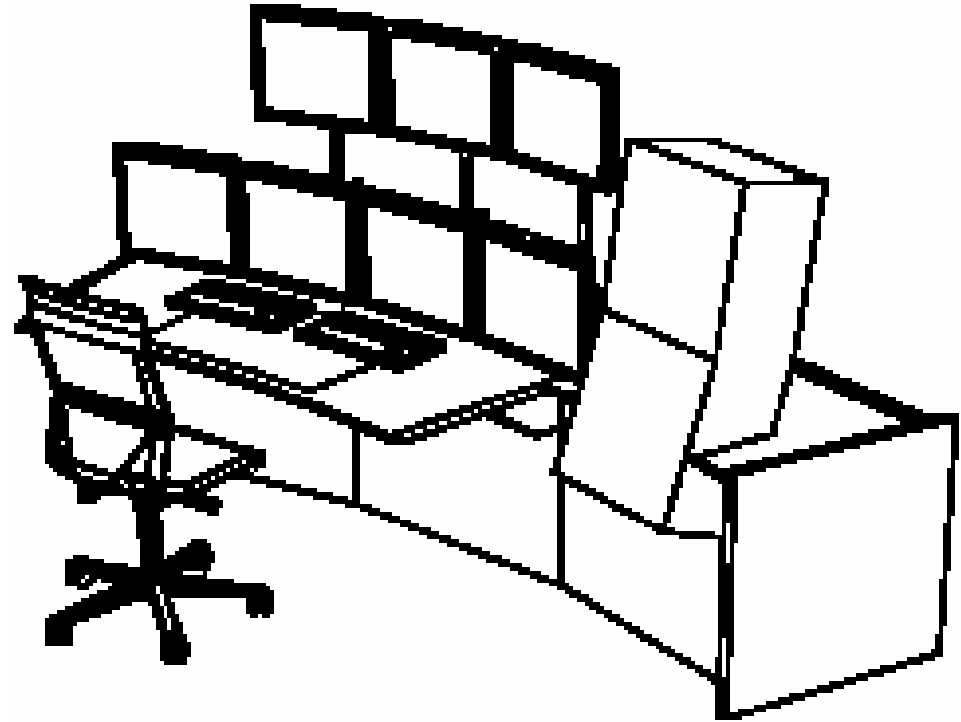
- 3 screens/workstation
- For each 2 workspaces:
 - 1 admin PC
 - 3 fixed displays



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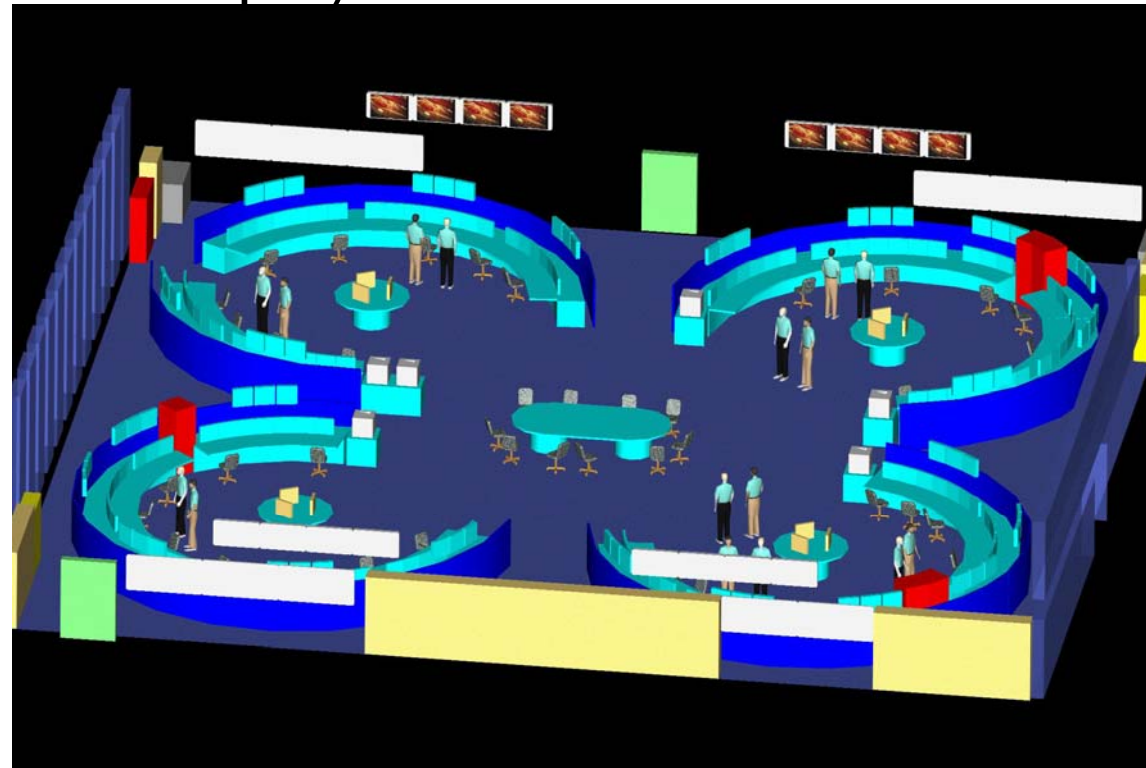
Special case of ACCESS CONSOLES

- 19" rack for keys and specific HW
- Allows operators veto ("inhibit")
- 4 screens
- Includes intercom



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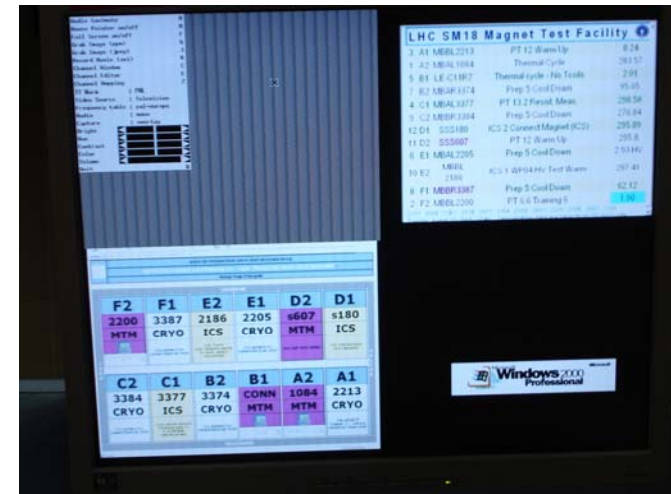
- 39 consoles distributed over 4 islands
 - TI, PS complex, SPS, LHC
 - Cryogenics split between TI & LHC
- 3 Access control cabinets
 - PS complex, SPS (2 racks in 2006), LHC
- 4 x 4 giant fixed displays on walls



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- Needs
 - Quick patching/repatching
 - Quasi-realtime processing (FFT...)
 - Special display modes (i.e. mountain range)
- Project by J.Kuczerowski & R.Steerenberg
- Based on Acqiris modules
- Integration into OASIS for display
- Use of LabView for quick modification
 - Cross fertilisation of 2nd job
 - Support team exists within AB/CO

- Vistars
- State of machine parts
- Special processes (i.e. batch compression)
- Losses patterns
- Beam screens
- Need for splitting screens



- Phone based global communication system
 - IP Touchphones + alarms server
- Pressure from users to keep legacy intercoms
 - IT/CS interfaces PS complex intercoms & public address
 - SPS intercom historically in AB/CO



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- 2006 startup
 - with 6 different control systems:
PS complex, SPS, LEIR/LHC, TI, Cryo, SC/RP
 - managed by 3 different groups:
AB/CO, TS/CSE, SC/RP
- Now that we have one control room...
will we have a single control system in a finite time?