

# New Furniture for the DESY Accelerator Control Room.



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**New Furniture for the DESY Accelerator Control Room**

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Physical Map of the World, April 2007

AUSTRALIA  
Independent state

Dominion  
Dependency or area of special sovereignty

City / ADMRES  
Island / island group

Capital  
★

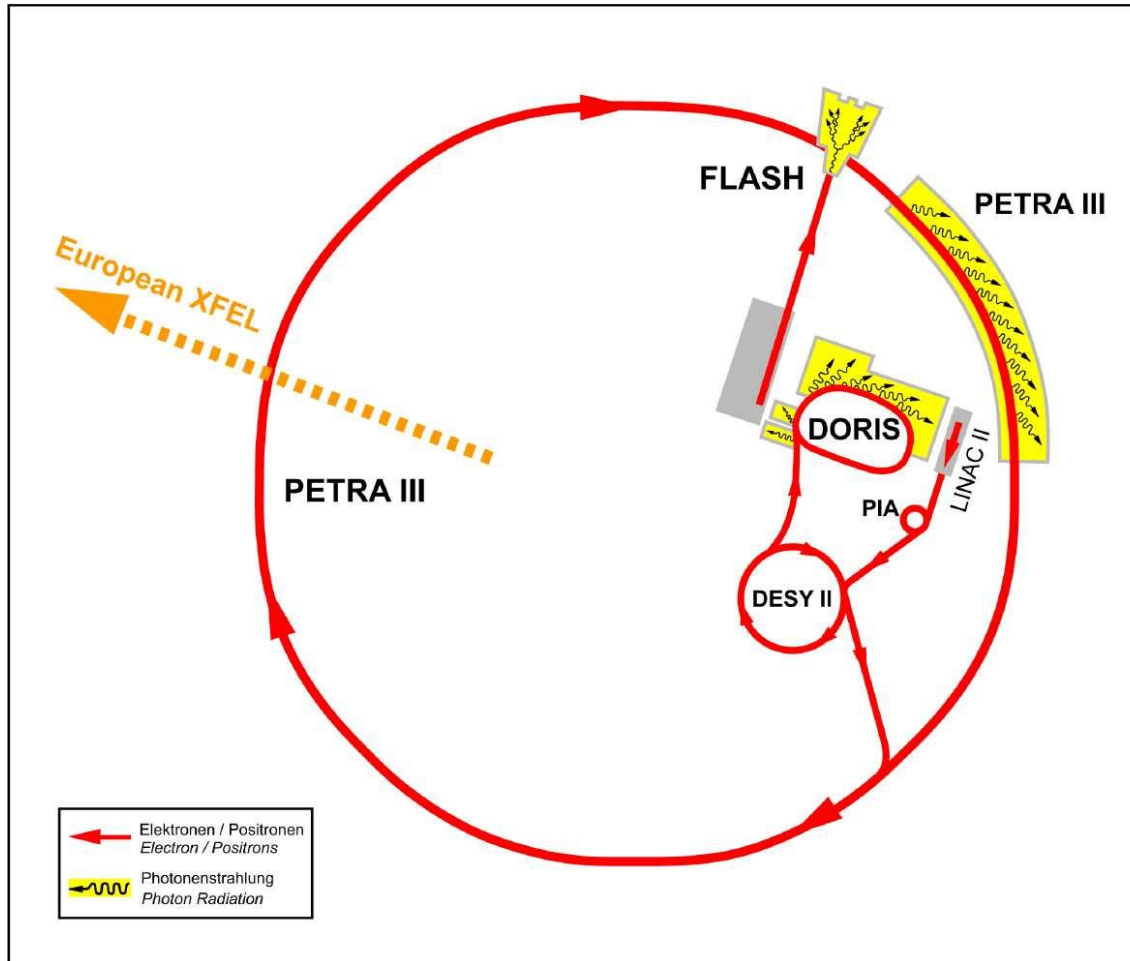
Scale 1:10,000,000  
Reference Projection  
Standard parallels 30° N and 30° S



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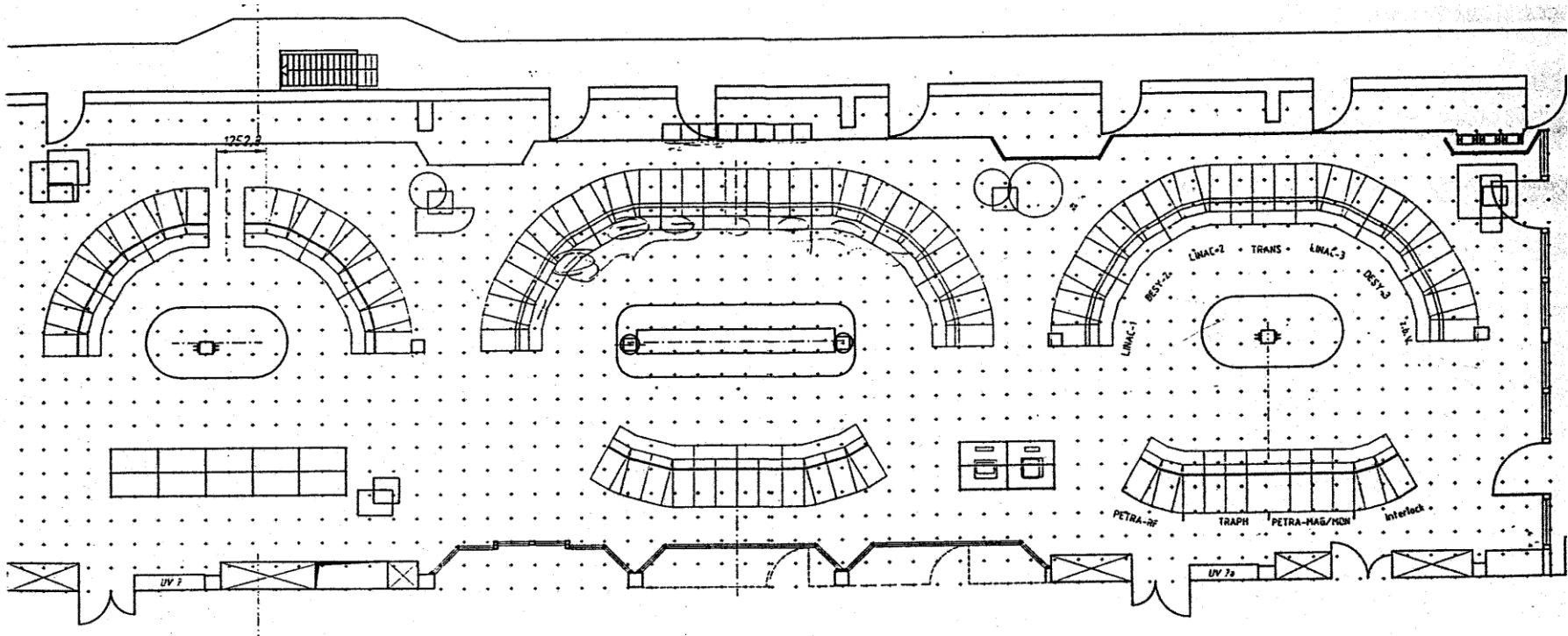
# DESY's Accelerators



- > 6 different accelerators
- > 1 control room

# The Accelerator Control Room

All machines are operated from one room by one shift crew.  
Large room: 11m x 38m = 418m<sup>2</sup>



# The old Consoles

The old consoles were build in the 1970ties in 19" technology:

- big screens, 19" wide
- 19" racks between the screens



# The old Consoles, upgraded

The old consoles were upgraded in 2005:

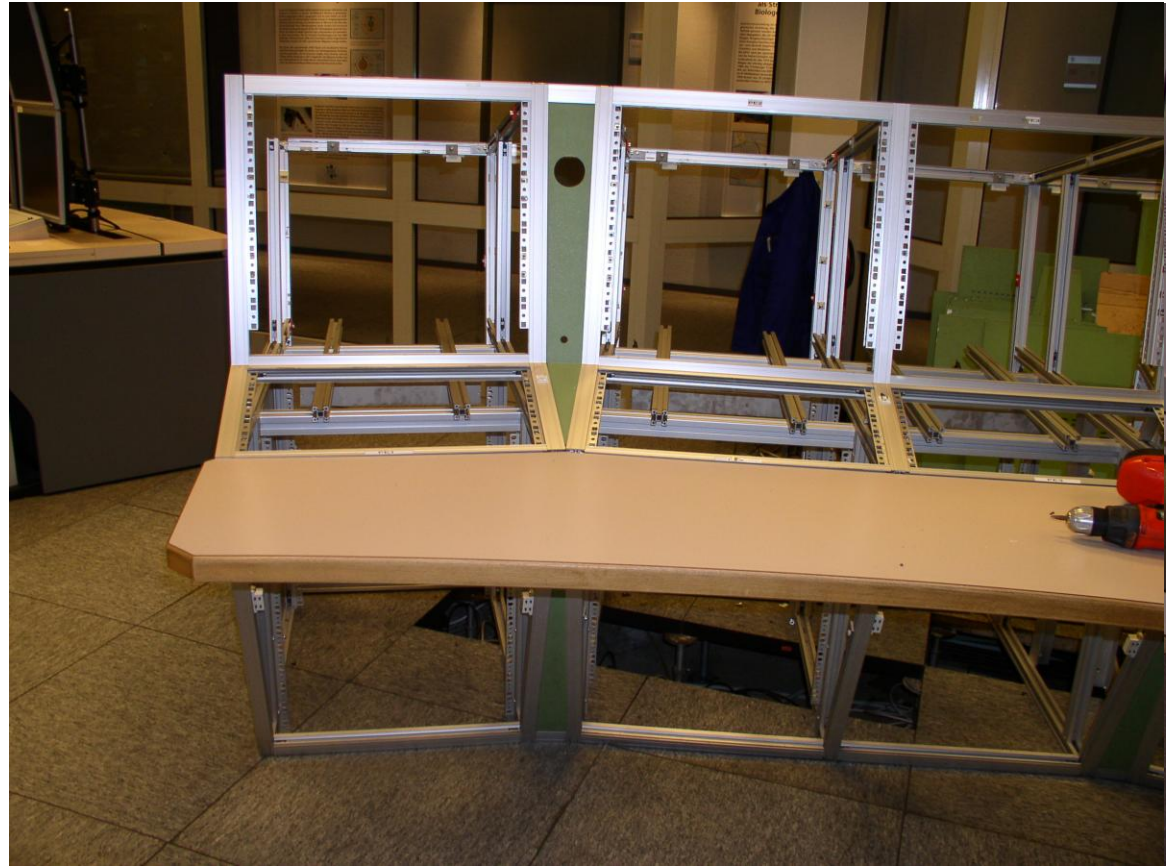
- flat screens
- 2 screens above each other
- still 19" racks below the screens



# The End of the old Consoles

The old consoles were replaced in 2009:

- designed in 1973
- no more spare parts
- screen position and size inflexible





# The new Furniture

Design criteria:

- > 19" racks below some, but not all screens
- > flexible screen positions
- > flexible screen sizes
- > airflow from below, outlet only at the back side
- > easy access to the computers below the table
- > outlets for USB, 230 V AC, ethernet etc. on the table
- > more room between the consoles



# The new Furniture

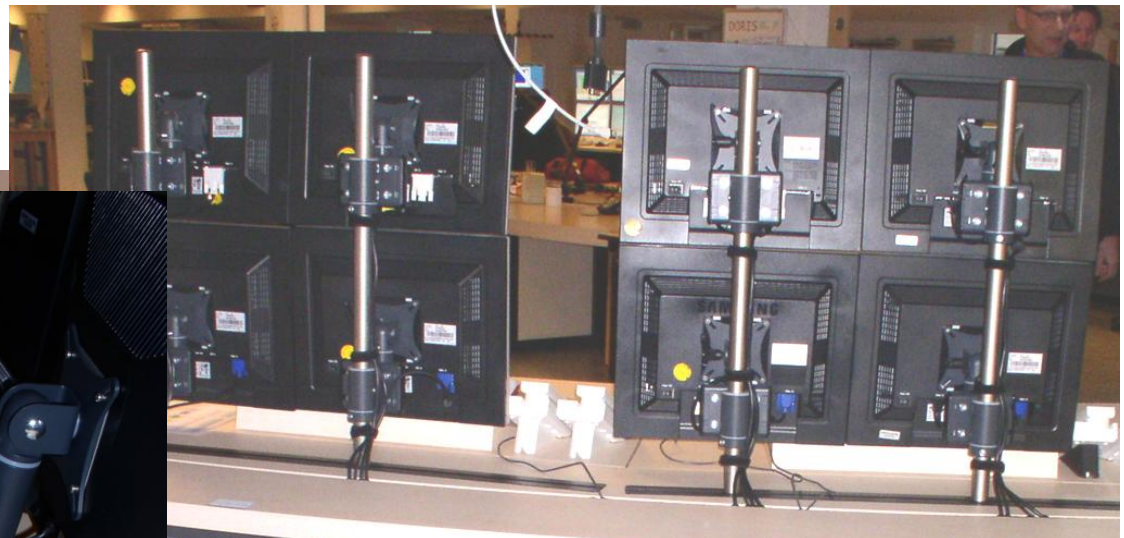
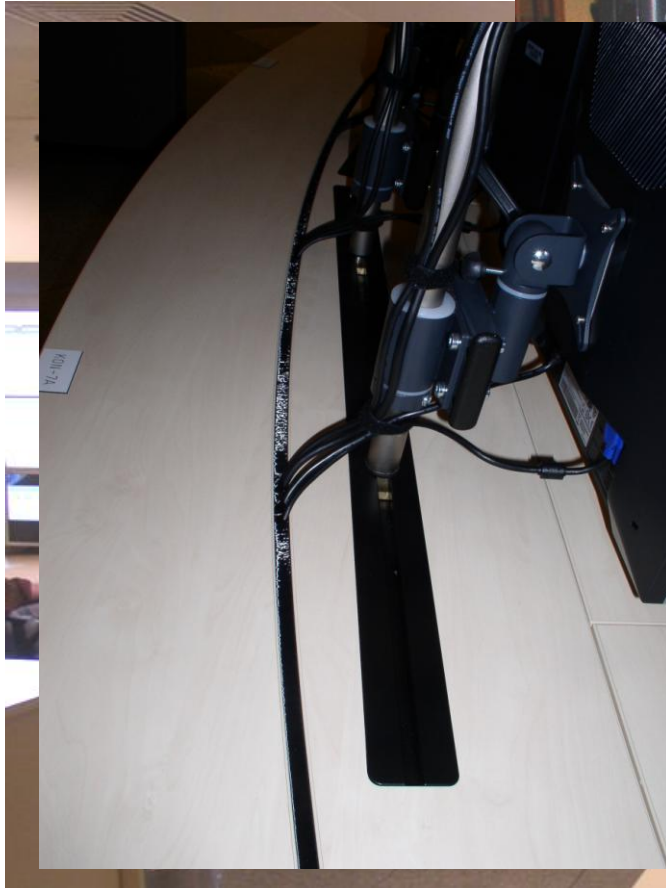
19" racks below some, but not all screens



# The new Furniture

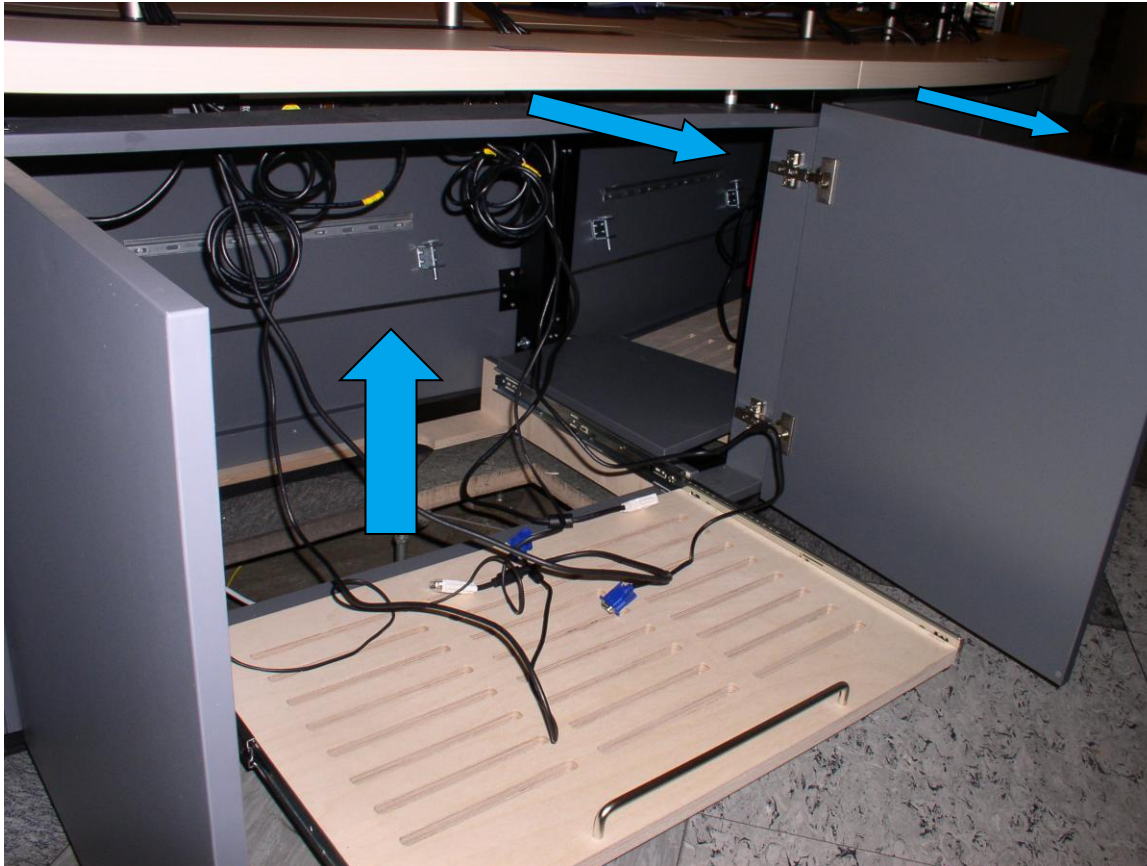
flexible screen positions

flexible screen sizes



# The new Furniture

airflow from below, outlet only at the back side



# The new Furniture

easy access to the computers below the table



# The new Furniture

outlets for USB, 230 V AC, ethernet etc. on the table



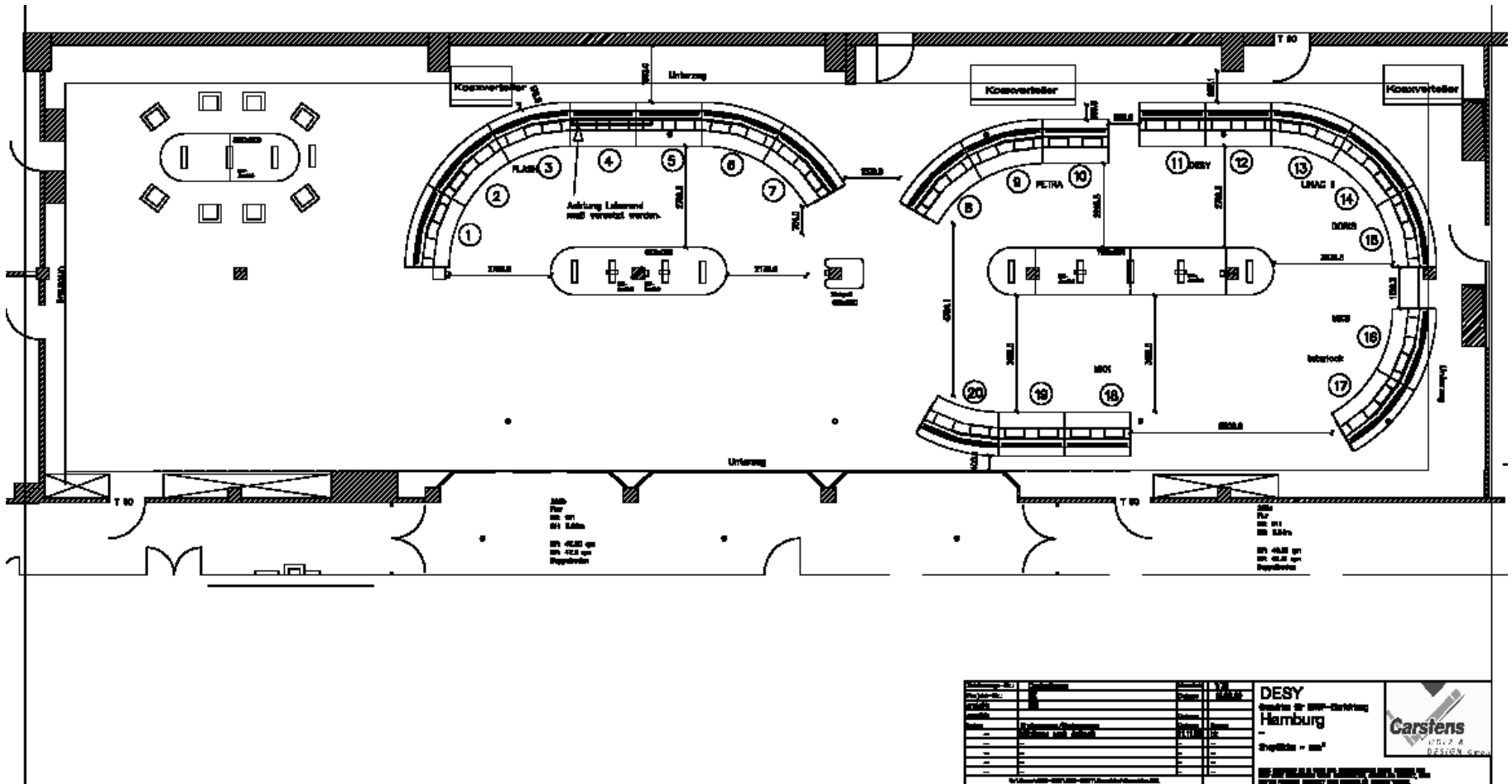
# The new Furniture

additional hardware can be placed between the screens



# The new Furniture

more room between the consoles





# Acknowledgement

The new furniture for the DESY control room was developed by a group of operators (Bernd Kuehl, Benjamin Polzin, Torsten Schulz, Olaf Goldbek, Freddy Wierzchole and Hans-Otto Wiese), designed and build by friendly people from “Carstens Holz und Design” and installed with a lot of contributions from the DESY groups MCS, MDI and ZBAU.

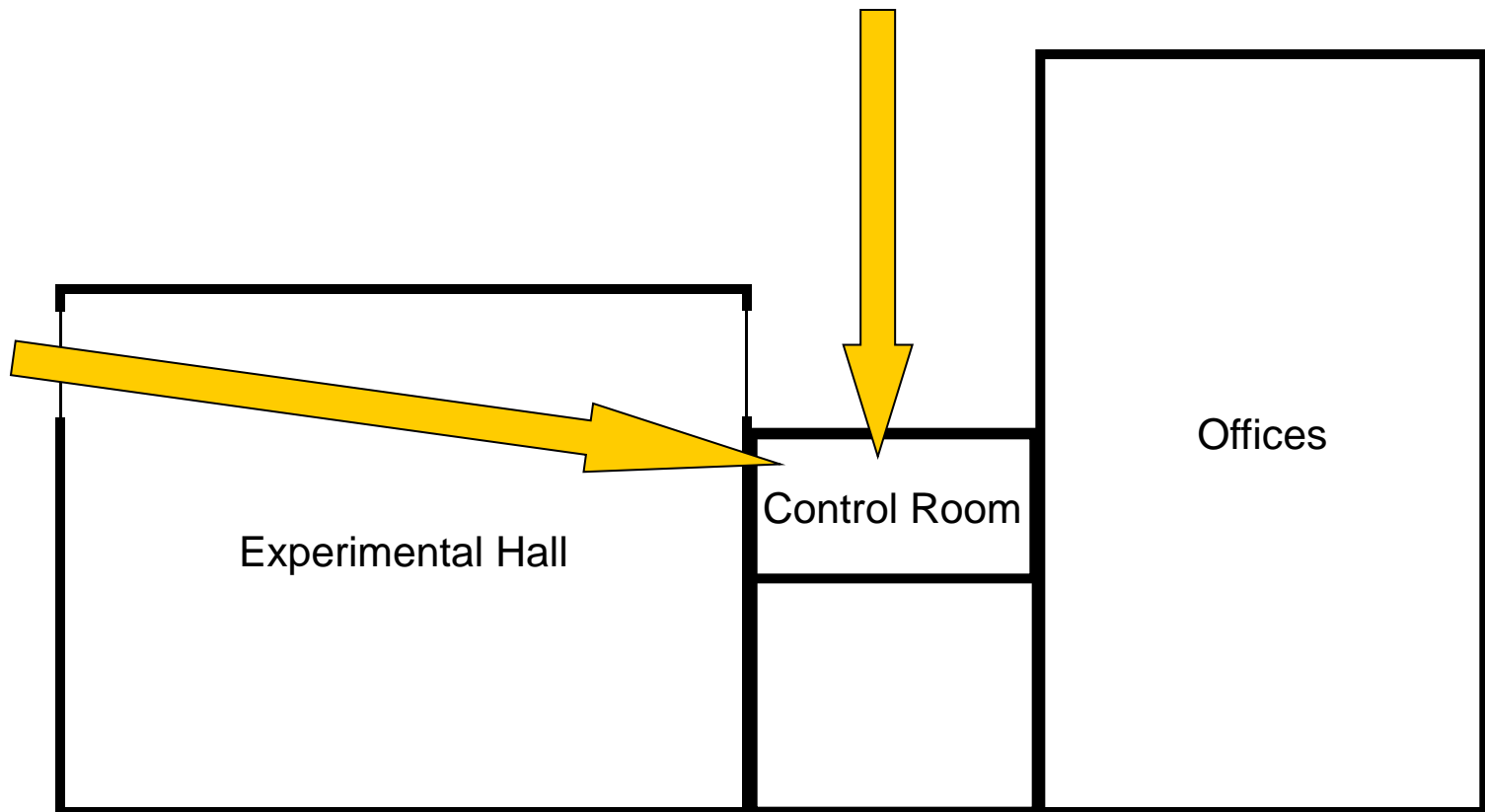
**Thanks a lot  
to all of them!**



# Appendix: Natural Light ?

German law asks for natural light in every workspace.

The control room does not have any walls to the outside:



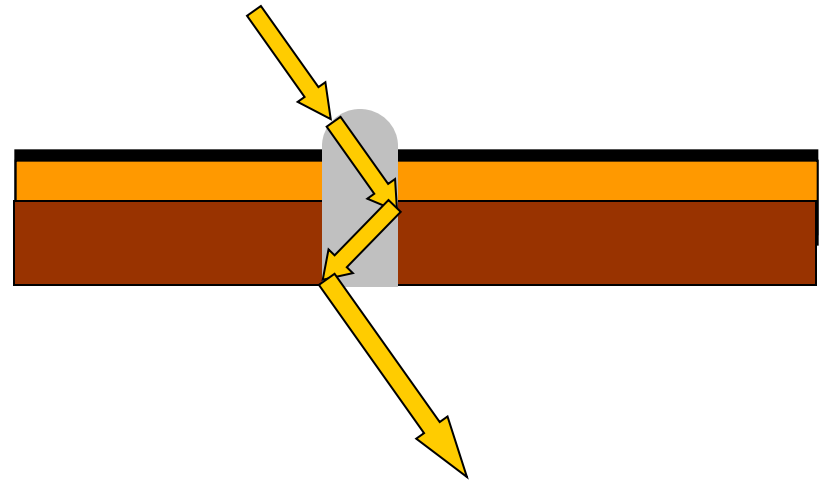
# Appendix: Natural Light ?

Indirect light from the experimental hall:



# Appendix: Natural Light ?

Light through the ceiling: Structural engineering does not allow big holes in the ceiling.



A metallized tube reflects daylight into the room.