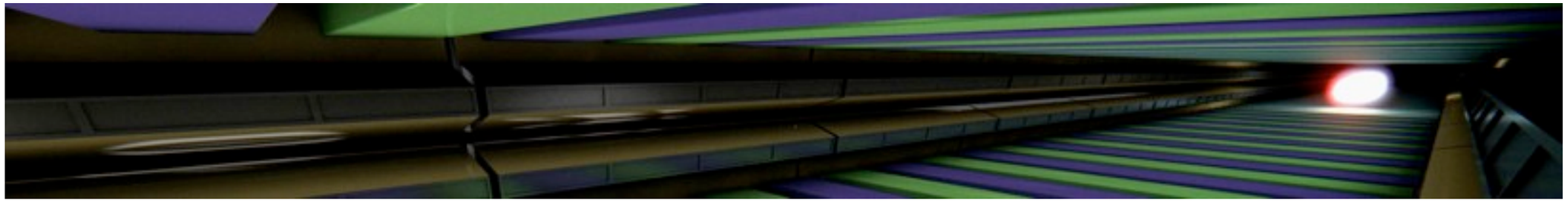


Introduction

Tobias Haas

Technical Meeting

3 February 2012

Homework from last time

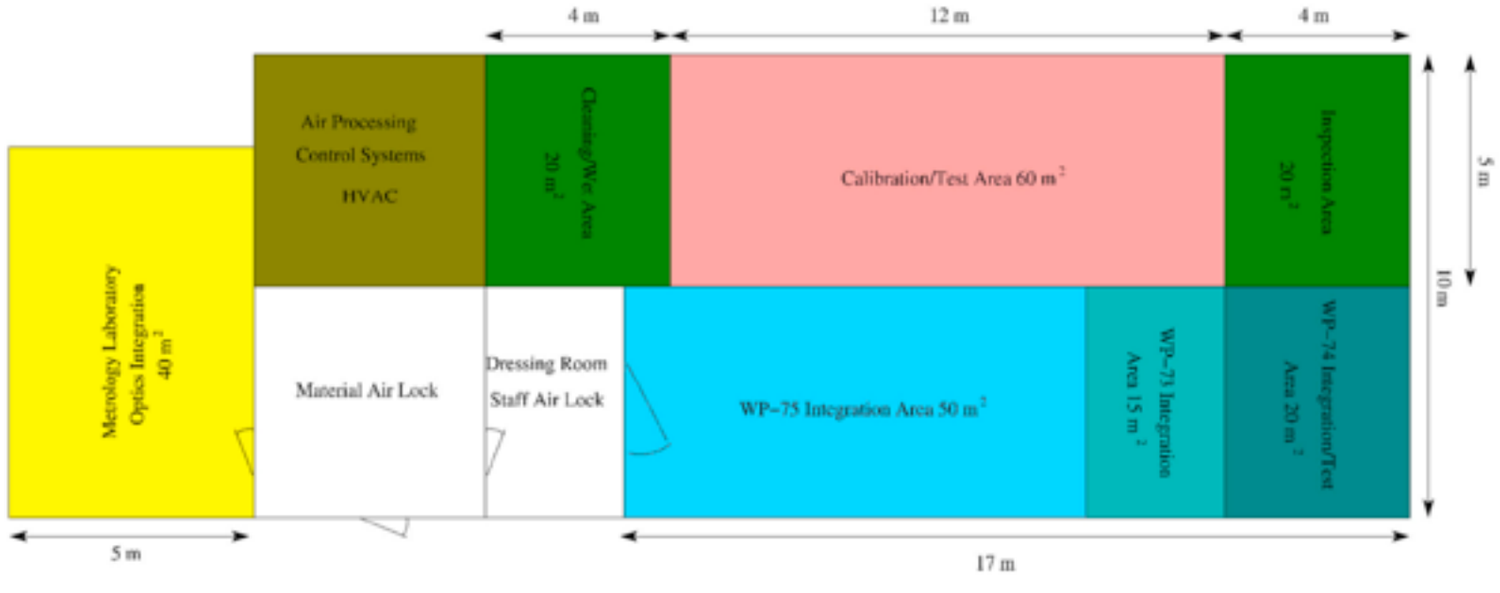
- Beam line separation for SASE 3
  - The final decision on this issue still requires discussions between **S. Molodtsov**, the instrument scientists and **H. Sinn**
- DAQ and Control racks
  - Produce a first layout for DAQ and control racks **(C. Youngman)**
- Labs in XHQ
  - Circulate the list with all information and answer the questions (**All**)

Lab Specs

- Information received from
  - J. Grünert, M. Kuster, M. Lederer, C. Youngman
- Information announced by
  - C. Bressler, M. Meyer
- Discussions have taken place with
  - A. Mancuso, J. Schulz
- Additional (significant) requests from
  - EMBL
- Propose 2 working groups
  - Bio labs: J. Schulz, A. Mancuso, S. Kozielski, R. Menzel (EMBL)
  - General labs: M. Kuster, J. Grünert, M. Dommach

Markus Kuster: Clean Room

- All specs come from this doc:
  - 220 m2
  - Includes needs from
    - ➔WP73:
      - 40m2 optics metrology
      - 15m2 integration area
    - ➔WP74
      - 20m2 integration and test



XHQ Clean Room Laboratory: Specifications and Requirements — Version 1.0 — Date September, 19 2011 — Status Confidential

Clean Room Laboratory

XHQ Schenefeld

Specifications and Requirements

Prepared by
M. Kuster, A. Koch

With contributions by

M. Dommach, J. Grünert, C. Schulz, H. Sinn

European XFEL GmbH

Revision History

Revision Number	Date	Authors	Comments
0.5	2011 August 4	M. Kuster, A. Koch	Draft version distributed to Harald Sinn, Jan Grünert, Chris Youngman, and Carola Schulz
0.7	2011 August 22	M. Kuster, A. Koch	Draft version, which includes WP-74 part and comments provided by Carola Schulz.
1.0	2011 Sept. 19	M. Kuster, A. Koch	WP-73 requirements have been added.

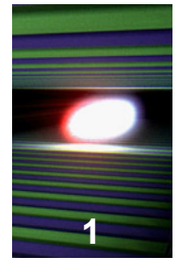
J. Grünert: Mechanical Prep Lab

- Setup, assembly and maintenance of bulky mechanical parts like supports frames including mechanical stages, stepper & servo motors, position encoders etc. During this work, the frames might already have vacuum chambers installed.
- Calibration of position encoders and precision motors
- Mounting mechanical setups that do not require clear room environment or that are not permitted to enter the clean room area
- Optionally: 3D measurement device (like FARO arm)
- The mechanical preparation lab is NOT intended for any mechanical machining in the style common at a mechanics workshop.

J. Grünert: Other needs

- Storage of larger frames and setups such as test setups when they are not used for durations of several months.
- Total combined area of Mechanical Preparation Lab and WP74 diagnostics lab should be at least 150m2.
- In current layout, the diagnostics lab is quite far from the elevators and the cleanroom lab which is also used by WP74. This is ok as long as the corridors remain wide enough (current width seems ok).
- Office work places for 4 persons are in general critical. Are the lighting aspects for computer screen working areas now respected (e.g. line-of-sight parallel to window)

Commonly used lab space



Maintained by WP79

- Wet labs and bio-sample preparation 200m²
- Dry sample preparation 200m²
- X-ray lab 50m² (better more)
- Photoelectron and Auger spectroscopy (not yet on the plan)
- Microscopy (included in dry labs)
- Nano-fabrication (not yet on the plan)

J. Schulz

EMBL and WP79

Biolab WG

- Bio labs 300m²
- Crystal storage 40m²
- Mechanical workshop 40m²
- Electronic workshop 40m²

Not in WP79

- General electronics lab 300m²
- Mechanical preparation lab 100m²
- Cleanroom area
- Laser labs
- Vacuum preparation labs 200m²

General Labs WG

Large Electronics Lab

- How were the 300m2 arrived at

// legend: the row in the table, name, quantity, m2 //
19, optical microscope, 2, 1
21, ultrasonic bath, 1, 0.4
22, hot plate, 1, 0.4
27, electronic racks, 10, 5
28, workbench, 15, 20
30, oscilloscope, 6, 2
31, soldering station, 8, 7.2
32, motor testing station, 2, 2.5
34, gas cylinder, 2, 0.5
41, ccd camera microscope set up, 1, 0.8
53, open frame metal frame shelves, 10, 12
51&52, computer printer station, 1, 1
36, roller table cart, 4, 2
TOTAL 54.8m2
total x 2.4 = 131.2 m2
this accounted for circa 50% responses, so the total needed space for electronic related (type) lab 300m2

Current State of Planning

- First meeting with lab/TGA planners on 27 Jan
  - ScholzeJaeger/Dr. Heinekamp
- Next meeting on 10 Feb.
- Contact to planners: C. Schulz
- First conclusions:
  - Layout will probably change
  - Our requirements may have to be adjusted/revised
  - First new layout to be presented on 17 Feb.

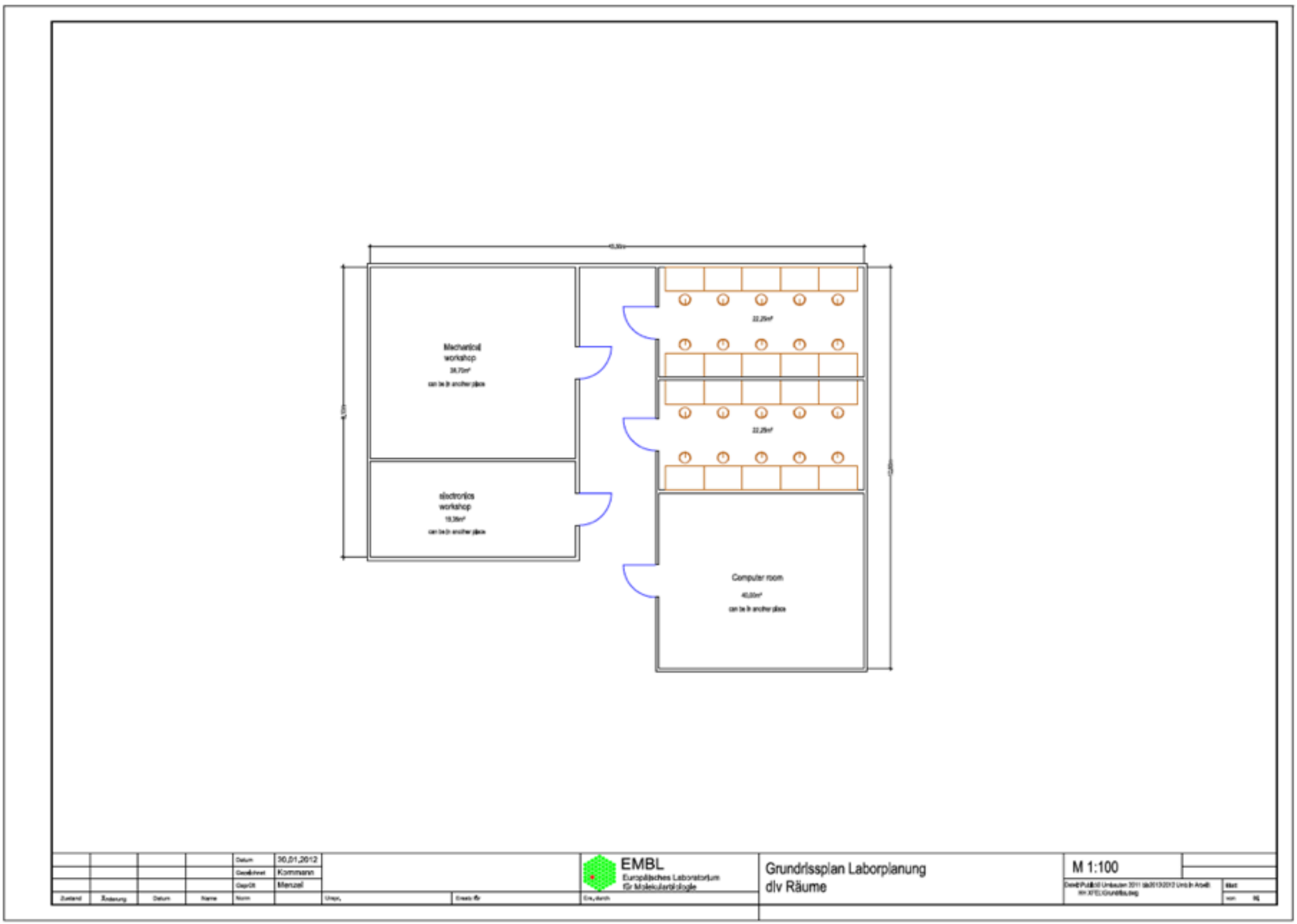
Unspecified labs

- Detector development lab (WP75/50m2)
- Vacuum transport assembly (WP73/50m2)
- SQS lab (WP85/50m2)
- Lab 86 (WP86/50m2)
- Dosimetry lab (TC/RadProt/50m2)

- Remark: WP81 has no lab of its own...

EMBL wants 600m2 in XHQ + ...

... + 300 m2 elsewhere



Goals for today

- Agree on working groups
  - Biolabs (Schulz,Kozielski,Mancuso,Menzel)
  - General Labs (Kuster,Grünert,Dommach)
  - Results by 10 Feb.
- Get commitment on unspecified labs:
  - Data by 10 Feb, otherwise will remove from list
- Get the management to make a statement on EMBL in XHQ