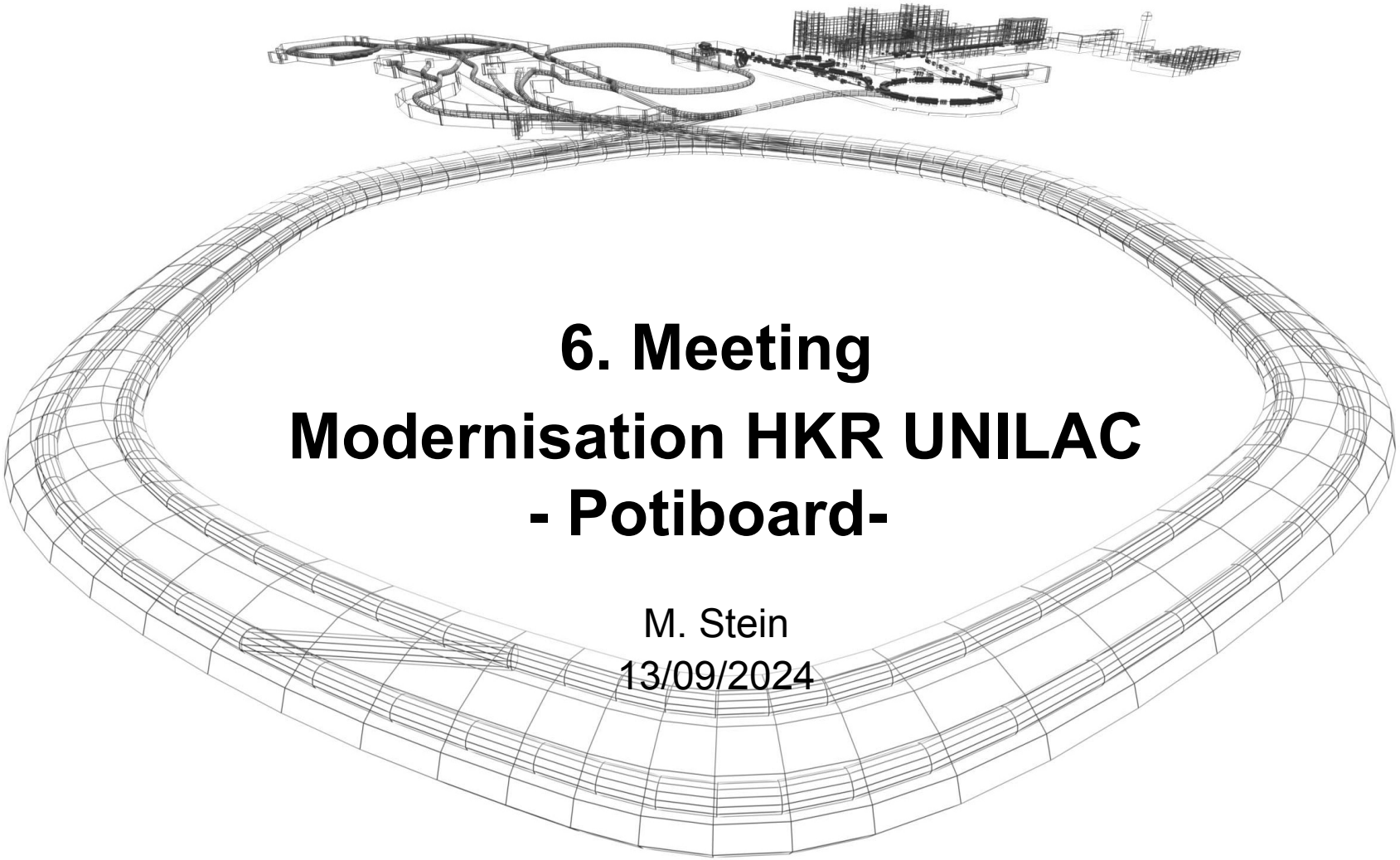


6. Meeting
Modernisation HKR UNILAC
- Potiboard-

M. Stein

13/09/2024

Project Organisation

- The ‘Potiboard project’ is divided into two sub-projects:

  - **Potiboard-Encoder-Device**
    The group *Hardware and Electronics (HEL)* from ACO will develop, build and maintain the potiboard encoder devices.

    Volker Kleipa is the sub-project lead.

  - **PotiboardApp Application**
    The main development of the application is outsourced. This sub-project is under supervision of the group *Applications (APP)* of ACO.

    Jutta Fitzek and Christian Hillbricht (both of group *APP*) are the coordinators.

    Arthur Halama of the group *Application Support (APS)* of ACC is **Product Owner**.

Potiboard Project Plan

	Description	Comment	Date
1.	Review	Status and Planning	17th-21th June
2.	Functional and Integration Test	Dry-Run July 2024	15th-19th July
3.	Review	Status and Planning	Begin of Sept.
4.	Review	Status and Planning	Begin of Oct.
5.	Functional and Integration Test for Emergency System	Dry-Run October 2024	22nd - 25th October
6.	Meeting für weiteres Vorgehen Richtung Vollausbau		Nov. 2024
7.	Fertigstellung funktionsfähiges Vollausbau-Potiboard	Zur Strahlzeit	Q2 2026

Status: Milestone Emergency System (1)

Compulsary lists of requirements (uncomplete):

- ***Potiboard-Encoder-Device:***
  - Two equal devices should be ready for Emergency System
  - Total of 8 rotary encoders should be in one line
  - A light should indicate the connection status (**?**)
  - A Left and Right Button to change (selected magnets) on beam line
  - Two Buttons to decrease/increase Increment

Status: Milestone Emergency System (2)

Milestone Emergency System (3)

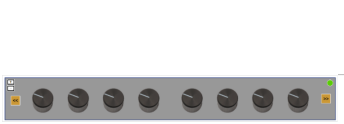
Compulsary lists of requirements (uncomplete):

- ***PotiboardApp Application***:
  - Context Selection Widget
  - Pictogram-View (horizontal row) of all magnets in chain (for selection)
  - Filter function
  - Second horizontal row with icon list representing selected magnets
  - A Left and Right Button to change (selected magnets) on beam line
  - Two Buttons to decrease/increase Increment
  - Sleep Button (block all input)
  - Coupling Switch (Master Mode)

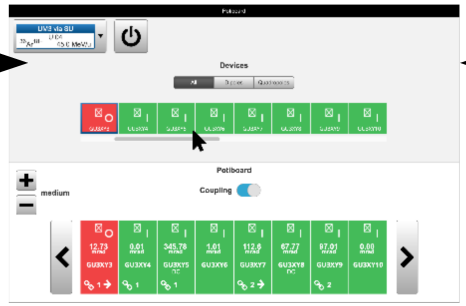
Milestone Emergency System (4)

Test during Dry-Run October 2024

- Functional Test
  - Bug Resolution: The correct rotary encoder signals should be transmitted. Sometimes signals drop out or are with oposite signs.
  - Bug Resolution: Buttons still tend to bounce and pass thei signal more than once.
- Integration Test
  - Set Unilac magnets of different tyes (MU, MS, QT, QQ) from the *Potiboard-Encoder-Device* via the *PotiboardApp Application.*
  - Check how well humans adapt setting the magnets via the LSA parameters forseen for the potiboard operation (focal strength and angle).



Unilac-Console
PC USB-Midi



LSA

Potiboard Project Plan

	Description	Comment	Date
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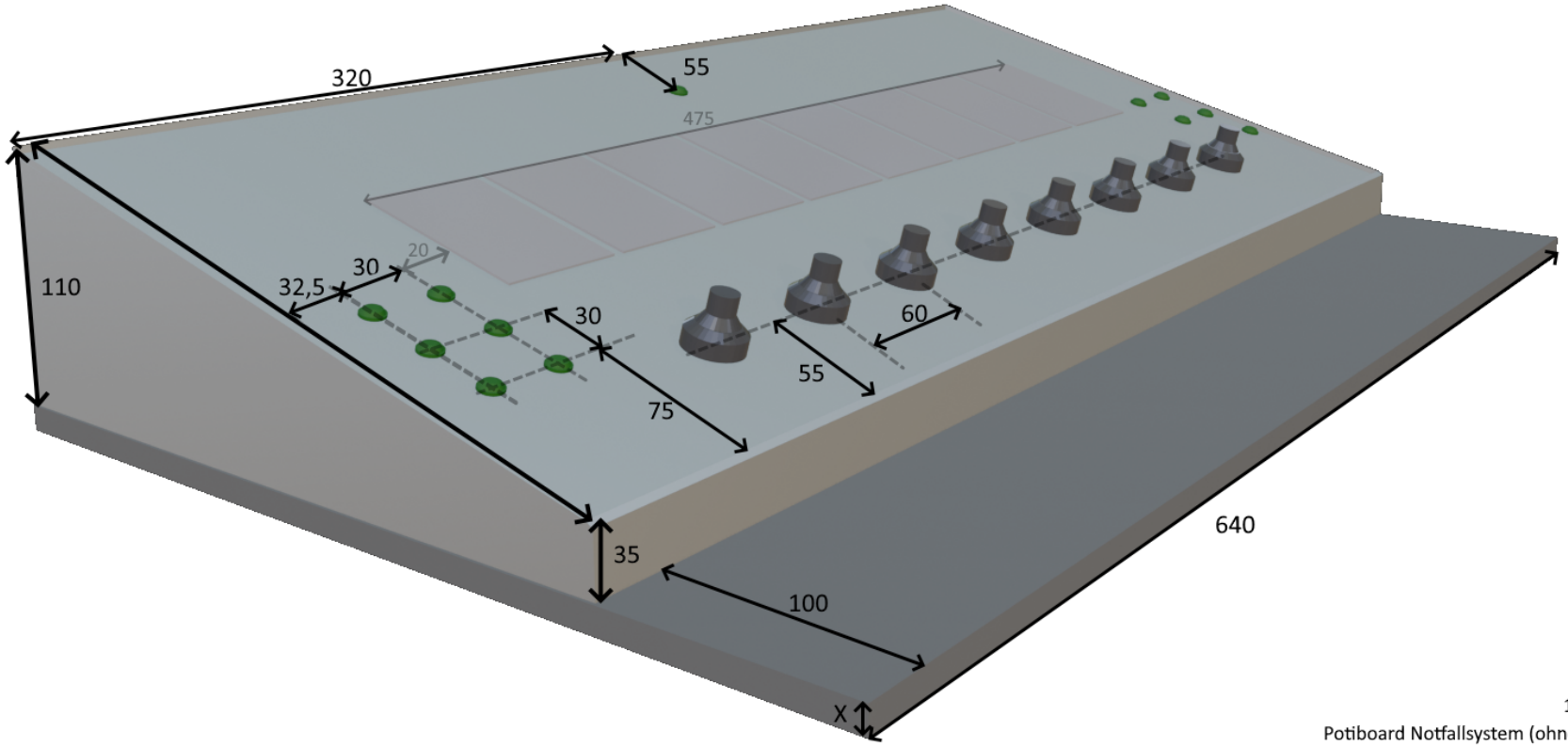
Perspective Emergency System



12.09:2024
Potiboard Notfallsystem (ohne Displays)