



Project	HKR-Injector-Upgrade / Uni-BPM-PHAS
Project Lead	W. Kaufmann
Status Date	07.07.2022

Project Description	Subprojects / Tasks
This project is planned for 2023 with 75 (DAQ modules) and 4 PM. The goal is to allow for digital control of both, BPMs and phase probes using FESA. Project will be executed in separate steps: <ol style="list-style-type: none"> production of new SW for BPM display and phase probe selection, realization of new data acquisition for demodulated signals and SW adaptation. Requirement specification for PHAS exists, prototype SW for BPM GUI available from K. Fuchsberger (new contract required).	Software GUI and FESA software for BPM readout (existing electronics) <ul style="list-style-type: none"> Purchase of commercial DAQ components Realization of connector box Installation of DAQ hardware in LSB Implement FESA software and GUI for new BPM readout Perform beam tests Commissioning of the full system

Project Goals	Resource Profile																					
<ol style="list-style-type: none"> Production of new GUI using Device Access for existing BPM data acquisition Implementation of new PHAS control software Production of new readout for demodulated signals (COTS electronics, FESA) Be prepared for the move to FCC 	<table border="1"> <thead> <tr> <th>Year</th> <th>Estimated costs [k€]</th> <th>Personnel [person months]</th> </tr> </thead> <tbody> <tr> <td>2022</td> <td>30 (software work) 35 (Oszi, 8Ch)</td> <td>2 PM für PHAS, 1 PM für BPM</td> </tr> <tr> <td>2023</td> <td>75 (DAQ modules)</td> <td>4 PM</td> </tr> <tr> <td>2024</td> <td>10 (cabling, electronics)</td> <td>6 PM</td> </tr> <tr> <td>2025</td> <td></td> <td></td> </tr> <tr> <td>2026</td> <td></td> <td></td> </tr> <tr> <td>Sum</td> <td>Ca. 140.000 Euro</td> <td></td> </tr> </tbody> </table>	Year	Estimated costs [k€]	Personnel [person months]	2022	30 (software work) 35 (Oszi, 8Ch)	2 PM für PHAS, 1 PM für BPM	2023	75 (DAQ modules)	4 PM	2024	10 (cabling, electronics)	6 PM	2025			2026			Sum	Ca. 140.000 Euro	
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Major Milestones	Risks, Boundary Conditions and Comments
Q3/2022	Major Risks: - Low priority (compared to FAIR activities), delay Concerned departments: - BEA - ??
Q1/2023	
Q2/2024	
Q4/2024	Boundary Condition: - Must be prepared before move of HKR to FCC Comments: