

ID	Task Mode	Task Name	2022				2023				2024				2025		
			Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	
1	✦	LhARA															
2	✦	Proposal															
146	✦	LhARA Project															
147	✦	Launch of LhARA project	◆ 01/04														
148	✦	Conceptual Design Report for the facility	◆ 31/03														
149	✦	Technical Design Report (TFD2) for Stage 2															
150	✦	Technical Design Report for Stage 1	◆ 31/03														
151	✦	WP1 Project Management															
728	→	WP2 Source															
754	✦	WP3 Capture															
782	✦	WP4 Ion-acoustic															
783	✦	Preliminary activity (PA)															
784	✦	task 1 - review- current state of the art : ionacoustics.proton dosimetry															
785	✦	Task 2 development of GEANT 4 Monte Carlo part of the forward model															
786	✦	Task 3 development of k-Wave forward acoustic															
787	✦	task 5 assembly of apparatus for validation of mc															
788	✦	Task 6 forward model validation experiments															
789	✦	Preconstruction programme															
790	✦	Task 4. implementation, simulation evaluation and development of inverse dose-map reconstruction software															

Project: LhARA1- DK
Date: Wed 15/12/21

Task		Inactive Summary		External Tasks	
Split		Manual Task		External Milestone	◆
Milestone	◆	Duration-only		Deadline	↓
Summary		Manual Summary Rollup		Progress	
Project Summary		Manual Summary		Manual Progress	
Inactive Task		Start-only			
Inactive Milestone	◆	Finish-only			

ID	Task Mode	Task Name	2022				2023				2024				2025		
			Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	
791	✦	Task 7 assembly and integration of dosimeters for use in radiobiological studies															
792	✦	Task 8 acoustically compatible biological sample holders for high-throughput radiobiological studies															
793	✦	Task 9 Final experiments with LhARA															
794	➔	Reporting															
795	✦	Deliverable 1															
796	✦	Deliverable 2															
797	✦	Deliverable 3															
798	✦	Deliverable 4															
799	✦	Deliverable 5															
800	✦	Deliverable 6															
801	✦	Deliverable 7															
802	✦	Deliverable 8															
803	✦	Deliverable 9															
804	✦	Deliverable 10															
805	✦	Facility construction															
806	✦?	facility exploitation															
807	✦	WP5 Vertical Beamline															
808	✦	WP6 System design															

Project: LhARA1- DK
Date: Wed 15/12/21

Task		Inactive Summary		External Tasks	
Split		Manual Task		External Milestone	
Milestone		Duration-only		Deadline	
Summary		Manual Summary Rollup		Progress	
Project Summary		Manual Summary		Manual Progress	
Inactive Task		Start-only			
Inactive Milestone		Finish-only			