**Name of the project: ALLEN4EIC**

**Table 3.1c: List of Deliverables[[1]](#footnote-1)**

Only include deliverables that you consider essential for effective project monitoring.

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Number** | **Deliverable name** | **Short description** | **Work package number** | **Short name of lead participant** | **Type** | **Dissemination level** | **Delivery date**  **(in months)** |
| 1 | AllenCore-based processing pipeline for ePIC | GPU-accelerated real-time reconstruction framework customized for ePIC’s streaming DAQ |  | IJCLab | OTHER | PU | 16 |
| 2 | Open-access demonstrator | Fully packaged, EOSC-integrated container images and scripts for deployment and reuse |  | LPNHE | DEM | PU | 20 |
| 3 | Training and documentation materials | User guides, tutorials, and event materials from workshops in Europe and at BNL |  | CPPM | R | PU | 22 |
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| **KEY**  Deliverable numbers in order of delivery dates. Please use the numbering convention <WP number>.<number of deliverable within that WP>.  For example, deliverable 4.2 would be the second deliverable from work package 4.  **Type:**  Use one of the following codes:  R: Document, report (excluding the periodic and final reports)  DEM: Demonstrator, pilot, prototype, plan designs  DEC: Websites, patents filing, press & media actions, videos, etc.  DATA: Data sets, microdata, etc.  DMP: Data management plan  ETHICS: Deliverables related to ethics issues.  SECURITY: Deliverables related to security issues  OTHER: Software, technical diagram, algorithms, models, etc.  **Dissemination level:**  Use one of the following codes:  PU – Public, fully open, e.g. web (Deliverables flagged as public will be automatically published in CORDIS project’s page)  SEN – Sensitive, limited under the conditions of the Grant Agreement  Classified R-UE/EU-R – EU RESTRICTED under the Commission Decision No2015/444  Classified C-UE/EU-C – EU CONFIDENTIAL under the Commission Decision No2015/444  Classified S-UE/EU-S – EU SECRET under the Commission Decision No2015/444  **Delivery date**  Measured in months from the project start date (month 1) |

**Table 3.1d: List of milestones**

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| --- | --- | --- | --- | --- |
| **Milestone number** | **Milestone name** | **Related work package(s)** | **Due date (in month)** | **Means of verification** |
| 1 | ePIC data formats integrated into AllenCore |  | 6 | Geometry and simulation data processed via AllenCore; validated against test events |
| 2 | Calibration algorithms operational on GPU pipeline |  | 12 | Algorithms tested on backward EMCAL data; latency, throughput and physics performance benchmarks validated |
| 3 | AllenCore modular release with EIC support |  | 16 | Version released and validated on both French and BNL environments |
| 4 | Open-access demonstrator deployed and tested |  | 20 | Container images published; open-access system validated by at least one external user group |

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| **KEY**  **Due date**  Measured in months from the project start date (month 1)  **Means of verification**  Show how you will confirm that the milestone has been attained. Refer to indicators if appropriate. For example: a laboratory prototype that is ‘up and running’; software released and validated by a user group; field survey complete and data quality validated. |

**Table 3.1e: Critical risks for implementation** #@RSK-MGT-RM@#

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| --- | --- | --- |
| **Description of risk (indicate level of (i) likelihood, and (ii) severity: Low/Medium/High)** | **Work package(s) involved** | **Proposed risk-mitigation measures** |
| **Delay in AllenCore modular release from ODISSEE project**  *(Likelihood: Low; Severity: High)*:  The project builds on the modularization of Allen into AllenCore, expected in Q1 2026. A delay could hinder early development for ePIC. |  | Maintain close communication with LPNHE/CPPM. Start early development with existing Allen branches. Prepare internal modular refactor if needed. |
| **Integration with ePIC software stack and data formats reveals instability**  *(Likelihood: Medium; Severity: Medium)*:  ePIC-specific geometry, event structure, or software (e.g., EICrecon, JANA2) may evolve or lack stable interfaces. |  | |  | | --- | | Maintain flexible and interface-driven development. Begin integration testing early with support from JLab and BNL. | |
| **Performance bottlenecks prevent real-time calibration from meeting latency targets**  *(Likelihood: Medium; Severity: High)*:  Real-time reconstruction/calibration might fail to meet latency or throughput goals due to unforeseen complexities or suboptimal parallelization. |  | Involve GPU experts from CPPM and LPNHE. Profile early and iteratively optimize. Design fallback hybrid CPU/GPU paths if necessary. |
| **Limited adoption or usage of the open-access infrastructure**  *(Likelihood: Low; Severity: Medium)*:  The open-access infrastructure might see limited uptake if not aligned with community needs or poorly documented. |  | Promote through training, documentation, and early testing with user groups. Align with EOSC and EIC community needs. |
| **Recruitment delays for key personnel**  *(Likelihood: Low; Severity: High)*: |  | Begin hiring as early as possible via CNRS channels. Reallocate responsibilities among partners if required. |

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| **Definition critical risk:**  A critical risk is a plausible event or issue that could have a high adverse impact on the ability of the project to achieve its objectives.  **Level of likelihood to occur: Low/medium/high**  The likelihood is the estimated probability that the risk will materialise even after taking account of the mitigating measures put in place.  **Level of severity: Low/medium/high**  The relative seriousness of the risk and the significance of its effect. |

1. You must include a data management plan (DMP) and a ‘plan for dissemination and exploitation including communication activities as distinct deliverables within the first 6 months of the project. The DMP will evolve during the lifetime of the project in order to present the status of the project's reflections on data management. A template for such a plan is available in the [Online Manual](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/om_en.pdf) on the Funding & Tenders Portal. [↑](#footnote-ref-1)