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**US HL-LHC Accelerator Upgrade Project**

**INTERFACE CONTROL DOCUMENT**

**WBS 302.2.01 – 302.4.01**

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| **Approved by:**  Giorgio Apollinari, HL-LHC AUP Project Manager, FNAL |

**Revision History**

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| --- | --- | --- | --- |
| **Revision** | **Date** | **Section No.** | **Revision Description** |
| v0 | 6/26/18 | All | Initial Release |
| V1 | 7/1/18 | 4 | Updated table and added reference to US-HiLumi-doc-1325 |
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1. Introduction

This Interface Control Document (ICD) provides complete information about the technical interfaces between the two entities named below. This ICD contains two tables: Table 1 – Physical Interfaces and Table 2 – Data Interfaces. Physical Interfaces include the flow of materials from one WBS entity to another, while Data Interfaces include the flow of data and documentation from one WBS entity to another.

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| This document represents interfaces between the following two entities: | |
| WBS 302.2.01 Magnet Design, Integration and Coordination | WBS 302.4.01 Magnets Vertical Test |

This ICD details documents to be sent after MQXFA magnet vertical test to the magnet review board for making a decision about magnet shipment for cold-mass assembly or re-work.

1. ICD Approval

Electronic signature is required by the following personnel:

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| --- | --- | --- |
| WBS Manager | WBS Manager | US HL-LHC AUP Project Management Office |
| WBS 302.2.01 L3 Manager | WBS 302.4.01 L3 Manager | WBS 302.2 Manager  WBS 302.4 Manager  System Integration Manager  Deputy Project Manager  Project Manager |

1. Table 1 – Physical Interfaces

Note: There are no physical interfaces.

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| **Item** | **WBS 302.2.01 Provides** | **WBS 302.4.01 Provides** | **Reference Documents, Drawings, etc.** |
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1. Table 2 – Data Interfaces

Note: hyperlinks within table link to other controlled documents that define the data interface

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| **Item** | **WBS 302.2.01 Provides** | **WBS 302.4.01 Provides** | **Reference Documents, Drawings, etc.** |
| Magnet Test Report |  | Test report for each magnet, within one month after vertical test is completed. | Example of MQXF test report:  US-HiLumi-doc-930 |
| Magnet Test Data |  | Strain gauge data, magnetic measurement data, quench data, and quench summary list (excel file), uploaded on online folder within one week after vertical test is completed. | US-HiLumi-doc-1325 |
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