### Details

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| --- | --- |
| Software name | adhoc-data-processing-pipeline |
| Project Manager | Teresa Murta |
| Customer | None |
| Path(s) to relevant files | git@github.com:NICE-MSI/adhoc-data-processing-pipeline.git |

### Document control

|  |  |
| --- | --- |
| Status |  |
| Version | 1.0 |
| Date of plan | 29/05/2020 |
| Plan generated by | Teresa Murta |

### SIL calculation

|  |  |
| --- | --- |
| Criticality of usage | Significant |
| Complexity of program | Moderate |
| Recommended SIL | 3 |
| Reviewed SIL | 3 |
| Factors that justify increasing the recommended SIL | Reliant on key staff |
| Factors that justify decreasing the recommended SIL | Alternative means of verification  Modular approach |

### Software development plan – Requirements for SIL 3

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| --- | --- |
| User requirements | Documented user requirement  Review by team  Review by suitably qualified independent person  Review by customer or proxy |
| Functional requirements | Documented funcional requirements  Traceable requirements  Review by team  Review by suitably qualified independent person |
| Design | Clear and well structured design  Tool support  Review by team  Review by suitably qualified independent person |
| Coding | Header to identify program name, author, date and version number  Program history  Coding guidelines  Review by team |
| Verification | Module testing as coding progresses  Effective testing of complete software against specification  Review by team |
| Validation | Documented testing against specification  Review by team  Review by suitably qualified independent person |
| Delivery, use and maintenance | Version control on release  Version control before release  Bug tracking / error logging  Traceability  User documentation |

### Other information

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| --- | --- | --- | --- | --- | --- |
| Brief description | Modular set of Matlab functions that can be called from a master script. It enables the user to perform a set of standard steps of Mass Spectrometry Imaging (MSI) data processing. | | | | |
| Class |  | | | Platform | Matlab |
| Type |  | | | Language | Matlab |
| Responsibilities for testing (give details) | | | NPL: Teresa Murta perfoms key tests before releases. Chelsea Nikula, Rory Steven, and Marcel Niehaus use it regulary and report unexpected results or irregularities. | | Customer: |
| Configuration management | |  | | | |
| Archiving regime | | GitHub | | | |
| Release rules | | Daily updates are commited and pushed to GitHub repository. | | | |
| Maintenance plan | | Issues are corrected within a couple of days of detection. | | | |

### For first release

|  |  |  |  |
| --- | --- | --- | --- |
| Result of final review |  | | |
| Basis for decision |  | | |
| Approved for release | Version: | Date: | Approved by: |

### Subsequent releases

| Outline changes | Version | Date | Signed |
| --- | --- | --- | --- |
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