

# C1. Data Subscription Service

The attributes marked with a \* are confidential and should not be disclosed outside the service provider.

| Service overview               | Data storage providers and applications representing individual users subscribe to data through a well-defined interface<br>Data owner must be able to mark data as subscribe-able<br>Subscriptions are activated by matching notifications   |             |            |  |  |        |      |             |            |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
|--------------------------------|---|-------------|------------|--|--|--------|------|-------------|------------|--|---|--|--|--|--|---|--|--|--|--|---|--|--|--|--|
| Service name                   | Data Subscription Service   |             |            |  |  |        |      |             |            |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Service area                   | Discovery of data set changes and user notification   |             |            |  |  |        |      |             |            |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Service phase                  | Working Proof of Concept  |             |            |  |  |        |      |             |            |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Service description            | Discover changed data through notifications that are triggered by data or metadata updates.   |             |            |  |  |        |      |             |            |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Customer group                 | Researchers   |             |            |  |  |        |      |             |            |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| User group                     | Researchers   |             |            |  |  |        |      |             |            |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Value                          | Enlarge the number of users than can use data services without wasting expensive research times checking for changed data sets  |             |            |  |  |        |      |             |            |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Tagline                        | Discover change data sets through data or metadata changes  |             |            |  |  |        |      |             |            |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Features                       |   |             |            |  |  |        |      |             |            |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Service options                | <table><thead><tr><th>Option</th><th>Name</th><th>Description</th><th>Attributes</th><th></th></tr></thead><tbody><tr><td>1</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td></td><td></td><td></td><td></td></tr><tr><td>3</td><td></td><td></td><td></td><td></td></tr></tbody></table>   |             |            |  |  | Option | Name | Description | Attributes |  | 1 |  |  |  |  | 2 |  |  |  |  | 3 |  |  |  |  |
| Option                         | Name  | Description | Attributes |  |  |        |      |             |            |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| 1                              |   |             |            |  |  |        |      |             |            |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| 2                              |   |             |            |  |  |        |      |             |            |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| 3                              |   |             |            |  |  |        |      |             |            |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Access policies                |   |             |            |  |  |        |      |             |            |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Service management information |   |             |            |  |  |        |      |             |            |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Service owner *                | EUDAT operated by CSC - IT Center for Science   |             |            |  |  |        |      |             |            |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Contact (internal) *           | Chris.Ariyo@csc.fi  |             |            |  |  |        |      |             |            |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Contact (public)               |   |             |            |  |  |        |      |             |            |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Request workflow *             | <pre>graph TD     subgraph Developers         RI[RI service developers]         ES[E-Science application developers]     end     subgraph Operators         EO[E-Infrastructure operators]     end      RI --&gt; Q1{Automating frequent actions on data (previously) requiring human monitoring of results?}     ES --&gt; Q1     Q1 -- Y --&gt; Q2{(Near) Real-time result requirements?}     Q2 -- Y --&gt; Q3{Research data objects and actions uniquely identified and resolvable?}     Q2 -- N --&gt; Q4{Resources available to integrate a UI to DSS?}     Q3 -- Y --&gt; Q4     Q3 -- N --&gt; Q5{Required service portfolio integration feasible?}     Q4 -- Y --&gt; Q5     Q4 -- N --&gt; Note[DSS might not be a direct choice for you.]     Note -.-&gt; Q1     Note -.-&gt; Q2     Note -.-&gt; Q3     Note -.-&gt; Q4     Note -.-&gt; Q5     EO -.-&gt; Q5     Q5 -- Y --&gt; UseDSS[Use DSS]</pre> |             |            |  |  |        |      |             |            |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Service request list           |   |             |            |  |  |        |      |             |            |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Terms of use                   |   |             |            |  |  |        |      |             |            |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |

| SLA(s)               |   |      |             |         |             |         |   |  |  |  |  |   |  |  |  |  |
|----------------------|---|------|-------------|---------|-------------|---------|---|--|--|--|--|---|--|--|--|--|
| Other agreements     |   |      |             |         |             |         |   |  |  |  |  |   |  |  |  |  |
| Support unit         |   |      |             |         |             |         |   |  |  |  |  |   |  |  |  |  |
| User manual          |   |      |             |         |             |         |   |  |  |  |  |   |  |  |  |  |
| Service architecture |   |      |             |         |             |         |   |  |  |  |  |   |  |  |  |  |
| Service components   | <table border="1"> <thead> <tr> <th>#</th> <th>Type</th> <th>Name</th> <th>Description</th> <th>TRL [1]</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> | #    | Type        | Name    | Description | TRL [1] | 1 |  |  |  |  | 2 |  |  |  |  |
| #                    | Type  | Name | Description | TRL [1] |             |         |   |  |  |  |  |   |  |  |  |  |
| 1                    |   |      |             |         |             |         |   |  |  |  |  |   |  |  |  |  |
| 2                    |   |      |             |         |             |         |   |  |  |  |  |   |  |  |  |  |
| Finances & resources |   |      |             |         |             |         |   |  |  |  |  |   |  |  |  |  |
| Payment model(s)     |   |      |             |         |             |         |   |  |  |  |  |   |  |  |  |  |
| Pricing              |   |      |             |         |             |         |   |  |  |  |  |   |  |  |  |  |
| Cost *               |   |      |             |         |             |         |   |  |  |  |  |   |  |  |  |  |
| Revenue stream(s) *  |   |      |             |         |             |         |   |  |  |  |  |   |  |  |  |  |
| Action required      |   |      |             |         |             |         |   |  |  |  |  |   |  |  |  |  |

[1] Technology Readiness Levels (TRL) are a method of estimating technology maturity of components during the acquisition process. For non-technical components, you can specify "n/a". For technical components, you can select them based on the following definition from the EC:

- **TRL 1** – basic principles observed
- **TRL 2** – technology concept formulated
- **TRL 3** – experimental proof of concept
- **TRL 4** – technology validated in lab
- **TRL 5** – technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)
- **TRL 6** – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)
- **TRL 7** – system prototype demonstration in operational environment
- **TRL 8** – system complete and qualified
- **TRL 9** – actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies)