

Software Requirements Document
'Supplier Declaration Portal' (E-I-05)

| Rev. | Author | Date | Notes |
|------|---------|-------------|--------------|
| 1 | WM & DC | 29 March 10 | New document |
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Overview

The Supplier Declaration Portal is an outward facing web portal to MI: Restricted Substances allowing suppliers to enter their substances declarations for materials, preparations and parts (single components and assemblies, referred to as Articles under REACH) online. This supercedes 'Supplier Declaration Process – phase 1' E-I-01 which provided an excel template to suppliers for each material, preparation or article required to be reported. The new functionality delivered by the web portal will enable both simpler reporting to suppliers, and provide tools to Customers for efficient supplier management.

The UCD for the Supplier Portal (E-I-05) was voted third highest in terms of priority in the January 2010 voting by EMIT members.

In this document, Customers are Granta MI software users requesting supplier declarations, Customer Admin are Granta MI: Admin users responsible for database structure and set up, and Suppliers are direct suppliers to Customers (Tier 1 in the supply chain).

Stakeholders

| | |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sponsor/Champion | <ul style="list-style-type: none"> • Will Martin |
| Project Expert | <ul style="list-style-type: none"> • David Cebon • Kim Marshall • |
| Software Developers Product | <ul style="list-style-type: none"> • (co-)writes the specification document • Implements the project <p>Web: API: Client:</p> |
| Other parties: Interested | <ul style="list-style-type: none"> • Arthur Fairfull |

Proposal

It is proposed that the workflow will be as follows:

1. Set up Portal Database (Customer Admin)

1.1 An MI: Admin User is responsible for setting up the Portal database by copying part of the Company's Master Restricted Substances Database onto the Portal database computer.

1.2 The following types of declaration method will be provided for:

- A. Yes / No declaration. i.e. the requested substances, do / do not exist in the reported material, preparation or article.
- B. More / less than 0.1%. i.e. the suppliers declare the requested substances as being more or less than 0.1% in the reported material, preparation or article.
- C. Discrete levels (e.g. <0.1%; 0.1-0.3%; 0.3-1%; 1-3%; 3-10%; 10-30%; 30-100%). i.e. the supplier indicates the range in which the reported substance is in the reported material, preparation or article.
- D. Continuous % scale. i.e. the supplier reports the precise % of reportable substance in the material, preparation or article. Customers can request full disclosure (100% of the material composition, or disclosure of restricted substances only).
- E. Industry Standard e.g. IPC 175, ASD SAE 9535

1.3 The declaration method used will be dependent on the individual circumstances of the Customer. For example, if they have strong control over their suppliers, and their suppliers are familiar with reporting on substance content, 'D Continuous % scale' may be applicable. For Users with less control over their suppliers, and / or who have suppliers with limited capability for substance declarations, A 'Yes/No' declaration may be the appropriate approach. Customers can also use one of the existing industry standards if this is widely used in their supply chain.

1.4 Customers may want to apply different declaration methods to different groups of materials, parts and suppliers. For example, they may want full disclosure on their preferred in house materials list, but only Yes / No declarations on bought in components.

1.5 Furthermore, they may want to divide up their parts, materials and suppliers into separate projects with different parameters. For example, they may be managing their supply chain management effort per discrete business unit, project, or legal entity. The set up of the Portal Database should allow for the creation of 'Declaration Projects' to which materials, parts and suppliers can be assigned, as well as declaration methods, and legislation lists (e.g. SIN List + Candidate List, ASD list only, In house list only). All declarations associated with a specific project could then be managed as a group.

2. Generate Components Records (Customer)

2.1 Having set up the Portal Database, the Customer imports the list of materials, preparations and articles requiring declarations. This data can be imported in bulk via an extract from their PLM system or their Master Restricted Substances Database. Key data fields will include:

Part / Material Number
Part / Material Description (Name)
Supplier Code
Supplier Name

2.2 The Customer also imports the supplier contact information into a linked database table. This consists of Name, email, telephone, address.

2.3 Following bulk import, manual editing will be possible (e.g. to amend contact details), and add new materials and articles. Access control settings will be applied to each material or article record.

3. Specify Records Requiring Declarations (Customer)

3.1 The Customer then verifies which suppliers, articles and materials should be included in the scope of the supplier management effort. A cross reference may be necessary to identify any already existing in-house material or part declarations. Some materials or parts may be excluded from the scope where valid declaration data exists in external commercial databases such as 1-Source or BOMCheck.

3.2 Lists of materials and parts are then assigned to a Declaration Project which will determine the declaration method to be used, reporting deadlines, and legislation (list of substances) to be reported against for each material or part.

3.3 Following this review and assignation process, Suppliers within scope are emailed a list of part / materials numbers, instructions and URL for the web portal including login details, compliance reporting deadline, and additional information at the discretion of the Customer (e.g. contact details for support).

4. Complete Declarations (Supplier)

4.1 Having received their reporting request by email, Suppliers then login to access their area of the web portal. Here they will find a simple, uncluttered interface in which to report their requested part and materials.

4.2 Via this interface, suppliers will be able to select a requested material or part, and report against it using the format set by the Customer (i.e. one of the options A to E above). In the case of parts made of standard materials (eg metals with known composition), it will be possible to make the declaration by simply specifying the material.

4.3 Suppliers will then have the ability to copy one declaration to all parts / materials in a folder (where they are similar parts / materials with similar compliance properties), or apply a given declaration for one part / material to other parts / materials displayed in a list.

4.4 The Supplier will be able to run simple reports to show the declaration status of all parts (e.g. reported / unreported, reporting deadline), and a list of all unreported parts.

4.5 Basic automated checks will be applied (as described in UCD E-I-04) when submitting declarations (e.g. to alert the supplier to a 'required' field being missed, or a CAS checksum where the supplier is being asked for a full disclosure declaration, and they are reporting a substance not present in the RSDB).

4.6 When submitting a declaration for a single part or groups of parts, the supplier signs the form electronically and a date stamp is applied to the declaration.

5. Data Verification

5.1 In addition to the automated checks carried out above, a further approval process will be carried out by the Customer EHS staff once the declarations have been downloaded into the Granta MI in-house

database. A combination of manual and automated checks (as described in UCD E-I-04) will be applied prior to final approval for use in the Master database. Should the checking procedure identify any non conformances, the supplier will be notified by email and requested to resubmit their declaration addressing the identified issues.

6. Management Tools (Customer)

6.1 For supplier management purposes, the Customer will be able to run a number of reports from the web portal:

- Status of all declarations
- Status of declarations from one supplier
- Status of declarations for a specific list of components (e.g. parts / materials within a particular engineering project)
- List of suppliers who are complete, working on their request, not working on their request
- Generate emails to suppliers of specific components / materials (e.g. all suppliers of parts who have missed a deadline, or are approaching a deadline)

7. Authentication System (Supplier) *Supplier Account Administration?*

7.1 Each supplier will be given one login for their Portal account initially. Should they lose their password, they will be able to request a new password which will be sent to the primary email address set up for that supplier by their Customer.

7.2 Via administration functions, they can then add up to five logins as necessary. In addition, they can:

- Modify address & contact details (but not their supplier code or company name)
- Reset password for logins

8. Additional Workflows (Customer)

8.1 At set times, data can be downloaded from the Portal Database to the Master Database. This schedule can be set in an Administration area of the Customers login for the Portal.

8.2 Users in MI: should also be able to send data to the Supplier Portal. For example to request a supplier resubmission where a received declaration has been found to be invalid following secondary verification review in MI (UCD E-I-04).

8.3 The Administration area of the Portal will have the same User setup functionality described above in 7. and allow Customer Admin to reset Suppliers Primary contact passwords.

9. Other

9.1 Future functionality should include the option for Suppliers to prepare declarations offline, and then upload them into their area of the Supplier Portal.

9.2 Compatibility with Industry declaration standards should be provided for such as IPC 175 (electronics), ASD / SAE 9535 (aerospace), AIAG Compliance Connect Spreadsheet.

9.3 Declarations gathered by the Supplier Portal should support the generation of reports via MI into the Industry Standards mentioned above.

Wider Impact

The access control system in GRANTA MI does not currently support the potential many thousands of logins necessary for the web portal, and therefore a software solution will need to be developed to deliver this capability.

Consideration should be given to the ongoing integration of Eco Audit functionality into MI. Future data points gathered by the supplier portal may include energy, water and carbon consumption data from the supply chain.

Specific Requirements

| # | Description | Est | Priority |
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| Setup database | | | |
| 1. | <p>Populate master substances database (Customer)</p> <p>1.1 Generate database records for the materials, preparations and articles requiring declarations</p> <ul style="list-style-type: none"> by bulk import from PLM via MI Toolbox importers by hand inputting/editing individual records <p>1.2 Populate the supplier table with contact data for each supplier</p> <p>1.3 Link the suppliers to all of the materials, preparations and articles that they supply.</p> | | 1 1 1 |
| 2. | <p>2.1 Set-up the structure of portal database (Customer Admin)</p> <p>MI Admin User sets up the Portal Database Structure by copying part of the Master database structure as well as 'empty' records (containing only record identifier and name information) and links between the following tables:</p> <ul style="list-style-type: none"> substances legislation bought-in components materials (and preparations) | | 1 |
| 3. | <p>Set up 'Declaration Projects' (Customer)</p> <p>3.1 By assigning materials and / or components to specific 'Declaration Project' the Customer can manage sets of materials, parts and suppliers as separate projects (e.g. Different Declaration Projects for each legal entity, business unit, or project).</p> <p>3.2 The customer may set up as many declaration projects as needed.</p> <p>3.3 Each 'Declaration Project' will contain the following information:</p> <p>(i) The declaration type:</p> <p>A. Yes/No Exists/Does not exist</p> <p>B. more/less than 0.1%</p> <p>C. discrete levels (eg <0.1%; 0.1-0.3%; 0.3-1%; 1-3%; 3-10%; 10-30%; 30-100%)</p> <p>D. continuous % scale (with full disclosure or partial disclosure)</p> <p>E. Industry Standard e.g. IPC 175, ASD SAE 9535</p> <p>(ii) The list of substances to be declared against in this declaration project (eg SIN List / REACH Candidate List / GADSL list, etc)</p> <p>(iii) The list of records (materials/preparations/articles)</p> | | 1 |

| # | Description | Est | Priority |
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| | deadlines, or who have passed deadlines 7.7 Generate reports to identify Suppliers who have completed their reporting requirements, those who are active but not complete, inactive suppliers to allow targeting of Customer resource on poorly performing suppliers | | 1 |

| # | Description | Est | Priority |
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| 8. | <p>Authentication System (Supplier Admin)</p> <p>8.1 Provide login details to users (eg up to 5 accounts per supplier... Supplier.1 Supplier.2...each account having identical capabilities) Through an Administration link Suppliers can add new users after their additional login provided by their customer.</p> <p>8.2 Modify user account details - address, password etc Through an Administration link suppliers can modify company details, apart from company name and supplier code which can only be modified by their customer</p> <p>8.3 Forgotten password workflow: If a supplier forgets their primary login password (or any of their logins), they can request a new password at the login screen. This will send a new password to the email address entered for that login. If they have lost their login also, they can request their login by entering their email address. If this email address matches the email entered for the supplier primary account (set by their Customer), they will receive their login. If they do not have this, they will need to contact their Customer. From the Administration link, the Supplier can reset any of the passwords for additional User Accounts created for that Supplier account.</p> | | 1 1 1 |
| 9. | <p>Additional workflows (Customer Admin)</p> <p>9.1 Copy data from portal database to main database and vice-versa The Customer will have an Administration area of their Portal where they can schedule data updates from the Portal to the Master Database. For example to schedule data transfers nightly, or over a weekend.</p> <p>9.2 User Management. The Customer will have similar functions to 8. above to add new Users to their Customer Portal, and reset passwords etc.</p> | | 1 1 |
| 10. | <p>Other</p> <p>10.1 Future option to upload declarations from file</p> <p>10.2 Use industry standard formats for uploading declarations</p> <p>10.3 Use industry standard formats for reporting declarations</p> | | 2 2 2 |

1. Must Have
2. Should Have
3. Nice to Have
4. Unprioritised
5. Not required