### **GEFEG Proposal for use of EDIFIX by UBL TC Members**

The purpose of this document is to propose that TC members adopt the use of our EDIFIX ® software for the following TC activities:

- 1. Creation and maintenance of Schema
  - A critical task that must be completed before this is fully accomplished is the alignment of spreadsheets and EF <u>before</u> new 1.1 work is started. This is a task that can only be undertaken with both GEFEG and UBL members' effort.
- 2. CCTS data models including maintaining them and generating both schemas and spreadsheets from them.
  - EF currently creates one to one schemas and spreadsheets from UML/CCTS data models. This reduces the opportunity for errors, as the data model is the single source in EF for enhancements and changes.
- 3. Quality Assurance
  - This includes an approach as agreed to by the TC and SSC that would allow us to verify that EDIFIX, spreadsheets, and any other software tools produce the same results.
  - That we use UBL models to create both schemas and output spreadsheets, thereby reducing the opportunities for errors from different sources. We currently create models from one source, and schemas from documentation in a change log.
  - We propose a circle approach where externally created spreadsheets (created by users or TC members) are imported and exported into EF. EF--->Spreadsheet; Spreadsheet--->EF; EF--->Spreadsheet. This allows automated comparison between the spreadsheets and checks whether EF works correctly.
  - It is important to note, that this does not eliminate any existing UBL spreadsheets.

#### 2. Documentation

- EF allows a user to create custom reports that document all output artifacts in PDF, RTF, and HTML format. Additionally UML diagrams can be exported in .bmp, .gif, and html format. Reports can be created that include detailed notes, as well as implementation guides. A sample report is included here.
- For an example of what can be done with EF for implementation guides, see <a href="http://www.edifice.org/sites/repository/billing-epigs.aspx">http://www.edifice.org/sites/repository/billing-epigs.aspx</a>.

GEFEG is an internationally renowned software development, professional services, and training company with a strong focus on data modeling, schema development, and documentation for international standards. Our target market is medium to large organizations and government agencies. We are a small company with less than fifteen team members and have offices in Berlin and California. We have over 700 customers including many Fortune 100 customers worldwide.

In November 2003, we introduced our commercial software EDIFIX 5.0® Professional Suite to various TC members. EDIFIX is not new unproven technology. At the time, the software already included support for several XML standards. It included modules for data modeling, schema editing, generation, and XML guideline creation. Additionally, EDIFIX® can generate UBL standards from a partially complaint CCTS data model. This is important as it allows for the generation of UBL specific models and schema without a requirement for full CCTS compliance. Thus, it supports UBL for people starting from the data modeling level and others, who start on the schema level to do their customizing. We were also developing functionality for CCTS. Some functionality to support schema development by derivation, restriction, and extension as described in the Guidelines for Customization for UBL v1.0 Schemas already existed as well. As the Guidelines for Customization are not complete, we cannot claim that all functionality exists today to support these Guidelines.

After the November meeting, we made a decision to add UBL standards to future EDIFIX versions. The main problem we observed was the mixture between handcrafted data and machine generated data resulted in an opportunity for improving the quality of the spreadsheets which were used for XSD generation.

Our decision to include UBL standards to EDIFIX includes support, training, and future product enhancements as the standard matures. We also committed to providing a free Reader that is publicly available and includes both OASIS approved and TC approved UBL standards. Since February of this year, we have actively participated in various UBL work efforts, teleconferences, and Face to Face meetings. Additionally, we have actively participated in UN/CEFACT meetings. Our commitment to UBL is independent of any TC decisions to use EDIFIX ®. We have plans for expanding support and training resources as required to support additional EDIFIX customers worldwide.

### Our proposal is as follows:

- 1. Transfer UBL 1.0 maintenance to UBL TC members. All future standards development work beginning with UBL 1.1 should be done by UBL TC members and not GEFEG.
- 2. Provide at no charge, UBL TC developers with EDIFIX 5.5 for limited use. The limitation is that the software can only be used for UBL TC development and maintenance. It cannot be used for any work for a public or private employer, or for use by self employed individuals for commercial gain.
- 3. Provide training internet and/or Face to face meetings at no charge.
- 4. To provide the same level of support as is provided to all GEFEG commercial customers. Support will be provided from our Berlin office for Europe and from California for North America and Asia.
- 5. Provide documentation of how EDIFIX complies with UBL NDR.
- 6. Provide documentation explaining how EDIFIX processes UBL spreadsheets.
- 7. Provide products enhancements to support future UBL standards.

- 8. Research and develop in the future at least one open file format for import and export of UBL models.
- 9. Research for future development, requirements for exporting schema to an open file format as mutually agreed to by TC members.
- 10. Provide technical resources to support TC members as necessary.
- 11. Support the import of Excel spreadsheets to create data models.
- 12. Support the export of Excel spreadsheets from EDIFIX data models.
- 13. Support the development process as diagramed. Work with SSC and TC members to document and improve the process.

# Request Gathering / Requirements Analysis RFEs - New Business Cases - Interop and other reviews - Alignments - Internal Requests -Design and Modeling Phase (see detail page) Submission Modeling and Harmonization Acceptance Bus / Tech Review Integration/Archival and Assessment **Technical Production Phase** Generate W3C Schemas ASN.1 Formatting UML, Schemas Examples, etc Specs QARelease Phase Packaging - Publication to Vote - Comments Processing Post-Release Phase

Marketing and Liaison Activities - Maintenance

## **Design and Modeling Phase Submission Package Acceptance** Type: New, update, fix, ..., internal Format: text, spreadsheet, ..., other? Complexity / Workload: Document, BIE, ... Bus / Tech / Logical Review and Assessment - Alignment with existing BIEs and CCs - Document / scenario alignment - Conformance with derivation methodology (CM) NDR Conformance **Modeling and Harmonization** Prior Schemas, etc New Schemas, etc Create BIEs/Documents/CCs Incorporate into Library - Record changes - Enter into EDIFIX - Test - Regenerate artifacts with EDIFIX - Test again - Archive results )A Test results (schemas, spreadsheets, UML, etc) against NDRs and prior version. Final integration into Library and archival Technical Production Phase

