GECO FUNCTIONALITY

GECO provides the following capabilities:

1. Configuration data repository

As described in the Overview, all the configuration data generated in a project can be stored in **GECO**.

The data can be read, added or modified, depending on the rights assigned to the user who has logged in into the tool.

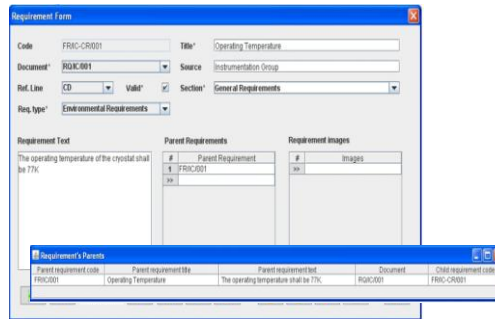Data can be displayed by the user as:

- ❖ A summary data view which displays the most relevant field records in a table

- ❖ A full data view that displays all field records in a form. Specifically, the relationships among requirements, documents, individuals, etc. are shown in the full view

In both views, **GECO** provides the user with all the filtering and sorting capabilities that are needed to search the desired data.
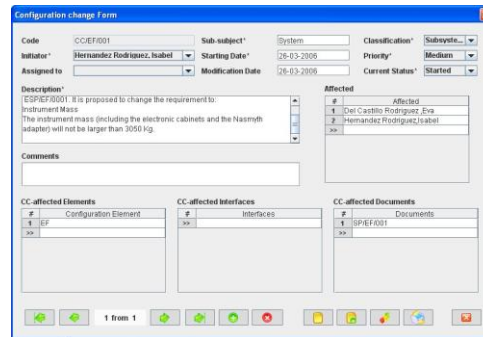

2. Data traceability

Cross-relationships among the configuration data (mainly parent-child requirement traceability) can be introduced. The data traceability is critical for keeping the coherence of the system.

GECO searches parent or child requirements by taking into account the relationships entered into the Requirements form.

3. Configuration management and quality control

GECO helps managing configuration changes, non-conformities and anomalies during their lifecycle, as well as keeping the related users informed by sending e-mails at their status transitions.
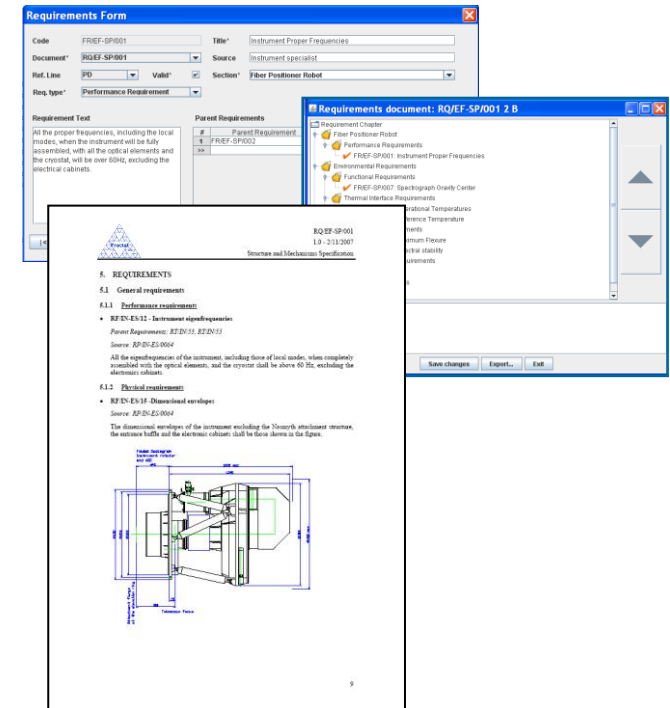

Prior to start the system verification, the technical requirements can be automatically introduced into the verification matrix.

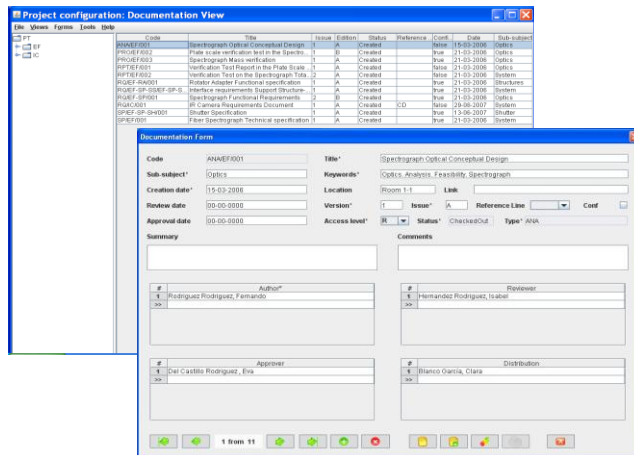## 4. Automatic generation of requirement documents

The requirement section of the documents can be generated automatically from the requirements stored in **GECO**.

This function helps to keep a coherent set of requirements and avoids maintaining duplicated information.

GECO allows to organize the requirements into sections and subsections, which can be arranged before exporting them to the requirement document.

Requirement Documents play and important role in the requirement set and are mainly needed to interface with external parties, such as contractors and customers, as well as to comply with the intended project milestones and reviews.

GECO OVERVIEW

GECO our *Configuration Management Tool*, provides the System Engineering Group with the means to manage the configuration data generated in all phases of a project, from development to integration, verification and operation, as well as disseminating this information to all project members in charge of developing and operating the system.

The configuration data that can be stored and managed by **GECO** are:

❖ Product Tree elements

❖ Parts

❖ Table of interfaces

❖ Requirements, interface requirements and the relationships between parent and child requirements

❖ Requirement verification matrix

❖ Configuration changes

❖ Non-conformities

❖ Verification and operation anomalies

❖ Project documentation

The configuration information is laid out hierarchically, following the system's Product Tree. This way of displaying the subsystems provides an intuitive view of the system's breakdown structure, and thus allows the user to access, with a few mouse clicks, to a Product Tree element, its requirements, interfaces, associated documents, etc.

GECO contains a relational database and a graphical user interface developed in Java.

Why is GECO needed in a project?

Software tools help managing the big amount of information generated during the lifetime of any project. This is particularly important for geographically distributed organizations, where it becomes essential to keep the configuration elements information in an electronic format, well organized and easily accessible to all people involved.

FRACTAL System & Project Suite includes:

1.System engineering and configuration control

The configuration data management tool, **GECO**, helps to track the system development successfully, from the initial high-level requirements up to integration, verification and operation.

2.Project documentation control

The documentation management tool, **DOCMA**, helps to organize and keep track of your project documents, improving the internal communication among the different members involved.

3.Project management tool

The project management tool, **MANATEE**, helps your organization manage your projects efficiently, by controlling the three project parameters (scope, schedule and budget).

All applications can be used independently or in an integrated way.

A trial license and further information about these tools can be found at:

http://www.fractalslne.es/

e-mail: info@fractal-es.com

Configuration Management Tool