MATREX - MATERIAL RECORDING EXPERIENCE: NEW FEATURES AND REGULATORY CONSIDERATIONS

Vanessa Cocheteau(1), Hélène Combes(2), Christian Durin(2)

(1) CELAD, 48 Route de Lavaur, 31130 Balma, vanessa.cocheteau@cnes.fr
(2) CNES, 18 avenue Edouard Belin, F31401 Toulouse Cedex 9, France

ABSTRACT
MATREX is a CNES materials database oriented in recording experience coming from projects. This database allows to collect, store, consult different data on materials, processes, projects, substances and suppliers. It can propose a risk level following anomalies treatment, new constraint on material. MATREX is available through the website: https://matrex.cnes.fr.

Increasing numbers of regulations in Europe (e.g. RoHS, REACH) or local regulations (e.g. French Space Operations Act) are implemented and impacted our space activities. With the REACH regulation, one of the most imminent implications are the possible obsolescence of qualified materials, processes and technologies and the need to be compliant with the Article 33 obligation (“Duty to communicate information on substances in articles”).

Therefore, it has become essential to have a dedicated tool to identify the risks (short/middle/long term) and to be able to meet these obligations. The “substance module” was created for the purpose of making links between lists of substances and materials, indicating risk information, identification of impacted materials. The MATREX database has been improved to take into account these requirements.

MATREX database now offers to store:
- the list of substances included in materials, through information given in the Material Safety Data Sheet,
- the list of high concern substances, for REACH regulation. The stored lists are the Annex XIV, the recommendations Annex XIV, the candidate list and the Annex XVII,
- the properties of substances, used for example for the re-entry analysis.

In addition, an advanced search improvement and a new risk automation module have been implemented in order to crosscheck all the data.

For few years, some specific information are available for external users. The MATREX database has been chosen to be the reference for the European Space Material Data Base, more information on materials and substances are now available for external users:
- general information and documents,
- properties ion materials and substances,
- substances included in the material
- list of high concern substances,
- risk on materials.

A new version of MATREX is in progress, available by end of this year, and will allow all users to access more information, including processes, projects, suppliers, and new features. MATREX is a tool to exchange data in order to save money and time but also allowing each user to store its own data and to find new information in a secure way.