

## FREME PROJECT FOR MULTILINGUAL AND SEMANTIC CONTENT ENRICHMENT

Many industries are coping with new challenges and finding opportunities in the growing amount of digital content across languages, sectors and domains. Functionality like machine translation, entity recognition, or multilingual linked data sets – based on Linked data (LD) and language technology (LT) solutions – face several issues: e.g. a plethora of content formats to process, adaptability and “silo solution” dependency, and usability in an industry application scenario: the lack of adequate tooling for a given or new group of user types (authors, translators, data wranglers or scientists, etc.) in selected business scenarios.

FREME enrichment services will improve the existing processes of digital content management by providing a reusable set of open **Application Programme Interfaces** and Graphical User Interfaces, thanks to the FREME framework. The enhancement will go through the whole content value chain: content creation (or authoring), content translation/localization, publishing and access to content including cross-language sharing and personalised content recommendations.

The FREME Project, a two years project funded by the European Commission under the Horizon2020 research programme, started in February 2015 aiming at the opening of new opportunities for all sectors involved in digital content management, and strengthening the position of the European Union as provider of innovative multilingual products and services based on digital content and data, addressing well-identified industry and consumer market needs.

The FREME Project intends to provide a set of interfaces for the enrichment of textual digital contents, both multilingual enrichment, which is the annotation of content with additional linguistic information in a language or languages other than the language of content itself, and semantic enrichment, which is the annotation of content with additional information that transforms unstructured content into its structured representation. FREME e-Services are based on existing and mature technologies.

To bring the FREME innovation straight to the market, FREME e-Services will be designed on the needs provided by four real world **business cases**:

- Authoring and publishing multilingually and semantically enriched eBooks
- Integrating semantic enrichment into multilingual content in translation and localisation
- Enhancing the cross-language sharing and access to open agricultural and food data
- FREME-empowered personalised content recommendations.

After the first six months of Project, FREME provides four **e-Services**, and each one can be accessed as a Web service via a RESTful interface. The REST API design has been chosen to permit an easy integration of FREME tools written in various programming languages. All FREME e-Services use the Natural Language Processing Interchange Format, NIF, as the broker format for access to the services and for interaction between the services themselves.

“Since FREME objectives span a wide range of business and research communities, we have discussed FREME at many events, ranging from cutting edge research conferences or industry specific events to EU networking, related to the communities of data, language technology and public sector information.” (based on the FREME Newsletter cover letter by project coordinator: Prof. Felix Sasaki from DFKI, [felix.sasaki@dfki.de](mailto:felix.sasaki@dfki.de)).

For further information please visit FREME website at [www.freme-project.eu](http://www.freme-project.eu) or contact us at: [info@freme-project.eu](mailto:info@freme-project.eu).

TURIN, 31 JULY 2015

Coordinator

