ABSTRACT: In this paper we argue why it is necessary to associate linguistic information with ontologies and why more expressive models, beyond RDFS, OWL and SKOS, are needed to capture the relation between natural language constructs on the one hand and ontological entities on the other. We argue that in the light of tasks such as ontology-based information extraction, ontology learning and population from text and natural language generation from ontologies, currently available datamodels are not sufficient as they only allow to associate atomic terms without linguistic grounding or structure to ontology elements. Towards realizing a more expressive model for associating linguistic information to ontology elements, we base our work presented here on previously developed models (LingInfo, LexOnto, LMF) and present a new joint model for linguistic grounding of ontologies called LexInfo. LexInfo combines essential design aspects of LingInfo and LexOnto and builds on a sound model for representing computational lexica called LMF which has been recently approved as a standard under ISO.