



Request for Proposals:

Technical Support for a FAIR Vocabulary of Demography

1 March 2024

IUSSP seeks partners for the creation of a Multilingual FAIR Vocabulary of Demography. The joint [IUSSP-CODATA Working Group](#) has recommended the creation of a vocabulary of demographic terms consistent with the FAIR principles (Cox et al., 2021; Wilkinson et al., 2016). The new Vocabulary will provide authoritative definitions of demographic terms in a form accessible by both humans and machines consistent with emerging standards for the semantic web. The IUSSP [Standing Committee on Demographic Terminology](#) will oversee the content of the Vocabulary. IUSSP seeks partners with the technical capabilities required for creating and sustaining a FAIR online platform for the Vocabulary. Support for the FAIR principles is very strong among national and international research agencies, and IUSSP will favor partners who can seek funding for the work described here.

The project is expected to have two phases, development and long-term services, which may involve different partners.

1. Capture and reformat existing dictionaries and thesauri

IUSSP has been publishing definitions of demographic terms in multiple languages since 1954, and most of the content for the FAIR Vocabulary of Demography already exists in electronic form. However, much of this content will need to be reformatted for the new platform.

The Institut National d'Études Démographiques (INED) preserved earlier efforts in two online services: Demopædia (<http://www.demopaedia.org/>) and DemoVoc (<https://thesaurus.web.ined.fr/navigateur/fr/about>). Demopædia provides short essays defining demographic terms in 18 languages. Demopædia is built on Wikipages, but terms are also available in an SQL database. DemoVoc is a thesaurus of demographic terms in both French and English, which is built on the SKOSMOS platform. DemoVoc does not include definitions, but it does use SKOS to describe relationships between terms.

Partners in this phase will work with the IUSSP Standing Committee on Demographic Terminology to decide the best way to combine the features of Demopædia (18 languages, definitions) with DemoVoc (SKOS relationships among terms).

2. Long-term FAIR vocabulary service

IUSSP seeks a partner who can provide a platform for the Vocabulary with all of the features associated with FAIR (Cox et al., 2021). A model for governance of the Vocabulary is included as an Appendix to the report of the IUSSP-CODATA Working Group. The governance model is intended to simplify coordination between the partner maintaining the technical infrastructure of the Vocabulary and the IUSSP standing committee responsible for the content of the Vocabulary.

IUSSP is especially interested in having its Vocabulary of Demography adopted by the social science research community. As described in the Working Group report, this community relies upon two metadata standards: Statistical Data and Metadata eXchange (SDMX) and Data Documentation Initiative (DDI). Strategies for reaching out to the SDMX, DDI, and other communities (like PxAXIS) will be very welcome.

Proposals should discuss the technical approach, capabilities and experience with the FAIR principles and commitment to long-term maintenance of the online platform. Please describe potential funding opportunities and plans for long-term sustainability.

For more information, please contact George Alter, Chair, IUSSP Standing Committee on Demographic Terminology, at altergc@umich.edu.

Proposals may be sent to altergc@umich.edu by **1 June 2024**.

References:

Cox, S. J. D., Gonzalez-Beltran, A. N., Magagna, B., & Marinescu, M.-C. (2021). Ten simple rules for making a vocabulary FAIR. *PLOS Computational Biology*, 17(6), e1009041. <https://doi.org/10.1371/journal.pcbi.1009041>

IUSSP-CODATA Working Group on FAIR Vocabularies. (2023). *FAIR Vocabularies in Population Research*. Zenodo. <https://doi.org/10.5281/zenodo.7818157>

Wilkinson, M. D., Dumontier, M., Aalbersberg, Ij. J., Appleton, G., Axton, M., Baak, A., Blomberg, N., Boiten, J.-W., da Silva Santos, L. B., & Bourne, P. E. (2016). The FAIR Guiding Principles for scientific data management and stewardship. *Scientific Data*, 3. <https://doi.org/10.1038/sdata.2016.18>