

FDO Bulletin 2021-3

December 2021

Participate in the High-Level Panel on the Future Data Space at 19.1.2022 (see below)

The month August and September seemed to be crazy in Europe, since many of the experts engaged in the FDO Forum were occupied with proposal writing which influenced FDO Forum's productivity.

FDO Forum

The Steering Committee of the FDO Forum has now been extended by 6 new members to achieve a better geographical coverage. The following experts joined SC: Natasha Simons (AU), Lianglin Hu (China), Deepak Subramini (India), Mikiko Tanifuji (Japan), Joseph Wafula (Kenya), Washington Segundo (Brazil), Tyng-Ruey Chuang (Taipeh) and Alena Rybkina (Russia). A further improvement of the geographical coverage is intended at a later phase. A more balanced representation will be discussed at the FDO Conference October 2022.

Reach Out and Community Engagement

FDO organised two sessions (whole day) entitled "FAIR Digital Objects to Establish a Global and Interoperable Data Space" at the **SciDataConf** conference with 120 participants from many different countries. It was obvious that FDO Forum reached out to new experts and that its goals and terminology become more popular (session recordings: <https://www.scidatacon.org/virtual-2021/sessions/330/>).

The first **Community Interaction Meeting (CIM)** to which all members of the FDO Community (those who registered and are on our FDO mailing list) and the RDA DFIG IG are invited took place and had more than 70 participants. It made clear that the FDO Forum follows a process where experts working on FDO aspects and being able to spend some time are involved in the WGs and where all registered experts will be involved in the specification work. A document process specification will be made public soon which will explain in detail the steps that will be taken. The breakout session resulted in a couple of major conclusions which FDO Forum needs to consider: (1) The Website needs an improvement and a clarification about different websites is urgently required to prevent confusions. (2) While this first meeting focussed on presenting the state of discussions, the next CIM meeting in March 2022 should also present practical work¹ and if possible, opportunities to participate. (3) FDO Forum should start with recipes to guide interested users and also offer training courses based on what has already been done. It is obvious that these items can only be taken care of if members of the FDO Forum will invest time funded by their projects.

Next public meetings (times in UTC):

Date	Meeting
19. January 2022, 13.00	High Level Panel on pillars of the emerging future data space
February 2022	planned to have a FDO Community Meeting on FDO Typing System
March 2022	2 nd Community Interaction Meeting
April 2022	Workshop with leading persons from research infrastructure and eInfrastructures
October 2022	1 st International FDO Conference, Leiden

Websites

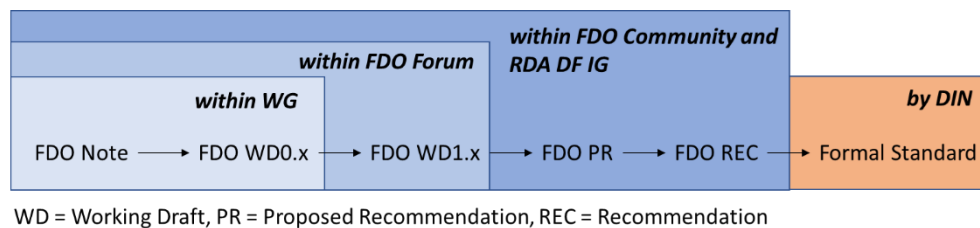
There was confusion about different websites which need to be clarified. The website of the FDO Forum is <http://fairdo.org>. Its content is determined by the co-chairs of the Steering Committee (SC). Our colleague Luiz Bonino who is participating in the SC and two WGs and contributing with his deep

¹ A paper with demonstrator projects will be finished and made publically available in December.

knowledge runs his own website called <https://fairdigitalobjectframework.org/>. This requires a clarification: The FDO Framework was endorsed as V1.02 by the Paris meeting² and needs an urgent improvement which will be discussed according to the FDO Forum document process. This is currently being defined. Finally, the intention is to integrate the FDO Framework requirements into the FDO Specification Document.

FDO Document Process

Now that first documents of Working Groups are becoming available that have an influence on the FDO Specification, it became obvious that the FDO Forum needs a strict “document process specification”. This has been worked out based on the IVOA process³ which is a lightweight version of the W3C process and was seen as suitable for FDO Forum purposes. For FDO specification documents, for other FDO documents and for external documents to be endorsed by the FDO Forum it include clear phases. The document will be made public after some more improvements in December to achieve transparency.



The diagram indicates the steps to be taken from Working Group internal Notes up to FDO Recommendations. It should be noted that the German DIN (standardisation body) expressed its interest to work on turning our specifications to formal standards as part of the international standardisation and that a close collaboration with the FDO Forum will start in 2022. Important is that the community of interested and registered experts will be involved in the specification process. To support the third step we will have a public share of versions and a google drive for commenting:

- versions: <https://datashare.rzg.mpg.de/s/RTeYZGe3QMgEciH> (this might be changed in future)
- commenting: <https://drive.google.com/drive/u/0/folders/1HWOX2D4CZBHZxTeW2ot1yQgKfZQKvS7I>

FDO Documents

For the following documents which are in the WD1.x state a Request for Comments will be launched in the coming days: (1) Machine Actionability, (2) FDO Configuration Types, (3) PID Profiles and Kernel Attributes, (4) Granularity, Versioning and Mutability, (5) The FDO Plug-In Concept.

Working Groups

Joint Work on Typing

During the last weeks the three core WGs (**TSIG, SEM, BIG**) focussed on preparing the document process specification, the CIM meeting and discussing the FDO Typing System, both within the WGs but also in a joint task force. Two joint meetings were organised to discuss the purpose of an FDO Typing System and its key pillars with the intention to write a joint paper which would enter the Document Process in 2022. Despite the different backgrounds of the group members clear agreements were achieved: (1) Only typing issues related to FDOs will be addressed. (2) In the focus will be to define the set of mandatory and optional elements that are required to describe genres of types. In this respect will make use of existing work as much as possible such as from EDAM, CMDI, DDI, OBI, etc. and need to build in flexibility (4) A unified structure (type of FDO Types) will have to be specified as basis for interoperability. (5) Ways to integrate already existing community concepts need to be solved. (6) An infrastructure existing of registries and some tools needs to be defined.

To achieve these goals the next steps were identified where a use-case based approach seemed to be most appropriate: (1) Everyone is welcome to provide descriptions of types from his/her work environment. (2) Scenarios of FDO usages are also needed to identify the set of elements needed. (3) Existing “type” descriptions will be analysed such as from RDA DTR instances already in use. For this

² FDOF V1.02 can be found here together with other documents about the Paris meeting:

<https://github.com/GEDE-RDA-Europe/GEDE/tree/master/FAIR%20Digital%20Objects/FDOF>

³ <https://www.ivoa.net/documents/DocStd/index.html>

use case based approach it is important to engage as many experts from different research communities as possible requiring an open interaction.

TSIG (Technical Specification & Implementation Group)

TSIG worked hard to finish the discussions on the first documents (now in WD1.0 state) by building editing teams and almost all TSIG members took part in commenting and improving the documents.

BIG (Basic Infrastructure Group)

BIG started editing a document on the interoperability of data type registries that includes a precise description of the data model used for type definitions and continued the discussion on a generic PID infrastructure.

SEM (Semantic Group)

The group presented its work at the first Community Interaction Meeting (CIM) in October and is currently involved in the discussion around FDO Types together with TSIG and BIG. SEM is moreover planning a follow-up of its hackathon on a semantic model for FDO held in August aiming at applying the FAIR Digital Object Framework (FDOF) to selected use cases.

CWFR (Canonical Workflows for Research)

The CWFR group is finishing its time-consuming work on producing the special issue on canonical workflows for research, discussing coming working meetings and summarising the discussions from one year of work.

eING (eInfrastructure Group)

The eING group is finishing its Demonstrator paper to which several teams working on FDO implementations contributed. The intention is to start a discussion on a “testbed” implementation allowing people to plug-in their solution to test compatibility. The group intends to also start work on training and recipes.

Participation

Again, we received questions about possibilities to participate. Here are the two options:

- informed member of the FDO Community
- active member of an FDO Working Group

FDO Community: If you do not have much time but nevertheless want to participate in the document commenting process or in receiving other information and calls for participation, please, register here: <https://fairdo.org/register/>

FDO Working Group: If you have time and are involved in active projects on implementing FDO aspects or planning to start FDO related work, then send emails to the WG chairs or the FDO Forum (secretariat@fairdo.org) to get involved.

High Level Panel on Future Data Space

The FDO Forum will organise a panel on key pillars of the evolving Future Data Space with well-know panellists on 19. 1. 2022 at 14.00 CET (13.00 UTC). Please, register here for participation:

<https://ucsd.zoom.us/j/92302933025>



Responsible for this FDO Bulletin are the FDO-SC Co-Chairs:
Christine Kirkpatrick, Dimitris Koureas, George Strawn, Peter Wittenburg
Comments/question can be sent to secretariat@fairdo.org

