

# Common notes: FIP for Purpose ENVRI-FAIR

Online meeting, January 25, 2022

Practical information	
Date: January 25, 2022 Time: 09.00-12.00 CET	Meeting location: <a href="#">Zoom link</a> This document: <a href="#">Link</a> Project space: <a href="https://osf.io/7n5yp/">https://osf.io/7n5yp/</a>
Attendees: 44	

*Everyone is encouraged to actively contribute to these meeting minutes*

## 1st event: FIP presentation session January 25 - 3 hours

9:00 - 20 min	Barbara: Review of process
9:20 - 40 min	Erik: FAIR principles, FERs and qualifications: <a href="https://osf.io/x2hd9/">https://osf.io/x2hd9/</a>
10:00 - 30 min	Barbara: Introduction to the improved FIP Wizard (beginning slide 28): <a href="https://osf.io/f74d2/">https://osf.io/f74d2/</a>
10:30 - 15 min	break *be sure all accounts are available and working*
10:45 - 60 min	Barbara/Erik: Hands-on, using the improved FIP Wizard
11:45 - 15 min	Q&A / Discussion

## Notes:

- FIP Wizard II <https://fip-wizard.ds-wizard.org>
- FIP Wizard II [GuideLines](#)
- **Workshop Feedback form:** <https://docs.google.com/forms/d/e/1FIPWizardFAIpQLScIscXjnvxm4NlKYqwXBXnk1GR9oXLthYXbkSL7BE-3GaOmzw/viewform>
- I am sorry, I need to join another meeting - the migration for EMSO ERIC was completed successfully. Thank you for the migration tool (Ivan Rodero to Everyone (10:19))

- ToDo
  - Clean up 2020 (2019 if possible)
  - Clone - update 2022
- Laura - mint FER that is a specific INSPIRE resource ISO 19115
-

## Online meeting, January 28, 2022

Practical information	
Date: January 28, 2022 Time: 09.00-12.00 CET	Meeting location: <a href="#">Zoom link</a> This document: <a href="#">Link</a>
Attendees: 26	

*Everyone is encouraged to actively contribute to these meeting minutes*

Feedback Form:

<https://docs.google.com/document/d/1XBnGDL9YZ9yZle25oUupJD-0d2AXwkKo6lw3Jvsu3aA/edit?usp=sharing>

**March 1: hard deadline on the FIPs and Convergence analysis (presentation of the results)**

### 2nd event: Consultation Session January 28 - 3 hours

- Agenda: Follow up / Clarifications from Tuesday (Barbara and Erik)
  - Q&A
  - Email questions
  - FERs and Qualifications
- Review:
  - Begin with FIP from 2019
  - In FIP Wizard II: Clean up the FIP and publish
  - Use the newly published 2019 FIP as the basis for the 2020 and 2022 FIPs.
- 5 new FERs nanopublished, of which 3 are qualified.
  - “Refresh” to see the newly qualified nanopubs
    - Clear the existing FER, then select it again from the drop down
- Note: Creator of the assertion = person, Creator of the nanopub = FIP Wizard
- Note: A GFF qualified FER requires two nanopubs. Example: a FER....

```

@prefix this: <http://purl.org/np/R4duJIszplG62y3A3nSF0Tz1191A2We4E6i8B4qUtlU> .
@prefix sub: <http://purl.org/np/R4duJIszplG62y3A3nSF0Tz1191A2We4E6i8B4qUtlU> .
@prefix np: <http://www.nanopub.org/nschema#> .
@prefix dct: <http://purl.org/dc/terms/> .
@prefix npx: <http://purl.org/nanopub/x/> .
@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .
@prefix orcid: <https://orcid.org/> .
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
@prefix fip: <https://w3id.org/fair/fip/terms/> .
@prefix prov: <http://www.w3.org/ns/prov#> .

sub:Head {
  this: np:hasAssertion sub:assertion ;
  np:hasProvenance sub:provenance ;
  np:hasPublicationInfo sub:pubinfo ;
  a np:Nanopublication .
}

sub:assertion {
  sub:ICAMP-DX a fip:Available-FAIR-Enabling-Resource , fip:Data-schema , fip:FAIR-Enabling-Resource ;
  rdfs:comment "ICAMP-DX is the IUPAC standard format family for spectral data exchange" ;
  rdfs:label "ICAMP-DX" ;
  rdfs:seeAlso <https://iupac.org/what-we-do/digital-standards/icamp-dx/> .
}

sub:provenance {
  sub:assertion dct:creator orcid:0000-0001-8911-7253 .
}

sub:pubinfo {
  sub:sig npx:hasAlgorithm "RSA" ;
  npx:hasPublicKey
    "MIGfMA0CCQgS1D3QESBQAAGHwDCBQBgQCokf7Lk1y8B78UvJFF9D70Kk0w03err4H3v/VClRvshED13B2Vek0WwRe+T0PycB
    npx:hasSignature "03a0D071e0e1p18rj8Pw10YQ2hdcFjvGf1saovk4W1ysVka2y1g6eQz6Zkx6yV0H0cBy6e16Fh3LPH
    npx:hasSignatureTarget this: ;
  this: dct:created "2022-01-27T10:05:10Z"^^xsd:dateTime ;
  dct:creator <https://fip.wizard-ds.wizard.org/> ;
  dct:license <https://creativecommons.org/publicdomain/zero/1.0/> ;
  npx:introduces sub:ICAMP-DX ;
  prov:wasDerivedFrom <https://w3id.org/fip/wizard/26046c4ff-9003-4134-b698-aae29f906256> .
}

```

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○ .... and its GFF qualification:

```

@prefix this: <http://purl.org/np/R4duJIszplG62y3A3nSF0Tz1191A2We4E6i8B4qUtlU> .
@prefix sub: <http://purl.org/np/R4duJIszplG62y3A3nSF0Tz1191A2We4E6i8B4qUtlU> .
@prefix np: <http://www.nanopub.org/nschema#> .
@prefix dct: <http://purl.org/dc/terms/> .
@prefix nt: <https://w3id.org/np/ontology/> .
@prefix npx: <http://purl.org/nanopub/x/> .
@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .
@prefix orcid: <https://orcid.org/> .
@prefix prov: <http://www.w3.org/ns/prov#> .

sub:Head {
  this: np:hasAssertion sub:assertion ;
  np:hasProvenance sub:provenance ;
  np:hasPublicationInfo sub:pubinfo ;
  a np:Nanopublication .
}

sub:assertion {
  <https://www.gfairfoundation.org/> npx:qualifies <http://purl.org/np/R4duJIszplG62y3A3nSF0Tz1191A2We4E6i8B4qUtlU> .
}

sub:provenance {
  sub:assertion prov:wasAttributedTo <https://www.gfairfoundation.org/> .
}

sub:pubinfo {
  sub:sig npx:hasAlgorithm "RSA" ;
  npx:hasPublicKey
    "MIGfMA0CCQgS1D3QESBQAAGHwDCBQBgQCokf7Lk1y8B78UvJFF9D70Kk0w03err4H3v/VClRvshED13B2Vek0WwRe+T0PycB
    npx:hasSignature "03a0D071e0e1p18rj8Pw10YQ2hdcFjvGf1saovk4W1ysVka2y1g6eQz6Zkx6yV0H0cBy6e16Fh3LPH
    npx:hasSignatureTarget this: ;
  this: dct:created "2022-01-28T09:11:15.169+01:00"^^xsd:dateTime ;
  dct:creator orcid:0000-0003-2195-3997 ;
  nt:wasCreatedFromProvenanceTemplate <http://purl.org/np/R4duJIszplG62y3A3nSF0Tz1191A2We4E6i8B4qUtlU> ;
  nt:wasCreatedFromPublicationTemplate <http://purl.org/np/R4duJIszplG62y3A3nSF0Tz1191A2We4E6i8B4qUtlU> ;
  nt:wasCreatedFromTemplate <http://purl.org/np/R4duJIszplG62y3A3nSF0Tz1191A2We4E6i8B4qUtlU> .
}

```

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- Carl-Fredrik: shall we have a two stage submission of nanopubs:
  - First publish to a temporary server to validate and qualify
  - Then publish the nanopub in public service
  - And then receive qualification
- Add FERs for AAI services, need several levels
  - Protocols SAML, OIDC
  - Individual ID providers
  - Federated ID brokers EGI Checkin etc
- <https://madrigal.eiscat.se/madrigal/>
  - “The CEDAR Madrigal database architecture and implementation meets and exceeds FAIR guiding principles in all aspects.”
  - Description of data model and metadata files  
[http://cedar.openmadrigal.org/docs/name/ad\\_metadata.html](http://cedar.openmadrigal.org/docs/name/ad_metadata.html)
  - The Madrigal database “informal” FIP
    - [http://cedar.openmadrigal.org/static/siteSpecific/Madrigal\\_FAIR.pdf](http://cedar.openmadrigal.org/static/siteSpecific/Madrigal_FAIR.pdf)

- Metadata Longevity Plan
  - From IAGOS “The sustainability plan is continuous preservation as long as the IAGOS-DC continues to exist and that its expertise is maintained in the long term” Is this sufficient for the FIP?
  - Yes, in principle. I think this shows some thoughtful consideration / planning about the issue.
  - In the first generation of the FAIR metrics, we asked for a link to a document, so this would suffice.
  - However, because such documents are not always available or easy to link to (and because they are themselves not typically machine actionable) we invented the MLP nanopub. This is essentially your “metadata longevity plan” but rather than a long text document, it is in short-form nanopub format. This means it is also machine actionable, so we allow (oblige) in the template a statement of how many years. But this is merely a convention of the nanopub - any document (hopefully machine readable) would suffice.
- The A1.1 and A1.2 Principles
  - There are usually multiple FERs needed for A1.1 and A1.2 - do we list all of them?
  - We are experimenting with an “index” nanopub as a way to “bundle” all the individual components into a single nanopub.
- Retract nanopubs: you need either Barbara or Nanobench ;-)
- Question R1.3 in red, why? Its a statement not a question - its ok to that it stays red.
- One community, many FIPs
- A1.2 versus R1.1
  - Metadata should (in general) be open (by default), restricted as necessary (with justification).
  - So both data and metadata should be licensed
  - Possible solutions:
    - Follow DCAT metadata
    - Publish your data as nanopubs that have license built in.
- Note: Informal FIPs
  - The HMDB is FAIR. Specifically, it is:
    - <https://hmdb.ca/about#compliance>
  - Madrigal Distributed Data System Architecture and Features: Full Implementation of FAIR Guiding Principles
    - [http://cedar.openmadrigal.org/static/siteSpecific/Madrigal\\_FAIR.pdf](http://cedar.openmadrigal.org/static/siteSpecific/Madrigal_FAIR.pdf)
- For I1

- RDF or RDFS / XML or XMLS
- Two levels of metadata
  - Metadata for datasets
  - Metadata that describes the shape of the metadata
- Marc Portier, Vliz vzw → some general technical observations on using the fip-wizards:
  - Auto-save does not seem to be reliable all the time, and partially seems to lose some entries at times.
  - Observed behavior
    - Regularly experienced going back to things I had corrected earlier
    - In some cases the actual selected URL from the drop-down was gone and was replaced by the original search-term-lookup-characters I had typed into the box
    - Although the check-icon next to the title on top kept claiming “All changes have been saved”
  - This might be latency and load related (also on my end) - combination of using the tool during zoom sessions might not be optimal (bandwidth-wise)
  - Some tips around this - In general I had the feeling
    - the ‘version history’ view was helpful in actually checking which updates had arrived and were registered on the server side!
    - Also reopening the project seemed to somehow reset timings/ workings and showing a consistent view between client and server
  - Apart from these glitches: grand work! Also on the non-technical (support) side!
- FER Types
  - Lara likes the “smart” drop down lists
  - Barbara says the typing is not trivial
- FAIR requests some separation between data and metadata
  - Provide some information about what you will get when you access data.
- Published FIP (the index nanopub) points to the FIP Wizard environment - be sure to keep the “edit” access to only your colleagues (can be “view” for everyone else).
- Lara: Warning - do not overestimate the role of the FIP (as it is) in convergence - is the FIP too coarse grained.
- **Future improvements... Please list your FIP Wizard wishes**
  - Better navigation (on the left)
  - Fix the auto-save issues
  - Index nanopubs for multi-resource answers
  -



## Online meeting, February 22, 2022

Practical information	
Date: February 22, 2022 Time: 09.00-12.00 CET	Meeting location: <a href="#">Zoom link</a> This document: <a href="#">Link</a>
Attendees: Carl-Fredrik Enell, EISCAT	

*Everyone is encouraged to actively contribute to these meeting minutes*


*Please let us know* what you thought of today's event by filling out the feedback form:

<https://forms.gle/Em9Qz2DK3gTmP56LA>

### 3rd event: Convergence Session February 22 - 3 hours

- 9:00 Welcome
- 9:05-10 min BM: Brief history of ENVRI-FIPs (3rd assessment)
- 9:15-20 min EAS: What is Convergence?
- 9:35-15 min BM: Data analysis on FIPs
- 9:50-10 min Break
- 10:00-60 min EAS: Review with a focus on convergence strategies
- 11:00-20 min BM: Presentation of FIPs / convergence matrix / discussion
- 11:20-20min EAS: Outlook - CODATA / FDO Forum

### Notes

- FIP Datasets:
  - Summary tables / charts  FIPResults
  - FIP API Queries:
    - <https://peta-pico.github.io/tapas/tapas.html?api=peta-pico/dsw-nanopub-api>
    - Triple Store API in GitHub: <https://github.com/peta-pico/dsw-nanopub-api>
    - The SPARQL query used see link
- Maggie: Good to see that there are some services - like the NERC Vocabulary Service - that are being used by many of us. Probably in the NVS case, this is a sustainable resource, as it has a big organisation backing it. But should we be calling for



FER-backing service providers to issue "sustainability statements" or similar, or even organize some kind of "sustainability & governance certification" that would help RIs when selecting which FERs to incorporate?

- Marc: @erik -- I think your current remark (on interpretation level of 'using Prov-O' holds for every resource in the list.
  - Erik: agreed Marc, may be a role for FAIR evaluators
  - Marc:
    - we now count "occurrence statements" but behind any of those there is a graded nuance, I am sure
    - e.g. (1) what does 'REST' actually mean - as only a small percentage of REST APIs actually follow all constraints and the HATEOAS principle coined in the rest-dissertation.  
Or (2) How could prov-o have a higher count than RDF? (since one implies the other?)
      - Xen: (in addition to Marc's 2nd question) and with only 6 occurrences of a Provenance Model in the RIs.
- Maggie: But the EOSC Nordic "test" was somewhat flawed in itself - so how reliable are those numbers really?
  - Marc: I think this does not invalidate the meaningfulness of this exercise at all, but the remark must be made -- there is no 'grading' (or even validation) of compliance to any of these.
  - Erik: See current discussions on evaluators (convergence on FAIR evaluation)
    - [Apples to Apples](#) EOSC Task Force
    - EOSC Nordic Seminar <https://indico.neic.no/event/211/>
- SPARQL query:
 

<https://virtuoso.nps.petapico.org/sparql?default-graph-uri=&query=prefix+fip%3A+%3Chttps%3A%2F%2Fw3id.org%2Ffair%2Ffip%2Fterms%2F%3E%0D%0A%0D%0Aselect+distinct+%3Fcommunity+%3Fc+%3Fquestion+%3Fq+%3Fsort+%3Fresource+%3Fres+%3Freslabel+%3Fvalue+where+%7B%0D%0A++%3Fdecl+a+fip%3AFIP-Declaration+%3B%0D%0A++++fip%3Arefers-to-question+%3Fquestion+%3B%0D%0A+++fip%3Adeclared-by+%3Fcommunity+%3B%0D%0A++++%3Frel+%3Fresource+.%0D%0A++++values+%3Frel+%7B+fip%3Adeclares-current-use-of+fip%3Adeclares-planned-use-of+%7D%0D%0A++++optional+%7B%3Fresource+rdfs%3Alabel+%3Fresourcelabel%7D%0D%0A++++optional+%7B%0D%0A+++++values+%3Fresourcetype+%7B+fip%3AAvailable-FAIR-Enabling-Resource+fip%3AFAIR-Enabling-Resource-to-be-Developed+%7D%0D%0A+++++%3Fresource+a+%3Fresourcetype%0D%0A++++%7D%0D%0A++bind+%28replace%28str%28%3Fcommunity%29%2C+%22.%>

[23%22%2C+%22%22%29+as+%3Fc%29%0D%0A++bind+%28replace%28str%28%3Fquestion%29%2C+%22%5E.\\*-%28%5B%5E-MD%5D%2B%28-%5BMD%5D%2B%29%3F%29%24%22%2C+%22%241%22%29+as+%3Fq%29%0D%0A++bind+%28concat%28replace%28%3Fq%2C+%22F%7CM%22%2C+%220%22%29%2C+%22x%22%29+as+%3Fsort%29%0D%0A++bind+%28replace%28str%28%3Frel%29%2C+%22%5E.\\*%2Fdeclares-%28.\\*%29-use-of%24%22%2C+%22%241%22%29+as+%3Fr%29%0D%0A++bind+%28replace%28str%28%3Fresourcetype%29%2C+%22%5E.\\*%2F%28%5B%5E%2F-%5D\\*%29-%3FFAIR-Enabling-Resource-%3F%28%5B%5E%2F%5D\\*%29%24%22%2C+%22%241%242%22%29+as+%3Frt%29%0D%0A++bind+%28replace%28replace%28replace%28concat%28%3Fr%2C+%22%2F%22%2C+%3Frt%29%2C+%22%5E.\\*%2Fto-be-Developed%24%22%2C+%221%22%29%2C+%22%5Eplanned%2F.\\*%24%22%2C+%222%22%29%2C+%22%5Ecurrent%2F.\\*%24%22%2C+%223%22%29+as+%3Fvalue%29%0D%0A++bind+%28replace%28str%28%3Fresource%29%2C+%22%5E.\\*%3F%28%23%7C%2F%29%28%5B%5E%2F%23%5D\\*%2F%3F%5B%5E%2F%23%5D\\*%29%2F%3F%24%22%2C+%22%242%22%29+as+%3Fres%29%0D%0A++bind+%28str%28%3Fresource%29+as+%3Freslabel%29%0D%0A++filter+%28%3Fc+%21%3D+%22ENVRI%22%29%0D%0A%7D+order+by+%3Fsort+%3Fc%0D%0A&format=text%2Fhtml&timeout=0&signal\\_void=on](#)

- Markus: Agreed, larger number isn't automatically better FIP performance.
- Carl-Fredrik: It is to be expected that we (Eiscat) have little overlap. Our FERs will be more representative of space physics. However I would expect to see overlap in AAI / SSO solutions, etc. I also wonder what metadata license to select when metadata sets are open to the public. We have just defined that they are open.
- Alex V: I believe some principles are more equal than others, at this moment all have the same weight.
- Peter: Interesting. SeaDataNet cdi overlap will or should certainly be within the marine community. But I am still a bit surprised the overlap outside is not larger as we have many commonly applied solution like XML, ISO19115/139, restful API, NVS, etc. something to investigate further if it is not caused by the way the FIP was filled in by me.
  - Marc: @peter thijsse -- good remakr, maybe we should spend some time in the marine community to compare our FIPs and check our interpretation of certain sections?
  - Peter: Another strange observation is that SeaDataNet Sextant has quite more overlap with others than SeaDataNet CDI while they work with same basis, similar service types/vocabs/formats :) so there must be something in the FIP

profiles how they were created. @Barbara: I will look into this and compare the two. @Marc: exactly, good plan

- Peter: We need an iteration round on the consistency of how the FIP's currently have been created before drawing generic conclusions. We can do this in the marine community first.
- Barbara: @Peter... we can look into this.. Right after the Workshop... I go the rdf Statements and just sparqled them... let's see (could be that in Excel happened something... but I controlled several times)
- Peter: @Barbara: I think it may be more on my side when creating the FIP, than on your end in the queries. E.g. not including FER refs. will check in next days
- 
- Maggie: danger in FAIR evaluation, that it is taken by important organizations like funders as 'quality indicators' used to score projects.
  - Barbara: FAIR evaluators often emphasize the use in iterative FAIR improvement
- Lara: I don't see the link between resource overlap and interoperability. There are very few points where this can be true (vocabularies for example, here if we could know if the chosen vocabularies are interoperable, e.g. provide mapping with others it could show interoperability at metadata/data level). For other points the overlap does not relate to interoperability, if metadata from different RIs are indexed in different search engines it does not make them less interoperable, the same goes for data formats or PIDs and licenses.
- For the reviewers - in 12 minutes, explain
  - Agree on a few key variables to present, and the data to support them
  - FIP Overlap is a good approximation to "harmonization"
    - Sub-domains
  - Angeliki: I think an external reviewer would ask about the progress made during the project, and probably discuss how the different decisions made during the project (tasks, actions etc) contributed to this progress
  - Maggie: I think this is a possible question from the reviewers. My question would be if we trust the numbers from the analysis to such a degree that we can make very strong statements. The points made earlier in the chat about possible uncertainties in the FIPs makes me think that we should stress that both data collection & analysis are still in progress, as the RIs are still learning about both involved concepts and the wizard.
- Markus: The time series of convergence matrices is rather convincing. It shows quite some progress in conversion.
  - Simply the fact that there is much more red in 2021 than in 2019.

- You do see increasing overlap within the subdomains also?
- Maggie: What is "better": increasing convergence/alignment across all FAIR aspects inside a given subdomain, or a (strong) convergence for all subdomains on a subset of FAIR aspects?
- Andreas: @Maggie, that is really a difficult question, not sure if there is a simple answer ...
- Angeliki: @Maggie-I think this question again needs to be defined with some additional constraints: at RI level, someone would like to see their own progress, so compare their own profiles in time. At subdomain/cluster level, someone would expect to see the overlap in interoperability resources first!
- Erik: We are now looking for examples in ENVRI-FAIR where FIP data actually influence implementation decisions.
  - Lara: will help when FERs have indication on their "FAIRness" - example: how well are vocabs mapped and interoperable?
- See also <https://fairdo.org/wg/fdo-fipp/>
- Get a formal acknowledgement statement of ENVRI-FAIR support.
-