1. Towards VOResource 1.2
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- “Use the UAT” defined
- URIs: SPDX and referenceURL-s
- altIdentifiers on ResourceName-s
- DOIs as source formats

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2. UAT Usage
VOResource 1.1 said for subject: “Terms for Subject should be drawn from the Unified Astronomy Thesaurus”.
But: The numbers? The labels? Full URIs?
EN of 2022-07-22 says: None of the above.
Use identifiers from http://www.ivoa.net/rdf/uat/ such as 53-persei-stars or roche-lobe-overflow.

3. Please Update Your Subjects
If you publish registry records, please update their subjects.
It’s really much more useful if subjects come from a well-defined, hierarchical vocabulary. See this 2021 blog post¹ or my May 2021 Interop talk² for examples.
There’s even a mapping³ from most current subjects to UAT near equivalents.

4. Minor URI Updates
(A) referenceURIs now must start with http(s). This came up when we temporarily used these as identifiers in an external repository, and URLs without schemes were not understood. But it is more generally helpful if these strings can be dereferenced without any guessing. And anything but http(s) does not make sense right now: People need to be able to open these in their web browsers.
(B) rights/rightsURI should now come from SPDX. SPDX is a collection of URIs for licenses used by all the major Linux distributions. Using it, you can identify usage conditions by string comparisons. That’s probably not important in everyday science work, but people writing software or re-distributing astronomical data will be grateful if you make your terms machine-readable.

5. More altIdentifier-s I
Use case: VizieR wants to declare relationships to non-VO resources with a DOI.
You could already define relationship targets with ivoids:

```xml
<relationship>
  <relationshipType>Cites</relationshipType>
  <relatedResource>astropy</relatedResource>
  <relatedResource ivo-id="ivo://cds.vizier/iii/227">General Catalog of galactic Carbon stars</relatedResource>
</relationship>
```
Can we do something machine-readable about astropy, too?

6. More altIdentifier-s II
We already have DOIs in altIdentifier elements on the resource level. RelatedResource elements have the type vr:ResourceName. Can we add an altIdentifier attribute to that?

```xml
<relationship>
  <relationshipType>Cites</relationshipType>
  <relatedResource ivo-id="ivo://cds.vizier/iii/227">General Catalog of galactic Carbon stars</relatedResource>
</relationship>
```
Sure. We re-use the rules for altIdentifier-s elsewhere in VOResource. In particular, we use a “URI form” of the identifiers, in the DOI example, this results in the doi: scheme. Let’s avoid baked-in HTTP resolvers – it’s preferable to leave the choice of a resolver to the client.

¹ https://blog.g-vo.org/semantics-cross-discipline-discovery-end-down-to-earth-code.html
³ http://svn.ari.uni-heidelberg.de/svn/gavo/hdinputs/sembarebro/res/mapping.tsv
7. More altIdentifier-s III

But: VOResource 1.1 has already added altIdentifier elements to creator and contact (really, only for ORCIDs). These now have name/@altIdentifier, too.
Fortunately, nobody has really taken up the altIdentifier elements on persons. Let’s deprecate them.
However: Against the previous state, person:identifier is now 1:1 rather than 1:n.

8. Apropos of DOIs

content/source gives a bibliographic source. Its @format attribute so far only had “bibcode” as a defined value. In 1.2, it will also admit “doi”.

9. Anything Else?

If nobody brings up any other feature requests…
…or protests against the current plans…
…we’ll be going for PR after the Interop.