

# Summary of the 2 start-up meetings of the Kartslink project:

## Francophone meeting of April 20, 2020

## Anglophone meeting of May 2, 2020

*Ce rapport est aussi disponible en français*

These meetings were based on a presentation available here: ([Français](#)) ([English](#))

Note: I did not include the URLs of the documents and tools mentioned in this review, because it would have been difficult to keep them up to date. You will find them in the Wiki pages.

Writing: Eric Madelaine

### Participants and round table (for the 2 meetings):

**Eric Madelaine:** Speleology Committee (CDS 06, Alpes Maritimes, France), creator of its cavities database, currently offline ([Cavites06](#) in Filemaker), but an extract of which could be broadcast in the future. Head of the Scientific Committee of CDS06; requirements in terms of observation base (physical sensors, for example reefnet), and possibly topography.

**Frédéric Urien:** President of Wikicaves (France), and of the [Grottocenter](#) database (includes access to the [BBS](#)).

**Bernard Thomachot:** Wikicaves (France), wiki expert, followed by contributions on Grottocenter.

**Dominique Ros:** (France), representing Wikicaves (treasurer). Souterweb site manager.

**Yannick Decker:** Administrative Director of the French Speleology Federation (FFS, France) and topographer. Link between the project and the FFS Board of Directors. The FFS is very involved in the project: you have to follow the movement and be an educator with the members and the CA. Karstlink responds to the wishes of the CA to harmonize. The federal portal will link the bases.

**Christine Maury:** Edytem (Research laboratory, <http://edytem.cnrs.fr>, France). Responsible for the [Choppy Fund](#), which is one of the 3 libraries referenced by the [BBS](#) in France. Interoperability and provision of data at stake for the CNRS. Currently no exchanges with other libraries. Consider using <https://www.navigae.fr/> for digital topographies in the framework of the IMAGEO consortium. The platform does not store documents but makes them available from databases which are queried using the Dublin Core.

**Jean-Pierre Lucot:** Head of the [Var base](#) (France), which is publicly available on the web, and manages cavities, topos, bibliographies. Documents available outside the cavities too. Not a computer scientist.

**Guillaume Chardin:** [Base du Var](#) (France), software development. Awaits recommendations, normalization of objects / fields. Gas analysis type observation project.

**Olivier Testa:** (France) expeditions and a lot of data on certain countries. Bulk but fairly comprehensive data for some countries. Use [iNaturalist](#) (<https://inaturalist.org>) to record bio data.

**Josiane Lips:** President of the Scientific Commission of the FFS (France), responsible for the Biospeleological Study Group and its [GEB](#) base which is being put online (21,000 data). Basis made by Alain Gresse then taken over by Karsteau. GEB participates in sharing as part of Karstlink.

**Patrick Deriaz:** President of the Codis of the UIS ([BBS](#)), Librarian of the CoDoc of the SSS (Switzerland)> evolution of the management tool for associating bibliographies with files.

**Laurent Blum:** Geomatist, Speleologist, Topographer (Disto x310 and PocketTopo, Thérion), President of CDS du Gard (France), administrator of the [Vmap](#) database, data on Gard, Hérault, Lozère, Ardèche. ~ 23,000 cavities, partly shareable depending on the choice of contributors. DBMS Postgres PostGis.

**Patrick Degouve:** Secretary of [Karsteau](#) (France), which is used by many departmental committees. Not a technician. Collaboration with Basekarst. Departments open data, others do not. So sharing according to the decisions of the departments.

**Joël Roy:** President of [Karsteau](#) (France), who contributes to the project. Reflection in progress Karsteau is likely to participate more (perhaps in steering the project).

**François Ichas:** from the [Karsteau](#) team (France), involved for years in our tool, I have a role of "generalist" knowing all aspects of comics by being a specialist in nothing ;-). Very motivated by this work of convergence and exchange between databases.

**Claude Alliod:** scientific com of the FFS, (France), member of the Com Documentation of the FFS, admin of the [basekarst 01](#) base, and leader of the BDD working group of the FFS. FFS national base project. The base of the [CNDS](#) (national speleological documentation center, FFS) should participate in KarstLink.

**Alain Gresse:** Admin [basekarst 69](#) (France), works on the GEB base (Biospeleological Study Group). Developed APIs on GEB, basekarst 01 and 69 (he gave us a demo). APIs currently exchange in JSON format, and can only communicate point to point, pending the definition of our ontology.

**Bertrand Hauser:** admin of the [canyoning](#) site (France), website and relational database. Participate out of curiosity. Database which could possibly use Karstlink.

**Philippe Vernant:** Geoscience researcher Montpellier (France) and Speleo: Database of cavar topographies [karst3D](#), Thérion format (and gateways from other tools), with possibility of embargo (file availability possible over 5 years, but the visualization of 3D models is immediate)

**Sophie Verheyden:** Scientific Commission of the Belgian Union of Speleology (UBS, Belgium), does research on this theme. Research who can follow the file and who can contribute. Currently the cavity bases in Belgium are managed by regional administrations, not by cavers. UBS has its documentary base.

**Mariangela Martellotta:** is part of the SSI (Italy). [Wish project](#) which federates the bases on the cavities of Italy.

**Graziano Ferrari** (Italy), IT specialist. Manages the [register of Italian caves](#). Involved in semantic web projects. Development of virtual libraries (with VL in Bologna, BBS, etc.).

**Elisa Ponti** (SOCISSI, Italy). [WISH project](#): national database, only shares logistical and topographic data (no scientific data collected). Provides links to the regional databases of the Italian federations. Project also sharing scientific data.

**Peter Matthews** (UIS, Australia): Member of KarstLink Management Team (UIS liaison, project infrastructure and web pages). President of UIS Informatics Commission. Designed and produced original Australian Karst Index Database ([KID](#)) in 1985. Electrical Engineer then computerist, interested in cave documentation systems since 1959.

**Rod Smith** (ASF, Australia) started 12 months ago improving the karst database for Australia ([KID](#), 20 years old!). Another base is under construction (perhaps several).

**Matic Di Batista** (Slovenia). Caver and IT specialist. Author and manager of the cave database (central register of Slovenia: <https://www.katasterjam.si/>, managed by the Karts Institute of Postojna), documentation, maps, visualization on online maps. Management of public / restricted access rights to the database.

**Bonita Pollock** (Univ. South Florida, United States). Coordinator of [KIP](#) (Karst Information Portal), and of the "linked data" team. Creation of a native database based on RDF. Metadata based on Mark format?

The following people were also interested, but could not be with us that day:

**John Fioroni**, The Cave Exploration Society Inc. (USA)

**Mike Lake** Australian Speleological Federation (ASF, Australia) managing web sites and servers for ASF, managing KID database.

**Ferdinando Didonna** (SOCISSI, Italy)

#### Statistics :

- 27 participants, France, Belgium, Italy, Switzerland, Australia, Slovenia, USA
- 9 Cavity databases (often containing other info), 3 Doc databases, 2 Biospel databases, a Topo database, a Canyon database

## Discussion topics:

#### How the Karstlink project works:

- KarstLink Wiki: registration required to be able to contribute and edit the pages.
- Mailing Karstlink: subscribe!, this is the project information list (bilingual)
- "Partners" page: few have registered for the moment, please do it if you intend to contribute (whether you are an individual, or the representative of a group, a database, a structure, etc.)
- The works carried out within the framework of Karstlink will be presented at the Congress of the UIS in July 2021. Everyone will be able to propose in a few months a contribution to present how it makes data available or retrieves it thanks to the tools developed in Karstlink
- Many questions arise about the service that Karstlink can provide. The uses are very numerous, everyone is free to use the tools in the way that suits him. As an example, the Wish project (Italy) could use the ontologies that we are going to develop to recover data from regional databases more regularly. Alessandro Vernassa, who manages the Liguria database, is ready to provide the data in the format we are going to develop.

In the same way the FFS (France) will thus have the tools to constitute a federal base on the one hand, or to synthesize national statistical data by interrogating all the bases of the territory.

KIP, BBS, Fond Choppy and other libraries are interested in sharing their resources; it will be possible to create a portal allowing direct interrogation by a single request of many documentary backgrounds related to karst.

The databases of Bio-speleo or on the measurements carried out with the sensors can be interfaced with databases of cavities, ...

#### Questions/answers :

Q: Is the objective to create a global database gathering all the information collected?

[Eric] No. We want to allow local management of existing databases, and allow the query of one or more of them 1) from other databases, or 2) from a portal.

Q: Tools, example of connection with existing databases?

=> Bonita's experimental RDF database (USF) is still in an experimental state, possibly available online before summer

=> GrottoCenter has an API for Cave and BBS information, not yet in semantic web format

=> [Eric] See on the Tools page of the wiki for links to articles by my colleagues from the Inria Web semantic team on tools for creating interfaces with native databases.

Q [Eric -> Bonita] relationships between the vocabulary / ontology of your database and DCMI?

Q [Eric -> Graziano] Could you publish references to your articles on "linked data" on the karstlink mailing?

Q [Eric] looking for more contacts for other databases (caves): USA (managed by state organizations?) Canada, United Kingdom, etc...

=> USA: Peter mentioned that American databases are generally managed by state, we have no direct local contact at the moment.

UK: No direct contact at the moment. [Eric] will publish an article presenting Karstlink, and a call to join us, on the "Darkness Below" site.

Canada: No information on provinces except Quebec, which does not have an exhaustive base today, but may be interested in joining Karstlink later.

### **Objects page (now "Entities")**

Define a vocabulary to communicate between databases that do not have the same field names.

Basic philosophy: we aim for sufficiently broad and flexible concepts, so that each base can find its little ones there, and make correspond ("mapping") the objects and fields of its internal structure.

### **Rules Pages:**

We want to work as much as possible by discussion and consensus, but at certain times, we will have to validate the choices by a vote ... This would allow us to validate all the stages and thus to engage serenely in the next stage

### **"Partners" and "Databases" pages**

Beyond the structures and bases already mentioned above, also committed to participate in a regional database in Spain, a documentary background in Switzerland, Bio and cavity databases in Georgia and Greece, the database for Peru caves.

### **Agenda:**

- June 2020: vote on the operating rules, the Basic Entities
- Summer 2020: definition and implementation of a "core" ontology comprising the main entities of our databases, and allowing to build the first experiences of interfaces, interrogation and data exchange.
- Summer 2020: Expression of interest for partners wishing to participate in the construction of a small prototype, for a presentation at the UIS 2021 congress. Constitution of working groups.
- June 2021: Presentation at the UIS congress, Savoie, France.