

# UIS INFORMATICS COMMISSION (UISIC) REPORT 2017-2022

Cave and karst documentation, mapping and data

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Web: <https://www.uisic.uis-speleo.org> Forums: <https://www.uisic.uis-speleo.org/forum/>

This report covers our work in the five years since the 2017 Congress in Sydney, Australia. This is a slightly edited version after the 2022 Congress of the original 23 Jul 2022 version.

Our groups have made good progress as below, but other projects are waiting for volunteers to help. If you would like to contribute to any of the groups below, please email their leader directly via the website. We could really use some cave documentation oriented people who are adept at developing web-based applications.

With the intense work that has been going on in the Commission over the last couple of years or so parts of our website have got out of date. This is gradually being corrected. On the other hand we have now installed our *cavedata* forums for discussing all things cave and karst documentation etc., and for use by each of our sub-commissions or projects as required.

An old but important issue which has arisen during the period is that of balancing the need for ready access to cave and karst information against the need to protect the caves and cave owner relations. One size does not fit all, and so some serious discussion is being started to reach a consensus and strategy to accommodate the requirements of each country, and to produce a UIS Guidelines document on this topic.

After 36 years as president of the commission it is time for me to step down in favour of someone more energetic and outgoing to lead our team and promote our many projects with new enthusiasm. My invitations during the last few congresses for someone to take over have not been taken up, so to precipitate some action I am stepping down at the end of this period, i.e. at this year's ICS in France. I will not be leaving the commission, only leaving the presidency, and will continue to work on some of the commission's projects. It is hoped to have a new president in place by the time of the ICS, but if not, our UISIC meeting at the ICS will be run by Philipp Häuselmann of Switzerland (Thanks, Philipp!), as I am not able to get to Europe this year.

We were fortunate this year to finally get a Vice-president – Mike Lake of Australia. Mike is very familiar with cave documentation, and instigated and has managed the web-based Australian Karst Index Database for many years.

Following are brief reports of the work done over the period by our sub-commissions and projects, not in any particular order. More details about all our sub-commissions and projects can be seen on our website and forums above.

## **Survey and Mapping Sub-commission** - Philipp Häuselmann (CH)

### **Project: Mapping symbols for artificial cavities** - Philipp Häuselmann (CH)

This project is now essentially ready for final voting and subsequent publication after a few details were sorted out during the ICS. - PH

## **Publications Exchange Sub-commission** - Michele Sivelli (IT)

Michele has done considerable work furthering the aims of the sub-commission and has produced a new spreadsheet for discussion. His detailed report of progress, and the spreadsheet, are available via the PESC web page on the UISIC website. - PM

## **UIS-WikiCaves Sub-commission** - Didier Borg (FR)

A proposal has been sent to the Protection Commission to initiate a project with UNESCO in order to collect data on the underground environment.

A partnership has been set up with a French Geopark so that GrottoCenter provides the services it needs. This partnership will be presented in September at the Congress of European Geoparks.  
- *Frédéric Urien, Didier Borg.*

### **Project: GrottoCenter Data Protection Updates** – Didier Borg (FR)

The UIS gave a grant which allowed for new developments on GrottoCenter that makes it possible not to disclose the location of a cave while still sharing information. A new letter is being sent to UIS delegates and federations to ask them to indicate their expectations in terms of sharing information on caves, and to invite them to share data and sign a partnership with the Wikicaves association in order for GrottoCenter to work in a manner suitable for the caves of their country. A UISIC forum has been set up to discuss the necessary changes. - *Frédéric Urien, Didier Borg.*

## **KarstLink Sub-commission** – Eric Madelaine (FR)

*KarstLink* is a protocol to transfer cave and karst data between databases via the semantic web. The project was launched following the Sydney congress, and important objectives have been achieved.

Summary of main activities:

<https://www.uisic.uis-speleo.org/exchange/karstlink/index-en.html>

Ontology with examples and instructions:

<https://ontology.uis-speleo.org/>

*Karstlink* is used by GrottoCenter to make its data available and to collect the data available via CSV. The Karst Information Portal makes its data available with CSV *Karstlink* files.

In the next period we aim to:

- describe new entities in the *Karstlink* ontology (e.g. scientific observations, sensor data, etc.)
- work with all the organisations and agencies managing cave data so that they may use *Karstlink* to make them accessible.
- create new services, usable by the whole community and allowing the collection of data related to the underground environment.

- *Frédéric Urien, Eric Madelaine.*

## **Caver's Multi-lingual Dictionary Sub-commission** - Mladen Garašić (HR)

Since the Sydney Congress we have added Chinese (including Pinyin), our 27<sup>th</sup> language, and have added or updated several new links and bibliographic entries. Recently we have received a full set of Slovakian terms and they are now also loaded. Soon to be on the website will also be a version of the Dictionary with the terms grouped by subject, as well as the current Hungarian alphabetical order. - *PM*

### **Project: Cave and Karst Glossary** – Peter Matthews (AU)

We have long wanted to link definitions to the Dictionary's terms, and we now have the collaboration of Malcolm Field to convert his well-established *Lexicon of cave and karst terms* into a web-based linkable glossary. This will of course be useable by both the Dictionary and *KarstLink's* vocabulary/ontology, as well as by anybody else. Once established, we will then work on integrating definitions in other languages. We are currently parsing Malcolm's publication into a

database. - *PM*

## **Data Exchange Sub-commission** – Peter Matthews (AU)

### **Karst Data Interchange Sub-commission** – Mike Lake (AU)

The *Karst Data Interchange* (KDI) is a simple UTF-8 text-based format for transferring cave and karst data between independent databases by caving groups et al. when the complexities of *KarstLink* and the Internet are not required. It was first successfully used by the Australian Speleological Federation in producing its *Australian Karst Index 1985* book, and in converting its Karst Index Database from a PC-based system to the current web-based system. That early ASCII format is now being brought into the modern age, soon for discussion and publication. - *PM*

### **Project: Data Transfer Guidelines** – Jill Rowling (AU)

This project aims to produce a set of Guidelines for ratification by UIS to facilitate the responsible sharing of cave and karst data, one of the UIS core aims, while at the same time recommending techniques for the appropriate suppressing of data for sensitive caves. A letter is being sent to all country federations and UIS Delegates inviting them to contribute their requirements to the Guidelines. A UISIC forum has been set up to discuss the content and build up the Guidelines for submission to UIS for eventual publication. - *PM*