# Collaborative Terminography: Three Use Cases of Online Databases and Needs<sup>1\*</sup>

David ar Rouz<sup>1</sup>

<sup>1</sup> LIDILE, Univ Rennes, F-35000 Rennes, France

#### **Abstract**

Several free online terminographical databases have been under development for about 15 years. Based on three observed recurrent cases of needed terminographical collaboration, the study aims to determine whether three of them, FAIRterm 1.0, 2.0 and TermiCo, answer the identified needs. If not, what functionalities are still missing to enable a true collaboration between translation teams, professional translators and experts, or Breton speakers in search of terminology? One of the outcomes is that collaboration of several users on the same term records is still limited to particular projects in FAIRterm and has to be asked for. Another one is that few fields in the structures of the databases help users record information for provisional hypotheses, perhaps because collaboration is seen as a set of individual contributions to a common database and/or the necessity of provisional data as arguments to the choice of an appropriate translation is not still acknowledged.

#### **Keywords**

Terminography learning, translation teams, translator-expert collaboration, Breton speakers, amateur terminography

### 1. Introduction

The present research is rooted in multiple experiences of terminography needs, both personal and professional, as a free-lance translator first, between 1999 and 2009, and now as a lecturer in translation. The search of an appropriate tool began in 2016, when a terminological database was to be developed within the OTCT Erasmus + project [1]. Based on the mentioned experiences I suggested that it should be collaborative. We identified then Gariépy's research [2], which already outlined the relevance of a collaborative terminographical tool.

The development of the TermiCo tool was started, but it remained short of coming to be operational, because it depended on a student's IT skills and the collaboration could not be extended beyond his internship for lack of time. TermiCo was presented, however, in 2017 at the first Congrès mondial de traductologie, and the resulting chapter was published in 2021 [3].

In accordance with Gariépy, I abide to the distinction between terminology and terminography that both L'Homme [4] and Gouadec [5] recalled. The first is thus either a discipline or a set of terms, but also the study of terms, the definition of rules for their processing. The second is, as worded by Gouadec, "all the activities of collecting, processing, organising, managing, circulating and exploiting terminologies and term repositories understood as elaborated sets of data and information." [6] Terminography is carried out especially for translation or in a translation context, but not only.

Concern for collaboration implies considering the terminographical ongoing process, not only the published result. This means that, rather than aiming to publish definitive data, the tools that we need for collaborative terminology should not only allow edition by other terminographers than the author of a term record, but also enable everyone to see and study the steps that lead to the choice of a given term.

The FAIRterm database [7] is another ongoing project aiming at enabling collaboration in the terminology field. I offer here to study therefore the functionalities of several tools, FAIRterm (1.0

<sup>4</sup>th International Conference on "Multilingual digital terminology today. Design, representation formats and management systems" (MDTT) 2025, June 19-20, 2025, Thessaloniki, Greece.

and 2.0 [8]) and TermiCo [9], with regard to different needs. The confirmation of such needs will be addressed in each of the three cases to be studied here.

I have selected the compared tools on the first basic criteria that they were free to use, and enabled to create term records in the languages of the application, translated or not from any other available language. This is not the case, for example, of TermWiki, which uses English as a pivot language [10]. This limitation could entail a loss of time for professional translators, and possibly prevent the Breton speakers I will talk about below from simply doing the work they could do with an open collaborative tool. Regardless of any particular situation, the choice of English, or indeed of any other pivot language, implies a serious cognitive bias and a threat to a true multilingualism. The cost criterion is important too because, if commercial tools may already address the identified needs, their price cannot be afforded in the situations under analysis here.

Indeed, I will analyse these tools based on three use cases: the case of translation teams, the situation of eliciting terminology from experts, and the case of Breton speakers in need of (professional) terminology. In each section, I will explain the particular needs that the considered situation highlights, and will compare how the tools answer them.

### 2. Case 1: translation teams

The case studied here can refer to a team of professional linguists working together on a – perhaps unique – project. It may consists of several translators sharing a translation, of a translator and a reviewer only, who could be joined by a terminologist, or of several translators, reviewers and terminologists. This need should be confirmed through a specific survey, as surveys like the European Language Industry Survey (ELIS) [11] or the ones conducted by the Société française des traducteurs (SFT) [12] do not seem to address the questions of the used or needed collaborative terminological tools, for what kind of collaborations and with whom.

The present case can also refer to teams of students learning these language professions. In our university, such teams are constituted twice every year, first with first-year and second-year students of the Master's degree in translation, then with first-year students of the Master's degree and third-year students of the Bachelor's degree. These simulations of translation agencies are known as "Tradutech" intensive sessions, and they were the basis of the Erasmus + OTCT project.

The following features are based on the needs I identify in such sessions every year. They are confirmed by the fact that we provide spreadsheets as templates for students to deal with terminology, and they upload them to a well-known collaborative cloud in order to fill them in all at the same time in each team. The problem of such a procedure is obviously confidentiality. It may not be crucial for our students, but it could be for professionals.

Outside of our university, such collaborative projects are widely used too. Elbaz & Loupaki's project [13] is one example of terminographical collaboration between students of different universities and countries, but Loupaki & Charalampidou [14] described another one in their own university. Many others are certainly set up elsewhere and every year, especially as terminolographical work should be part of collaborative pragmatic translation projects, like the one described by Bíloveský & Meskova [15].

**Table 1**Comparison of answers to translation teams' needs by FAIRterm 1.0, 2.0, and TermiCo

	FAIRterm 1.0	FAIRterm 2.0	TermiCo
Languages			
Working languages of the teams (DE, EN, ES	, ✓	✓	✓
FR, IT) in the Master's degree in translation of the	2		
university Rennes 2			
Other languages (for other training	g limited	✓	×
programmes or professional teams)			
Records			

Domains and subdomains:			
	×	✓ for domain	×
• suggestions for ease and speed of input	*	IATE's list	Not functional
• exhaustive list of domains	~ ✓		
• text field for accuracy	·	✓ (subdomain)	<b>x</b>
Non-matching indication (see below)	Possible in note but needs typing, where a drop-down list would be handy		
	where a dr	op-down list woul	d be handy
Sources		0.11	,
<ul> <li>Multiple characterisable sources</li> </ul>	Unique text field		✓
<ul> <li>Customisable list of sources (for ease and speed of input)</li> </ul>	×	*	×
Collaboration features			
Attach records to projects/teams	on request	not yet	×
Filter terms by project-team	for one's team	×	×
See others' work	in a project	to be	through search
		implemented	
See "hypothetical" term records as arguments	(✓)	· ( <b>√</b> )	(✓)
to the finally chosen translation	,	· /	,
Edit others' term records	in a project	to be	×
	1 3	implemented	
Display term record modifications history	for administrators only		×
Come back to previous version of term records	by administrators only		*
Select and export only "preferred" terms	<b>*</b>	×	*
Merge all term records leading to a satisfactory	*	×	×
translation into a log embedded in the final term			
record			
Guidance			
Pop-up information on the use of each field	*	×	×
Tutorials about terminography	*	×	×
Tutorials about online collaboration	*	×	*
D C	1 .: C	1 '	С С

Because of space constraints, I cannot provide the explanation for each item. I will therefore focus on the items that I suppose are the least obvious.

The specification of the domain and subdomain of a concept in terminography is awkward for a number of reasons. In Gouadec's method [16], the "field" of the term tables that students and professionals alike use for the terminography work help to specify and classify terms according to the sources that could be gathered. For example, if a term from a text dealing with sailing describes in fact a function of a navigation device, the relevant field might be "computer science", because the translation should be found in a computer science dictionary or database rather than in a maritime one.

In FAIRterm 2.0, the domain is to pick up in the list of domains from the IATE database [17]. During and after the development of TermiCo, we looked for a more comprehensive list of domains, such as the ones used in libraries, but the Dewey classification, for example, is expensive.

As in other fields of term records, suggestions, and therefore lists, are important, because they avoid typing often the same data, but it is equally important to enable users to specify what they need. If, as a terminographer, I deal with the terminology of the flute, will the categorisation of "musical instrument" in "INDUSTRY > miscellaneous industries > miscellaneous industries" by IATE seem satisfactory? If I deal with "rowing", should I choose "SOCIAL QUESTIONS > social affairs > leisure > sport", without selecting any of the four possible subcategories, which do not correspond? By comparison, "flutes" and "rowing" are subjects in their own right in the catalogue of a library.

Giving the possibility to add domains would be interesting, but also risky: will users have correctly explored the existing items in the list? A slight difference in the way to label the domain could lead to unintentional multiplication of domains actually referring to the same one. FAIRterm 1.0, with only text fields, can be perfectly tailored to the terminographer's needs, but can

also lead to an unending list of quasi-duplicates. The closed list for domains and text field for subdomains in FAIRterm 2.0 seems a good compromise, but an accurate subdomain would not counterbalance an inappropriate domain.

For terminologists, the necessity to specify any difference between a source and a target term may seem obvious. For students, it is not so. However, they learn more often, at least in our university, to deal with terms that they have to translate in a given text, than with terms to include in public databases. They need therefore to collect hypotheses that could lead them to the appropriate translation, and to indicate, for themselves or for collaborators, why these hypotheses cannot stand for the translation to use in the translated text. This is called "non-matching indication" by Gouadec [18] and the field is restricted to a list of symbols. They show for example that the concordance is based on a generic/specific term ("<" and ">"), comes from a distinct domain (" $\leftrightarrow$ "), stands for only part of the source term or, on the contrary, is only a part of a more complex target term ("\x\"). Each time, the difference is to be specified in the "note" field. The information contained in such a drop-down field is key to the scientific character of any translation-based terminographical collaborative process [19].

The compared tools do not include it. Should they? The note could be sufficient, but 1) the symbols could highlight the hypothetical status of the recorded concordance, and 2) the mere displaying of the field would also have a pedagogical virtue: that of reminding students or *amateur* terminographers that it may be relevant for them to pick up one of the symbols in the list, and specify why source and target terms do not fully match.

The exploited sources in a terminographical search can apply to a source term, providing then either a context or a definition for it. They can be bilingual and thus provide the exact concordance between a source and a target term. Finally, they can contain only the target term, with a context and/or a definition that help the terminographer determine if it constitutes a valid translation for the source term. In TermiCo, sources can therefore be "characterised" to indicate their scope (term only, definition, concordance), and users can add several sources with their own "characterisation". A term record could thus contain the three types of sources and even more than one for each type. In FAIRterm, sources are to be typed in a unique text field.

In the three tools, the possibility to add frequently used sources in a drop-down list is not implemented. Researchers know how fastidious it can be to add correct and complete bibliographical references to an article. In the case of terminographers, the reference to a source could be added dozens of times for different terms. They can obviously be listed outside the tool, but in a collaborative context, homogeneity of their presentation would not be guaranteed.

TermiCo does not offer all the collaborative features that exist, for example, in Wikipedia. Users are allowed to read others' work, but cannot edit it directly, nor display a log of the modification brought to a term record, come back to a former version, etc. The initially suggested feature for collaboration was a ticket system. However, it meant that term records remained editable only by their creator, and this implies a high risk that they would remain frozen despite the need for evolution.

FAIRterm 1.0 has a collaborative version of the application, but it served only for one project so far, and is not open by default to any user. In FAIRterm 2.0, it should still be implemented and tested. In such versions, users can see each other's work, and edit it directly. The access to logs and former versions of term records is available only to administrators.

## 3. Case 2: consulting experts

The second case of collaboration that I would like to mention here is when translators or terminologists decide to call upon an expert to elicite terminology. If expert and translator find themselves in the same place, there is obviously no need to use an online, nor even a digital tool, but experts can be far from the translator who needs them. In this case, collaboration will occur by phone or videoconference.

One might think that the expert could be given access to the term base. If the expert is a translator or terminologist too, s/he would contribute directly in the term base. If s/he is not, there would be a risk, then, to contravene to the third rule that Gouadec [20] provides for the consultation of experts: they should not see source terms. They could otherwise suggest calques, or other unidiomatic spontaneous solutions, that the source term would help them justify, regardless of the term they usually use in other circumstances, but which does not occur to them on the spot.

The solution would be for the requesting translator to share the screen with a partial record for the target term, with all the relevant fields that the translator will have been able to fill in, but no translation hypothesis. TermiCo and FAIRterm 2.0 make it possible to show only partial terminology records in target language. As experts would seldom be consulted for only one term to elicite, the partial target term records should be saved before the actual conversation, to be displayed when the terminographer can meet the expert. In TermiCo and FAIRterm 2.0, this means that temporary codes should be typed as "target terms" in term records designed for this particular consultation, besides possible hypotheses in other term records.

For example, in the field of rowing boats, a terminographer looking for the French translation of "pin block measurement tape" would first create the source term record from the document to translate. Then, s/he would create a target term record with a code that could be the number of the source term record, and also a definition or description in the target language: "élément du portant placé juste sous l'axe de la dame de nage pour en faciliter le centrage" [element on the rigger, just below the pin block, to help place it right in the middle]. S/he would also create other records with hypotheses, such as:

- 1. \x\ (non-matching indication meaning that the hypothesis corresponds to only a part of the term to translate), axe de dame de nage (translation), = pin block (note indicating the part of the term thus translated), T (status indicating that the suggestion is the terminographer's).
- 2. \x\, étiquette graduée, = measurement tape, T.
- 3. étiquette graduée d'axe de dame de nage, T.

When interviewing the expert to get confirmation of the translation hypotheses, the terminographer would show the term record with the code as a target term, and ask for example: "Comment certains fabricants de bateaux cherchent-ils à faciliter le centrage de l'axe de la dame de nage?" [How do some boat manufacturers try to help centre the pin block in the rigger?]. The expert would not see the source term, and could mention his or her own suggestion to name the object.

Note that FAIRterm 1.0 is not fit for such consultations, since term records are bilingual. Or else, terminographers should type codes for source terms too, which would mean more data handling and risks of mistakes.

Another specific need of such collaborations is to ask image-based questions. It may be much easier, indeed, to ask an expert what the object on a photograph is than trying to describe it, especially when the terminographer may not have understood quite well what it was. The term record that would be shown to the expert in the above example could thus contain an image copied from the source document. TermiCo has this functionality, not FAIRterm, in neither of both versions.

The need described here is certainly rare, as it is easier to call upon experts who are geographically close. However, it highlights the need to be able to show source and target terms independently, as well as the interest of images in the terminographical process.

## 4. Case 3: terminography in Breton

The last sociolinguistic surveys about the two indigenous languages of Brittany, Breton and Gallo, stated that the number of Breton speakers had suddenly dropped from an estimated 207,000 speakers in 2018 [21] to 107,000 speakers in 2024 [22]. Both languages are considered as "severely endangered" in the *Atlas of the World's Languages in Danger* [23]. For Breton, there is only one professional terminologist in the Public Office for the Breton Language (POBL), which means that many fields

cannot be covered. Speakers must therefore look for the appropriate Breton terms they need in their everyday and/or working life by themselves. As they are scattered all over Brittany, however, their collaboration is made difficult without an appropriate tool.

I thus met two bilingual school teachers who took advantage of a one-week meeting where Breton is the exclusive everyday language, in July, to work together on the terminology of their occupation. Other teachers, e.g. of history and geography, struggle everyday with (inconsistent) terminological suggestions that they find in different handbooks, and do not have any way, space, nor tool to exchange with their fellows on such questions. Of course, these personal observations should be confirmed by a comprehensive survey, which could seek to determine:

- how often Breton speakers feel a lack of adequate terms;
- in which contexts (everyday life, work, hobbies...);
- how they compensate for the terms that they repeatedly lack;
- whether they discuss their findings or solutions with other Breton speakers or would appreciate being able to do it;
- whether some entire fields lack terminological covering;
- how many speakers share the feeling that adequate terms are missing in a given field;
- whether they identify terminography as an activity that they practice, or as an out-of-reach occupation (and why);
- how many of them would be ready to engage in a collaborative process to look for solutions to the terms they lack, either for a few limited needs, or for a systematic search and endeavor to cover one or several fields;
- what their ease with term management tools would be;
- what kind of support they would need to use them effectively.

Regardless of the answers that would come up from such a survey, exploring such potential users' needs may highlight other requirements that could foster more collaboration in terminography. All the needs mentioned in section 2 are still relevant for them. In the following table, I keep only what relates to their specific needs.

**Table 2** Specific needs for Breton speakers

	FAIRterm 1.0	FAIRterm 2.0	TermiCo
Languages: Breton	×	✓	×
Records			
Domains and subdomains: suggestions in BR	*	×	×
Sources : list of existing sources for BR	×	×	×
<b>Collaboration features:</b> Moderation? (by	×	×	×
whom? under which status? hierarchy?)			
Guidance: MOOC about terminology and	×	×	×
terminography in BR			

In collaborative tools like Wikipedia, moderation is not quite necessary, or occurs in a collaborative way too, with users having more privileges or information than others, because the high number of voluntary contributors is the guarantee that inaccurate information or other defaults will be corrected at some point. The Breton-speaking population is small, as stated above, and old (60% are older than 60) [24]. Consequently, the computing skills required to contribute in a collaborative terminographical tool still reduce drastically the targeted public. A moderation, by an independent and experimented terminologist, could then be relevant.

The role would include guidance, since Breton speakers are not likely neither to have gone through translation studies, nor even to have met the notions of terminology and terminography. That is why an open online class (which would have little chance to get "massive") on these notions

would be needed. The person in charge should be an experimented linguist, able both to guide users and to let them carry out their search, describe what they find, and finally choose what suits best their need. This terminologist should be independent from the Public Office for the Breton Language, because the latter has a prescriptive stand that could be counter-productive, and participation may be a condition for terminological appropriation.

### 5. Conclusion

If the need for collaborative terminography and the technological solutions to practice it may be obvious in professional contexts, especially with the term bases in CAT tools, other tools have been elaborated for more than fifteen years. Researchers identify indeed non-commercial, and even non-professional needs among learning or *amateur* terminographers who could not afford collaborative terminography tools. The aim of the present article was therefore to confront actual identified needs in three distinct situations with the functionalities of two existing free tools, FAIRterm and TermiCo, with two versions of the first one.

The provisional conclusion of this study is that each tool contains interesting functionalities, but there is still some way to go before the needs for collaborative terminography, to be clearly distinguished from terminology, would be totally satisfied in situations such as learners' experiments, expert-terminographer dialogue, or Breton speakers' terminographical efforts. The main reason for this may be that they stem from the idea of enabling different users to contribute a common terminological database, to be consulted by anyone, without acknowledging the need for provisional term records. They would nevertheless constitute successive steps and arguments leading to the choice of the appropriate term.

Such a perspective would demand much more guidance, in the form of specific fields reminding users to specify the status of their term concordances, or of tutorials and direct help in the applications. In some cases, moderation may be necessary. In any case, it would require confidence in the terminographers' ability to learn, to record accurate data, to follow up the created and contributed term records, etc. and in the other users' caution with the provided data and reading of all relevant information in term records.

### **Declaration on Generative AI**

The author(s) have not employed any Generative AI tools.

### References

- [1] OTCT (Optimising Translator Training through Collaborative Technical Translation), Erasmus + project, 2014-2017, URL: https://otct.huma-num.fr/.
- [2] J. L. Gariépy, La collaboration en terminographie. Étude de cas comparée de la terminographie collaborative et de la terminographie classique, master's thesis, University of Ottawa, 2013.
- [3] D. ar Rouz, F. Moreau, F. Barbin, Ch. Gruenais, TermiCo. Terminographie collaborative, in: R. Agost Canós & D. ar Rouz (Ed.), Traductologie, terminologie et traduction, Classiques Garnier, Paris, 2021, pp. 141–155.
- [4] M.-C. L'Homme, La terminologie : principes et techniques, Les Presses de l'Université de Montréal, Québec, 2004.
- [5] D. Gouadec. "Terminologie, traduction et rédaction spécialisées." La terminologie : nature et enjeux, Langages 39.157 (2005): 14–24.
- [6] *Ibid.*, p. 14.
- [7] P. Elbaz & E. Loupaki. "Terminologie collaborative: analyse d'un projet inter-universitaire outillé en contexte européen." Digital Scholarship in the Humanities 38.1 (2023): 148–160.
- [8] F. Vezzani & G. M. Di Nunzio. FAIRterm, 2021. URL: https://shiny.dei.unipd.it/fairterm/.
- [9] C. Gruenais. TermiCo, 2016. URL: https://termico.huma-num.fr.

- [10] Gariépy, op. cit., p. 66.
- [11] European Language Industry Survey, URL: https://elis-survey.org/.
- [12] For example, C. Le Bourdon, B. Bratteby, G. Maclachlan, R. Swyer, Analyse des données sur les pratiques professionnelles des métiers de la traduction en 2015, Société française des traducteurs (SFT), 2015; and B. Riou, F. Boulay, C. Djégbé, Rapport de l'enquête 2022 sur les pratiques professionnelles en traduction, Société française des traducteurs (SFT), Stat & More, 2022.
- [13] Elbaz & Loupaki, op. cit.
- [14] E. Loupaki & P. Charalampidou, L'approche collaborative dans l'enseignement universitaire de la traduction professionnelle : une nouvelle priorité ?, paper at the international conference Nouvelles approches didactiques de la traduction et de l'interprétation, CLESTHIA (Université Sorbonne Nouvelle), Société française de traductologie (SoFT), Société d'étude des pratiques et theories en traduction (SEPTET), Paris, 14<sup>th</sup> February 2025.
- [15] V. Bíloveský & Ľ. Meskova, Un modèle de maîtrise des compétences interpersonnelles, interculturelles et transversales dans le processus de formation à la traduction spécialisée, paper at the international conference Nouvelles approches didactiques de la traduction et de l'interprétation, CLESTHIA (Université Sorbonne Nouvelle), Société française de traductologie (SoFT), Société d'étude des pratiques et theories en traduction (SEPTET), Paris, 15<sup>th</sup> February 2025.
- [16] D. Gouadec, Terminologie et phraséologie pour traduire : le concordancier du traducteur, La maison du dictionnaire, Paris, 1997.
- [17] *Interactive Terminology for Europe (IATE)*, 2024. URL: https://iate.europa.eu/.
- [18] Gouadec (1997), p. 98.
- [19] D. ar Rouz, Didactique de la traduction : peut-on enseigner une démarche terminographique scientifique ?, in: R. Agost Canós & D. ar Rouz (Ed.), Traductologie, terminologie et traduction, Classiques Garnier, Paris, 2021, pp. 99.
- [20] Gouadec (1997), p. 93.
- [21] P. Wakeford & F. Broudic, Les langues de Bretagne. Enquête sociolinguistique. Sondage 2018 : les principaux résultats, Région Bretagne, Rennes, 2018, p. 16.
- [22] TMO, Enquête sociolinguistique 2024 sur les langues de Bretagne. Présentation des principaux résultats, Région Bretagne, Rennes, 2025, p. 18.
- [23] Ch. Moseley (ed.), Atlas of the World's Languages in Danger, UNESCO, 2010 (3<sup>rd</sup> edition), Paris, Map 10, p. 25.
- [24] TMO (2025), p. 20.