

Building on a terminology resource – the Irish experience

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www.focal.ie is the national database of Irish language terminology. In this paper, we examine: (i) the impact achieved by this resource in the five year period since work commenced; (ii) the possibilities which have arisen from one project over a short time span, to develop sub-projects and related initiatives; and (iii) the advantages and opportunities arising from the creation of one high-quality electronic language resource. The Irish case shows that the development of high-quality resources for a lesser-used language can have interesting and unexpected knock-on effects.

We present eight stages and aspects of term planning: preparation/planning; research; standardisation; dissemination; implantation; evaluation; modernisation/maintenance; and training. Fiontar, in its work, has moved from its initial involvement in the dissemination of terminology, to take an active part in other aspects of term planning for Irish: research, standardisation, evaluation, modernisation and training. This has been achieved through editorial and technological development, in partnership with key stakeholders and always from a socioterminological point of view – that is, with an emphasis on terminology as an aspect of language planning and from the point of view of users in particular.

Particular projects described include Focal as a term management system and as a user resource; tools for translators; user links to a corpus; the development of a new sports dictionary; and research into subject field headings. Two related projects are the LEX legal terms project for term extraction and standardisation, and the development of terminology for the European Union.

1. Introduction – the Focal.ie national database of Irish-language terminology

www.focal.ie is the national database of Irish language terminology. It is the primary on-line lexicographical resource for Irish, averaging 640,000 queries each month (November 2009-January 2010). It was developed by Fiontar, Dublin City University, in collaboration with the National Terminology Committee (TC), Foras na Gaeilge, the statutory body responsible for terminology development in the Irish language.

In this paper, we will examine: (i) the impact achieved by this resource in the five year period since work commenced; (ii) the possibilities which have arisen from one project over a short time span, to develop sub-projects and related initiatives; and (iii) the advantages and opportunities arising from the creation of one high-quality electronic language resource. The Irish case presented here will show that the development of high-quality resources for a lesser-used language can have interesting and unexpected knock-on effects. This paper explores some of them.

There are several aspects of term planning for a language. As a first step, we present stages and aspects of term planning. The approach used here is based on Auger's (1986) six-fold division, and others – particularly ISO, UNESCO (2005) and Santos (2003). Eight steps were identified by synthesising these models:

a) *Preparation/planning*. This means looking at term planning at a national, managerial and policy level. It has been repeatedly found (Onyango 2005; Nic Pháidín; Bhreathnach 2008) that lack of strategic planning and management are detrimental to language planning-oriented term planning. In general, though, terminology work has rarely been examined from a project-management perspective (Fähndrich 2005: 234). Fähndrich, for example, says that, in her view, 'terminologists pay far too little attention to business matters in general and project management in particular,' (Fähndrich 2005: 257). Fontova's paper on quality guarantees in term standardisation for Catalan (2007) takes a managerial approach to terminology, but it is one of the few. The most comprehensive

document on the preparation and planning stage of term planning is the 2005 UNESCO document *Guidelines for Terminology Policies*.

b) *Research*. There are many kinds of research which could be carried out within a term-planning organisation – *ad hoc* work in response to queries, terminology projects, collection of *in vivo* terms, *in vitro* term creation, corpus work, and so on.

c) *Standardisation*. Standardisation of terms follows different rules for different languages, of course, and it also raises questions of power and authority and representativeness, and these are different in each linguistic and legislative situation (not to mention the other terminology situations which are not discussed here, like industrial companies, for example).

d) *Dissemination*. Dissemination refers to the way in which terms are made available to their intended users. Effective dissemination influences different levels of use, such as media, education and official public use, and colloquial and lower spoken registers. Dissemination might cover such aspects as publication (on paper or electronically), distribution and marketing. It is acknowledged that dictionaries and term lists only have indirect influence on term dissemination (Prys 2007: 8). Kummer (1983) also stresses the importance of informal means of dissemination. So a discussion on dissemination should look at how the term-planning organisation ensures that its terms are made available to the target users in other ways as well. Dissemination needs to take account of how people use terminology websites. The interaction between user and dictionary or term resource has recently emerged as a research topic (see Boleslav Měchura 2008, for example).

Literature remains scarce on the marketing of terminology. This is despite the fact that Auger, among others, objects to the use of a ‘static’ model of term provision: dictionaries aren’t read and will not change individuals’ language habits; on-going dialogue is needed with the media, education and other agents.

e) *Implantation*. Following Quirion (2003a), we are using the term *implantation* (rather than *implementation*), and the implantation of suggested or standardised terms among users is of course one of the most essential criteria for the success of a term-planning organisation – and perhaps the one over which it has least control. Dissemination and implantation are of course very closely related, with the methods of dissemination having a huge effect on how many and amongst which groups terms are implanted. In some ways the debate is the same, but implantation is influenced by other factors as well as dissemination. Fontova (2007: 4), in her discussion of implantation, lists factors affecting implantation, including general diffusion, the promotion of powerful and prestigious diffusion mechanisms, perseverance, training, and, especially, time. Quirion (2003b; Quirion; Lanthier 2006) studied the effect of four terminological factors on term acceptance: conciseness, absence of competing terms, derivative form capability and compliance with the rules of the language, and found that they do in fact all influence term implantation.

f) *Evaluation*. There are many aspects of the term-planning process which can be evaluated: the terms themselves, the production mechanism, the term resources, and the dissemination and implantation of the terms. The organisation itself can of course also be evaluated.

g) *Modernisation/maintenance*. The terminological reality changes as time goes by, and so different domains have to be constantly ‘fed’ with terms. There is also the need to keep term resources up to date from a technological point of view.

h) *Training*. There are several aspects to the training of terminologists, including university courses and on-the-job training, as well as participation in the international development of the discipline. There is also, on a broader level, the question of user training, both the general public and specialised users such as translators, technical writers, language planners, documentation specialists and subject field specialists.

Clearly there are other ways of naming and categorising the steps, but this approach provides a coherent framework in which to present terminology work in Irish.

Fiontar, in its work, has moved from its initial involvement in the *dissemination* of terminology, to take an active part in other aspects of term planning for Irish: *research, standardisation, evaluation, modernisation* and *training*. This has been achieved through *editorial and technological development, in partnership* with key stakeholders and always from a *socioterminological* point of view – that is, with an emphasis on terminology as an aspect of language planning and from the point of view of users in particular. These themes will be discussed in this paper.

2. Impact of Focal since it became available

‘Focal’, in Irish, means ‘word’, and is pronounced [fɔkəl]. Focal was developed by Fiontar, using software developed in-house. The editorial team input, checked and amended all the available material, and terminology has been added continuously since then, as it is developed and approved by the TC. The database contents now stand at 148,000 Irish and 143,000 English terms. Initial funding (2004-2007) came from the European Union through the INTERREG IIIA programme, as a communications technology initiative, and the project is currently funded by Foras na Gaeilge.

Before Focal was launched in autumn 2006 as the principal means for the dissemination of terminology, Irish-language terminology was only available in a series of 54 domain-specific dictionaries and several unpublished lists. A limited number of resources was also available on-line in Word format.

Focal has two main functions. It serves as a look-up resource, both general and highly-specialised. It is also the national terminology management system for the Irish government, the editorial interface through which both the TC and Fiontar now manage all terminology development in Irish.

Although Irish is a State language, with legislative status guaranteed by the Official Languages Act (2003) and with EU official language status since 2007, its sociolinguistic profile more closely resembles that of a lesser-used language. The Irish language suffered the fate of several European lesser-used languages during the 17th-19th centuries. By the 1890s it was largely confined to a shrinking base of the poorer classes on the western seaboard. The nationalist insurgence of the late nineteenth century and the achievement of political independence in the early part of the twentieth century brought language revival centre stage, thus giving rise to a need for modern terminology. From the 1920s right through to the end of the 20th century, development of terminology in Irish was overseen by the State and was

largely driven by the demands of (i) education (teaching academic subjects through Irish); (ii) communications and media and (iii) public administration and law.

Meanwhile, the native speaker base continued to contract, and the bulk of writing activity and terminology work was increasingly conducted by the expanding base of L2 speakers who were motivated to use the language in modern life, particularly in education, media and legislation. The domain balance in the range of terminology created reflects this somewhat artificial context for term creation in Irish in the twentieth century. More terms were created for educational domains like geography or chemistry for example than for domains in everyday life like industry and health, or indeed sporting terminology as discussed in detail below. A significant shift has occurred however in the first decade of the new millennium, as the acquisition of language status (both in Ireland and in the EU) has resulted in the underpinning of language status, thus displacing education as the main driver for term creation. This shift has several implications, and we cannot explore all of them here, but the profile of terminology work in Irish has undoubtedly been raised. The Official Languages Act (2003) requires public bodies in Ireland to offer bilingual services and Irish achieved official status in the EU in 2007, with consequent increases in demand for Irish-language terms. The opportunity and need to disseminate Irish-language terminology in a manner fit for purpose became an obvious priority and was interestingly first funded by the EU through its Interreg programme. Building on the success of Focal, all of the other initiatives described in this paper have been funded by an Irish government department.

2.1. Impact on users

As a terminology resource, Focal has proved far more popular than originally anticipated. Now, in the fourth year since first going live, an average of 640,000 searches are performed each month.

Apart from a tiny budget to promote it initially, knowledge of Focal has spread mainly by word of mouth. Usage has continued to grow. It also reflects the ambient shift worldwide from printed reference works to on-line resources. Continuous efforts are made to increase the visibility of Focal, on a limited budget. The website itself was designed to be visually attractive. One of the features on the front page is ‘Téarma an lae’, the term of the day. This is intended to create interest among casual visitors to the site. A small amount of money is spent on Google advertisements. Fiontar staff regularly visit universities to give talks on Focal and on terminology, especially to students of translation. During 2009, promotional material was also distributed to libraries and banks, to target a broad base of users among the general public.

We don't know who all the users are, of course, but based on statistical analysis of usage patterns and countries of origin we have identified a core base of consistent users who work as translators and in professional language roles. The Republic of Ireland accounts for 80% of the user base; Northern Ireland and the UK account for 12%; Luxembourg at 1.5% and Belgium at 1% together reflect the usage by EU translators, and the American continent accounts for 3.5%.

Due largely to a dearth of lexicographical resources, there is a high dependency on Focal. The majority of searches are for Irish equivalents of English terms. In 2009, for example, 74% of searches were from English to Irish (21% were from Irish to English and the remainder were for other languages, searches without results and cases where the search language could not be determined). The most recent authoritative English-Irish dictionary was published in 1959

and is extremely outdated as regards modern terminology. The New English-Irish Dictionary (NEID), under development by Foras na Gaeilge since 2002, will not be available for some years. Focal has therefore taken on the function of a dictionary for many users of Irish. This has led to the TC receiving many requests for general purpose terms which ordinarily would not be part of their remit. The most frequent searches in Focal are for such general purpose terms, for example, *event, need, experience, area*.

Focal has engaged with its users continuously since the launch of the initial pilot demo version in 2006, and extensive opinions and feedback are received. Several e-mails are received each day; the bulk of these are from translators and editors. Requests may be categorised as follows: requests for advice (on terminology, but also on more general grammar and other questions), messages pointing out errors in the database, and, sometimes, suggestions for future improvements.

The number of requests for general language advice is another indication of the use of Focal as a general language resource. Recent requests for LGP terms have included ‘coleslaw’, ‘folk rock’, ‘pop balladry’, ‘android’, ‘all-seeing eye’. Requests for translation are sometimes received as indicated in these representative examples:

Can you help me with translating some things. i have tried my hand at pretty much everything but im sure there is bound to be mistakes in my work. its for my boss´ website and he has his heart set on adding irish to all the other languages. can you assist me at all please, i dont know what else to do or who to ask. (received 07.01.10)

I want to give my new baby (as yet unborn) an Irish name and so I was wondering if you could give me some information on two boys names [...] I would appreciate this information ASAP as I am due soon. (received 17.11.09)

I was hoping you could help me - could you provide me with the correct spelling in Irish for the phrase - ‘Sleep in Peace’. We wish to have this engraved on the headstone of my parents grave and want to ensure correct spelling. (received 16.11.09)

Other requests are for general information about the Irish language, such as checking spellings, or the English meaning of common Irish words or phrases. It would appear that there is a need for a general language information service or ‘helpline’ for Irish, which would be similar to that available for Catalan (optimot.gencat.cat) or the *Service des consultations linguistiques* offered by the Office Québécois de la langue française. Although a limited service is funded by Foras na Gaeilge, a full information and advice resource for translation and LGP queries is an obvious priority.

Focal, finally, also impacts on users as a *training* tool. A dictionary skills course is available on the website, which explains concepts such as metadata, definitions, inflection and grammatical annotations in the context of how to use the site. This course is used as a teaching tool on some translation courses. This tool was inspired by, among others, the Pavel terminology tutorial offered by Termium.

2.2. Focal as a term management system

The term management system (TMS) developed by Focal has also led to a change in how the TC engages with the public. The direct link to the TC means that translators and others can request new terms on-line and receive a prompt response. It has raised awareness of the work of the TC, increased appreciation of the complexities of terminological work, and stimulated debate on terminology and associated issues of standardisation among users of the language.

2.3. Focal as a way of sharing new resources

All the terms included in Focal have been approved by the TC over the years. As Focal became established as the source for terminology in Irish, it became apparent that some other resources, although not approved by the TC, would be useful, particularly for translators. An Auxiliary Glossary is used for these collections, which currently include two legal dictionaries and one military dictionary, as well as terms and sentences from the database of Rannóg an Aistriúcháin (the Translation Section), Office of the Houses of the Oireachtas (the Irish parliament). A separate login page was created so that this organisation could input and update its own collections regularly.

It is hoped to further develop this aspect of Focal through the development of a portal, currently nicknamed ‘Superfocal’, which would be linked to a number of separate databases. Superfocal would be designed to allow the creation of multiple richly structured terminological databases within one system. The system would enable the existing user and editorial interfaces (the public website and the private database administration website) to communicate with multiple databases. The advantage of this portal is that existing functionality would not have to be duplicated given multiple databases. Another advantage is that data would be easily transferable from one database to another as each database would have the same structure. Such a system would also allow the creation of terminological (and also lexicographic) databases not connected to the Focal terminology portal. The creation of separate interfaces, both public and private, for such databases, would also be made easier with Superfocal.

3. Sub-projects and related initiatives

Initially, the modest aim of the Focal project in 2005 was to combine printed sources into a relatively simple terminology database. There were elements of training, research and modernisation (of terminological data) involved, but the main focus was on dissemination. As this was achieved, opportunities arose to make new resources available to users, and to make the existing data more accessible. Opportunities also arose to use the techniques and skills developed for Focal in new projects and new research. Some of these are described here.

3.1. Tools for translators

It was decided to compile a CD-ROM version of the database for users who do not yet have broadband internet access; this CD-ROM, due for publication in 2011, will also enable users to access and search Focal from within other software applications such as Microsoft Office at the click of a button.

A downloadable TBX file of the entire database contents will also be made available in late 2010, specifically to support the translation sector.

3.2. Resources for language users

Due to the non-availability of general dictionaries and language services, and the role of LGP (language for general purposes) in Focal, it was decided that provision of some usage examples in Focal would greatly enhance the user experience by clarifying the meaning of common concepts. The National Corpus of Irish (NCI) was identified as a useful source for finding terms in context. NCI version 1, published in 2003, was initially developed by the Linguistics Institute of Ireland, under the EU-PAROLE project (1996-8) and contained 8 million words of contemporary text, including books, newspapers and periodicals. The corpus was further developed by Foras na Gaeilge during phase one of the NEID project (2002-5). It

now contains over 30 million words of Irish text, including 5.5 million words from websites. Educational, journalistic and informative texts, produced by L2 writers, form the bulk of this corpus. The relative absence of native speaker material and spoken registers from the corpus limits its suitability for general lexicography but conversely it is extremely useful for the terminologist as a rich source of usage examples, showing terms in context. The facility for users to search NCI through terms in the Focal database, which will be available later in 2010, will be a useful addition, especially since the database itself, for historical reasons, is not corpus-based.

3.3. Additional material

As well as improving access to the existing material, various subprojects have been undertaken to augment the existing material in particular fields. The largest of these subprojects is a new dictionary of sports terminology (discussed below), but work has also been done on plant and animal names, names of public bodies and the names of countries, languages and currencies.

3.4. The sports dictionary

Irish contains a wealth of sporting terms used in native sports such as Gaelic football and hurling as well as in sports such as soccer and rugby which have been played in Irish-speaking contexts for generations. The TC has published lists of Irish-language terminology for sports and games commonly played in schools as well as providing various sporting terms at the request of members of the public. However, several of the more modern sports and others which are not widely played in Ireland have little or no established Irish-language terminology. A great deal of sporting terminology is available in printed LGP dictionaries and other sources but apart from a short glossary published by the TC in 1938 there currently exists no specialised dictionary of Irish-language sporting terms.

Under the current contract for managing and developing Focal, Fiontar is compiling a sports dictionary including specialised terminology for over 40 different sports as well as terminology for related fields such as physiology, sports administration and drug testing. The finished dictionary will include around 10,000 terms. This project, along with the IATE project discussed below, has seen Fiontar's work on Focal move into the field of terminology production. It is a collaborative project, drawing on the expertise of a wide range of subject experts and language practitioners, and in collaboration with the TC during the term validation stage. The research is carried out in a clone of the Focal editorial interface thus enabling the easy transfer of completed work to the main database for publication. Work commenced on the dictionary in 2009 and the primary research will be completed by the end of 2010 although the validation process will continue beyond that date.

Most of the terms used in the dictionary have been sourced from authoritative English-language sources including glossaries published by the International Olympic Committee and other regulatory organisations. An exception was made for terminology relating to the native Irish sports of hurling and Gaelic football due to the existence of a large corpus of relevant Irish-language sources. The draft term lists are then reviewed by a panel of subject experts who rank them in order of importance and suggest additions and deletions. The next step is to search a corpus of dictionaries, glossaries and other texts for Irish-language equivalents. In the (quite common) event that an equivalent is not found a new term is proposed.

The results of this initial research are then sent in domain-specific lists to a panel of Irish-speaking journalists and sports commentators who provide feedback on the Irish-language

terms. This system means that panel members unfamiliar with certain sports need not give feedback on every list but can rather focus on fields in which they have expertise. This feedback is vital in ensuring that terms currently in use in the Irish-language media are not overlooked and it allows some of most active users of sporting terminology to participate in the creation of the dictionary, thus maximising the likelihood of implantation. This feedback is taken into account before a final draft for each domain is compiled and sent to a subcommittee of the TC for review. The subcommittee includes terminologists, journalists, commentators, teachers and translators as well as Fiontar staff members. When the terms for a particular domain have been approved by the subcommittee they are then published on Focal as a draft list. Users of the site are encouraged to browse each new batch of terms and provide feedback. This should facilitate dissemination and implantation of the terms.

The previous under-representation of sporting terminology in currently available Irish-language resources can be partly explained by the predominance of terminology relating to core subjects on the school curriculum, as discussed above. Sport, therefore, was not a top priority. The sports project provides an opportunity to redress this imbalance. Fiontar hopes to carry out research on other under-developed domains in the coming years.

3.5. Academic research

Aspects of the Focal database have been used as a research topics for several MA theses, for example *Research and analysis of place names around the world and their derived forms in Irish; Finding examples for Focal. Extraction of 'good' usage samples for use in an online terminology database*; and *A Survey of users of the National Terminology Database for Irish, focal.ie*.

PhD research is currently being undertaken into the use of subject field headings, and it is planned to incorporate the results of this work into the database. A field heading system originally developed by DANTERM is being adapted to the needs of the database contents, and concepts are being analysed and categorised. Another PhD research project is on the development of a model for term planning, based on the literature and on the work of recognised best-practice cases.

4. Related projects

One of the most important results of the in-house development of the Focal database – which has a sophisticated editorial interface – is that sister or ‘clone’ databases can be created for related projects. There are four major new additions to the Focal family: the IATE terminology project and the LEX project for legal terminology, discussed below; and www.logainm.ie and www.ainm.ie.

www.logainm.ie, the placenames database of Ireland, developed since 2007, is not a terminology or a lexicography project, but the skills acquired in terminology work – both database development and editorial skills – were found to be easily transferrable, and there is significant overlap between the user-bases of these resources. The placenames database contains official English and Irish placenames, with genitive forms and information notes. A new departure was the development of mapping tools, sound files and a system to enable simultaneous Irish-English and English-Irish translation of lists of placenames. Educational resources for primary and postprimary school pupils and third level students were also developed, building on Fiontar’s experience in creating a dictionary skills course for Focal.

A database of biographies of prominent figures associated with the Irish language in the period 1560-2000 is currently in the initial stages of development and will be published at www.ainm.ie. The project involves the digitisation, segmentation, updating and expansion of the original series, *Beathaisnéis*, in 9 volumes, containing in total 1,272 lives and 2,052 pages, by Diarmuid Breathnach and Máire Ní Mhurchú (1986-2007). This will be a major step in the provision of online digital humanities resources based on the heritage of the Irish-language community.

4.1. LEX legal terms project

The LEX legal terms project aims to compile and make available Irish-language legal and statutory terminology. Since 2008, work is being carried out on the Irish and English versions of Statutory Instruments, to align them to create a translation memory for use in the translation of legislation, and to extract terms from them and make these available both to government translators and to the general public through Focal.

The primary source of the legal terminology used in this project is the Irish-language version of Statutory Instruments 1976-1981. The Instruments are secondary legislation covering a wide variety of domains, from agriculture to hairdressing. Many of these terms are not essentially ‘legal’ terms but they are the preferred terms used in ‘statutory’ contexts, and are the chosen terms used in Irish-language legislation. These texts were selected as they are the most recent translations of secondary legislation produced by the Translation Section of the Irish Houses of Parliament. The Translation Section has responsibility for the translation to Irish of all Irish primary legislation or acts and, until the early 1980s, of all secondary legislation or Statutory Instruments. Due to the linguistic and translation expertise of the Translation Section staff, the translations of these texts, and so the terms contained in them, are of a high standard.

Since the early 1980s, Statutory Instruments have largely been translated by freelance translators or not at all. Arising from a recent case in the Supreme Court in relation to the availability of Irish-language secondary legislation the government undertook the establishment of a new Translation Unit early in 2010 with responsibility for the translation into Irish of all new Statutory Instruments and a substantial portion of the backlog. The LEX project in Fiontar is therefore a highly relevant support for the translation and terminology needs of this new Unit, in addition to its obvious relevance to the legal profession and to specialist translators in Ireland and the EU.

Term extraction is carried out on the Statutory Instruments and the results are then input to a clone database of Focal. A search function allows the editor to select an English term and generate a list of every aligned segment pair in which it appears. These segments are examined and the Irish term or terms used as translation for the English term are identified and added to the database along with the aligned segment pair in which they appear. These segments have two purposes. The first is to record the format of the term as first extracted. The second purpose is to provide usage samples for these terms when they are published in Focal. The layout of these segments has been planned so that they can be easily exported to Focal. All terms published in Focal must be approved by the TC. In order to expedite the TC authorisation process all the terms in the legal database will be compared with the data in Focal, entry by entry. The initial comparison process will be done electronically followed by an editing process in order to prepare the information produced for the TC. The terms will be published in Focal when they have been approved by the TC.

The main benefits of the legal terms project include the provision of translation memory for translators working in the new government Translation Unit along with a collection of high quality and easily accessible legal and statutory terminology. The project will also greatly increase the amount of legal terminology available to the general public via Focal. Another benefit lies in the opportunity to improve the quality of existing legal terminology on Focal through the addition of usage examples harvested from the Statutory Instruments.

4.2. Terminology for the European Union

The IATE Irish-language terminology project, which began in 2008, has enabled Fiontar to broaden its role beyond terminology management and diffusion to terminology production. This project is funded by the Irish government, and work is carried out in collaboration with the EU institutions (Parliament, Commission and Council), to increase the number of Irish terms in the EU's terminology database iate.europa.eu. This is necessary to support the status of Irish as an official EU language from 2007, and the consequent additional demand for translation services. At that time, Irish had 13,427 term entries in the IATE database, out of a total of 8.7 million (1.5 million concepts) in 23 languages, ranging from 1.5m in English to 2,839 in Bulgarian. Based on experience with Focal, the Fiontar team was contracted to provide 16,500 terms per year to IATE. Lists of terms which will be required by translators for upcoming legislation are sent by the EU authorities to Fiontar to manage the research and validation processes. Domains which have been worked on to date include agriculture, statistics, transport, finance, human rights, veterinary science and waste management. Of the terms supplied to date, 31% are terms already available in Focal, 51% are terms which can be compiled from existing elements in Focal, and approximately 18% comprise newly composed terms. The latter are researched and drafted in Fiontar and sent to the TC for validation. All terms created are later published on Focal.

The project collaborators include terminologists from the EU institutions, Irish-language translators from these institutions and Irish government representatives. Regular meetings between the partners set out the priorities, establish work practices and co-ordinate the exchange of material. As part of this work Fiontar has established a panel of subject experts who assist in providing definitions of concepts to be translated.

The editorial interface is based on the Focal model and is available online which means that editorial staff can work on the project from anywhere in the world. To facilitate feedback on newly created terms Fiontar created a separate extranet to which work-lists are uploaded on a monthly basis. The Irish-language translators of the various EU institutions can access this website and provide feedback on the new terms which is automatically transferred to Fiontar's editorial interface. This system has proven very effective and the IATE Irish-language project is being considered as a model for EU terminology work in languages of new accession states.

5. Conclusion: the many roles of a language resource

The Focal terminology project, and its sub- and sister projects, have led to the creation of a centre for terminology work in Fiontar. At present, the staff working on these projects consists of a project leader, terminologist, editorial manager, technical manager and eight editorial assistants, with a team of external contributors and consultants. Over this brief 5-year period, the single initial resource, Focal, has acted as a hub in building expertise and as a forum for the development of new projects in Irish-language digital humanities. It affords excellent research training opportunities in linguistic and lexical resources for PhD students, for graduate internships and for undergraduate and postgraduate student placements.

The development of a programme of graduate internships, starting in 2010, is intended to fill a gap in up-skilling young graduates for the many career opportunities requiring sophisticated language and technological expertise. The programme will be coordinated by Fiontar and graduates will work on a rotation basis in government agencies (with terminology and place-names research partners) and on the projects described above.

In a lesser-used language situation, electronic lexical resources have the potential to overcome the challenges posed by the lack of up-to-date printed resources and by geographical diffusion. One major high-quality resource can act as hub, growing rapidly beyond the confines of the original specification, to have a significant role in a language community which has users dispersed over several continents. From a limited aim of providing a user-friendly access point to an array of terminology dictionaries, previously only available in print, the Focal project has become a focal point for translators, educators, administrators and others who use the Irish language professionally. From the point of view of the research team, what began as a terminology management solution has led to several associated initiatives in term creation and other linked resources.

As was noted at the beginning of this paper, Fiontar has moved from involvement in the dissemination of terminology to taking an active role in *research, standardisation, evaluation, modernisation* and *training*. Research work is undertaken by individual PhD students and members of the editorial team research new domains; standardisation work is undertaken in collaboration with the TC for all new terminology; evaluation is carried out through regular consultation with users; training has developed as a priority (both in-house, on-the-job training and the formal graduate internship programme). Modernisation and innovation were the principal motivation in developing the Focal project in January 2005 and these remain the inspiration and driving force behind the research and development of all our initiatives since.

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