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## **A brief report to Information Computer Technologies in Ireland**

### **1. Background / overview**

#### 1.1 ICT and status

The Information Computer Technologies (ICT) industry is universally associated with modernity and economic progress and the forces of globalization while lesser-used languages are often associated with the geographic and economic margins. The paradigm of a perceived incongruity or incompatibility between ICT and lesser-used languages is one which is often discussed.

Lesser-used languages are often associated with the geographic and economic margins, so in terms of intergenerational transmission within the Gaeltacht (the Irish-speaking areas which comprise a very small minority of the population) and in terms of motivation to learn the language outside the Gaeltacht areas, the perceived status and utility of the language are important factors.

In the case of the Irish language, the issue of status is particularly important as a factor in motivating learners of the language for a number of reasons. In the first instance the majority of the speakers of the language are ‘produced’ by the education system rather than ‘reproduced’ by intergenerational transmission (Ó Riagáin 1997). Strategies to strengthen positive attitudes towards the language and working to lessen negative attitudes are vital to support motivation to learn the language. The associations which technology has for the young in particular are those of modernity, creativity and innovation.

#### 1.2 Localization

The fact that a localization project is undertaken in a language by one of the bigger multi-national technology companies illustrates both an appreciation that the majority of emerging technologies reach the market in the first instance through the medium of a single language – usually English – and an aspiration that for primarily practical reasons a degree of localization is required to optimise the market reach of new technologies. While the motivation behind localization is primarily that of increasing market share, other factors undoubtedly influence localization decisions. In the case of Irish, there are no monoglot Irish speakers, so the impetus for localization does not derive from a simple analysis of core market requirements, but from additional factors such as public sector requirements, or perceived goodwill towards a project which offer a local language choice, for example.

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### 1.3 20-Year Strategy for Irish: 2010-2030

The Irish Government's *20-Year Strategy for the Irish Language 2010-2030* lists nine 'areas for action', one of which is one of which is 'Media and Technology'.

The Strategy recognizes that education, community, arts and media are no longer separate language domains which can be governed by discrete policies and that this is due to the prevalence of information and communication technology. In areas outside the Gaeltacht, Irish language speakers have traditionally been at a disadvantage by being dispersed among the general populace – effectively networks of speakers rather than communities delineated by geographical location. The Strategy recognizes the possibilities which virtual networks afford such speakers and states of “these developments have immense potential for resource building in the arts and education and open up new channels for individuals and communities to increase their knowledge and regular use of Irish”.

The section specifically dealing with Information and Communication Technology is worth quoting in full:

The Government will request the inclusion of Irish in all EU-developed ICT programmes. It will also actively engage with major IT suppliers to license and distribute Irish-medium IT programmes. An IT strategy will be developed, to include IT terminology and lexicographical resources; localisation and open source applications; switchability of interface and language attributes; additional content creation aids to supplement spellcheckers and computerised dictionaries; diacritic markers; multilingual web pages; terminology for computer-aided translation; multilingual content/document management systems; language technology issues and corpora; speech technology, speech synthesis, speech recognition, adaptive technology and embedding issues; capacity building for end users and technology specialists; e-learning and the Irish language; call centre software; back end databases and bi/multilingualism; metadata; mobile devices; optical character recognition; and handwriting recognition.

Such IT developments need also to be embedded in educational, social and work-related practices to become effective means of enhanced communication.

### 1.4 The Official Languages Act, 2003

The Strategy and such legislation as may come into being on foot of it are likely to have a major impact, just as a previous piece of legislation, the *Official Languages Act, 2003*, did. This sought to set out minimum standards of service provision for those who choose to use Irish in their dealings with the public sector. A direct consequence of the act was the professionalisation and standardisation of the translation sector by means of a 'seal' of accreditation which is overseen by Foras na Gaeilge. Other ICT-based initiatives which support the translation sector either began or were further developed as a result of the Act. The development of translation memories based on a corpus of parallel texts is perhaps the most obvious example.

## **2. Resources, tools, projects and other initiatives**

### **2.1 NEID – the New English-Irish Dictionary Project**

This is a flagship project of Foras na Gaeilge which has statutory responsibility for lexicography. The aim is to produce a modern bilingual dictionary containing c. 40,000 head-words to be published in both printed and electronic format. An on-line version of the dictionary will be made available in late 2012. Part of the preparatory work involved the creation of a corpus of English as it is used in Ireland (25 million words) and a corpus of Irish texts (30 million words). More information and examples of the work can be accessed on the project's website cited below:

[www.focloir.ie](http://www.focloir.ie)

### **2.2 The National Terminology Database**

The national database of Irish-language terminology was developed by FIONTAR in Dublin City University (DCU) in collaboration with An Coiste Téarmaíochta/The Terminology Committee of Foras na Gaeilge. The Terminology Committee has statutory responsibility for the development of new terminology. The database contains over 325,000 terms and more than 880,000 unique visitors have used the website between 2006 and 2011. Further information about the project is available on the project's website:

[www.focal.ie](http://www.focal.ie)

### **2.3 WinGléacht**

An electronic version of the Ó Dónaill *Irish-English Dictionary*. This is a commercial product for purchase from

[www.litriocht.com](http://www.litriocht.com)

### **2.4 Acmhainn**

A website with dictionaries, word-lists, and resources for translators including texts about the art of translation, samples of best practice translations and a forum.

[www.acmhainn.ie](http://www.acmhainn.ie).

### **2.5 Microsoft Office**

Foras na Gaeilge works on an ongoing basis with Microsoft to produce LIPs (Language Interface Packs) for operating systems and various other resources such as proofing tools. Current information is available at:

[www.irish.ie/UsingLearning/default.asp?catid=510](http://www.irish.ie/UsingLearning/default.asp?catid=510)

### **2.6 OpenOffice**

This open source, open standards suite is available in Irish and a support sub-project of 'native-lang' exists for Irish.

Native Language homepage: [openoffice.org/projects/native-lang](http://openoffice.org/projects/native-lang)

Irish language project: [ga.openoffice.org/foireann.html](http://ga.openoffice.org/foireann.html)

## 2.7 Other localisations

ICT staples such as *Google*, *Firefox*, *Opera* and *Facebook* are all available in Irish and Irish is an option among the languages in *Google Translate* is available for Irish.

## 2.8 Gaelspell and Ceart

Gaelspell is an Irish-language spellchecker for Microsoft Word which is available for MS platforms and for Mac and Unix. Ceart is a powerful free-standing software package which corrects spelling and grammar and is available commercially.

[www.cruinneog.com](http://www.cruinneog.com)

## 2.9 Scriobh

This is a useful website which lists many of the ICT resources related to writing in the Irish language (dictionaries, spellcheckers etc) but also resources such as information on accent marks, on older Gaelic fonts and suchlike, and provides links to them.

[www.scriobh.ie](http://www.scriobh.ie)

## 2.10 Getthefocal

A mobile phone application (iPhone/Java) which offers a dictionary function, sentence translation and pronunciations. A less powerful version is available free via iPhone and Android app stores.

[www.getthefocal.com](http://www.getthefocal.com)

## 2.11 Freagra

A free translation service for short translations – accessible by phone, text, email or web.

<http://ling.ie/freagra/>

## 2.12 Predictive Text and other mobile technologies

The availability of predictive text in Irish is important for practical usage and for reasons related to status, particularly as perceived among the young who constitute the majority of learners. To positively influence attitudes, Foras na Gaeilge has worked in conjunction with various partners to ensure the availability of predictive text in various technologies as these have evolved. A brief history runs as follows: in conjunction with Vodafone in Ireland, a jav applet was developed for predictive text in the Irish language. T9 and XT9 options followed after this. Foras na Gaeilge worked in conjunction with Samsung on the “Gael Fón” which featured Irish language user interface as an option. This localized feature, since offered on all Samsung phones in the Irish market, has been a unique selling point. Foras na Gaeilge is currently in discussion with another major mobile phone manufacturer about Irish language features.

## 2.13 Abair.ie

This is an on-going text-to-speech voice synthesis project, based in Trinity College, Dublin which has received funding from Foras na Gaeilge.

[www.abair.ie](http://www.abair.ie)

#### 2.14 Taisce Téacsanna

Taisce Téacsanna is a web-based project which aims to provide a comprehensive choice of standard documents in Irish (government forms, local government forms, policy documents, information leaflets etc.) which Public Sector bodies can download and use. This system allows State bodies to share common documents (English and Irish), saving money on production and translation costs, and it also helps organizations to fulfil their obligations under the Official Languages Act, 2003.

[www.gaeilge.ie/Terms\\_and\\_Translations/Taisce\\_Teacsanna\\_Text\\_Bank\\_.asp](http://www.gaeilge.ie/Terms_and_Translations/Taisce_Teacsanna_Text_Bank_.asp)

#### 2.15 Database of Public Sector Terminology

[www.gaeilge.ie/TermsTranslations/Terms.asp](http://www.gaeilge.ie/TermsTranslations/Terms.asp)

#### 2.16 Translation Memories

A Translation Memories project for Irish funded by Foras na Gaeilge is nearing completion and beta versions have been provided to accredited translators for testing before a wider release is planned.

#### 2.17 Internet Strategy

As a result of research which it commenced in 2009, Foras na Gaeilge has just developed an Internet Strategy for Young People aimed at ensuring the provision of the best possible range of services and technologies for young people.

### 3. Best practice and problems

When funding was offered by Foras na Gaeilge to publish a weekly newspaper in Irish, a condition of the contract was provision of an electronic version free of charge on the web a number of days after the ‘hard copy’ publication.

[www.gaelsceal.ie](http://www.gaelsceal.ie)

The Oireachtas na Gaeilge Irish language media awards (roughly analagous to the Welsh Eisteddfodd), which celebrate excellence in journalism in the Irish language now have a new competition for best ‘blog’.

A solely **web-based radio broadcaster** has been broadcasting in Irish with limited funding from the Department of Community, Equality and Gaeltacht Affairs. This broadcasts a narrow range of chart-based programming (with lyrics almost exclusively in English and continuity announcements in Irish) and because of its mode of transmission operates without a licence. As a consequence of this and its target audience of teenagers its potential listenership is limited to those with mobile devices (primarily smartphones and tablets) and broadband access. The project is thus heavily dependent on hardware which offers a range of other entertainments, and its success is likely to depend on its ability to adapt to changing technologies.

[www.rrr.ie](http://www.rrr.ie)

An intermediary development involving old and new media is an on-line book club where a new title is announced monthly on a website and sold (hard copy) via the site. Local book clubs meet in selected locations (details on the website) to discuss the selected book but individuals can also review and discuss the books on an on-line forum. This approach uses technology to facilitate more use of the language and improving language skills via socialising and building networks of speakers.

[www.clubleabhar.com](http://www.clubleabhar.com)

The project above indicates the lack of e-books in the Irish language. At the moment only two of the Irish language publishers produce e-books and even these do not provide them as an option for all new titles. The slow uptake of the related hardware – primarily Amazon's Kindle – may seem an unlikely barrier to making e-books commercially viable, but when the smaller size of the Irish language book market is considered, the hardware barrier proves critical.

#### 4. An additional note on broadcasting

Broadcasting is probably the most prevalent use of technology in the area of language policy which probably impacts on daily life in Ireland (Watson 2003). While not automatically considered as part of the ICT area, the related technologies which support broadcasting and which have grown around it – particularly around TG4, as set out below – and which are in development (e.g. translation memories and speech synthesis) are likely to afford broadcasting the potential for even greater influence in the support of language such as Irish. For example Ireland's *20-Year Strategy for the Irish Language 2010-30* mentions that “subtitling options will be substantially increased in order to offer the option to have subtitles in Irish, English, or both, or no subtitles, thus significantly reinforcing the accessibility of TG4 to learners and non-proficient users of Irish as well as fluent speakers” and does so in the context of speech recognition, translation technology and speech synthesis.

The *20-Year Strategy for the Irish Language 2010-2030* also mentions a number of developments in the **Broadcasting Act 2009** which are intended to enhance the use and status of Irish in broadcasting (and thus everyday life), including: allowing more favourable charges, terms and conditions in respect of archive schemes by public service broadcasters for the purpose of Irish language broadcasts; increase in the allocation of licence fee money from RTÉ to the Broadcasting Funding Scheme (from 5% to 7%), of which TG4 is a main beneficiary; the continuation of a “free hour” of Irish language television from RTÉ to TG4 (valued at circa €10m); the deepening of RTÉ's remit in relation to the Irish language; the fact that Irish language programmes are now free from the “peak hours” restriction in the case of the Broadcasting Funding Scheme; the fact that TG4 has been given specific powers to provide on-line non-linear services in Irish; and; the fact the Minister for Communications, Energy and Natural Resources is to consider the multi-annual funding requirements of TG4.

**Raidió na Gaeltachta**, which originally began broadcasting in 1972 as a community radio station for the Gaeltacht (Irish-speaking regions) continues to fulfil that role but also serves the wider Irish language community throughout Ireland – and beyond, via

the Astra 2D satellite and web streaming. Since 2005, the station has adopted an ‘alter ego’ of youth-focused programming after 8pm, primarily of pop, world, and eclectic music. The lyrics of songs played after this watershed need not be in Irish, but the continuity announcements are always in Irish, of course.

Two community radio stations operate fully through Irish on the island of Ireland, **Raidio na Life** (since 1993) in Dublin and **Raidió Fáilte** (since 2006) in Belfast. Both receive funding from Foras na Gaeilge. While having distinct local characters, the two stations co-operate and swap programmes on a regular basis. Both stations stream content on the web. Both stations also train broadcasters and producers and many of those who trained in the elder station are now household names through subsequent careers in other national media. This all helps to enhance the status of the language in the eyes of young adults in particular as something modern, attractive and glamorous.

**TG4** is a national Irish language television broadcaster which was originally called *Teilifis na Gaeilge* when it was established in 1996. Not all of its content is in the Irish language and it has used minority and specialist programming to attract new audiences and create awareness of the channel. Approximately five hours per day of Irish language content are broadcast including a comprehensive news service, a highly popular soap opera, a high quality arts magazine programme and a wide range of children and youth programming, some dubbed and some original. This synergy has had the effect of Irish language soundtracks being offered as options on DVDs of popular children's programmes such as *Dora the Explorer*, *Spongebob Squarepants* and so forth. The effect of TG4, then has been to support the normalization of the Irish language in broadcasting context, in the domains of popular culture and everyday life for the general public but particularly for young viewers.

A secondary effect of TG4 has been the emergence of a cluster of companies working in the area of broadcast technologies (e.g. independent programme production, dubbing, subtitling) which operate predominantly through the medium of Irish and have provided employment opportunities in the creative sector for those in the Gaeltacht and other Irish speakers. As a result of *Raidió na Life* and TG4 in particular, it may well be the case that it is easier for a young person to make a career as a broadcaster, producer or technician in the Irish broadcast media if he or she has Irish.

The national broadcaster RTÉ has a long history of integrating Irish into its output, particularly its news service and continuity announcements. This is true in particular of the television channel **RTÉ1** and the radio channel **RTÉ Raidió One**. In Northern Ireland, **BBC Northern Ireland** has a dedicated Irish language section on its website with listing of television, radio and web-based material available in Irish, some of it directed towards supporting language learning (as, unlike the situation in the Republic, Irish is not a part of the core curriculum in the education system in Northern Ireland).

## 5. References

- Ó Riagáin, P. (1997): *Language policy and social reproduction: Ireland 1893-1993*. Oxford: Oxford University Press.
- Watson, I. (2003): *Broadcasting in Irish*. Dublin: Four Courts Press.