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EILEAGTRONAIGEACH A THIONNDADH GU GÀIDHLIG

OPPORTUNITIES FOR THE GAELIC VERSIONING OF
ELECTRONIC GAMES

AIR SGÀTH / FOR
BORD NA GÀIDHLIG

John Galloway, January 2011

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Executive Summary

- The electronic games industry is, effectively, the video games industry. It is fiercely competitive: in 2010 its global value was estimated as £105bn.
- Current trends are towards the production of more games online and for handheld devices, in line with popular demand.
- The games companies are focused on profits, which are often uncertain, and will only localise to other languages if the cost and time will be repaid by a significant volume of additional sales. Minority languages are not considered.
- Most of the promotion of games in different genres is carried on the internet.
- The shelf-life of most genres of games and the platforms on which they are played varies: there is constant innovation and development. The games which are acknowledged as having short average shelf-lives are those for handheld devices.
- Games companies' estimates of the costs of localising games they had produced recently ranged, per language, from £30,000+ for a Playstation game to £250 for a game for a handheld device.
- Were the localisation of a commercial game to Gaelic feasible, the only requirement of the Gaelic community would be to provide translators for text and, if sound files are necessary, 'actors' for voice-overs.
- It would be extremely expensive to produce an original game of commercial quality in Gaelic. The cheapest games, for handheld devices, cost between £20,000 and £50,000 to make.
- Three ways forward are suggested: taking an opportunity to acquire a localisation at minimal or no cost of a new Welsh language iPhone app; focusing planning and resources on the setting up of Gaelic online games on a Gaelic social networking site, games on such sites being a growing preference amongst game-players world-wide; and maximising whatever potential there may be in the localisation of free 'open source' games, some of which are reportedly of high quality.

Opportunities for the Gaelic Versioning of Electronic Games

This report gives the findings of an investigation commissioned by Bòrd na Gàidhlig to provide awareness of any opportunities which may be fruitful, in terms of language planning and value for money, to achieve the provision and uptake of electronic games in Gaelic, and of what to avoid.

The primary enquiry was on the potential for the translation into Gaelic of the linguistic aspect of existing electronic games, and the requirements for the publication of Gaelic language versions of games yet to be produced. In the course of this, an insight was also gained on the prospects for the production of original Gaelic games.

1. Electronic games

The investigation covered electronic games on disc (for installation and play on PCs), on websites (accessible on a PC), games for consoles (solely used for playing games), games for handheld devices (for example the Nintendo DS) and mobiles (such as iPods, iPhones, etc). (Sometimes - as hereafter in this report - the term 'handheld' is used to conflate the last two categories.) There are other types of electronic game – for example, audio games and arcade games, but each of the other genres is far larger, more competitive, and used far more often by the public, and their production constitutes the video games industry.

What these games are played on – whether a PC, an internet website, or a handheld device - are known as 'platforms'. Websites with games to play online are known as 'game portals'.

Games are often referred to in categories: as core games (which are often of complex design and generally demand the intense involvement of the player), casual games (which are simple to understand and can be interrupted as desired), or serious games (educational, instructional or informative).

2. Localisation of games: an overview

In the video games industry, the provision of versions of a game for different linguistic and cultural contexts is called 'localisation'. The industry has accepted the view that gamers enjoy games more if they play them in their own language and cultural milieu, provided that the game and the localisation are of high quality. Localisations appear in the finished product in one of two ways: some games appear on the market in different language editions, while others such as PC and console games allow selection of language, through an inbuilt settings menu, as the game is begun. The process of localisation is more easily carried out at the production stage: 'retrofitting' can be time-consuming and expensive.

Not all games lend themselves to localisation: sometimes – as with some Japanese games – they are strongly linked to a cultural context, elements of which are not always easily understood by people in other countries, despite language translations.

Where localisation is practical and desirable, the procedures involved are specialised and complex, and games developers use teams with professionalism and experience for the various tasks. Apart from language, there is a need to be aware of cultural sensitivities, legal restrictions on what can be depicted, and different rating systems for entertainments, and to find a way of accommodating them. There is also a developing academic field, principally in the linguistic and educational aspects of game development and use.

There are three levels of localisation:

- *'Box and Docs' localisation* – the game itself is not localised, but the packaging and manual are.
- *Partial localisation* – the game is partially localised: usually, all the game text and packaging, with voiceovers subtitled.
- *Full localisation* – the game is fully localised, including voiceovers.

The extent of localisation – or whether any localisation is carried out at all – is determined by commercial considerations. The games industry is fiercely competitive: the development and production of the most attractive games have and will require enormous financial investment, over years, before launch on the market starts to recoup the expenditure, and thus costs, cash flow, and the ultimate profitability are of prime importance. (This is illustrated by the collapse in 2010 of Realtime Worlds, whose founder and staff had previously been extremely successful game designers and developers. The company went into administration with debts of £3m only six weeks after the launch of its last venture – an on-line game which had taken five years and \$100m to prepare, but which failed to find sufficient immediate favour with the game-playing public.)

In this commercial environment, localisation is an initial cost which can only be justified if it can be predicted that it will increase profits substantially by extra sales. The likelihood of this is a judgement which has to be based on market research, and increasingly English-speaking developers have found markets for products localised to other major languages: French, German, Spanish, and Italian being the most common. Apart from the attractiveness of the games, the localisations have to be of high quality: poor quality localisations are shunned.

If a game is fully localised in different language versions, the publishers endeavour to release them simultaneously ('sim-shipping'), or with a short delay until a publicised date, in the various speech communities. The object is to ensure maximum return on the localisations made, minimising sales of the English version on the 'grey market' (i.e. cross-border or through the internet) or the making of pirate copies. For games as a single package with built-in language options, and particularly with the increased sales of official downloads from the internet, this precaution is not so necessary, but it is still desirable to have a universal release date, to achieve world-wide publicity for marketing and public relations, and hence to maximise sales in the various language communities.

3. Conduct of the investigation

The investigation was conducted by personal and telephone interviews and e-mail communications with academics and practitioners in the fields of computer science, psychology, linguistics, language technology, game localisation, and education, officials of minority language organisations, and video game producers and publishers. No prime source of information was found: the contacts were recommended by predecessors in the lines of enquiry, or found by internet searches. A list is provided in the Appendix, along with a list of those who, at the time of writing, had not yet replied.

Use was also made of online information and academic papers, and the 'The Game Localization Handbook' by Heather Maxwell Chandler (2004) provided invaluable insight on the planning, processes and problems of localisation.

4. Findings on the issues the investigation was required to address

The following considerations of the issues necessarily contain some repetition of information and explanation, as some of the implications of the issues overlap.

(a) The trends currently apparent in the electronic games industry

The consensus of information and opinion received is that, although games sold on disc remain popular, there is an increased use of the internet to buy and download games for play on PCs and game consoles, and the current trend of market development is toward games for smaller hand-held devices and games online.

According to market research, the demographic profile of video game players (hereafter: 'gamers' for brevity) is changing. The average age is rising (35 in the USA): reflecting the presence of an older generation which grew up with video games, and continue to play them. Younger people are, apparently, at least as interested, particularly in online gaming: according to the EU Kids Online Survey (2011) 60% of 9-16 year-olds across 25 European countries go online daily, or almost daily, and 83% play games online.

There is also growth in the number of casual gamers, of whom a large proportion are women and older men. In the UK, casual games on social networks are becoming a strong competitor to specialised game portals, with 11% of British online casual gamers stating that their social network site is their primary gaming facility. As well as having young people as a core market, social network sites and their games are particularly popular with women.

Young people are also the main players of games on handheld devices such as iPods and iPhones. The games are extremely cheap, ranging in price from £0.50 to £2.99 and are readily disposed of and replaced by others. Surveys have shown that about half of all owners of an

iPhone are under thirty years of age, and that an iPhone game will retain their interest for, on average, thirty days.

The relative fall in the share of the market taken by games on disc may be due not only to the growth of the other platforms' popularity, but also – in part - to the enormous cost and time commitment associated with core commercial games. A certain number of these games remain successful, and periodically relaunched in new editions – for example, the FIFA football games – but, given the ever-higher expectation of gamers in terms of attractiveness and quality of the gaming experience, new games are more risky, as shown by the demise of Realtime Worlds, referred to in 'Localisation – an overview' above.

(b) The extent of the industry's awareness with respect to language choice, and how choice is offered

Not all games use a language: simple flash games for handheld devices, for example, do not.

Where a language is part of a game, the industry's awareness is almost entirely associated with sales and profitability, and hence localisations are to major international languages, sometimes with additional secondary localisation to other major languages.

In respect of choice: some of the games for PC, for consoles, for play online, and for play on the more advanced handhelds offer built-in choice. Other games are published in several language versions, for distribution in the appropriate countries, in which case there is not usually a choice at the point of sale, except if sought and found on the internet.

(c) The languages on offer in the various parts of the industry, and how they are selected

As noted above, localisation is carried out for commercial reasons, for major language markets. In the English-speaking world, games are often produced with 'EFIGS' localisations – English, French, Italian, German and Spanish, and sometimes to others as well, such as – variously - Dutch, Danish, Norwegian, Swedish, Polish, Hebrew, Japanese and Korean.

Amongst Scottish companies, Tag Games cited 'localisation on the basis of cost and return: usually EFIGS but also Mandarin and others. Cohort Studios distributed their latest game 'The Shoot' in fifteen languages. Proper Games also quoted EFIGS: the first game they published was also localised to Russian: they stated that the languages were chosen by the external publisher and the choice was based on the 'intended geographical target market'. 4jStudios also usually localise to EFIGS for their console games.

The main languages to which US publishers often localise are French and German as these are the bigger European markets, and according to Chandler (2004) each can be expected to sell 10,000 units. Spanish and Italian versions are also made, if market forecasts are favourable: sales of 5,000 units are required to recoup the expense of localisation.

(d) The provision currently available for minority languages: how, and why

The provision for minority languages in the commercial games industry is almost non-existent, because the small size of the speech communities indicates that the cost of localisation would not be recouped by sales. A notable and recent exception is the Welsh language game app for the iPhone, released by Broadsword Publishers in January 2011, but as much of the work on it was apparently carried out voluntarily, it could not be counted as a truly commercial venture.

Existing minority language games are mostly intended to aid learning the language, rather than to provide recreation for its own sake: some are sold on disc for installation on a PC; others are found on dedicated websites set up by members of the language community or by broadcasting or educational bodies.

There have been localisations to minority languages of 'open source' free versions of popular commercial games: 'Freeciv' – a free version of 'Civilisation' has been localised to Welsh, and is currently being localised to Gaelic by Michael Bauer in Glasgow, with assistance from Kevin Scannell at the University of St Louis. As far as is known, these localisations are voluntary and unremunerated, and the resultant game non-profit-making: the basis for the provision of open source software is that will not be used for commercial purposes. SuperTuxKart is a open source racing game resembling the commercial and popular MarioKart games: it is available for localisation and this is apparently in progress for Irish. Scannell reports that, in addition to the Freeciv 'Civilisation', he has translated about thirty small games to Irish.

(e) The way in which the market for different genres of games is promoted

Much of the promotion of all kinds of video games is to be found on the internet, as this is a cheap and direct way of bringing games to the attention of likely buyers. Sites which sell games also promote them vigorously: Amazon, for example, has an online Video Games Pre-Order Promotion Centre. There are opportunities to try out games, and promotional videos on game sites and on YouTube.

Games magazines and shops also provide publicity. Core games to be sold on disc or online are promoted by repeated prior publicity and advertising of the launch date: as a new core game or its new edition may be years in costly preparation, anticipation is nurtured to maximise sales at the launch.

(f) The shelf-life of various genres of games and various platforms for games

The shelf-life is determined by the ready market for games of ever higher quality and innovation, and for platforms with ever higher specification on which to play them.

For both PC and internet platforms, the viability of the platform depends on the specifications of the computer: the processor, memory, drivers, graphics card, etc. The higher its specifications, the higher the quality of the game which can be played, whether installed

from a disc, downloaded from the internet, or played on an internet site. To keep pace with game development, PCs require hardware updates and eventually replacement. Core games bought on disc or downloaded from the internet can be supplemented by updates, which provide fresh interest, although periodically a new edition will be published, to higher specifications.

A game console usually has a operating life of several years (Nintendo reckon 5-10 years for theirs) and retains its attraction as long as entertaining games are available for it, but in time many players want higher specifications: either a new version of their old console ('backward compatibility' – the ability of new versions to play older games – is the norm) or a new make of console which appears to have a better range of games. Again, successful games can be updated from the internet in the intervals between the publication of new editions. This is also the pattern for other devices, although the games are much cheaper and appear to be more quickly replaced by others. Games apps for the iPhone, for example, have a notably short shelf-life: on average fewer than thirty days, according to one report. They are numerous, extremely cheap and may only be played a few times before the player is attracted to another, although inevitably some games will retain their popularity. Updates are available and a new iPhone is marketed each year, but backward compatibility ensures that games bought earlier remain playable on newer iPhones.

(g) Trends and costs which would be associated with Gaelic localisation of various games

No respondent anticipated that localisation of a core game to Gaelic would be commercially viable, and it was felt that games producers and publishers would not, of their own accord, wish to be involved. Given that the venture would require subsidy, the object would be to select a game which is localisable and would be popular and thus attractive to Gaelic-speaking gamers. Localisation is easiest and cheapest if it is built into the game at production, but at a time when its appeal to the gaming public is as yet unproven. If the game were already on the market in English, and attractive and successful, some Gaelic-speaking gamers may have bought it already, and the volume of sales of a new edition with a 'retro-fitted' localisation may be reliant on a great deal of language loyalty.

For a core game, the investment for localisation at the production stage would have to be substantial, and at least as much were it a 'retro-fitting' localisation afterwards. Cohort Studios estimated that for their core game 'The Shoot', published by Sony, the cost per language was about £5000+ for text elements, and £25,000+ for the voice-over recordings.

Localising small games for handhelds is cheaper. For Cohort Studios' self-published titles they work to a budget of under £20,000 and reckon that localisation to Gaelic would cost £250, mostly in translation. This, they acknowledge, is a small amount, but they estimate that they would have to sell 200 units of the game to break even on that outlay, and they believe there would be no demand. Tag Games also make games for handhelds, and quoted, as a rule of thumb, £500 - £3000 per language, depending on the complexities of the process in relation to particular languages and particular games. Dynamo Games, in response to the

query about cost, cited the website of the translation service they use, indicating most of the cost is translation. According to Frank Arnot of 4jStudios, “the technical side of localising a game to Gaelic would be very straightforward”.

(h) Required frequency of updating of localised games; costs and requirements

In general, many games for the handheld devices are simply discarded rather than updated: if their appeal fades, they are replaced on the market by newer ones. For other platforms, new editions of successful games emerge every year or two, and in this interval updates can be downloaded from the internet, but no information has been found which points to a particular frequency of update across all games. The provision of an update depends on the genre of game, its character and success, and the degree of confidence that the innovation will deliver a better game experience and retain the gamers’ interest. The localisations costs will vary, depending on the particular requirements of the update.

(i) Skills required within Gaelic employment pool to produce and maintain Gaelic versions of games

In most circumstances where localisation of a commercial game might be a feasible proposition, the only skill required of the Gaelic community would be translation and, if it were a game which included voice-overs, ‘actors’ to make the recordings. Companies consulted reported that, where they seek a localisation, they or partner companies would handle the technical aspects.

In the case of open source games localised by volunteers on a non-commercial basis, the process will require some application of technical expertise. Michael Bauer, for example, who is localising the ‘Freeciv’ version of ‘Civilisation’, has the assistance of Kevin Scannell of the University of St Louis.

(j) How would a Gaelic choice be promoted?

Assuming that the Gaelic community would contribute to the promotion with input to the media and online links, it would seem likely that information about the Gaelic facility would accompany the publisher’s general promotion of the game in the press and media (as described in (e) above) along with some extra publicity for the innovation.

However, given the apparent reluctance of companies to take on a localisation of a new game to Gaelic themselves, it might only be carried out if a subsidy were provided, and it seems likely that, in that event, the game publishers would see promotion as an expense which would form part of the subsidy.

(m) The approach and interest of the organisations and individuals in (l), and others, to opportunities for Gaelic

Interested

Steven Rose is very positive about the prospect of localising the Welsh iPhone game app to Gaelic.

Delyth Prys has been involved in educational games, but would be interested in the development of others, and in any sort of collaborative venture.

Breandan McCraith gave information and advice on the position of Irish with respect to games, and on Foras na Gaeilge's current development of an internet strategy aimed at young people.

Creative Scotland – degree of possible involvement not yet ascertained.

Interest, but not suggesting relevant involvement.

University of Abertay: Vera Kempe and Ken Scott-Brown of the School of Psychology would be interested to observe the social impact of localised games on the Gaelic community, once they are available. (Professor Natanson, of Arts, Media, and Computer Games, was helpful with information about the industry, but not interested in Gaelic localisations.)

NPLD - Jeremy Evas, Bwrdd yr Iaith Gymraeg/

- Sytske de Jong, Dept of Culture, Language, and Education, Province of Friesland

The impression was gained that it may be easier to build a cooperative venture directly with one or two partners than through the NPLD. Sytske de Jong was the contact given by Jeremy Evas of Bwrdd yr Iaith Gymraeg for computer games development in the NPLD: however, the project she is working on is not for localising recreational games, but for an online computer game platform to provide language learning for children aged 4 to 6. She says Donald Morrison is aware of this and that BnG is welcome to join the project group. A second e-mail was sent asking for any information about video games in minority languages, but to date no reply has ensued.

Amongst video games companies contacted, Cohort Studios had wanted to localise their first games to Gaelic, but had concluded that it would be financially unviable. Dynamo Games also expressed sympathy with the idea, but had reached the same conclusion.

Kevin Scannell's primary interests in this field are in open source software and localising to Irish; in communication he did not express interest in involvement with Scottish Gaelic, but has provided valuable assistance to Michael Bauer in the localising of 'Civilisation'.

Sarah Dauncey is interested, but in the possible educational impact, if there is any involvement of schools.

5. Conclusions

In general, consideration of the possibilities of localising of games to Gaelic is not very encouraging.

The video games industry operates with vast sums of money; the production costs of games have tight budgets, while profits are uncertain and sometimes non-existent. It is safe to conclude that publishers of any genre of game will not finance the localisation of a game to Gaelic, because they cannot foresee it being profitable. The recent appearance of a Welsh iPhone game app might appear to belie this, but that game was, the publishers report, largely produced by voluntary work: the equivalent cost was quoted as two man-years. Having apparently saved much in production, there will be a large profit margin.

Some companies might be willing to carry out Gaelic localisations if a subsidy were provided, but it is a moot point, given finite funding, whether this would be the best use of it. For prestige and popularity, a localised game would be renowned as a game as well as for its use of Gaelic. Subsidising localisation of a core game would be enormously expensive, with no guarantee that the game would be popular with Gaelic-speaking gamers except through language loyalty, nor that it would enhance Gaelic's public status. This is also true of subsidy of the localisation of a handheld game app: it would be cheap, but the rate at which gamers dispose of them suggests that one or two ventures into this market might make only a temporary impact on the Gaelic community and the general public, and the value and purpose of sequential subsidising of localised game apps for a minority of Gaelic-speakers might be questionable.

As one respondent, Sarah Dauncey, pointed out, the games industry is contributing to the status of English as the universal lingua franca. The task for minority languages communities would appear to be to seek out whatever opportunities there are to acquire a presence in the domain.

Reviewing the testimonies and information gathered in this investigation, there emerge three ways in which the objective of producing video games in Gaelic could be taken forward:

- (1) Steven Rose, the Development Director at Broadsword Publishing, is very positive about the prospect of localising the Welsh iPhone game app to Gaelic: all they would require is translation of the text. The game was originally designed for the iPad, being localised into a number of languages, and on that platform appears to have a measure of global popularity.
- (2) All the evidence indicates that both online gaming and social networking – particularly when on the same website - have an established and growing popularity with both younger and older generations. In considering the viability of developing Gaelic video games, their provision on a Gaelic social network site was the positive prospect suggested by academics at the University of Abertay. They, and the education consultant Sarah Dauncey, thought that it might be useful to explore what use the GLOW network might be in creating online games for a Gaelic site. Breandan

McCraith of Foras na Gaeilge reckoned that ‘the internet is the place to be’ drawing on his observation of the use of English on network sites in Ireland, and the EU Kids Online Survey (2011). The developments in Ireland are toward Irish language social network sites for young people: they are exploring the localising of games.

A social network site does appear to be the best platform for games, and the best return for any funding which could be invested in localisation. Necessarily, the games could not be amongst the more expensive to localise, but it could be useful to explore what could be achieved through collaboration and sharing of cost with other minority language communities which might want to set up their own social network sites.

- (3) Open source games software offer opportunities. Kevin Scannell reckons there are a number of open source games, beside the Freeciv ‘Civilisation’, which are interesting or compelling for serious gamers. Given that there are few recreational games using Gaelic, and none which would fit Scannell’s description of these free ones, it would seem worthwhile to encourage high quality Gaelic localisations of them.

6. Summary of findings

The report has to conclude that, consistent with the requirements of language planning and value for money, there are few opportunities for effecting Gaelic versions of electronic games. The industry is fiercely competitive: companies will only countenance the production of versions of their games in other languages if they will boost profits, which quite often are not made. Minority languages are not accommodated, and the cost of subsidising Gaelic versions of the expensive genres of games would be prohibitive, while the lesser cost of versioning cheaper games might not be repaid in customer satisfaction and status for the language, due to the short shelf-life of games in this genre.

For Gaelic to achieve and maintain a presence in this domain, it will be necessary to seek out opportunities for the best return on investment, and the report notes three: obtaining a Gaelic version of a Welsh iPhone app, for minimal cost; to move towards the provision of online Gaelic games on a Gaelic social networking site, in line with the most significant developments in the gaming world; and maximising the use of good quality free games software. These are advocated as the way forward.

John Galloway, January 2011

APPENDIX

Respondents to the investigation

Jeremy Evas	Bwrdd Yr Iaith Gymraeg / NPLD
Sytske de Jong	Dept of Culture, Language, and Education, Province of Friesland / NPLD
Delyth Prys	Team leader, Language Technology, Canolfan Bedwyr
Breandan McCraith	Foras na Gaeilge
Vera Kempe	School of Psychology, University of Abertay
Ken Scott-Brown	School of Psychology, University of Abertay
Louis Natanson	Academic Director: Arts, Media, and Computer Games, University of Abertay
Michael Bauer	Glasgow
Kevin Scannell	Director: Maths and Computer Science, University of St Louis
Miguel À Bernal-Merino	Lecturer in Game and Media Localisation, Roehampton University
Carme Mangiron	Lecturer, School of Applied Languages, Dublin City University
Minako O Hagan	Lecturer, School of Applied Languages & International Studies, Dublin City University
Heather Maxwell Chandler	Game Development Consultant; Executive Producer & co-owner, Media Sunshine, Inc.; author of 'The Game Localisation Handbook'
Colin McQuillen	Producer: Proper Games
Brian McNicoll	MD: Dynamo Games
Lol Scragg	CEO: Cohort Studios
Paul Farley	MD: Tag Games
Frank Arnot	Studio Director, 4jStudios
James L. Milton	Centre for Applied Language Studies, School of Arts, Swansea University
Sarah Dauncey	Education Consultant, Rural learning
Steven Rose	Development Director, Broadsword Publishing
Tanya Flanagan	National Coordinator, Modern Languages and Primary Schools Initiative, Ireland
Janet MacIver	BBC Alba

Non-respondents

Cobra Mobile Ltd	
Digital Goldfish	
Mixed Bag Productions	
Play2Improve	
Ruffian Games	
Kristian Ó Donovan	Flùirse Education Solutions, Tralee, Ireland
Antaine Ó Donnaile	BBC Belfast
Helydd Daniel	NPLD
Kazeta.info	(Basque website)
Luistxo Fernandez	Basque blogger
Drouzig.org	Breton ICT company