



CHAPTER 17

TELEWORKING AND TELECENTRES

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INTRODUCTION

This chapter contains material drawn from the Telework, Telecottage and Telecentre Association's *Teleworking Handbook*, with permission of the TCA. The TCA is the leading UK organisation supporting and promoting the idea of teleworking. The 360-page handbook, which is now in its third edition and has sold more than 10,000 copies, can be purchased online on a chapter-by-chapter basis through the TCA's Web site www.tca.org.uk. Printed copies of the book are available from the WREN (Warwickshire Rural Enterprise Network) Telecottage (s.lewis@ruralnet.org.uk).

WHAT IS TELEWORKING?

Teleworking is working at a distance from the people who pay you, either at home, on the road or at a locally based centre. Teleworkers use e-mail, phone and fax to keep in touch with their employers or customers. Teleworking is part of a range of flexible work practices that are becoming widespread and also include flexi-time, part-time working, job sharing and career breaks.

Various terms are used to describe the new forms of work, including "teleworking" (the catch-all term for workers who use teletechnology), "telecommuting" (often used to describe those who work for one employer and spend only part of their time working from home), distance working, flexible working, flexi-place working, e-working and remote working. The terms teleworking and telecommuting are attributed to U.S. academic and consultant Jack Nilles who, in 1973, worked on the first documented pilot telecommuting project with an insurance company.

In early 1999, the European Commission's survey of 7,500 people in the European Union member states and 4,000 businesses found that:

- Of those who are regular teleworkers working more than one day a week, 81% are men.
- Sixty-eight per cent of teleworkers are in the 30 – 49 age group.

- Most teleworkers have high levels of education or are qualified professionals (60%), twice the figure for the labour force as a whole (30%).
- Teleworking is most prevalent in the financial/business services sector (8.5%) and the distribution, transport and communications sector (5.5%).
- The differences between teleworking and non-teleworking households are small, indicating that the media stereotype of women teleworking to combine family and work duties is inaccurate.
- There are considerable differences in the prevalence of teleworking in different European countries, ranging from a low of 2.8% in Spain to a high of 16.8% in Finland.

WHY IS TELEWORKING RELEVANT TO TELECENTRES?

Sustainability and income

Most telecentres face a continual fight to achieve sufficient income to maintain their services. One possible income stream involves developing teleworked business services. However, developing such services, particularly for rurally based centres that must market and deliver services over large distances, is not a trivial task.

Providing an occupation after training

Many telecentres receive the major part of their income in exchange for providing information and communications technology (ICT) training services. However, providing training without thinking about what opportunities for work may be available for the trainees on completion of their courses can lead to disappointment and to alienation of the centre management from the local community. Telecentres therefore often get involved in trying to provide work for their “graduates.” In this way, former trainees don’t have to relocate out of the area to get work, or else commute long distances.

Equipment hire

For telecentres that are based in towns or cities, renting out time on computers and Internet access is often a minor but important income stream that encourages a continuing new flow of telecentre users. Where people have access to telework but do not own their own equipment, they have greater motivation to hire telecentre equipment for longer periods, providing an income for both the teleworker and the telecentre. This is sometimes a transitional stage until the teleworker is able to afford his or her own equipment and home office.

Keeping up to date on business practices

Where telecentres are located in rural areas it is all too easy to fall behind on current ICT usage and business practices. Working for clients in metropolitan centres — or even in more developed countries — encourages telecentres to keep their software and training courses up to date, which in turn ensures that the centres’ trainees are more employable. The idea of a “virtuous circle” of interaction between telework, ICT training and child care was pioneered by the KITE telecottages in Northern Ireland (discussed in more detail below).

Enhancing the centre's community hub role

Telecentres often aspire to be 21st century community centres, acting as multipurpose providers of services and information for their locality. One of the strongest motivations for local residents to get involved with their telecentre is the opportunity of paid work. At the same time, where the local community is aware that the telecentre can take on work tasks, there are likely to be more requests for telecentre assistance with community development and commercial projects in the locality.

Creating a continuing market for telecentre training services

Many of the longest-surviving telecentres, such as the Moorlands Telecottage in Staffordshire, UK, report that it is important to ensure that trainees keep “coming back for more.” Where the telecentre can offer telework opportunities, it is far more likely that local government and other funding bodies will provide assistance with training telecentre users. This in turn allows a wide range of courses to be provided and helps individuals create their own training path, gradually gaining more skills that enable them to take on a wider variety of work tasks. This is particularly important for telecentres in remote rural areas that serve sparse populations. If they don't create a continuing market for telecentre training, they eventually run out of trainees and may subsequently close down.

CASE STUDIES OF TELEWORKING

KITE, Co. Fermanagh, Northern Ireland

Kinawley Integrated Teleworking Enterprise (KITE) is located in West Fermanagh, close to the border between Northern Ireland and the Republic. It is a successful enterprise that sources 60% of its work from North America, and offers childcare facilities as well as training. The purpose-built telecottage is the brainchild of Sheila and Michael McCaffrey, both of whom have substantial managerial and business experience. Sheila identified the basic requirements to set up the enterprise: premises, childcare facilities, training, equipment and a market for services.

The telecottage occupies a purpose-built centre established in 1993 and has a predominantly female workforce that has received training in both managerial techniques and ICTs. KITE focuses its business on the remote management of data and has customers in the USA, UK and Ireland. KITE believes industry standards, specifications and requirements are very important, so it has involved partners to assist in ICT training and development for both the corporate and community sectors. The training emphasis is on high levels and end results.

Equipping a centre such as KITE is a continuing issue and Sheila comments, “We invest in the tools of the trade which are relevant and necessary — this is a key to success and growth in any profession. However, our decisions are based on customer needs, not on flash new technologies which may not be relevant to our customer base.”

One of the key features of the KITE development is the provision of onsite child care to supply “family friendly work.” The childcare provision originally covered preschool care but has been developed to include after-school and holiday care, as well as a variety of play and learning opportunities based on ICTs. For more information, contact KITE by e-mail at s.mccaffrey@btinternet.com.

Moorlands Telecottage, Leek, Staffordshire, UK

Moorlands Telecottage is attached to the local school and is a classic example of the telecottage as rural ICT training centre. Simon Brooks, Community Education project officer, explains that Moorlands courses focus on various aspects of information and business technology — and that around 50% of the training offered is now paid for by businesses on a commercial basis: “A lot of businesses prefer to send their staff into the telecottage, away from distractions in the office. Many courses are held in the evenings at the request of clients.”

He says, “One problem that a rural telecottage must plan for is that if the local population is small, then eventually you will run out of trainees. We get a lot of repeat business — people coming back for retraining — especially from small businesses. They might start off learning word processing to do invoicing, move on to PowerPoint to get work from clients, and then learn Excel so they can do their own accounts.”

The telecottage is also used as a referral agency by local businesses looking for teleworkers. Simon explains, “We don’t do this officially or gain any income for it because we don’t want the hassle of being an employment agency, but local businesses know that people we have trained are going to be competent and high quality, so they come to us when they need work done. We contact suitable teleworkers and tell them to get in touch with the businesses. It’s up to the businesses which teleworker they pick and to sort out the details of the job.” For more information, contact Moorlands Telecottage by e-mail at moorlands@fenetre.co.uk.

East Clare Telecottage and Training Associates, Scariff, Co. Clare, Ireland

East Clare Telecottage was established in 1991 to provide computer-based office services to businesses and community groups. Drop-in access by people wanting to use ICT equipment amounts to about 10% – 15% of the income of the telecottage unit. Services supplied include design and printing, translation, computer training, software development, Internet access and Web design.

There is also a small call centre with three workstations, set up initially with European funding as a training project. The call centre can offer order processing, reservations, data distribution and market research.

East Clare operates a network of translators who take on contract work. They keep a register of 75 local translators and work amounts to perhaps 15 person-days each week (three full-time equivalents). The network receives a commission on work obtained. East Clare Telecottage sees translation of Web sites as a new area of opportunity.

Telecottage manager Nana Luke agrees that the service offering is a wide one, but says that the main theme of success is being able to provide a “one-stop shop” — either for the printing services of the telecottage or for translation. The telecottage plans to do more Web site development and hosting in future. It is also working on a European-funded plan to develop the Teleworking NVQ further, in particular by providing training for managers of teleworkers. There are nine people directly employed by the various operations at East Clare though not all are full-time. For more information, contact East Clare Telecottage by e-mail at bealtaine@bealtaine.ie.

OPPORTUNITIES FOR TELEWORKING

Level, location and trust

Where telecentres are thinking about offering teleworked services, it is important to consider some general trends in the telework market.

In general, businesses are happier about outsourcing tasks they consider to be “professional” or “managerial,” just as they prefer to allow managerial-level staff to telework rather than clerical or administrative operatives. In essence, they trust people in professional roles to manage themselves, but feel they will have to do the management for those carrying out more basic tasks — something that is hard to do if the people in question are out of sight as teleworkers. This division is also related to location: higher level services are less sensitive to geographical location than basic services such as secretarial or bookkeeping, which tend to be sold to customers face-to-face within a “drive and drop” radius of the telecentre.

If you are a programmer specialising in Java and Cold Fusion, you can probably sell your teleworked services on another continent. But if you’re someone with basic office administration skills, your customers are likely to be located within 50 kilometres of your workplace. Most telecentre clients tend to fall into the latter category. It is therefore advisable to carry out a skills survey of your telecentre users in order to try identifying whether there are professional level skills among them which you could develop to provide a niche, high-level service.

Also ask your telecentre users what hours, and how many hours, they would ideally like to work and if there are any time constraints that need to be worked around. If your users are all women returners who only want to work from 10:00 a.m. to 3:00 p.m. because of children at school, and your teleworking business idea is to operate a small call centre, then you are going to have trouble providing staff to cover the remaining normal business hours. Where users wish to work only 20 hours a week or less, you may have extra cost burdens in providing adequate customer service and require extra quality control measures.

In 1998, the TCA supported a survey of UK telecottages activities by Bill Murray of Small World Connections. About one-third of the 165 telecentres and telecottages surveyed replied. The results, summarized below, give a snapshot of the “typical” telecottage, and this can be useful to those thinking about how teleworking is likely to relate to their telecentre operation:

- Just over 20% of the centres that responded to the survey have more than 50 regular users and 50 occasional users, but seven centres (about 13%) reported no drop-in users at all. The average is 30 regular and 30 occasional users. Only three centres (about 2%) reported that more than 10 people other than staff used the centre as a regular place of work. Over 66% have no one using their centre for regular work.
- Forty per cent of the centres subcontract work to local teleworkers.
- The vast majority of the centres (88%) are located in rural areas or small towns (rural villages 38.8%, small towns 36.7%, remote rural areas 12.2%, city centres 4.1%, city suburbs 2.0%, large towns 6.1%).
- Most centres have two full-time staff and one part-timer. Over 60% have no volunteers.

- Half of the centres are “breaking even” financially, with 33% making a loss (usually the most recently set-up telecottages) and about 28% making a profit. Only six centres that were loss-making were operating outside their own financial plans.
- Facilities vary widely. All have Internet access and 82% have a Web site. Over half have ISDN (integrated services digital network) lines. However, only 20 centres responded to the initial e-mail version of the survey questionnaire — which is hardly likely to instill confidence in potential business clients.
- Predictions for the future were increased emphasis on training, Internet access and use, and commercial work.
- Just over 33% of centres derive income from commercial operations, but 40% rely almost entirely on continuing public funding. About another 33% pay no rent.

TELEWORKING SERVICES

Abstracting, editing, proofreading and indexing

There is strong demand for these skills in combination with the ability to handle scientific subjects. An example of a teleworking business based on these skills is Crossaig in Scotland, which arranges abstracting and indexing of biomedical articles for Elsevier’s EMBASE database. The printed journals are scanned into computer text files (with optical character reading [OCR] software) at the company’s offices and then sent by ISDN file transfer to the teleworkers around Scotland. The teleworkers work on a piece-rate, but many have specialist skills and Ph.D.s in areas such as marine biology or pharmacology can earn up to £17.50 per hour for their work. This arrangement gives Crossaig access to the skills it needs, and the teleworkers access to work from remote rural areas.

Preparing press cuttings to clients’ briefs is another related niche business area, though it might require your teleworkers to work slightly unsocial hours and be in a region where they can get the relevant papers or magazines early enough to still meet the time limit set (e.g., most cuttings must be faxed through before a specific deadline each morning).

Audio typing

This market is under threat from advances in systems that allow direct dictation to computer. However, there is scope for audio dictation in specialist areas such as medical and legal transcription, where a detailed knowledge of terminology may be required. Also, in any situation where accuracy or human intelligence is important, or where the quality of the audio recording is poor, humans are needed for the transcription process. The work can range from correspondence to whole books or conference proceedings.

Bookkeeping and accountancy services

Accountants may be prepared to send out the more tedious areas of their work, such as putting purchase receipts and invoices onto computer. You will need specialist accountancy skills to succeed in this area.

Computer programming/software support

Several telecentres have been started up by computer dealers who offer tailor-made programming services to customers, as well as software training and support. Offering technical support over the telephone to new computer users also appears to be a gap waiting to be filled. But beware: you should think about getting professional indemnity insurance to cover yourself in case your advice leads to a financial loss for one of your customers.

Conferencing

Conferencing services help with telemeetings. Telecentres can offer videoconferencing and audioconferencing facilities. For videoconferencing, you must have an ISDN telephone line and suitable conferencing hardware and software.

Data conversion

Converting data from one disk format to another or from one software package to another is a commonly requested service in telecentres. Software format conversion does need some knowledge of the package involved. Also important is quizzing customers on exactly what they want to do with the resulting file, so that they will be provided with an appropriate format.

Data input

Many first-generation telecentres financed themselves with contracts from companies and government institutions to put large volumes of data onto computers. However, most historical data needed by companies has already been entered, and there is strong competition from low labour-cost regions of the world. Despite this, many companies need to continue to process data on a regular basis and, if you can offer low cost and high quality, they might be interested in a teleworking arrangement. Data input work is not generally well paid, and is usually quoted as piecework. Specialist areas such as the construction of mailing lists can be more remunerative and could be tied in with preparing mailshots or faxshots (mailings by fax).

Call centres

Call centres, where staff handle large volumes of telephone traffic, have been highly successful in the commercial sector. Such centres are used to deliver a wide range of services, most of which fall into two major categories — telemarketing and data processing:

Telemarketing services:

- central reservation services for hotels, airlines and car hire
- technical support centres for computer hardware and software
- outbound and inbound telesales
- order processing
- consumer information centres
- market research

Data processing services:

- abstracting and indexing
- health claims processing
- banking administration
- financial analysis
- magazine subscription administration
- medical transcription
- Value Added Tax (VAT) reclamation
- central order processing (e.g., stationery, computer hardware)

Call centres are a highly specialist area, both in terms of technology and marketing, and in the appropriate training of staff. The industry as a whole in Europe is starting to move towards higher-skill services to provide integrated offerings such as “shared services centres” which handle administration and accounts as well as calls. The reason for this change is that basic call centre services can be provided more cheaply from low labour-cost regions of the world. Technology is now available to allow calls to be distributed from centres to teleworkers operating from home, although take-up has not been great to date.

If your telecentre is in a remote rural area, be aware that the cost of getting calls to and from your region may rule out the call centre option. You may also not have access to broadband infrastructure or ISDN, or even to caller-line ID services that are vital to many call centre functions. However, if you are in the same local call area as a large city, this could be an area of opportunity.

Information broking

Almost every business sector needs facts of some description. Information brokers are experts at accessing paper and online information sources and distilling the results into a product they can sell to clients. Most brokers are specialists who know the resources in a particular subject area intimately. Good personal contacts are also important. Charges are usually via an hourly or daily rate, or by subscription to a briefing document.

Information services/booking agency/tourist information

Telecentres can provide ticket reservation services for professional and amateur venues. They can arrange bookings for coach services, community halls and sports facilities. Other related ideas include registers of business services and local organisations. Tourist information such as accommodation lists, sites of interest and events diaries are provided by several telecottages in holiday areas in the UK, Ireland and Australia. This seems to be a service that fits well with other telecentre activities and can attract funding or sponsorship from government agencies. A number of telecottages manage tourism Web sites on behalf of local tourism development groups.

Office services

Various virtual office services have grown up over the past five years, providing an official “front” for businesses — telephone answering, accommodation addresses and meeting space. These services aim to fulfil all the functions of a traditional receptionist/secretary on a teleworked basis.

Telecentres can also be used as accommodation addresses by very small businesses. Arranging appointments for salespeople is a service regularly requested on the TCA's weekly e-zine, *TCA Online*, which telecentre staff could take on.

Publishing, design and multimedia

There are a number of areas where teleworkers can be involved in publishing, including preparing diagrams on computer, editing text, doing graphic design and layout work, and proofreading. However, these areas all require specialist skills. It is not just a case of buying the desktop publishing software! Related areas include computerised presentations incorporating sound, graphics and animation (multimedia). Telecentres often act as the focus point for community publishing operations such as local newsletters or business directories.

Scanning

Scanners are used for three purposes: to scan text, to scan line graphics and to scan photographs. For text scanning, you will need a flatbed scanner with an automatic feeder and OCR (optical character reading) software. Text scanning works well on clean, typed manuscripts. It does not cope well with heavily edited typescripts or with handwriting (yet). For scanning line graphics such as simple company logos, a standard scanner will be sufficient. To scan photographs at high resolution you need a high-quality scanner and specialist knowledge of printing processes such as half-toning to get best results. For colour reproduction, expensive colour separation drum scanners are used. These are normally provided on a bureau basis by reprographics or typesetting companies.

Skills register

Telecentres often maintain a local skills register of individual teleworkers and can refer work to them. Sometimes the telecentre takes a percentage of the value of the work if a contract is arranged through the telecottage. In others, because the teleworkers are using telecentre equipment, no commission is taken. Some telecentres simply maintain a skills noticeboard that teleworkers can advertise on; others hold social events where teleworkers can exchange ideas and form business relationships.

Training materials

The production of training courses and training materials for distance learning is a fast-expanding market. Such documents can run to hundreds of pages and can command high prices, especially where they are prepared for professional bodies or large corporate clients. The preparation of distance learning materials requires skills in editing, teaching, high-level word processing and/or desktop publishing.

Translation services

Translation work can be often received and delivered via e-mail. Translation work can be tied in with word processing and desktop publishing services. By acting as the hub for a number of language teleworkers, telecentres can provide a comprehensive service to businesses.

Word processing and desktop publishing

Word processing (typing) services can be offered to home workers, businesses, political parties and pressure groups, community newsletters and societies. If you are in a university area, see if you can get involved in typing theses and academic papers. Another area that is more within the skills range of most telecentres than full-blown publishing services is the use of desktop publishing to prepare brochures, newsletters, price lists and instruction leaflets for local companies.

Web page design

The production of Web pages is something that many telecentres have tried. To produce Web pages, you need appropriate authoring software and a working knowledge of HTML, the programming language used. It is a big help if you have graphic design or information editing skills, as many client companies are not good at putting together clear information or understanding how to structure it for use on the Web. Some Web sites include forms and other areas for users to enter information. Programming skills in CGI scripting, in database-related languages such as ASP, and in Java (the programming language used to send small, self-running programmes over the Internet) are in high demand, but the market for basic Web page design is highly competitive.

LEGAL, TAXATION AND SAFETY ISSUES

Employment agencies and the law

Many countries have legislation that requires those who act to obtain work for others to have an employment agency licence. This can affect telecentres that provide a marketing function for their trainees or associated teleworkers, and should be checked in detail.

Employment and self-employment

Telecentres often have a casual relationship with teleworkers who use their premises but are not employed directly by them. Rules for employment, self-employment and employer responsibilities vary widely depending on the jurisdiction you are working in, but it is often the situation that the telecentre does not want to employ the teleworkers directly because of the wide range of responsibilities it may have to take on through labour legislation. Therefore, in setting up teleworking arrangements, the telecentre management should discuss this issue and probably take advice from an accountancy or legal professional.

Health and safety

In general, telecentres are responsible for the health and safety both of their employees and the telecentre users. As users will be accessing computers the telecentre must comply with national legislation on the use of VDU (video display unit) workstations, such as the following European Union regulations:

- Screens should be clear and stable, bright and free from glare, and should swivel and tilt easily.

- Keyboard characters should be adequately arranged and the keyboard should be adjustable, with sufficient space available to support the user's hands and arms.
- There should be sufficient space to allow the user to change positions and vary movements. The work desk should be sufficiently large and the document holder adjustable and stable.
- Lighting conditions should be satisfactory.
- Glare and reflection at the workstation, as well as radiation levels, should be minimised.
- The work chair should be adjustable in height and in the position of the back rest.
- A foot rest should be available if required.
- Environmental factors, including the effects of reflection and glare, noise, heat and humidity, should be minimised.

The following should also be avoided:

- *Insufficient power sockets leading to over-use of extension leads, trailing cables and adaptors* — The use of ICT equipment usually requires two additional power outlets and one or two telecoms sockets. Safely stowing cabling is important. Home offices may also need rewiring for more sockets. All installations should be checked by an electrician.
- *Hazardous equipment* — Electrical equipment must be checked for safety (e.g., all cable grips must be in place; there should be no burn marks on plugs or cracked sockets).
- *Shelves situated inconveniently* — When a person frequently places and replaces heavy files on shelves, there is risk of stress on the spine and overbalancing if the shelves are not conveniently placed relative to the workstation.
- *Office chairs and tables* — They should be adjusted to the appropriate height for long periods of work.
- *Reading glasses unsuited to close work* — Anyone working with computers should have his or her eyes tested, and the optician should be informed of the computer work.
- *Poor artificial lighting* — Spotlights and Anglepoises in small spaces are generally less tiring on the eyes than fluorescents. Light levels should be about 350 lm per square metre. Screens should be positioned at right angles to windows. Blinds to prevent sunlight making screens hard to read should be installed where needed.
- *Poor air supply* — Temperatures should be as near as possible to 18.5 degrees Celsius. Adequate ventilation is also important where equipment such as laser printers may give off ozone or other fumes.

Data protection legislation

Many countries have enacted legislation intended to ensure that computer-based data is protected and personal confidentiality respected. Telecentres must have appropriate procedures in place to comply with such legislation. Where work is taken into the centre for clients, the burden of complying with such legislation will increase, particularly if work involving the preparation or maintenance of mailing lists is involved.

Security

A survey of telecentres carried out by the TCA in 1994 showed a number of problems with user supervision that could affect the confidence of businesses considering telework to a telecentre:

- About 33% of the telecentres that responded to the survey felt that people could get into their offices undetected during office hours.
- Once inside the building, visitors were generally supervised by centre staff or clients, but fewer than 50% of the centres reported supervision “all the time.”
- More than 75% of telecentres had no signing-in or visitor’s badge procedure.
- Almost 50% allowed access to the office outside office hours by clients.
- Only about 25% had an alarm system.
- Almost 50% described their environment as “loosely controlled.”
- Only 30% had any kind of disaster recovery plan.
- Only 40% had plans for provision of alternative telephone lines.
- Only 20% had plans to cope with power supply loss.
- Fewer than 50% required users to employ passwords when accessing computers.
- Fifty-three per cent of telecottages reported at least one security incident. No incidents of hacking or computer fraud were reported, and the level of deliberate computer misuse was low compared to that found by national surveys, although misuse incidents — including loading illegal (copyrighted) software, introducing viruses and running up large unauthorised online charges — were reported.

QUALITY CONTROL

Successful telecentres pay close attention to quality control, and some (including KITE, profiled earlier in this chapter, and IWS, profiled below) have even gone as far as obtaining ISO certification for their quality-control procedures. Such certification can be an important trust-building measure for businesses thinking of outsourcing telework, but it involves a major investment in creating paper trails and appropriate procedures which may be too great a burden for smaller or recently started telecentres.

MARKETING CENTRE-BASED TELEWORK

The success factors for those telecentres that have achieved income from teleworking include:

- resourcing a dedicated marketing function for bringing in the work;
- focusing on niche services, preferably at professional services levels;
- building adequate telecommunications infrastructure;
- providing professional response to enquiries;
- establishing quality control procedures;
- acquiring a suitable pool of trained teleworkers; and
- instituting suitable measures to ensure protection of customer data and confidentiality

Providing such a high level of service may be beyond the financial and human resources of your telecentre. It usually requires employing someone with good marketing experience who may also have specialist knowledge of a particular sector or service. Such people don't come cheap, and many community-based organisations are not prepared to consider such a high level of expenditure on one staff member. If this is the case for your organisation, then think twice about looking to telework as an income source. However, examples such as Innovative Work Solutions (IWS) and Lasair described below show that telework can be a viable option for telecentres that are prepared to plan and invest in their teleworking services.

IWS, Haverfordwest, Pembrokeshire, Wales

Innovative Work Solutions (IWS) is providing what it describes as a “high-quality temp service,” using teleworkers from west Wales. According to the Web site: “Companies don't have to limit their activities to skills available locally. Teleworkers can take the strain of a direct mail campaign, or fill in for staff during peak holiday periods. Using our services also allows companies to expand output without increased premises costs.” As well, IWS ensures that:

- Its teleworkers are qualified and trained.
- The teleworkers have access to suitable hardware and software that matches the company's requirements.
- Full in-house technical support is provided to the teleworkers.
- Job specifications are checked and the job is completed to ISO 9000 quality standards.

Each job carried out by IWS has a worksheet that specifies the requirements for the job, such as spacing, tabs, paragraph styles, preferred spellings, page layout, fonts and formats. Typical administrative services (e.g., word processing by someone with RSA II or III qualifications and a minimum of three years' office experience) costs about £5.50/hour.

Over 90% of the work carried out at IWS is translations (especially Welsh) for companies such as TV station S4C, which delivers and collects its work entirely by e-mail. Rates for translation work are about £10.00/hour. However, despite a 100% increase in turnover for the last year, manager Malcolm O'Brien says that business is static. This is because funds for their marketing consultant dried up, so that the only active marketing currently carried out is a Yellow Pages ad.

Initially, IWS had more than 100 teleworkers on its books, but quickly found that only around 20 of these were “really useful,” with about another 20 being of “fringe” value. The remainder were deleted after a period of inactivity. Malcolm describes translation as an administratively intensive business where work has to be checked rigorously, and where disputes sometimes arise over subjective issues like dialect and expression. He's also worried about the new UK tax regulations relating to subcontractors and feels that these may prove a major impediment to IWS's teleworking and consultancy services. For more information, contact IWS by e-mail at www.telecottages.org/iws.

Lasair Ltd., Benbecula, Outer Hebrides, Scotland

Donnie Morrison is one of a number of people to return to the Western Isles of Scotland. Formerly the sales and marketing director of a computer company, Morrison

set up the skills register for Highlands and Islands Enterprise (HIE) board, and then followed this up with the start-up of Lasair (which means “red hot” or “flame” in Gaelic), a limited liability company providing editing services. The first client was an American company indexing and abstracting business journals. Currently Lasair has about 20 people, mainly women, carrying out the work.

Other Lasair clients include the Metropolitan Police Forensic Laboratory, the legal journal *Scots Law Times*, and various scientific publishers. “At first we made the mistake of restricting the register to IT skills. It is now just a skills database. We look, for example, for people with language skills and then give them the IT skills,” says Donnie. The Lasair teleworkers required grants of up to 70% for their equipment. They are self-employed and have to “bid” for any available contracts. However, commercial margins are tightening for this type of work because of competition from low labour-cost locations, and there is also the threat of “smart software” that could make some of the work obsolete.

Training has also proved to be too costly when carried out on a one-to-one basis, so Lasair requires teleworkers to come to a central office for induction sessions and training. Teleworkers stay in contact and support each other through the First Class conferencing software package that runs over the Internet. Donnie has recently moved on, leaving marketing for Lasair to those who have become expert in the work, such as director Kathleen Turner. For more information, contact Lasair by phone at 01870 602757 or by e-mail at kathleen.turner@compuserve.com.