Sign Aware Project

Final Report to DWP

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For the project in the period July 2004 – June 2005

Prepared by

CDS, Bristol

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Summary

Sign Aware is a project which provides information about BSL and in BSL at point of need – anywhere and at anytime. This is done through a range of developments of sign awareness' materials, dictionaries and BSL information made available to Deaf and to hearing people on-line. Sign Aware focuses on the workplace and on providing materials appropriate to Deaf and hearing people working together. The products of SignAware are available at www.Signstation.org .

The project has exceeded its original specification in terms of products available to employers and people working with Deaf people. It provides the first on-line interactive course in BSL, a one hour video programme explaining about sign language, the first extensive sign language dictionary, video scenarios for the workplace, a quiz to test your knowledge, and text guides for interpreting, for facts on Deafness and sign language and a set of key points for different workers with Deaf people.

The site is backed up by a text search engine and is approved by the Trades Union Congress.

We are currently developing the website further, are conducting systematic evaluations of the use of the components of the site and are engaged in dissemination to make the site more visible to employers and those with an interest in Deafness and Sign Language.

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Aims of SignAware as set out in the proposal 2004

The employment profile of Deaf people is changing significantly. Compared to even 20 years ago, Deaf young people are better qualified are more likely to be in offices (than factories) and are more likely to use sign language in the workplace and in training (Dye & Kyle, DPIC 2001). Deaf people are more likely to be members of a Trade Union. However despite the high level contact with hearing colleagues and despite the prominence of BSL, they still report misunderstanding and discrimination in the workplace (Kyle and Dye 2003). Sign Aware is a programme of Action in BSL and to promote BSL which will deliver solutions at point of need.

The immediate targets are:

1. the provision of a delivery/access mechanism for sign language content and information to users anywhere and at anytime – *signed information at point of need*

2. the creation of specific content in the form of a core module of interactive sign awareness and BSL information visual programming

3. the provision of interactive sign language learning materials (on-line and on DVD) along the lines of the highly successful Die Firma and Die Firma2 in Germany

4. the creation of on-line sign language work-specific dictionaries – for categories such as interview and office management; specific trades/occupations – eg engineering, social work, mental health – these video dictionaries will be accessible from mobile phones

5. the provision of tutorial material in BSL and English which is directly usable in the workplace – eg Employment rights and Women's issues in the workplace; this aspect will be directed at employment issues globally by making a Sign Aware priority, a collaboration with the Trade Unions.

6. Adaptation of current Trade Union produced BSL content concerning rules rights and practices for on-line delivery

7. research and assessment which determines the need for and effectiveness of, new materials

8. creation of a Deaf-led programme, ***Sign Aware,*** to work in the medium term on a regional basis to research, develop and market materials suitable to supporting the needs of the community at large for information on BSL

The emphasis is on integration of materials and coordination with existing initiatives in order to ensure the impact. In order to create a longer term effect, the underlying purpose is to provide a framework for the creation and delivery of *Information at Point of Need*, such that members of the community can access BSL data whenever and wherever they need it. In so doing, Deaf producers will make available to the hearing community, content and information which is directly appropriate to their needs.

The Development of Signstation

In order to fulfil the aims as set out initially, we began a development which came to be Signstation – an online resources for people working with Deaf people. A range of extensions to the originally specification were made which provided necessary Deaf awareness material and a much more extensive dictionary than planned. These are described below. A full report on the work packages follows in Appendix 1.

www.Signstation.org

Signstation – a web site devoted to those people who want to know more about British Sign Language (BSL) and Deaf[1] people in the workplace. In this site, there is video, interactive exercises, pictures and graphics as well as English explanations of many of the features of sign language which will be useful at work.

In Signstation, the text can be made bigger or smaller and all the video can be played at high, medium or low quality depending on the Internet connection of the user.

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[1] Deaf with a capital 'd' refers to those people who are members of the Deaf community in the UK and who use British Sign Language.

The opening video plays automatically but can be viewed as text only if the user wishes. The user is offered the option to log in.
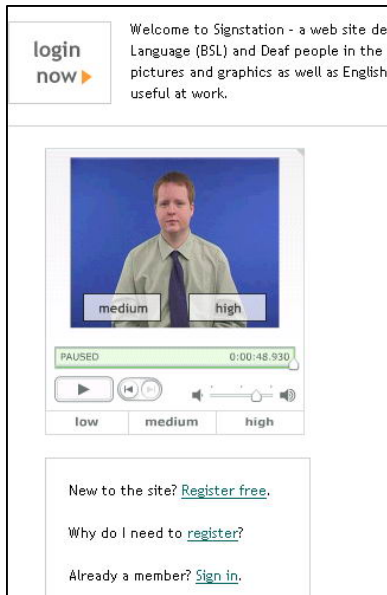
When the user logs in the system remembers his/her preferences and allows the person to search for video of signs. The ideal starting point is the message:

Signstation is a resource which will be useful for

Those working with Deaf people ☑
Employees and colleagues of Deaf people ☑
Managers of Deaf workers ☑
Human Resource and training staff ☑
Those who deal with Deaf customers ☑
Trade union organisers, safety at work representatives, Disability Officers ☑

When the user clicks on one of these options he/she is given a suggested route through Signstation. This route takes the user selectively to specific information and to the exercises and video which are most relevant.

There are many different components of Signstation designed to address a range of issues at a number of levels.
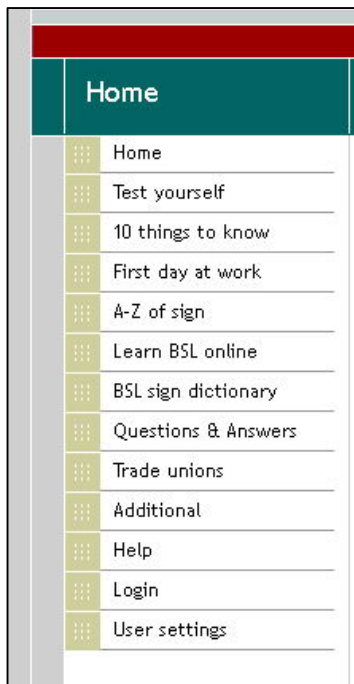
The left hand menus provide direct access to different areas of knowledge

These include the interactive quiz designed to advise the user where to start – by asking questions in text about Deaf people in the workplace and in sign language to determine knowledge of BSL. Feedback on the score (out of ten) is provided and suggestions about which part of the website the user should look at. The questions are generated randomly from an item bank and so the quiz is different each time the user takes it – allowing the user to determine how much he/she has learned by working through Signstation.
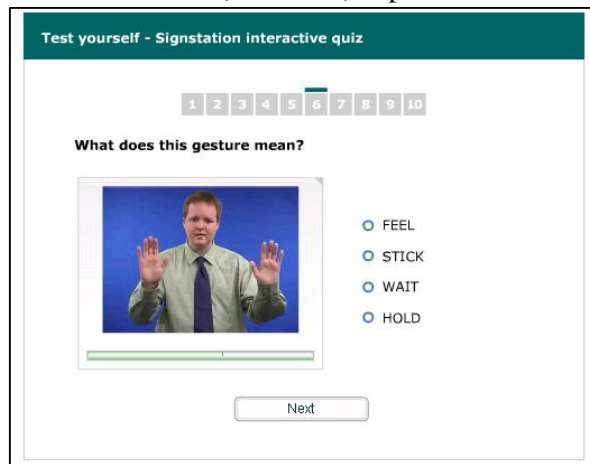
10 things you need to know about Deaf People and sign language.

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10

(1) Deaf People
Deaf people (Deaf with a capital D like British with a capital B - to mean belonging to the community) are members of the Deaf Community in the UK. The community is centred on Deaf clubs which exist in every town and city in the UK. They are different from hard-of hearing people or people who have lost their hearing because Deaf people use their own sign language (rather than spoken language).

(2) Language
Deaf people use sign language - more accurately, British Sign Language or just BSL, which has a different structure to English - it is not English on the hands. Finger-spelling is used to represent specific English words when needed. In fact in BSL, the face, the body and the hands are all equally important; Deaf people watch the face when signing, not the hands. BSL is different to other sign languages (eg American Sign Language and French Sign Language) and has been known to exist for over 400 years in the UK.

(3) English
Everything that can be said in English can also be signed. It is a recognised language and will serve the purpose of all members of the Deaf community. Some Deaf people can use both languages - English (usually written) and BSL - but they may use the English better in some contexts rather than others - not because Deaf people are unintelligent, but because they have had limited access to education.

For people in a hurry there is a section containing the 10 most important things they need to know ….   There are versions of this for fellow workers, for managers, for counsellors, for personnel staff & trainers and for those who have Deaf customers.

In each case a set of information is specially crafted for people in that situation. It is expected that this section will grow even further as more Deaf employee scenarios are targeted.

Arrival on the first day
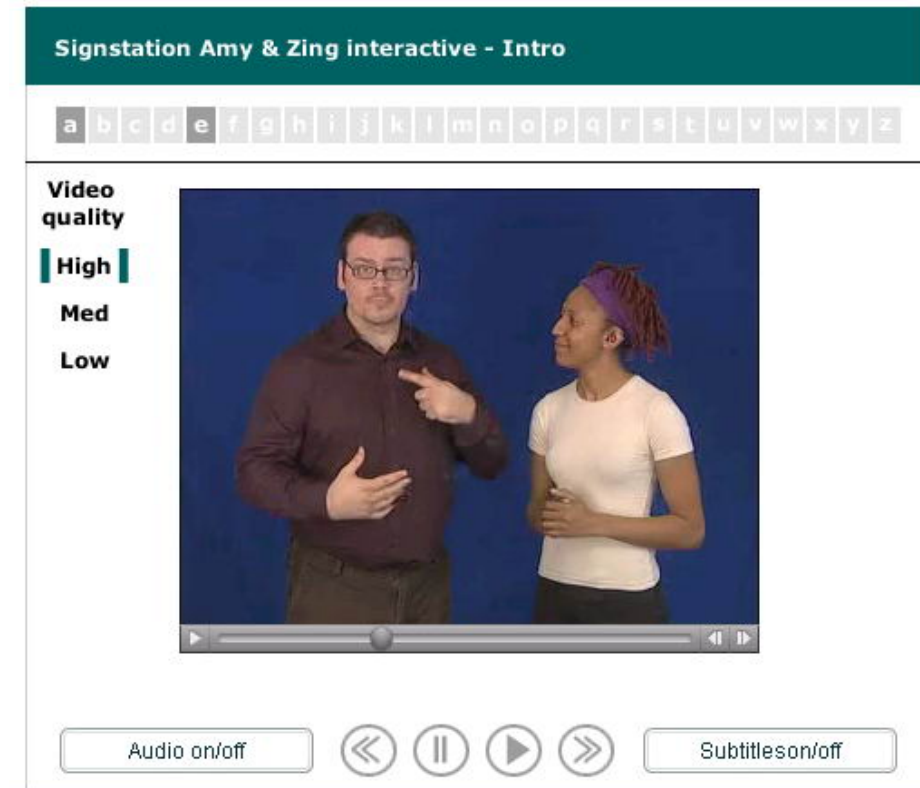
Click vocabulary items below for BSL video

Hello   Are you deaf?   Welcome   come on

v5.1

These scenarios are also configured as videos so that users can see what is appropriate behaviour and interaction with a Deaf person.

Signstation Amy & Zing interactive - Intro

a b c d e f g h i j k l m n o p q r s t u v w x y z

Video quality

| High |

Med

Low

Audio on/off   Subtitleson/off

Faced with the situation of a Deaf person coming to work for the first time, we have prepared a brief video guide with some useful signs. First day at work has 6 scenarios with explanations and basic vocabulary for communicating at work.

'Deaf customers' deals with the interaction with Deaf people as customers and again shows simple vocabulary and phrases in BSL. 'Counselling Deaf people', similarly shows how to interact with a Deaf person in a counselling situation.

Sometimes we forget that Deaf people are the experts in sign language and so we have turned to Amy and Zing to have the whole thing explained to us. In this section, two Deaf people explain what sign language is and why it is so important. They illustrate with examples. The whole video programme is about 50 minutes in length but is broken down into neat sections for viewing – an A-Z of sign language.

This can also be supplied as a standalone DVD with additional tutor notes for use in awareness training.

Some people want to go further and want to learn how to communicate with Deaf people properly. Signstation has a full length sign language video course. "The Company" is a teach-yourself BSL course based on the theme of a Deaf Design and Building company. Using a storyline of a young Deaf person joining the company and working through to a full scale, on-site building project, the videos show dialogues of increasing complexity. With each dialogue there are illustrated grammar explanations, exercises for the learner to carry out (and which provide feedback) as well as further information on Deaf people and sign language. Like all language courses, there is also a vocabulary list which can be consulted at any time and which

can be compared with what is being signed in the dialogues. Altogether the course will take

between 100 and 120 hours to complete. Again there is a version of the whole course on DVD.

One of the key features of Signstation is the possibility to search for a sign and to back this up, we have created a full 5000 vocabulary list of BSL which can be accessed by text, or through a unique picture interface for different categories. By clicking on the objects in the picture, the user can reach the corresponding sign.

By the time we are finished there will be over 5,000 signs available online. And it will be possible also to use the sign dictionary from a mobile phone.

There is also a good deal more information in our questions and answer section. It deals with Deafness, sign language, Interpreters, History of Deaf people, International aspects and new sections on the Disability Discrimination Act and on Access to Work have been added.

There is a full guide to the use of sign language interpreters with over 20 sections on how to find interpreters, what they can do and how to get the most out of them.

There is a Trades Union section where there is information relevant to Deaf people who are or wish to be members of a Trade Union. There is also guidance for Trade Union officers who wish to work with Deaf people.

People who do have advanced skills in BSL are directed to the sister site – www.deafstation.org where everything is presented in BSL – starting from the international and national news (updated daily).

There is also a set of weblinks to other relevant sites. Additional content which has been added or will be added shortly includes a set of stories and vocabulary list from the Highlands of Scotland, video scenarios and vocabulary about Deaf women in the workplace.

Signstation has been set up with the support of the Department for Work and Pensions under the BSL Initiatives (2004-5).

Signstation is approved by the Trades Union Congress (TUC).

Material for Signstation has been created by a working partnership of

Independent Media Signing (IMS) Newcastle,
Deaf Studies Trust Bristol, SLIC Ltd Edinburgh,
Institut für Deutsche Gebärdensprache und Kommunikation Gehörloser (IDGS – Hamburg) with video production by Remark! London

And is coordinated by and based in the Centre for Deaf Studies, University of Bristol,

Outcomes and Impact

We are currently assessing the usefulness of the site by testing with a controlled group of users. We are able to monitor the daily hits and to determine which parts of the site are gaining most attention. There has also been a good deal of very positive feedback from our on-line reply forms. The full evaluation will be written in 2006 as a paper for publication.

Plans are being drawn up for a full launch of Signstation and contact with Members of Parliament in order that it can be promoted at the highest level.

Appendix 1: Detailed report on the work packages

The report is based on the workplan agreed by partner and DWP and indicates which tasks are completed or have made progress in this time frame.

WP1.1 : User Needs Specification: This research work was carried out in July and early August 2004. It involved interviews and focus groups in three locations (Bristol, Newcastle and Dumfries).   The groups in each location included deaf people in work and hearing colleagues (ie people who work with deaf people). The report from this work was <u>completed and circulated</u>.

WP1.2 : Monitoring and Assessment of new materials. This work package requires the examination of Sign Station developments and the preparation of a common monitoring and assessment format to be used by the Deaf advisory group and partners by DST. The examination and description of the Sign Station components has now been tested with users and was reported at the February 2005 Steering Group meeting (see papers). On the basis of the preliminary findings, changes have been made to the components. The monitoring format is being developed and will be used by the Advisory Group in future and by partners.

WP 1.3: Procedures for assessment of the success of the project – systems for monitoring on-line use of the materials and off-line application of the prepared programmes have been prepared and mounted on-line.   Feedback From users is accumulating and is so far, wholly positive. We have prepared a protocol for testing the website and over 20 volunteers agreed to take part in a through evaluation. Data collection for this phase has been completed but final internal report is still awaited from DST.

WP 2.1: On-line server details and specification for video production was provided to all partners. Trial content from partners has been placed on-line.

WP 2.2: Server Development for Sign Aware – this work is ongoing throughout the project and refers to the software development needed for the delivery of video.

WP 2.3: Sign Station website/ Content Management System – continuing as in WP2.2   This now allows user registration and monitoring; there is a video search facility which will allow "search for a sign" on the home page.

WP 2.4: On-line phrase book/dictionary developments: the following sub-tasks have been completed: Task 2.4.1: review of existing dictionary implementations; Task 2.4.2: creation of a prototype dictionary interface. Task 2.4.3: develop of the dictionary content creation tool
The following is being re-defined in order to create a more powerful dictionary database: Task 2.4.4: develop the links for the external author interface in conjunction with the design of Sign Station. The technical components of the project have been completed satisfactorily.

WP 2.5: **Development of Sign Station web site** – significant progress has been made in this area from a prototype presented to the Steering Group in November; as a result of feedback since then, major alterations have been underway. The full site was made publicly available in March 2005 at www.Signstation.org .

WP 2.6: **Multimedia development and interactivity in Sign Station** – this activity deals with the technical implementation of the on-line sign language training course. The following have been completed: Task 2.6.1: detailed analysis and consultations on Die Firma; Task 2.6.2: specification of the implementation for (a) the Internet and (b) for BSL version on DVD – Both tasks completed in conjunction with German partners. "The Company" a 17 session teach yourself course of BSL is now online.

WP2.7: Content Creation tool - This extends the current content creation tool so that it can be operated by other authors for upload to the server or for applications with their own servers. This has been proven now and was used in Deaf Station for the coverage of the Deaf Olympics (January 2005 – when there were over 57,000 hits on the video content) – this demonstrates the feasibility of distance transfer of sign language video files. The implications are in the local preparation of materials by Trade Unions or others

for mounting on the central Sign Station server – video can be filmed on-site edited and automatically uploaded to the server from any location in the UK.

We have now completed work on a tool to extend the use of this content creation to allow learners to submit BSL video and to have it corrected centrally. Tests have been carried out and documentation is available.

WP 2.8: Software adaptations - this WP dealt with the development of a content authoring and server management system which will work on a range of computer systems. This was partly superceded by other software developments – however, the underlying elements for each task have been completed and are documented.

Task 2.5.1 re-write in java for a cross platform solution

Task 2.8.2: develop media editing features: deal with images and sound files more flexibly

Task 2.8.3: search system for server and make cross links to pre-existing content

Task 2.8.4: ability to deal with links to external urls

Task 2.8.5 integrate more features as seen in the html based tools – user preferences, categories. Effectively remove any reliance on the html interface.

Task 2.8.6: develop system to edit published content (even if clips are compressed already the editor should be able to change the links)

WP3.1: **Script preparation for the Core Deaf Awareness Unit** - was presented to partners and revised in the light of comments. This was presented to the Deaf advisory group in October 2004. This evolved from comments and filming was completed.

WP3.2: Sign Aware - Core Deaf Awareness Unit - Filming completed ("Amy and Zing"). This was tried with the Advisory Group in January 2005 (WP3.3). The interface for the website has been completed and was demonstrated in February.   There were some delays in the editing but these are now complete.

WP3.3: Editing and Trialling; consultation with Deaf Advisory Group - versions of the programme both as DVD and as on-line provision were offered to the advisory group members for feedback. None of the planned user clinics could be completed in the time available..

WP3.4: Final Version Amy & Zing is now available on-line and the DVD version has been prepared and is awaiting the final text to insert in the packaging.

WP 4 **Adaptation of German Sign Language Teach Yourself course for BSL**

WP 4.1: Examination of Die Firma and Initial BSL Specification – this was done by meetings in the UK and in Hamburg and the setting out of the detailed specification for the filming and video production.

WP4.2: BSL Scripting - Translation of all materials from German was completed by IDGS, Hamburg and extensive materials were delivered to CDS for adaptation and application to BSL.

WP4.3: BSL filming was completed for all of the dialogues, the grammar, the information section, the exercises and the dictionary.

WP4.4: Incorporation into the Die Firma format – video compression; text compilation; video/text links, requiring close working with Hamburg technical staff.   The extent of work required to complete this had been underestimated and there were a further three months of staff time needed (over what had been budgeted) in order to complete all the time coding and the matching of all vocabulary items. All tasks have been compelted.

Task 4.4.1: Final storyboard and Gloss and translation lists – ie checked against the final filmed version for Company 1

Task 4.4.1: Final storyboard and Gloss and translation lists – ie checked against the final filmed version for Company 2

Task 4.4.2: Grammar text for Company 1

Task 4.4.3: Grammar text for Company 2

Task 4.4.4: Extra comments - sociolinguistic text for Company 1

Task 4.4.5: Extra comments - sociolinguistic text for Company 2

Task 4.4.6: Interactive exercises – text and format for Company 1

Task 4.4.7: Interactive exercises – text and format for Company 2

Task 4.4.8: Checking and implementation of dictionary list for company 1&2

Task 4.4.9: All additional text and interface translations from Die Firma

WP4.5: Preparation of the video for the Company DVD and on-line version – now completed and available
    Task 4.5.1: Capture of clips from dialogue – Company 1
    Task 4.5.2: Capture of clips from dialogue – Company 2
    Task 4.5.3: Verification of captured clips against translation text and gloss list
    Task 4.5.4: Capture of clips for Grammar
    Task 4.5.5: Capture of clips for comments/extras/interface
    Task 4.5.6: verification of Task 4.5.1- 4.5.5 against vocabulary lists as collected in Task 5.1.4
    Task 4.5.7: entry of cue points and preparation of video, text to supply to Hamburg (March 2005) – this is a major task and will run for two months.

WP4.6: Trial web version for consultation with Deaf Advisory and lab trials – because of the extended time taken to complete the detail on the Company, only the lab trials have been carried out and we are awaiting the final report from DST.

WP 4.7: **Interactive signing exercises with Avatar** – automated signer. The initial specification for this component has been completed and work will continue after June 2005. This is because of technical difficulties with the interface, which we are informed, has now been solved in Hamburg. However, the exercises are not yet available and are expected in the first quarter of 2006.

WP 5.1: **On-line Dictionaries** for the workplace – background research has been carried out on the categories for the workplace. Filming of following categories has been completed: Office, Information Technology, Motor Car, Number System, Place names, Country names, Dates and Time. These are accessible in the on-line version after registration. These have been added to throughout the project period and there is continuing activity into 2006.
The work on the dictionary has expanded considerably and there is now access to a 5000 sign vocabulary list directly from the front page of the web site. This is a much larger resource than originally envisaged and is considerably larger than any other offering on the web.

WP5.2: BSL in the context of Employment Rights and Women's issues in the workplace - This work package was placed under review and was lowered in priority to focus on additional dictionary content, the creation of an on-line Quiz, then "10-Things you need to know about …", and the Q&A section. Each of these sections was new and additional to the original plan.
However, the Women in the Workplace package has now been filmed, edited and compressed and text has been produced for this. It should be available for use in late 2005.

WP5.3: Preparation of existing BSL-based Employment/Workplace/Trade Union Materials for on-line distribution through Sign Station – this has been negotiated through a series of meetings with Trade Unions and with the TUC. The TUC have now approved the Signstation web site. Material has now been supplied by Unions and wherever it is possible we have provided a translation to BSL. In the case of AMICUS, this is now on-line at Signstation.

WP 6.1: **Dissemination and Consultation Activities** – A paper was presented to the DTI Broadband conference in November 2004. This covered video telephony as well as access to video through Deaf Station and Sign Station.
Meetings have been held with Trade Unions (1st February), Mr Ron Todd (16th February) and Toyota (21st February). Outcome of the first of these meetings was the invitation to present a plenary session at the TUC Disability conference in May 2005 and agreement to use the TUC logo with the wording such as "Sign Station is approved by the TUC" (final wording to be confirmed).
The coordinator also attended a meeting convened by DWP of all the projects funded in this initiative, on 21st January – a presentation on the project was made.   Initial contacts have been made with several other companies. A presentation was given at Vauxhall in Liverpool in June 2005. There were presentations to a technology event for organisations and separately to Deaf users on 3rd October 2005 in Bristol. There was a presentation to the SEQUAL project dissemination meeting on 4th October 2005 in Bristol. Another presentation was given to a Broadband Conference organised by UKCOD on 5th October 2005. A presentation was given in Graz, Austria on 7th October to partners in a European Leonardo project,

WP 7: Management Continuing activities – All claim forms have been submitted to DTI and payments received and distributed.

The project kick-off meeting was on 6th July 2004.

Partners meeting were held on 1st September 2004, 23rd November 2004, 22nd February 2005, 7th June 2005, 26th October 2005

Advisory group meetings were held on 10th October 2004, 1st February 2005.

Steering Group meetings were held on 1[St] September 2004, 23rd November 2004, 22nd February 2005, 7th June 2005

Weekly team meetings have been held in Bristol and these are all minuted.