

Applied ICT

Advanced GCE AS H515

Advanced Subsidiary GCE AS H115/H315

Report on the Units

January 2008

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This report on the Examination provides information on the performance of candidates which it is hoped will be useful to teachers in their preparation of candidates for future examinations. It is intended to be constructive and informative and to promote better understanding of the syllabus content, of the operation of the scheme of assessment and of the application of assessment criteria.

Reports should be read in conjunction with the published question papers and mark schemes for the Examination.

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Chief Examiner's Report

Whilst most work submitted for moderation was of an appropriate standard for the level entered, on the written papers, candidates continue to fail to access the top 20%, and sometimes more, of the mark range. This was mostly due to poor responses in section B of the papers, particularly G041 and G054. Centres are reminded of the need to teach the concepts covered in the 'What You Need to Learn' section of the units, as well as preparing candidates to complete the pre-release tasks.

Candidates should be encouraged to ask for supplementary sheets if they run out of space, rather than answering elsewhere on the paper or in the margin, making the answers difficult to read. If supplementary sheets are used, candidates should be instructed to indicate that their answer is continued, rather than leave the examiner to find the rest of their answer.

Generally the quantity and organisation of pre-release work was appropriate. However, some candidates failed to specifically identify their responses to the marked tasks. This made it difficult for examiners to locate these tasks in order to mark them. Please ensure that each task is clearly labelled and that the work is submitted in task order. Draft copies of tasks are **not** required and should **not** be included. If there are several copies of a task, it makes it difficult for the examiner to determine which one they should mark. Also, candidates should **not** include copies of material from the WWW used as sources for the marked tasks. It is sufficient to simply list the URLs in a bibliography.

Centres are reminded that candidates should only submit work carried out in response to the tasks for use in the examination. General class notes based on the 'What You Need to Learn' section of the unit must not be taken in to the examination. However, all work taken into the examination room **must** be attached to the examination paper and submitted to the examiner. Those invigilating the examination need to be given clear instructions to do so.

Centres are reminded that the work submitted in response to the tasks must be each candidate's own unaided work. It is the Centre's responsibility to ensure that the work is carried out in conditions that allow the teacher to confirm this is the case. It should not, for example, be given as homework.

Care is needed to ensure that candidates do not share electronic files and that teachers do not provide too much direction when helping candidates to understand what they have to do. Some diagrams will inevitably be similar if they are drawn correctly. However, if candidates produce these individually, there will be subtle differences in the length of lines, positioning of items etc.

Whilst they must not mark the work, deadlines for handing in the work should be set so that there is time for the teacher to check the work before signing the Authentication Statement. Candidates also need to be taught the difference between using material from websites and other sources to inform their responses and simply copying it. This applies to both coursework and pre-released tasks. All units require the application of knowledge to a particular situation, so the simple copying of material is unlikely to meet the requirements of the task and may well be considered to be plagiarism.

All Centres should by now be aware of the Joint Council ruling regarding Centre authentication of coursework. This applies to both the pre-release tasks in the examined units and the Centre assessed units. Whilst most Centres submitted Centre Authentication Forms (CCS160) for the Centre assessed units, a significant percentage failed to include them in the script packets for the externally assessed unit. This should be done as a matter of course. Candidate Authentication Statements must be signed, but should be retained in the Centre and **not** submitted to the Examiner or Moderator.

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Some Centres submitted pre-release work in plastic pockets or even folders. The papers are now hole-punched to allow the work to be attached using a treasury tag through the top left-hand corner. Please ensure that all pre-release work is attached in this way in future. Please also discourage candidates from tying treasury tags in knots or wrapping them several times through the punched holes. It is essential that the Examiner can separate the pre-release work from the examination paper easily to mark it.

The importance of Centres getting marks to the Moderator by the deadline cannot be over-emphasised. Failure to do so may result in delays in the publication of candidates' results. If there are 10 or fewer candidates entered, all the work must be sent to the Moderator with the MS1.

Similarly, the importance of a fully and accurately completed unit recording sheet cannot be over-emphasised. Moderators must be able to match the work to the mark on the MS1, so both candidate name and number should be completed. It is also vital that the total mark is indicated, that it correctly totals the individual task marks and that the total on the unit recording sheet and the MS1 match.

As with pre-release tasks for examined units, plastic pockets, folders and particularly ring-binders should not be used to send unit portfolios. Work should be hole-punched and secured with treasury tags.

Principal Moderator's Report GCE Applied ICT – January 2008

General Comments

Moderation this session was limited to the many Centres new to this qualification, those who had not been accredited and the accredited Centres that were being randomly sampled. Although many Centres had assessed the work accurately, a significant number had not, resulting in significant scaling in some cases.

There were clearly a significant number of candidates planning to resubmit work this session. Some of these obviously failed to do so, resulting in a significant number of withdrawn candidates or those marked as absent on the MS1. Additionally, there were Centres where all candidates had been withdrawn due to staff absence or other reasons. Where Centres have withdrawn all candidates for a unit or units, it is vital that the Moderator is made aware of this, either by sending the MS1s with the candidates marked as absent, or by sending a note letting them know the candidate(s) that have been withdrawn. If moderator address labels have been sent to the Centre, the Moderator will be expecting mark sheets from the Centre and is required to chase the Centre if these do not arrive. This can waste valuable time, especially when there is no work to moderate.

Similarly, Centres are reminded that where there are **10 or fewer** candidates, as was often the case this session, **all** the candidates' work **must** be sent to the Moderator with the MS1 by the deadline. However, where **more than 10** candidates are entered, please do **not** send the work with the MS1. The moderator will request the 10 they want to see on receipt of the MS1.

Very many problems were caused this session due to poor administration in Centres and failure to send mark sheets to Moderators by the deadline. The importance of meeting the prescribed deadline for mark submission cannot be over-emphasised. Where the Moderator receives the marks late, the whole process is delayed and may mean that candidate results are also delayed. The January session in particular is very short, with Moderators only having about three weeks to complete the process.

Centres are also reminded of the need to complete and include Centre Authentication forms (CCS160) with the work. The Joint Council has indicated that Centres who fail to authenticate a coursework unit will not receive marks for that unit. Only one form per unit is required – it is not necessary to attach a form to each candidate's work. Also, whilst candidates must sign a Candidate Authentication form, these should be kept securely in the Centre and not submitted with the work.

In many cases unit recording sheets had been completed thoroughly. There were helpful comments as to why a particular mark had been awarded and page numbers to direct the Moderator to the evidence. However, a significant number of Centres had included little comment and no page referencing. This essentially means that the work has to be re-assessed, rather than moderated, and the Moderator may not be able to locate all the evidence claimed, resulting in scaling.

Pages should be numbered uniquely from the start to the end of the portfolio, even if this is done by hand when the work is finally assembled. Representative page numbers on the unit recording sheet are more helpful than attempting to indicate every page that contributes to the evidence. It is also most helpful if Assessors annotate the work to indicate where particular aspects of a task have been achieved at a particular mark band. Please use the task letters along with an indication of the mark band the evidence falls into, rather than assessment objectives.

Some work was very poorly organised, making the moderation process more difficult. Candidates need to be taught how to assemble a portfolio, rather than merely collect together a number of different pieces of work for assessment. They should be encouraged to organise the work in a logical order, use suitable section headings and to include a contents page.

As before, the moderation process was delayed while incorrect marks recorded on the MS1 mark sheet were corrected. Centres must ensure that task marks are totalled accurately, that the total mark is shown on the unit recording sheet and that this is correctly transferred to the MS1. If the total is changed due to internal standardisation or the addition of work, please ensure the relevant task mark is changed as well as the total. It is also vital that the Moderator can read the marks awarded on the MS1 to select a representative sample. Changes made on the top copy are not always readable on the Moderator's copy, resulting in delays while these are clarified.

Although more Centres are using treasury tags or other suitable methods to secure the work sent, plastic pockets and plastic folders were too often still being used as, occasionally, were ring binders. These should be avoided.

Comments on Individual Units

G040 – Using ICT to communicate

There were a reasonable number of entries for this unit and full range of marks from 0 to 50 was applied, accurately in most cases and less so in others. There was considerable variation in the quality of the work seen. Some was of a very high standard, while some was little better than would be expected at Intermediate GNVQ/GCSE level.

Some Centres continue to provide assignments that require candidates to create standard business documents such as letters, invoices, memos and agendas. These do not give candidates sufficient opportunities to demonstrate their abilities to use the range of software, facilities and media required for this unit.

Where candidates have not created all six of the required communications, they can still be awarded marks in task b. However, the mark awarded is likely to be significantly lower than the quality of those communications created would suggest.

Some of the unit portfolios produced for this unit were very extensive. This can be counterproductive as it becomes difficult for the Moderator to locate the required evidence. Unless the comparative report for task a is being used as one of the six original communications, which is not recommended, it is not necessary to include planning or draft copies of this document, neither are draft copies of evaluations required. Draft copies of other documents should be carefully selected, labelled and annotated to show development. Two or three drafts should be sufficient. Also, whilst the collection and analysis of existing documents to inform the design of the candidates' documents is good teaching practice, these do not need to be included in the portfolio. However, the documents compared in task a must be included in the portfolio, so that the Moderator can judge the accuracy of the descriptions given.

Task a

The requirement for this task is that candidates describe and compare two types of document from each of three organisations, for example a letter and a brochure from each. Care is needed in the choice of documents. As candidates have to identify good and bad points about writing style, it is important that documents have some content. Blank letterheads, business cards etc are not suitable documents for comparison. The two types of document should also be sufficiently distinct. Comparing two different pages of websites or two types of leaflet is not acceptable.

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Writing style was too often confused with text style. Candidates need to consider the type of language used, i.e. whether it is formal or informal, informative, persuasive etc, not whether it is emboldened or in too small a font size.

Some candidates had produced very detailed descriptions and comparisons of the documents but had included little indication of what was good or bad about them or how well they met their purpose. Discussion of house style and suggestions for improvement were also limited. Candidates tend to score better if their report is structured under headings that relate to the task requirements.

Centres are reminded that the quality of the candidates' written communication is assessed through this task. In some cases, too little account was taken of poor spelling, punctuation and grammar when deciding what mark to award. It is not sufficient for candidates to simply run the spell checker, although this should be used as a matter of course, they should also proofread the work and correct errors not identified or those of punctuation or grammar.

Task b

Tasks bi to iv should be assessed across all six communications created. To achieve the top of a mark band, candidates must demonstrate the requirements of that mark band consistently across most, if not all, of the six communications. Too often, candidates had produced good planning and drafting, good quality final communications or detailed evaluations for a few communications but had 'gone off the boil' and failed to demonstrate the required consistency.

Task bi

There are several aspects to this task; planning, development of drafts, accuracy checking and listing of sources. Lack of any of these aspects should reduce the mark awarded significantly. It is expected that even at mark band 1 the documents have been checked so that few obvious errors remain. This was often overlooked. Planning needs to be included for all, or nearly all, six documents to achieve mark bands 2 or 3. For mark band 3 the planning must be detailed. Candidates should consider the layout, content and aspects such as font style and colour schemes.

It is not sufficient to merely include draft copies. These need to be annotated to show what the candidate intends to do to improve them. This should include improvements to the layout and positioning of elements as well as proof reading the text. Again, annotated drafts should be included for all documents. However, it is not necessary to include large numbers of drafts for each document. It is the quality of the annotation, rather than the quantity of drafts that determines the mark awarded. In some cases, candidates had provided step by step guides with screen prints to show how the documents were created. This is not what is required and does not fulfil the requirement for annotated draft copies. The listing of sources was often the poorest aspect of this task. At mark band 3 a detailed bibliography is required. This was rarely seen in candidates' work.

Task bii

Although it is not necessary to include extensive before and after printouts to show how information was located and adapted, annotation of the work to indicate which information had been located and how it had been adapted would do much to aid the moderation process. To reach mark band 3, the communications should be of near professional standard. Whilst some very high quality communications were seen, some were quite poor but still awarded marks in this mark band. For maximum marks all six communications should be of a consistently high standard.

Task biii

Again, annotation would help to show the Moderator where the automated features required by mark band 3 have been used. Centres are reminded that the key terms in this task are 'appropriate use', 'suit the purpose' and 'improve impact'. As mentioned in the introductory

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paragraphs for this unit, the types of communication candidates are asked to produce will do much to aid or limit them in achieving marks in this task. More varied communications, such as multimedia presentations, web pages or newsletters, will give candidates greater opportunities to achieve higher mark bands. Assessors should consider the use of detailed witness statements to evidence the appropriate use of sound and video.

Task biv

Candidates need to evaluate the communications they produce and their own roles and actions. The latter aspect was frequently missing. Mark band 3 requires candidates to carry out ongoing evaluation of their draft communications, explaining how they are being changed to suit the purpose more closely. Too often a mark in this mark band was awarded when the candidate had only evaluated the final versions of their communications or where they had simply described how the drafts had been developed. Candidates need to describe the strengths and weaknesses of each draft and their own performance in detail to achieve high marks in this task.

Task bv

This task should form the content of one of the six communications created, rather than being addressed as a separate entity. It requires an explanation of the methods of communication listed at the top of page 5 in the 'What You Need to Learn' section of the unit specification. To achieve mark band 2 or 3, candidates would be expected to describe at least six of the communication methods listed. There was some confusion between types of information and communication methods. The technologies that support communication methods were often omitted or lacking the detail required.

Candidates are unlikely to be able to provide the level of detail required by mark band 3 in a slide presentation alone. The required detail could be provided in presenter notes to accompany the presentation. Centres are reminded that the term 'presentation' is used in its widest sense. Candidates might find it easier to provide the detail required by mark band 3 if they presented the information in a report or newsletter, rather than a slide presentation.

G042 – ICT solutions for individuals and society

Once again, this unit probably attracted more scaling than any other. This was largely due to a lack of suitable evidence to show what candidates had actually done. Candidates need as much guidance on how to present their evidence as they do on how to search for information, analyse it and present results. In some cases, candidates had aimed their evidence at mark band 3 and failed to include the required evidence of development through the task. However, some Centres had 'got it right' and candidates had produced excellent evidence.

Centres are reminded that all of the tasks, with the exception of task b, should relate to a single investigation. Guidance on the evidence required for this unit has been given out at OCR training events and is available in the documents section of the e-list. This can be accessed at <http://community.ocr.org.uk/lists/listinfo/ict-gce-applied>. The document 'Unit 3 – Further Guidance' can be found in the Public Documents and Resources section, so can be accessed if you have not yet subscribed to the e-list.

Task a

Although some good evidence was seen for this task, some was very poorly structured, making it difficult to determine what searches candidates had carried out and what information they had found. Screen shots were often too small for the Moderator to read the search criterion entered or the screen shot did not include the criterion.

To reach mark band 2 the advanced search facilities must be used, while mark band 3 requires the correct use of logical operators in the standard search box. Many candidates had approached this task 'back to front' by using logical operators and then going back to using advanced search facilities. The intention was that candidates use the advanced search facilities and discover the functions they offer before realising that similar searches can be carried out by

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using logical operators in the standard search bar. In some cases, mark band 3 had been awarded when it was clear that the logical operators were those included by the search engine as a result of carrying out an advanced search. Too often, logical operators were being used within the fields of the advanced search option when the whole point of the task is that more efficient searching is carried out by using these operators rather than the advanced search options.

Too often also, poor use had been made of both the advanced search facilities and logical operators. Entering a single word in the 'exact phrase' box, for example, is unlikely to make much difference to the search results, as is the use of AND in Google or any operator in lower case. Google and other search engines provide useful help on the use of operators and candidates should be encouraged to follow this guidance. Candidates should also be encouraged to use a range of operators including OR or NOT (-), as well as AND (+).

Mark band 2 requires a comparison of results as well as the use of advanced searches, while mark band 3 requires justification of the most appropriate search engine. We would expect candidates working at mark band 3 to show progression from mark band 2, i.e. they need to show the use of the advanced options of more than one search engine and compare the results to inform their choice of the most appropriate.

Task b

There was some misunderstanding of the requirements of this task. It requires discussion of the impact of the availability of electronic information, not the impact of ICT in general or the advantages and disadvantages of the internet. This session again produced a number of reports entitled 'How organisations communicate', i.e. Centres had addressed the mark band 3 criterion, rather than the banner of the assessment evidence grid which asks for 'an explanation of the availability of electronic information on individuals and society'. The resultant report often related more to the requirements of task b*v* in G040 than this task.

Candidates tended to describe how the internet is used for shopping, banking and other tasks, rather than the impact on the people using these services. The impact on society for mark band 2 was rarely more than a generalisation of the material discussed in relation to themselves and their family. Mark band 3 requires detailed explanations of the methods organisations now use to communicate with individuals and society and how this affects people who do not have or want access to electronic communication. Whilst candidates could often identify those who don't have access and why this is so, explanation of the impact this has was often limited.

As with task a in G040, insufficient account was taken of poor spelling, grammar and punctuation when awarding marks for this task. A few Centres had required candidates to concentrate on one particular website or method of using electronic information. This does not meet the requirements and limits candidates' discussion. A more general report is required. Similarly, detailed descriptions of different public service websites and how they might be used does not fulfil the requirements, although this may provide a good teaching strategy.

Task c

This task requires evidence of the use of a large website to find required information. The information required needs to be identified and candidates then need to provide evidence of how they located it. Candidates should include screen shot evidence of how they found the required information. Mark band 3 requires evidence of using the internal search engine of a large website and that this has yielded appropriate results. A witness statement should be included to confirm that the information was located independently or that the candidate needed help to find it.

Task d

This task requires evidence of complex searches involving both relational (= > < etc) and logical (AND, OR, NOT) operators. For mark bands 2 and 3, both on-line and local databases must be

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evidenced. Evidence of searching on-line databases may be linked with task c if an internal search engine has been used, but not to the use of generic search engines in task a. Most on-line databases will provide an internal search engine. Where it is possible to select two or more criteria, this is equivalent to AND, and if several options are selected within one criterion, this is equivalent to OR. We would expect to see complex searches of this nature. Centres are reminded that candidates need to interrogate databases that relate to their investigation.

For the local database, it is not sufficient to use a table in a spreadsheet as it is not then possible to easily demonstrate the required complex searches or to present the results as a database report. Whilst logical and relational operators can be used in custom filters in a spreadsheet package, candidates are limited to mark band 2 due to the lack of reporting facilities – a pivot table, for example, does not meet this requirement.

Some care is needed in developing local databases for candidates to search. These need to contain sufficient data to make searches meaningful. It is not necessary for candidates to create their own local database. Indeed, when they do, they tend to concentrate on this aspect, rather than the required search techniques. Candidates must include screen print evidence of the queries they set up in design view. For higher marks we would expect to see a number of different complex searches. Reports produced to achieve mark band 3 must be fit for purpose and must be printed out, rather than simply screen printed. Rather than simply using the report wizard, candidates should access reports in design view so that they can adjust column widths and the alignment of data, and edit titles and column headings so that it is clear what the report shows.

Task e

Although some good spreadsheet evidence was seen, much did not demonstrate sufficiently complex analysis. The document mentioned at the beginning of this section provides guidance on the types of functions and processing expected for mark bands 2 and 3. Candidates must evidence the functions and formulae they use by formula printouts or other suitable methods. Mark band 2 requires the use of macros to speed up the input of data and the production of results. Examples of this would be opening a form for data input, copying data into a range of cells, displaying a graph or printing results. Too often macros were only provided to move from sheet to sheet. They also need to show evidence of testing, not just a table stating that the results were 'as expected'. The testing should show that formulae and functions return the expected result, not just that macro buttons work. This is a task where candidates would benefit from guidance on how to present their evidence. Too often it was difficult to determine what the spreadsheet was designed to do, how it appeared on screen or how the various sheets were linked, if at all.

Task f

This task requires candidates to draw all the information they have found together to answer the investigation question. As such it should be a stand-alone document. As in G040, the term presentation should be taken in its widest sense. The task cannot be assessed across the whole portfolio.

The presentation should present what the candidate has found out, not how they have gone about finding the information, which is the subject of the rest of the portfolio. Too often this session, the presentation for task f simply repeated the methods used, with screen prints of searches and how the spreadsheet was created. In some cases the headings were the six types of information listed in section 3.2.6 of the unit specification. Whilst this may ensure that all six are included, it will not produce a well thought out presentation that presents the investigation results coherently. Where candidates have not addressed an individual investigation, it becomes difficult for them to produce the evidence required for this task. Also, if candidates have not listed their sources it is difficult to award any marks for this task as it is impossible to ascertain how many they have used. Mark band 3 requires a detailed and correctly structured bibliography.

Task g

Evaluations for this unit were weak. It is the methods used to find information and present results that should be evaluated, rather than the outcome or a task by task evaluation. For mark band 3, this evaluation should be ongoing rather than just at the end. Some evidence may appear in task a, but this must be clearly identified and cross-referenced if credit is given.

G043 – System specification and configuration

Tasks a and b are two separate stages of the specification process and cannot be interwoven. Task a requires candidates to investigate and describe in detail what the user wants to do with the system they will specify. This should include detailed descriptions of all tasks together with details of what will be input and how the output will be presented. This should not include consideration of input and output devices or the software required, which form part of task b. In task b, candidates should use these detailed requirements to specify a system that can carry them out. As well as specifying the hardware and software required, candidates must include the specification of any required configuration and, for mark band 3, candidates need to include clear evidence of the design of templates, toolbars, menus and macros they intend to create. All of this should form a stand-alone document that could be presented to the user for their approval.

Photographic and/or screen print evidence backed up by a detailed, signed and dated observation record would improve the evidence for the practical tasks in task c. This must include evidence of configuration as well as installation. Candidates must include a test specification and evidence of testing to go beyond mark band 1. To achieve mark band 3, the testing must be thorough and there should be clear evidence of how candidates overcame problems found as a result of testing. Testing seen often lacked the detail required for the marks awarded.

Similarly, candidates need to include annotated screen prints or printouts of the templates, toolbars, menus and macros that they create. Any screen prints must be large enough for the content to be read. All four items must be evidenced and, to go beyond mark band 1, there must be evidence of testing. For mark band 3, the installed templates, toolbars, menus and macros must be those designed by the candidate and must demonstrably improve the efficiency of the user.

Task e is best evidenced by a report or handbook for the user on health and safety and security issues. It should cover the content of section 4.2.4 in the unit specification. While most ergonomic issues were covered, management issues were rarely covered in sufficient detail. As with task a in G040, insufficient account was taken of poor spelling, grammar and punctuation when awarding marks for this task.

More Centres are correctly addressing task f, although a little more detail is required. Centres should refer to section 4.2.3 of the unit specification. Some candidates are still including descriptions of the stages of the Systems Life Cycle. This is not acceptable.

Evaluation was weak for task g. Candidates must evaluate both their specifications and the methods they used for installation, configuration and testing. It might help if these were treated as two separate evaluations. The first could appear immediately after the specification and consider how well it meets the needs of the user as identified in task a. The second could be produced immediately after completing the practical tasks and consider how they went about them, any problems that arose, how these were overcome and how they might approach a similar task in the future. As with other units, for mark band 3 this should be ongoing.

G044 – Problem solving using ICT

The entry for this unit was comparatively small, resulting in only a very small number of Centres being moderated. Some candidates had made a reasonable attempt at producing the evidence required, although there were also some serious misconceptions. The majority of Centres used

one of the scenarios issued by OCR or based their own scenario on one of them. However, in a few instances the problem set did not provide sufficient scope for candidates to produce meaningful evidence. Where candidates gained low marks it was often because they simply regurgitated theory, rather than applying it to the scenario provided. Although weaker candidates had clearly only used the information provided in the AS text book, more able candidates had carried out thorough research on types of information, types of software and quality procedures and had applied this to the scenario. There were good examples of system diagrams, although explanations of the system boundaries and environment lacked detail. Evaluation was also a weak area. Candidates must detail the goals, aims and objectives of their solution in task b, so that they can evaluate, in task g, whether these have been met.

G045 – Software development – design

Evidence submitted for this unit was generally of a good standard, although there were some Centres who had assessed it somewhat leniently. Despite the title of this unit, some candidates described alternative hardware, rather than software, solutions.

There are two parts to the assessment evidence for this unit. Tasks a, b and c are theoretical, identifying and describing the tools and techniques available. Task d to g relate to the solution of a given problem. Where Centres had attempted to combine these two aspects, candidates rarely covered the requirements of tasks a to c sufficiently.

Tasks a, b and c

To achieve mark band 3 for these tasks, candidates need to research the tools and techniques available so that they can describe a wide range, going beyond those listed in the unit specification. Although there is overlap between the stages, candidates were often confused as to which tools are used for analysis, which are used for design and which are used for investigation. It may help to consider section 6.2.3 of the unit specification, as far as the penultimate bullet list on page 72, in relation to task a. Although they can form part of analysis, decision tables, flowcharts and structured English are often part of system design, so task b should include these and the content of 6.2.4. Task c should include the content of 6.2.2. To gain mark band 3, candidates should explain the advantages and disadvantages of each tool or technique and how it might be used – examples for the given problem can be included here.

Task d

The report for this task should include both feasibility and design. The latter was lacking in some cases. Candidates must include designs for input screens and output screens and reports. The latter should include consideration of any calculations required to produce the output. As indicated above, the alternative solutions should relate to software rather than hardware, although some consideration of hardware should be included. While some excellent reports were produced with detailed alternative solutions and full consideration of technical, economic, legal, operational and social feasibility, others provided very limited alternatives with only a passing consideration of costs and benefits. The number of marks available for this task should be taken as a guide to the depth of evidence required. As with task a in G040, insufficient account was taken of poor spelling, grammar and punctuation when awarding marks for this task.

Task e

Most candidates attempted to produce DFDs using formal graphical representation with varying degrees of success. Both level 0 and level 1 DFDs are required for mark band 3. However, mark band 3 was often not achieved because the documentation lacked the detail required. All entities, processes, stores and data flows need to be described in detail to achieve mark band 3. Also, in some cases, there were clear errors in the diagrams produced, such as no indication of the direction of data flows or diagrams with entities and processes but no data stores.

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Task f

Again, although some good ERDs were seen, the documentation limited the mark awarded. A detailed data dictionary should accompany the ERD to reach mark band 3. A number of ERDs were seen that contained obvious errors or where many to many relationships had not been resolved. Such diagrams are not acceptable for mark band 3 or even, in some cases, mark band 2.

Task g

This task requires candidates to evaluate both the solution and their own performance. Whilst there was sometimes good evidence of one or the other aspect, there was rarely good evidence of both.

G046 – Communicating using computers

The work submitted for this unit was generally appropriate and in most cases had been accurately assessed, although there was some lenient assessment. Centres should only attempt this unit if they have facilities available to host websites and carry out the practical elements of task e.

Suitable organisations had been investigated for task a, although candidates did better when they investigated a real organisation, such as their school/college, rather than using case study material. However, whilst it is clearly convenient to base this task on the Centre's use of the internet and intranet, candidates should be given the opportunity to investigate other organisations' use of these facilities where possible, perhaps by arranging a visit to a local business. The organisations' objectives were rarely stated overtly. Candidates must describe advantages and disadvantages of both internet and intranet use, as well as suggesting improvements to both to achieve mark band 3.

Centres should refer to section 7.2.6 to identify what is meant by internet technologies for tasks bi and di. Discussion of HTML is not sufficient. In task bii, marks were awarded somewhat leniently. Candidates need to do more than simply identify that a particular section of code produces a table or a hyperlink to reach mark band 3. They should explain how the various tags are used and how they translate into the features seen in the browser. Candidates do not need to include the entire code for each of the three pages. They could include a screen print of the page as shown in the browser along with a number of relevant sections of the code that they can then explain in relation to the browser image. However, care is needed that a sufficient range of different features have been explained. The web pages annotated should be part of the website discussed in task bi, rather than an entirely different site or one they have created.

In task c, candidates tended only to consider the costs of hosting the site online. Bandwidth was given little consideration in some cases and candidates failed to describe a range of connection methods, hardware and software. The hardware and software should be that required to produce the website and host it locally. This will include a web server and software, as well as web design software. As in other units, insufficient account was taken of poor spelling, punctuation and grammar. This task should be a single coherent report, rather than a number of disparate sections including material downloaded from websites.

In task di, candidates must identify the internet technology they have used in their web page to achieve mark band 2. In task dii, candidates should not be penalised because they have not hosted their webpage online. This task is about evaluating what they did.

Centres should endeavour to ensure that candidates have the opportunity to install three pieces of communications software so that they have the opportunity of achieving mark band 3 in task e. It is not possible to cross reference the descriptions of hardware, software etc for this task to those for task c, as task c relates to hosting a website, while this task relates to simply accessing the internet and sending and receiving emails. For maximum marks, candidates need to produce a high quality user guide for installing and configuring the communications software. This should

be separate from the evidence that they actually carried out the installation. A detailed witness statement is helpful to confirm the installation and configuration tasks. Care is needed as to what is considered communications software. Compression software, for example, is not communications software, although it may be beneficial to reduce the file size of attachments. Likewise, virus checking software, while essential on any computer connected to the internet, is not communications software. Also, simply configuring an email client that already exists on the system is not installation. There are many freely downloadable browsers, email clients and instant messaging software that can be installed for this task.

G047 – Introduction to programming

Although some candidates who submitted work for this unit had been well taught and produced suitable evidence, others had followed a very minimalist approach. If all that candidates submit is the annotated code that they have produced, the Moderator cannot determine whether the programs actually run, making it difficult to confirm the marks awarded in both tasks ai and aiii. Candidates should state clearly what user need each program is designed to meet, so that the Moderator can judge whether the program meets the requirements. They should also be encouraged to include designs for the program, both in terms of the structure of the code and screen design. Although not overtly part of the assessment evidence, this is good programming practice. As well as the annotated code, candidates should include a test specification and evidence of testing to show that the program runs as designed. At the very least they must include screen prints to show stages of the program running.

Also, although the evidence requires a number of simple programs, many were too simple, generating only a few lines of code. Programs should be sufficiently complex for a range of programming techniques to be incorporated. Clearer evidence of the use of modularity and file handling is needed for mark band 3 of tasks ai and aiii. In particular, when using VB, candidates would be expected to use and call procedures, rather than simply using the subroutines associated with a button. Evidence of annotation is often clearer if the code is copied into a word processed document so that comments can be added in a different font style, colour or attribute to distinguish it from the code.

Although most candidates had used a version of visual basic for task a, a variety of languages were used for task b including Java, Pascal and C. Most of the programs provided for task b were suitable, with many Centres using one of those provided in the sample assignments. However, in some cases the programs were too simple for candidates to demonstrate the understanding required for higher mark bands. Candidates **must** annotate the program listings to gain marks in any of the three sections of task b. This must use a different programming language and cannot be the annotation of the programs written for task a. They must use ICT tools to do so. This may be either the comment tool in the programming language or, as suggested above, comments entered using a word processing package. To be awarded marks in mark band 3 of tasks bii and biii, candidates must provide detailed explanation of the code, for example the purpose of a sub-routine and how it is called by the program. There should also be no errors or misconceptions in the explanations. As well as actually annotating individual lines of code, candidates should give some indication of what the program is designed to do. Best practice is for candidates to be given the code to enter, compile and run, so that they can see what it does.

Task c requires evaluation of the programs in relation to the user's needs, evaluation of the suitability of the programming languages used and evaluation of the candidate's own performance. Coverage of all three aspects was rare in most of the work seen. If there is no indication of what the user requires of the programs written for task a, it is difficult for candidates to evaluate how well those needs have been met and for the Moderator to determine the accuracy of comments made.

H515/715 GCE Applied ICT (A2 units)

This was the third moderation opportunity for this qualification.

Unit G049 Numerical Modelling Using Spreadsheets

For this unit candidates were required to produce:

- a design specification that analysed a suitable problem and described how they would solve it by numerical modelling;
- evidence of implementing their solution using suitable entry aids and processing facilities;
- a record of how they overcame their problems;
- a specification for testing their spreadsheet, and evidence of the results of these tests;
- technical documentation that explained how their spreadsheet works, and user documentation that explained how it is used;
- an evaluation of the effectiveness of their solution and their personal performance.

A small number of Centres failed to identify that the emphasis of this unit is on numerical modelling rather than data manipulation. However, it is pleasing to note that the proportion of Centres in this category is lower than in the last two sessions. The problem that the candidates attempted to solve must provide the opportunity for significant numerical processing. Using a spreadsheet to simply store and present information, e.g. database solutions that involve little or no data processing are not suitable for this unit.

The design specifications produced by a number of candidates lacked the necessary detail. At the simplest level, these must incorporate consideration of user requirements, data sources, processing to be carried out and output to be generated. More able candidates incorporated ideas for screen layouts, identification of spreadsheet layout, spreadsheet facilities to be utilised and considered how the numerical processing aspects of the solution met the user requirements. Candidates achieving high marks for task a must produce a specification that is detailed enough to enable a competent third party to implement it independently.

The solution implemented by some candidate showed clear evidence of the use of complex spreadsheet facilities, as listed in section 10.2.3 of the unit, as well as clear evidence of a range of spreadsheet functions appropriate to the solution of the problem. Annotation of printouts or a commentary detailing the spreadsheet solution provided clear evidence of the use of the spreadsheet facilities and functions. This in turn provided evidence towards task c, the strategy for implementing the solution. Where no clear evidence could be found, often due to lack of annotation, marks were adjusted downwards as the Moderator could not easily locate the use of the functions within the spreadsheet solution.

For task c, the evidence presented often lacked details of the problems encountered by the candidate whilst developing the spreadsheet solution and how these were surmounted. Testing the spreadsheet solution was carried out poorly by the majority of candidates. There should be clear evidence of planning the testing to be performed. This should address testing functionality with the use of normal, abnormal and boundary data.

The technical and user documentation need to be separate documents as they are for different readers. The technical documentation must be sufficiently detailed to allow somebody to maintain or amend the spreadsheet. In many cases the documentation provided would not allow this to happen.

Few candidates performed well in mark band 3 in task f. In most cases the evaluation was descriptive rather than critical. Candidates must refer back to the initial requirements of the problem and, in order to access the higher mark bands, consider feedback from users and relate to the design specification.

G050 Interactive Multimedia Products

For this unit candidates were required to produce:

- a review of two commercially produced interactive multimedia products showing how their design influenced the design of the interactive multimedia product that they produced;
- detailed designs, of which one is chosen as the design for the final product;
- a multimedia product to meet the client's requirements;
- a detailed test plan;
- a detailed user guide;
- a review of both the interactive multimedia product that they produced and their personal performance.

Centres need to give careful consideration to the software used to evidence this unit. Section 11.2.4 indicates the types of interaction that could be incorporated into the final product. Not all multimedia software will facilitate the majority of these.

The design of a website is not appropriate; candidates wishing to design websites should undertake G053 Developing and Creating Websites. The unit specification makes it clear that this should be a standalone product; task e requires evidence of the system requirements and how to install and use the product, none of which are fitting for a website.

In order to access the higher marks in task a, candidates must evaluate the commercial multimedia products, rather than describe them. There must also be a detailed explanation of how the product influenced the design of the product that the candidates produce. A number of candidates evaluated websites rather than multimedia products. This disadvantaged candidates as many of the sites only demonstrated hyperlinks and the candidates did not have the opportunity to consider the user documentation, bearing in mind that they have to create user documentation for their own product in task e.

If a candidate chooses to evaluate a web-based product for one of the products, Centres must ensure that it contains elements outlined in section 11.2.4 of the unit, otherwise the candidate will not be able to incorporate such elements into their own design, based on the evaluation of the product. Evaluation of two web-based products is not appropriate as candidates are unlikely to have appropriate exposure to sufficient user documentation for multimedia products, disadvantaging candidates.

Task bii required a critical analysis of the designs in order to access higher mark points, not just a description of the designs. Good and bad points of each design need to be identified and a reasoned argument presented to explain why the final design was chosen by the candidate and how it met the needs of the client.

Task ci required evidence of the use of a variety of ICT skills to produce a multimedia solution. The nature of these skills is identified in section 11.2.4 of the unit. Candidates should annotate their evidence to explain how the skills have been used and how the skills are aiding the development of the multimedia product.

Task cii required the candidate to bring together the various components into a complete solution. This is where the nature of the multimedia software may restrict the nature of the product developed.

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The testing of the product for task d was carried out well by a minority of Centres. The candidates needed to test not just the functionality of the product, but the fact that the product met the requirements of the design specification.

Task e required candidates to incorporate installation instructions as part of the user guide for the product. Candidates are encouraged to incorporate images within their user guide in order to clarify the steps within the user guide. As already indicated, the user guide needs to include details of the system specification for the product and details of how to install the product.

For task f the candidates must critically analyse their solution in order to access the higher mark points. More able candidates provided evidence of obtaining feedback from users that tested the product, as well as providing clear evidence of linking the product to the design specification.

G051 Publishing

For this unit candidates were required to produce:

- notes taken during an initial, and any subsequent, meeting with a client, evidence of negotiating and amending a brief for the production of a camera ready copy (CRC) document;
- evidence of the drafting and production of a CRC of their final document to meet the brief and, in so doing, show that they could create and capture images, as well as import material from other packages, utilise object libraries such as clipart, and select and further develop images to meet the style and content of the final copy, as negotiated with the client;
- a CRC document, of at least ten pages, that combined different types of information presented to the client for approval, together with a letter which correctly described the final production stage and external factors which may affect completion of the final published document;
- an evaluation of both the layout and content of their final copy and their performance.

The evidence of the meeting(s) with client varied greatly. If the candidates cannot access real clients, then the teacher, or other suitable person, should act as the client.

Evidence for task bii frequently lacked evidence of the design stage processes. To access marks in mark band 2 there must be explicit evidence to include the following:

- sketching different initial document designs;
- following housestyle;
- creating master page layouts;
- presenting page proofs;
- producing artwork sketches;
- setting text orientation;
- creating style sheets.

Annotation of evidence generated will enable candidates to access mark band 2, whereas accompanying explanation will enable candidates to access mark band 3.

Higher marks in task ci required clear evidence of using more than four text styles, more than two text attributes and editing a piece of imported text. This is best evidenced through careful annotation of the evidence as the evidence should be explicit rather than implicit.

Task d requires analysis of the CRC and how the solution was refined to meet the client's needs. Candidates in mark band 3 will produce a critical analysis of the development of the product. There will be an evaluation, not a description, of the candidate's role in the development of the solution.

G052 Artwork and Imaging

For this unit candidates were required to produce:

- a portfolio of artwork samples produced to demonstrate a range of artwork skills;
- evidence of the development of computer artwork, using a variety of graphics software, following negotiation of a brief from a client, from initial ideas to final product accepted by the client, to include:
 - a range of initial proposals in response to a complex problem;
 - development of a final product, showing editing techniques;
- an evaluation of both the final product, including consideration of the hardware and software used, and their own performance.

In task a some candidates failed to include samples of artwork produced covering the range listed on the assessment grid. A small number of candidates included mainly material which they had not produced, but taken from other sources. Mark band 3 was achieved in only a small number of portfolios as few candidates explored the development of the materials using advanced editing and manipulation techniques. It should be noted that it is not necessary to provide step-by-step screenshots explaining how the original images were produced. The referencing for task a must relate solely to the portfolio of artwork and must not include reference to the product developed for the client.

A significant number of Centres did not ensure that an appropriate product was created for the client. Candidates are required to develop **artwork**, not publications, presentations, web pages or other such products; other units exist within the GCE Applied ICT specification addressing the development of such items and such evidence should be used for these units.

Task bi was poorly evidenced by many candidates as the sketches, in response to the client brief, were very brief and in many cases did not consider the capabilities of the software. In some cases, it was not clear if the client existed; if there is no opportunity for a real client, then the Teacher or other suitable person should act as the client. Task bii was difficult to achieve if task bi was poorly evidenced, as it was not easy to comment on the strengths and weakness of the designs. Mark band 3 required critical analysis and not just descriptive comments. Task bii requires explicit evidence that ICT skills have been developed. A diary can help to evidence this, or alternatively annotated screenshots can provide evidence. Evidence for task biv varied greatly as some candidates provided clear evidence of the development of the final product, including manipulation of material as part of the process.

Task c required a critical analysis of the final product, identifying how well it met the brief. Some candidates made little reference to the brief and some omitted to mention the printer, media or resolution. Candidates that appeared to have limited experience on working with computer artwork found it difficult to reflect critically on the final product and identify how weaknesses could be tackled in future briefs.

G053 Developing and Creating Websites

For this unit candidates were required to produce:

- an evaluation of commercial websites that have been downloaded;
- design notes for their website of at least three pages together with detailed plans for publishing your website;
- annotated print outs of their own web pages in WYSIWYG format identifying the features and techniques used in the web page;
- annotated printouts of their own web pages in HTML format identifying edits to script commands to change page layout;

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- documentation of website testing;
- an evaluation both of their website and the tools used to produce it and of their own performance.

For task a many candidates failed to explain the reasons for choosing, or not choosing, features in web pages examined, as required to mark band 2. In order to access mark band 3, there must be a critical analysis of the web pages examined. Frequently, the evidence provided was solely a description of the web pages visited, meeting mark band 1.

In task b, candidates were required to identify domain names suitable for the site and, in order to access higher mark points, explain the reason for this name and provide alternative options. It was pleasing to see that a number of candidates had actually uploaded the site designed. Task b also required structure diagrams, a story board, an index of pages and a task list/action plan. Frequently some of these components were missing from the candidate work; the most common omission was the index of pages in the website.

Evidence of understanding HTML script in task c was implicit rather than explicit in a number of portfolios. For mark band 2 candidates were required to edit script commands. Evidence to support this could include a before and after screen shot of the implications of the changes as well a narrative to describe the changes. Mark band 3 requires evidence of adding script commands to include at least two from graphic, table or hyperlink. A number of candidates concentrated on embedding scripting language code, such as JavaScript, rather than editing (mark band 2) and adding (mark band 3) HTML script.

In task e a small number of candidates failed to ensure that the website met the design specification; explicit evidence of this is required.

Task f required candidates to produce a critical analysis of their website in order to gain higher marks. An analysis of their own performance was also required. In many cases the evidence was a description of what they had undertaken, rather than a critical analysis.

Unit G056 Program Design, Production and Testing

For this unit candidates were required to produce:

- a program specification to meet the given requirement and describe how the specification meets the program requirements and how user's needs have been considered;
- a program design arising from the specification;
- an annotated modular program to realise the design;
- test documentation including a test plan with valid, invalid and boundary data, expected results, actual results and changes identified as a result of testing;
- a program review and evaluation report including an evaluation of their own performance.

Insufficient candidates entered in this moderation series in order make comments.

G057 Database Design

For this unit candidates were required to produce a relational database to meet a given specification requiring at least three related tables supported by design and analysis notes, technical and user documentation and an evaluation of the database produced.

Their evidence to support this should include:

- design and analysis notes, including normalisation of the data model;
- a user interface, including data input forms and methods of obtaining output;
- a working relational database;

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- user and technical documentation;
- testing of the database produced;
- an evaluation of the database;
- an evaluation of their own performance.

In order to access mark points beyond mark band 1, candidates must produce a correct entity relationship diagram and, for mark band 3, define the data model clearly and show that it is correctly normalised to 3rd normal form (3NF). Some candidates failed to provide clear details of the entities, attributes, keys, relationships and internally generated or processed data. It should be noted that the use of 'autonumber' primary keys in all entities is unlikely to be an appropriate solution to the database problem.

The data input forms for task b required evidence of data validation and should have been fully labelled in order to access mark band 2. These should also incorporate pull-down lists and labels. More able candidates demonstrated the use of forms allowing data entry into multiple tables and customised the database to hide the underlying software.

Candidates were required to evidence the manipulation of data in the database and use queries and reports. More able candidates designed reports with evidence of grouping, arithmetic formulae and used data from more than one table, accessing mark band 3.

The database documentation must enable somebody else to maintain the database. The use of software generated technical documentation does not demonstrate an understanding by the candidate of the evidence generated; such reports need to be annotated if they are used. Design documentation created by the candidate often showed a greater understanding of the design of the database for task d.

Testing of the database must include evidence of testing both functionality and rejection of data outside the acceptable range. Where input masks have been used as part of the solution, these must also be tested.

The reflection of how well the database met the specification needed to be a critical evaluation, rather than a description, if the higher mark points are to be accessed. Likewise, the analysis of the candidate's performance needed to be more than descriptive in order to access higher mark bands.

G058 Developing and Maintaining ICT Systems for Users

For this unit candidates were required to produce records of specifying, upgrading and repairing ICT systems, to include:

- records of interviews with two different users to identify their key requirements;
- detailed specifications for an ICT system for each user along with explanations of the reasons for selecting particular components in non-technical language;
- records of carrying out an upgrade involving selecting and adding a new component to a system;
- records of carrying out an upgrade by replacing a component in a system;
- records of troubleshooting procedures carried out to identify faulty components;
- an evaluation of the information sources used to find information on components;
- an evaluation of the specifications and approaches taken to specifying, upgrading and repairing systems.

Insufficient candidates entered in this moderation series in order to make comments.

G059 ICT Solutions for People with Individual Needs

For this unit candidates were required to produce evidence that:

- showed an understanding of legislation and the rights of each of the individuals in connection with the ICT solutions suggested;
- showed a clear understanding of the disabilities or limiting factors, and resultant needs, identifying and showing suitable items of equipment and software as appropriate;
- for at least one case study, provided a specification for a complete system, to include configuration and customisation of software and equipment as appropriate and demonstrate that they could customise the available operating system and applications;
- evaluated the viability and effectiveness of your proposed solutions, indicating how the solutions would enhance the quality of life for each individual;
- presented their reports or presentations in a way that is suitable for the needs of the individuals outlined in each case study or for a carer if the case study is that of a young child or a person with very limited understanding.

Evidence for task a, on a few occasions, extended unnecessarily beyond the legislation listed in section 20.2.7 of the unit.

Task b was, on the whole, evidenced well by candidates; although a small number of candidates did not evaluate the effectiveness of the recommended solution but had been awarded marks within mark band 3 by the Centre.

Evidence requirements for task c had been misinterpreted by a small number of Centres. Some candidates presented evidence suggesting that limited customisation of the operating system, application software and the hardware had been carried out. Task cii requires alternative suggestions to meet the needs of the user; evidence for this is likely to involve consideration of specialist hardware and software that is available to support people with individual needs, rather than relying on generic hardware and software customisation.

Task d required candidates to produce an analysis of their solutions in order to gain higher marks.

Task e required candidates to produce the recommendations in a format that suited each of the users. Some good evidence was presented for this task, although candidates occasionally omitted to provide evidence of verification of the accuracy of the information.

G041: How Organisations Use ICT

General Comments

Performance on this paper was, again, disappointing compared with previous sessions. No candidates managed to access the top 20% of the mark range, while there were a significant number with very low marks – sometimes whole Centres.

Many candidates had little understanding of the work covered, and those that showed some understanding had difficulty in applying it to the case study. Although most candidates attempted all of the questions, many had not read the question carefully and gave answers that gained few marks. The need to read the question carefully and answer accordingly cannot be over-emphasised. Whilst many had produced good quality pre-release material to help them in the exam, others included little or no pre-release for Task 1, which hampered their ability to answer the questions in section A. Generally, the quality of the pre-release material seemed weaker than in previous sessions.

Centres are encouraged to use the 'What You Need to Learn' section of the unit, as well as previous Examiner Reports, question papers and mark schemes when preparing candidates for the examination. Candidates should also be taught examination techniques to help them provide appropriate answers to the questions. The content of the 'What You Need to Learn' section of the unit must be taught before candidates sit the examination. Questions in Section B can ask about any of the topics covered. Too many responses to the questions in this section suggested that insufficient emphasis had been placed on teaching the content of the specification for this unit.

Whilst this unit is business related, it does require candidates to apply their knowledge of ICT systems to the business scenario. There were a number of questions on this paper that required specific ICT related answers, such as questions 5, 6 and 10, and the responses to these often demonstrated candidates' lack of knowledge of ICT systems.

Centres are reminded that all three tasks must be submitted to the examiner with the examination paper. Centres are also reminded that candidates should only include their responses to the tasks set. Class notes, hand-outs and worksheets on legislation or on aspects of the 'What You Need to Learn' section of the unit must not be taken in to the examination.

Most pre-prepared work was word processed and most candidates had clearly labelled tasks 2 and 3, although in some cases they were not easy to find. Task 3 requires a word-processed report. Examiners were instructed not to award marks for this task if it was hand-written. However, hand-drawn diagrams for task 2 are acceptable and candidates may benefit from hand-drawing the information flow diagram, or at least hand-labelling the information flows, as marks were lost due to candidates' inability to manipulate text boxes.

It would be helpful if Centres could clearly distinguish between Task 1, Task 2 and Task 3, and put the tasks in order. Candidates should be encouraged not to tie the treasury tag into a knot or wrap it through the hole several times – this leads to the examiner having to cut the tag to mark the paper! There were instances where the work submitted for the tasks was not fastened together / named etc. Although most Centres had attached the work with a treasury tag as requested, there were still some who used plastic pockets or even plastic or envelope folders to hold the pre-released tasks. Please do not do so. The work should be hole-punched in the top left hand corner and attached to the paper with a treasury tag through the hole provided.

Centres are reminded of the need to check the work carefully, but not mark it, before signing the Centre Authentication Form. The number of instances of identical information flow diagrams increased again this session. Candidates should also be warned that it is very obvious when they simply copy and paste from a website for task 3. While most candidates included the required list of sources for this task, some still failed to do so.

Care is needed to ensure that candidates are not given too much guidance when carrying out the tasks. Whilst it is acceptable for Teachers to ensure that candidates understand the content of the case study and the requirements of the tasks, they should not give help that relates directly to carrying out each task. Too often, the diagrams created for task 2 and the topics addressed in task 3 were similar for all candidates within a Centre.

Where candidates run out of space when answering a question, they should be encouraged to ask for a supplementary sheet, rather than writing the answer elsewhere on the paper. If they do use a supplementary sheet, they must indicate to the examiner that they have done so. Such sheets easily get mixed in with the pre-released tasks and may be overlooked.

Comments on Individual Questions

Task 2

Although most diagrams seen were appropriate, the execution of these was often weaker than in previous sessions. In particular, many candidates included the whole ordering process through to the customer receiving and paying for the goods. This meant that there was far more in the diagram than was required, making it difficult for candidates to label the information flows clearly. The extent of the diagram required is clearly stated in the task and candidates should only include what is asked for. The inclusion of the sales order processing system, and sometimes other parts of the system, as an entity resulted in some candidates losing marks. The task asks them to identify who sends and receives information. There were still some inappropriate diagrams which gained few, if any, marks. The type of diagram required is shown in the mark scheme.

Marks were most often lost because of the candidates' inability to manipulate text boxes so that the labelling of the information flows was ambiguous. Candidates may find it easier to label the flows unambiguously if they hand write the labels on the arrows. Where candidates had used colour to link labels to arrows, they often lost marks because it was not possible to distinguish between some of the shades used, even by those who are not red-green colour blind.

A few candidates lost marks because they had described what the sender/receiver did, rather than simply identifying them. Similarly, marks were lost when candidates described processes on the arrows, such as 'the invoice is printed and posted to the customer', rather than identifying the information and method, i.e. 'invoice by post'. It is also important that the information being passed is accurately identified. For example, in this case it is a printed order and picture of logo that is being passed, not just a printed order.

Incorrect identification of the sender/receiver of information also lost candidates marks. In particular, both the Sales Manager and the order processing clerk are part of the sales department. Consequently, a single box labelled sales department does not distinguish between them and is incorrect.

Centres are reminded that:

- the senders and receivers of information must be identified – preferably in a box
- a separate arrow should be drawn for each identified information flow
- the information and method only should be indicated on each arrow in such a way that there is no ambiguity
- there should be no description of processes – labels should be nouns, not verbs
- the boxes should be arranged so that arrows do not cross or go round corners

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- diagrams should be large enough for the labelling to be clear and unambiguous
- the use of numbered arrows with a separate table of information and methods should be discouraged.

Task 3

The majority of candidates limited themselves to the lowest mark band for this task because they made little or no attempt to apply their answers to the case study. Such responses can easily lead to plagiarism because candidates simply copy and paste material, rather than using their own words to interpret it. In this case there were a few websites that provided the type of information required and many candidates used just one of these, in some cases with limited understanding. For example, they could not differentiate between comments about self-employed people working from home or those setting up a business, and the effects on an existing business, such as Logos R Us, introducing home working.

To access the middle mark band, it is not sufficient to simply scatter the name of the organisation throughout their response. Candidates must give specific examples of how some staff working at home would affect the organisation. For example, they might suggest that the designers working from home would not be tied to office hours and could work more flexibly which might enable them to be more creative. In many cases, when the case study was referred to, it was simply to discuss which staff might be able to work from home effectively and which staff would not be able to. Such responses only achieved a mark at the bottom of the middle band. In some cases, candidates discussed warehouse and embroidery staff in this context. This was not relevant and outside of the task requirements, as these referred only to head office staff.

The final mark awarded within a mark band was dependent on the quality of the candidates' written communication. Candidates must ensure that they both spell check and proof read their work before submission. Examiners are judging the accuracy of the grammar and punctuation used, as well as spelling.

Most candidates gained some marks for their evaluation for AO4, although some only submitted a bibliography, which did not gain marks. However, many who did attempt an evaluation only commented on their sources, rather than what they did well or badly.

Candidates are required to include a word count for this task. They should be taught how to include this using the NumWords field, rather than screen printing the document information dialogue box, often on a separate sheet.

Question 1

Those candidates who accurately identified a job function generally went on to gain all four marks. However, some did not know the difference between a job function and the tasks carried out. The 'What You Need to Learn' section of the unit identifies a range of job functions. Some candidates had clearly not read the question properly and gave almost any job title mentioned in the case study. Strictly speaking, the function in this case is distribution. Most candidates gave the job title, i.e. distribution staff or distribution clerk. This was accepted for a mark but candidates should be taught to identify the job function, rather than the job title.

Question 2

This question was well answered by most. Too many candidates included the overall role of ensuring the company's ICT systems work effectively, which was too vague to be awarded a mark. However, many then went on to give four specific tasks and gained full marks. Where marks were lost, it was because candidates had suggested tasks they thought an ICT department might carry out or they had not read the question and gave answers that were more relevant to questions 4 and 5.

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Question 3

Too many candidates answered this question in relation to the ICT systems used, rather than the organisational structure. Of those who did discuss the warehouse's position in the organisation structure, most gained one mark for recognising it was within the operations division or came under the responsibility of the Operations Director, but rarely both.

Question 4

Very few candidates gained full marks for this question, although some parts were answered better than similar questions in previous sessions.

In part a, most gained good marks for ai, although some lost marks for describing the process, rather than simply identifying the items of information. Where candidates had described how orders from existing customers are obtained, rather than how their details are retrieved from the sales order processing system, they gained both marks for aii. Some did not read the question and gave answers relating to new customers.

In part b, many candidates could not differentiate between items of information stored on the system and retrieved and those that are calculated. This meant that items such as total price were given in bi, and bii then included answers that would have gained marks in biii. Where candidates did give unit price and description in bi, they did not always recognise that these are looked up when the item number and size is entered to gain marks in bii. However, this often formed the first part of their answer in biii, where it gained no marks. Many candidates did, however, gain full or nearly full marks in biii, sometimes repeating answers previously given in bii.

Part c was poorly answered by many. Common incorrect answers were 'an email telling the accounts department the invoice has been sent', 'delivery note' and, despite it being in the stem of part b, 'invoice'.

The answers to part d were often dependent on that given in part c. Many candidates gave internal mail or post, but rarely both. Internal mail was often misinterpreted both here and elsewhere as 'Internet mail' or 'internal email'.

Question 5

The hardware section was well answered, with many candidates gaining three or four marks. The software section was also well answered with the majority of candidates being aware that there is a database which stores stock. Some lost marks because their answers related to the embroidery workshop, rather than the warehouse, system.

Input data was poorly answered, with many answers simply suggesting that warehouse assistants update the stock database, with no indication of the data input. Outputs were also fairly poorly answered. Some candidates recognised that delivery notes and delivery addresses are outputs but these were often embedded in the description of a process.

Few candidates gained marks for the processes section. The most common answer worthy of a mark referred to the updating of the stock database, although this was rarely specific to removing items from stock – the question relates to processing orders only. Better candidates recognised mail merging as a process but rarely gave sufficient detail for a second mark.

Inputs outputs and processes are still confusing a number of candidates and probably need to be taught more thoroughly. Very few candidates gave a good answer to the inputs, the outputs or the processes. Often candidates gave answers which were in the wrong section, eg a process in the output section. The distinction between hardware and software seems to escape weaker candidates, as does that between input data and input devices, and outputs and output devices. The level of ICT knowledge displayed by some candidates was very weak.

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Question 6

This question was very poorly answered by the majority of candidates. Many candidates had not read the question properly and gave answers that related to the Operations Director travelling a lot, the weaknesses of a peer-to-peer network, or the fact that there is only a single server in head office. Very few recognised that there is no electronic communication between the sites and the impact this has on the availability of information between sites.

Where candidates had recognised this weakness, their suggestions for improvement were often too vague, such as 'link the two sites together' without saying how, or showed lack of understanding, for example 'link the warehouse computers to the head office LAN' without recognising the distance between the sites or 'set up an intranet / use email' without recognising that these need either a WAN or internet access in the warehouse to be established.

Marks can only be awarded in bii and biii if a suitable improvement is suggested. Where this was the case, the benefits identified were often very general, rather than specifically related to the case study, while problems tended to relate only to cost.

Question 7

There was confusion between general health and safety and specifically the Display Screen Equipment regulations. Where candidates did consider workstations, it was to describe the minimum requirements in a general way – comfortable chairs were often mentioned – rather than what the employer must do, i.e. ensure workstations meet minimum requirements.

Question 8

Although many candidates managed to gain marks in part a, it was clear that few had any real idea of what a public service organisation actually is. This was born out in their answers to part b, which tended to simply paraphrase the question.

Question 9

Knowledge of the electronic communications act was very patchy. Although this is a section B question, where candidates had good notes in task 1 and realised they could use them, some good answers were seen. However, some answers were in the wrong part of the question, losing the marks. Mostly, candidates guessed wildly as to what this Act involves.

Question 10

This question was very poorly answered by most candidates, with many making little or no attempt to answer it. Those that did tended to give answers similar to those for the question on robotics on the June 2007 paper, rather than related to process control. The 'What You Need to Learn' section of the unit clearly refers to both process control and production control – see section 2.2.6 on page 27. Candidates need to be taught about both types of control and their impact on methods of production.

Despite the mark scheme for part a being widened to accept any process involving computer control, rather than specifically process control, few gave acceptable answers. In part b, a few candidates mentioned sensors but there was little understanding of how the readings are fed back to control the process.

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Benefits tended to fall into the faster, cheaper, easier, more efficient categories, rather than the benefits to a manufacturing organisation of process control. Candidates managed to gain some marks where benefits applied equally to process and production control / robotics but few gained the second marks that related specifically to process control. For example, where candidates gained a mark for 'quality of the product is higher / more consistent', they went on to say that this is because of greater precision in the instructions, rather than it being due to constant monitoring and adjustment, which would have gained them the second mark.

Many candidates think that no workers are required when systems are automated. Whilst the workforce may reduce substantially, no process is entirely independent of human intervention / supervision.

G054: Software Development

General Comments

It was pleasing to note that many Centres had actioned the issues raised in the reports on previous examinations. Once again, there was a wide range of marks on this paper with many candidates accessing the marks available for the pre-release tasks.

Centres are reminded that all answers given to questions in Section A must be applied to the case study; in this case Island Fly. However, the performance of the candidates on section B of the paper continues to be disappointing

The majority of candidates had attempted all of the questions producing good quality pre-release material to help them in Section A of the examination paper. Centres are reminded that the work for Task 1 must only cover the topics listed in the instructions to candidates. A minority of candidates had not fully prepared the pre-release tasks failing to submit at least 1 of the tasks. This strategy disadvantaged those candidates who are unable to access all marks available for the tasks.

There were very isolated instances of candidates not producing work for Task 1 of the pre-release material. There were also some instances where the pre-release tasks for the June 2008 session had been completed. This disadvantaged candidates who were unable to access the marks available for Tasks 2, 3 and 4. Centres are reminded that, although the case study and Task 1 are the same for both examination sessions, Tasks 2, 3 and 4 change from January to June and the case study changes from one academic year to the next. It is, therefore, vital that the correct candidate instructions are used.

It would be helpful to examiners if Centres could clearly distinguish between the tasks, and put the tasks in order. Candidates should be encouraged not to tie the treasury tag into a knot or wrap it through the hole several times – this leads to the examiner having to cut the tag to mark the paper. There were instances where the work submitted for the tasks was not fastened together/named etc. This may cause problems during transit.

Some questions were poorly answered due to the candidates not reading/understanding the question. The need to read the question carefully and answer accordingly cannot be over-emphasised. Centres should give candidates some guidance on the key words that are used in a paper i.e. describe, explain and discuss, and the requirements of these key words.

Care is also needed to ensure that candidates are not given too much guidance when carrying out the tasks. Whilst it is acceptable for teachers to ensure that candidates understand the content of the case study and the requirements of the tasks, they should not be given help that relates directly to carrying out each task. Too often, the work produced for all tasks was very similar for all candidates within a Centre.

Centres are reminded that Section B of the paper can focus on any part of the unit specification. It was obvious that some Centres had concentrated on the requirements of the pre-release tasks and the case study and had not fully covered the requirements of the specification. This strategy disadvantages candidates when they are attempting to answer Section B of the paper.

Comments on Individual Questions

Task 2

The task required candidates to produce a system flowchart with the start point being given as a passenger contacting Island Fly to book a flight and the end point being when the booking reference number is given to the passenger. There were many instances of the start and end points shown in this task being different.

The main failing on this task was to produce a flowchart rather than a systems flowchart. There were some instances of candidates producing L1 DFD's in response to the task. Those candidates who produced a flowchart, including the start and end being identified, failed to gain any marks for this task. Few candidates were able to clearly identify the columns used in the systems flowchart as being the passenger, Admin, the booking system and Frequent Flyer records.

Those candidates who produced a system flowchart used symbols consistently. It is appreciated that there are many different sets of symbols that can be used to develop system flowcharts but which set is used is irrelevant, as long as the set of symbols used is consistent.

Too many candidates failed to achieve any marks for AO4, as they had made no attempt to evaluate the methods used to produce the systems flowchart.

Task 3

This task required candidates to produce Structured English for the part decision table given in the case study. Many candidates failed to define all rules and associated actions in the Structured English they produced. There were many instances of candidates failing to use the logical operators (>, <, =) correctly. This lost candidates marks for this task.

The type of Structured English used to produce the evidence for this task was, again, irrelevant. The wide range of Structured English being taught in Centres became obvious through the marking process.

Task 4

Candidates were required to design a booking screen for use in Island Fly. There were a large number of candidates who had produced the evidence for this task using some form of software package. This was accepted unless the screen showed any form of population of fields. If this was present then no marks were awarded for this task.

Section A

Question 1

Many candidates answered this question well. There were, however, still some instances of generalised purposes such as 'to improve/modernise the business'. Some candidates appeared to be confused about the difference between the purpose and the functions of the new system.

Question 2

Part (a) of this question focussed on the functional requirements of the new system. The question was linked to the functional requirements relating to the Frequent Flyer scheme. Many candidates did not link their answer to the Frequent Flyer scheme and so failed to access the marks available for this part of the question. Some candidates used the functional requirements given in the question as one of their answers.

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The focus of part (b) of this question was the non-functional requirements relating to hardware. A worrying number of candidates provided answers to this question that related to software. This showed that some candidates failed to read the question correctly. There were isolated instances of candidates providing a definition of non-functional requirements instead of relating their answer to hardware.

Question 3

Part (a) of the question asked candidates to describe the software constraints that had been defined by Island Fly. Many candidates simply provided the generic response of 'standardisation of software'. This strategy only gained 1 mark. Some candidates were able to identify that there was some relationship to the Operating System being used at Island Fly but were unable to access the remainder of the allocated marks as they did not explain that the vendor was to stay the same rather than the Operating System had to stay the same.

The focus of part (b) of this question was the process constraint of budget, with candidates being asked to describe these. Many candidates simply listed all the different process constraints that can be defined by a client, failing to relate their answers to Island Fly.

Question 4

Many candidates were able to describe two problems caused by the current system at Island Fly. However, the majority of the answers given by the candidates were not linked to the problems that are having an impact on the staff who work in the hangar.

Question 5

Candidates were required to identify and explain two security methods that could be used by Island Fly. If candidates failed to clearly identify the type of security method then they were unable to access the remaining marks allocated.

Those candidates who did identify and then explain two security methods were able to access the majority of marks allocated to this question.

Question 6

Many candidates were able to provide good descriptions of the advantages and disadvantages of using observation as an investigation method. They did not, however, go further with their answers and apply these to the head office of Island Fly.

Question 7

This question assessed the candidates' quality of written communication.

The question asked candidates to relate their answers to Island Fly. Those candidates who did this gave some excellent and insightful answers. Most made general comments about the advantages and disadvantages of using customised off-the-shelf software and so restricted their marks to the lowest mark band.

There were a number of candidates who confused customised off-the-shelf software with bespoke software giving the opposite answer to that which was expected. There were a few who explained why Island Fly should choose bespoke software when the question made it clear that customised off-the-shelf software was to be recommended.

Question 8

Candidates were required to identify and explain a training strategy that could be used with the administration staff at Island Fly. If candidates failed to clearly identify the training strategy then they were unable to access the remaining marks allocated.

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If they had been awarded the identification mark, many candidates simply gave generic answers, rather than relating their answers to the administration staff. This strategy limited their accessibility to the full range of marks allocated for this question.

Question 9

Candidates, once again, had to clearly and correctly identify the type of maintenance that would be carried out before they could access the rest of the marks allocated to this question.

It was worrying to note, in the answers given to this question, a general confusion about the different types of maintenance that can be carried out on a system and the purpose of this maintenance.

Question 10

To achieve the marks allocated to each section of this question candidates had to identify the software or device before they gained any marks for their justifications.

The focus of part (a) of this question was on the type of software that could be used to perform a given task. A surprisingly large number of candidates failed to identify that a database would be appropriate. Many candidates gave answers relating to hardware and, in many cases, provided the brand names of the software as their answer.

Part (b) of this question focussed on the hardware device that would be needed to back-up records. Many candidates felt that CD-ROMs or a USB stick/flask drive were appropriate back-up devices.

Section B

As stated previously in this report it was obvious that some Centres had not fully covered the requirements of the unit specification and had simply concentrated on the requirements of the pre-release tasks and the case study. This strategy led to candidates being unable to gain marks on Section B of the paper.

Question 11

Parts (a) and (b) of this question focussed on the components of the input and hardware specifications that comprise a physical design specification.

Very few candidates scored marks on this question. A list of the component parts of the different types of specifications is given in the unit specification.

Part (c) of this question required candidates to explain why a program specification should be passed to the end-user of a system. A large proportion of candidates failed to attempt this question leaving the answer lines blank.

Candidates should be able to explain why differing pieces of documentation should be given to the end-user and how each could be used at a future time in the life of the system.

Question 12

Despite the confusion that was evident in the maintenance question on Section A of the paper, many candidates were able to gain marks on this question.

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Question 13

This question focussed on a fundamental development tool, DFD's, which can be used within the area of software development and the systems life cycle.

Many candidates were able to provide reasonable descriptions of data flow diagrams so accessing 1 mark. Most candidates were unable to provide an evaluation (advantages and disadvantages) of the use of DFD's as a tool in the systems life cycle.

G055: Networking solutions

General Comments

Performance on this paper was similar to previous sessions. Candidates were, however, much better organised and there were fewer entries with tasks 2 or 3 missing.

Tasks – general

Tasks 2 and 3 were clearly signposted and it was obvious where each started and ended. Candidates had used the diagram provided for task 2 and had produced a report for task 3 that did not exceed 250 words and included, in many cases, a word count.

Task 2

Candidates designed a network layout that was generally suitable. Many candidates gained all six available marks, illustrating a network that was fully connected and contained suitable equipment. When marks were lost, it was because candidates did not include a sufficient range of servers, the network printer was not clearly identified or the cabling was not positioned safely.

Candidates were often able to identify the cable and connector used, although many used proprietary names rather than the type of cable and therefore lost this mark. Candidates were less likely to give a relevant reason for their choice of cable and connector. Candidates could identify a connection device (generally a switch or a router) and often gained a further mark for describing the function of the device, although the justification mark was often missed. Candidates were able to identify hardware and software but were often unable to identify its function and therefore to justify its selection. Those candidates who structured their answers under the designated headings of 'cables and connectors', 'other network connection components' etc, often obtained higher marks.

Where candidates did include an evaluation, a number evaluated their network design rather than the methods used to carry out the task, these candidates were awarded no marks for this section. Where an evaluation of the methods was present, candidates often described what they had done without attempting to assess any strength or weakness.

Task 3

Candidates were often able to identify risks and the ways to minimise risks. They often, however, did not link the risk with the minimisation. Risks were often not described in any detail.

Question paper – general

Candidates tended, on average, to score equally well on sections A and B.

Section A

Q1 This question was often well answered. Candidates who lost marks did so because they described features of client-server networks rather than advantages and disadvantages to IEC of networks in general.

Q2a Candidates were able to identify that at least one server would be present but a number tended to write this in three different ways.

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Q2b Candidate were generally able to gain at least two of the available marks, losing the other two through lack of detail.

Q3a Most candidates were able to draw a correct diagram, some showed the direction of flow and most added at least one label.

Q3b Many candidates described token passing and so did not leave enough space to describe how data flows around a logical ring. The most common correct points made were for data travelling in one direction and passing through all nodes.

Q3c Many candidates described the network failing if one computer stops working. They did not indicate that it is the cable or the receiver/transmitter that affects the network, which may not be part of the computer.

Q4a Most candidates gained the mark for this question.

Q4b Most candidates were able to identify that the cable is resistant to electrical interference and the best answers referred to the kitchen equipment. Candidates lost marks where they didn't expand a point they had identified. Stating that the cable protects from interference is not enough unless it is qualified by a description of data being interfered with during transmission.

Q4c A number of candidates stated that the cable was too expensive without making a comparison. A further number of candidates contradicted their answer to Q4b by stating that the cable is prone to interference.

Q5a Most candidates were only able to gain one mark for this question, often stating "boosts the signal" without any further expansion.

Q5b Many candidate identified that data is stored on the file server but, again, did not expand on this.

Q6 This question was very poorly answered. Candidates were not able to identify email client software or email server software, although many were able to identify browser software as a means of accessing web based mail. Where candidates had identified a relevant type of software, they were unable to describe its function beyond sending and receiving emails.

Q7 The most common answer was TCP/IP but this was often not described for either TCP or IP. Many candidates identified FTP and HTTP, which are more appropriate for Internet use or on the company's extranet rather than their network.

Q8 This question was poorly answered by a number of candidates who either described communication logs or who described the contents of a problem log. Those who directly answered the question, generally gained both marks.

Q9 Candidates often ignored the use of the extranet by customers and described extranet services and advantages in general, often relating these to staff and suppliers. Some candidates described using the Internet for the whole of question 9. Candidates need to be better prepared in terms of the understanding of the context of the case study.

Q9a Some candidates answered this question in terms of IEC staff or suggested that customers should be able to access data on the IEC network. Answer submitted by many candidates indicated that they did not understand the term 'services'

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Q9b Some candidates described the hardware and software needed by IEC to access the extranet rather than those needed by the customer. Where candidates identified a modem or router as required hardware, they should describe it making the connection to the Internet, rather than merely accessing it.

Q9c Candidates often evaluated the use of an extranet by IEC staff rather than the provision for customer and therefore gained few, if any, marks.

Q10 No marks were gained for any naming of proprietary software. Many candidates were able to identify FTP software for part (i) and browser software for part (iii) but very few candidates were able to identify any type of software for part (ii). Common answers for part (ii) were names of software packages or a repeat of the question, "web design software".

Q11 Candidates often described a file server rather than servers in general and were unable to identify that a server provides services / services requests. These candidates gained no marks for this question.

Q12 This question was generally well answered. Candidates who lost marks here did so because they described the advantages of web-based marketing rather than how it might be done.

Q13 This question was poorly answered.

Q13a A surprising number of candidates did not answer the question or had guessed at an answer. Many candidates gave an incomplete URL (e.g. www.google.com rather than <http://www.google.com>).

Q13b A number of candidates were able to describe the protocol being used and some were able to describe the URL being translated to an IP address. A number of candidates described the .co.uk as a domain name rather than a domain name extension.

Q14 A significant number of candidates failed to gain marks for this question because they describe data security rather than personal safety.

Q15 This question was generally well answered.

G048 Working to a brief

General Comments

There has been significant improvement of the administration of this qualification by Centres since this course was first introduced in January 2007. For the vast majority of students, marks awarded have been clearly identified on the appropriate front sheet. However, there is still a general lack of annotation of scripts to show where marks have been awarded and this hampers moderation somewhat.

Overall, candidate performance in response to the set briefs, was generally in line with previous sessions. However, there were a few instances of candidates completing work other than that set by the brief. Where a candidate fails to complete a brief set by the Examination Board, the marks available for the work are significantly reduced and, therefore, it is in both Candidate's and Centres' interest to ensure that candidates only complete those briefs set by the Exam Board.

Centres are reminded that there is no requirement for candidates to provide any printout of materials produced in direct response to the brief. This unit focuses on the planning and development of the product and any associated support materials, rather than on the final product.

Comments on Individual Assessment Objectives:

A

For this task, candidates are expected to review current working practice within their chosen area of focus. In some cases, the reviews of current working practice were in great detail and allowed candidates to clearly state the areas for consideration. However, there were also some cases where this report was extremely superficial and could easily have been improved.

Where a candidate fails to complete a brief set by the board, no marks are available for this task.

Centre assessment of this task was generally accurate.

Bi

Candidates must use suitably complex planning techniques. To be awarded marks within MB3, candidates must use two such techniques. If a candidate uses one only, we would usually expect to see marks in MB2 awarded. However, if the candidate uses the technique, but with little to no accuracy, a mark in MB1 was considered more appropriate.

Centres are reminded that planning must be completed at the start of the project. Where there is any evidence that candidates have completed their planning documents at the end of the process, all relevant marks will be removed.

Bii

MB3 and MB2 for this task are differentiated by detail. For MB3, candidates need to present a plan which works with detailed tasks, rather than allocating huge periods of time to one major task.

The usual error here was for candidates to work with major tasks – such as “produce website” and then to allocate a large period of time to the task. Candidates need to show the sub tasks which make up this major task and allocate quite small chunks of time accordingly.

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Centre assessment in this area has been a concern in the past and, to a lesser extent, continues to be so. As previously mentioned, candidates who produce a wide range of detailed tasks that cover all aspects of the project should be awarded full or nearly full, marks. However, if the candidate has provided a handful of tasks, however accurately applied, then marks from MB1 are more appropriate.

Ci

Candidates need to show that they have developed their skills. This may be shown in the diary, with an explicit column or entry aimed at this one issue, or by a self analysis task completed before and after the project. This may be considered the first part of the diary task.

In the best cases, candidates commented directly on this aspect of their development and identified whether this was an extension to what they already knew or a wholly new skill.

In order to achieve MB3, candidates need to show initiative in their development. This could be that candidates show that they have used other sources of information and learning which they have identified, or that they have used resources which they themselves identified as being of use.

Centres continue to award marks at MB3, despite very little initiative being evident. Candidates must think for themselves and come up with their own solution to their skills gap if they are to be awarded marks from this range.

Cii

There were some very good examples of candidates using a good range of skills during the life of the project and these were usually awarded accordingly. However, the majority of candidates failed to evidence this task well. For candidates to be awarded marks in MB3, there must be clear evidence of the use of a range of skills, with a clear indication that the candidate is fully aware that their work affects the both other team members, if they exist, and the end user.

In many cases, Centres awarded marks for this task which did not reflect the quality of work submitted.

Ciii

As with task Cii, a few candidates were able to show that they were able to deal with both day-to-day and more long term complex issues. However, in many cases, the diary entries were extremely vague and would benefit from more explicit discussion of these issues.

Unfortunately, this is an area that continues to need addressing by many Centres. This task carries a lot of marks and, where Centres over award, there is a strong possibility for moderation to identify the need for scaling. The differentiation between the Mark Bands is clear and well explained.

D

As with previous sessions, there was still a tendency for Centres to award production of the main task as production of supporting materials. Supporting materials support the task and are not the subject of the task.

Similarly, many candidates have been awarded marks above MB1, despite producing no evidence that they have developed or extended their ICT skills. This development may be evidenced via the diary or a separate report.

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E, F and G

These three reports required candidates to review their practice and make suggestions how their future performance may be enhanced. Basically, candidates are showing here that they have learnt about the different aspects of managing a task and could apply the elsewhere. To be awarded marks above MB1, these reports need to be well written and in some depth.

The best examples of work were those where each report was produced separately. Most candidates are now following this pattern and marks in this area have improved accordingly. To be awarded marks from MB3 for reports E and F, there must be a clear list of positive and negative comments about each theme. These must be supported by clear discussion of how the negative aspects of the work would be addressed were the task to be undertaken again.

In some cases, there was a degree of repetition between report E and F. The focus of Report E is on the quality of the planning, whilst the focus of report F is on the implementation. Implementation should be seen as a separate issue to planning. Candidates who discuss timing and planning issues as part of their discussion of implementation may expect to lose marks.

The final report concentrates on the overall quality of the work completed. This must be based on the requirements as laid out by the brief and, if one exists, the customer. Where candidates had produced separate report for this task, this report was generally well marked.

Grade Thresholds

Applied GCE (H115/H315/H515/H715)

January 2008 Examination Series

Coursework Unit Threshold Marks

| Unit | | Maximum Mark | A | B | C | D | E | U |
|-------------|-----|--------------|----|----|----|----|----|---|
| G040 | Raw | 50 | 45 | 40 | 35 | 30 | 25 | 0 |
| | UMS | 100 | 80 | 70 | 60 | 50 | 40 | 0 |
| G042 | Raw | 50 | 44 | 39 | 34 | 29 | 25 | 0 |
| | UMS | 100 | 80 | 70 | 60 | 50 | 40 | 0 |
| G043 | Raw | 50 | 44 | 39 | 34 | 29 | 24 | 0 |
| | UMS | 100 | 80 | 70 | 60 | 50 | 40 | 0 |
| G044 | Raw | 50 | 43 | 38 | 33 | 28 | 24 | 0 |
| | UMS | 100 | 80 | 70 | 60 | 50 | 40 | 0 |
| G045 | Raw | 50 | 43 | 38 | 33 | 28 | 24 | 0 |
| | UMS | 100 | 80 | 70 | 60 | 50 | 40 | 0 |
| G046 | Raw | 50 | 43 | 38 | 33 | 28 | 24 | 0 |
| | UMS | 100 | 80 | 70 | 60 | 50 | 40 | 0 |
| G047 | Raw | 50 | 45 | 40 | 35 | 30 | 25 | 0 |
| | UMS | 100 | 80 | 70 | 60 | 50 | 40 | 0 |
| G048 | Raw | 100 | 83 | 73 | 63 | 53 | 44 | 0 |
| | UMS | 100 | 80 | 70 | 60 | 50 | 40 | 0 |
| G049 | Raw | 50 | 45 | 40 | 35 | 30 | 25 | 0 |
| | UMS | 100 | 80 | 70 | 60 | 50 | 40 | 0 |
| G050 | Raw | 50 | 45 | 40 | 35 | 30 | 25 | 0 |
| | UMS | 100 | 80 | 70 | 60 | 50 | 40 | 0 |
| G051 | Raw | 50 | 45 | 40 | 35 | 30 | 25 | 0 |
| | UMS | 100 | 80 | 70 | 60 | 50 | 40 | 0 |
| G052 | Raw | 50 | 45 | 40 | 35 | 30 | 25 | 0 |
| | UMS | 100 | 80 | 70 | 60 | 50 | 40 | 0 |
| G053 | Raw | 50 | 45 | 40 | 35 | 30 | 25 | 0 |
| | UMS | 100 | 80 | 70 | 60 | 50 | 40 | 0 |
| G056 | Raw | 50 | 45 | 40 | 35 | 30 | 25 | 0 |
| | UMS | 100 | 80 | 70 | 60 | 50 | 40 | 0 |
| G057 | Raw | 50 | 45 | 40 | 35 | 30 | 25 | 0 |
| | UMS | 100 | 80 | 70 | 60 | 50 | 40 | 0 |
| G058 | Raw | 50 | 45 | 40 | 35 | 30 | 25 | 0 |
| | UMS | 100 | 80 | 70 | 60 | 50 | 40 | 0 |
| G059 | Raw | 50 | 45 | 40 | 35 | 30 | 25 | 0 |
| | UMS | 100 | 80 | 70 | 60 | 50 | 40 | 0 |

Examined Unit Threshold Marks

| Unit | | Maximum Mark | A | B | C | D | E | U |
|------|-----|--------------|----|----|----|----|----|---|
| G041 | Raw | 100 | 62 | 55 | 48 | 41 | 35 | 0 |
| | UMS | 100 | 80 | 70 | 60 | 50 | 40 | 0 |
| G054 | Raw | 100 | 64 | 55 | 47 | 39 | 31 | |
| | UMS | 100 | 80 | 70 | 60 | 50 | 40 | 0 |
| G055 | Raw | 100 | 71 | 63 | 55 | 47 | 39 | |
| | UMS | 100 | 80 | 70 | 60 | 50 | 40 | 0 |

Specification Aggregation Results

Uniform marks correspond to overall grades as follows.
Advanced Subsidiary GCE (H115):

| Overall Grade | A | B | C | D | E |
|---------------|-----|-----|-----|-----|-----|
| UMS (max 300) | 240 | 210 | 180 | 150 | 120 |

Advanced Subsidiary GCE (Double Award) (H315):

| Overall Grade | AA | AB | BB | BC | CC | CD | DD | DE | EE |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| UMS (max 600) | 480 | 450 | 420 | 390 | 360 | 330 | 300 | 270 | 240 |

Advanced GCE (H515):

| Overall Grade | A | B | C | D | E |
|---------------|-----|-----|-----|-----|-----|
| UMS (max 300) | 480 | 420 | 360 | 300 | 240 |

Advanced GCE (Double Award) (H715):

| Overall Grade | AA | AB | BB | BC | CC | CD | DD | DE | EE |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| UMS (max 600) | 960 | 900 | 840 | 780 | 720 | 660 | 600 | 540 | 480 |

Cumulative Percentage in Grade

Advanced Subsidiary GCE (H115):

| A | B | C | D | E | U |
|--|----------|----------|----------|----------|----------|
| 1.0 | 13.1 | 36.4 | 62.9 | 89.3 | 100.0 |
| There were 309 candidates aggregating in Jan 2008. | | | | | |

Advanced Subsidiary GCE (Double Award) (H315):

| AA | AB | BB | BC | CC | CD | DD | DE | EE | U |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.9 | 35.3 | 70.6 | 88.2 | 100.0 |
| There were 18 candidates aggregating in Jan 2008. | | | | | | | | | |

Advanced GCE (H515):

| A | B | C | D | E | U |
|---|----------|----------|----------|----------|----------|
| 8.2 | 28.6 | 49.0 | 63.3 | 93.9 | 100.0 |
| There were 54 candidates aggregating in Jan 2008. | | | | | |

Advanced GCE (Double Award) (H715):

| AA | AB | BB | BC | CC | CD | DD | DE | EE | U |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|
| 14.3 | 14.3 | 14.3 | 14.3 | 28.6 | 42.9 | 42.9 | 71.4 | 100.0 | 100.0 |
| There were 7 candidates aggregating in Jan 2008. | | | | | | | | | |

For a description of how UMS marks are calculated see:

http://www.ocr.org.uk/learners/ums_results.html

Statistics are correct at the time of publication.

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