

STATEMENT OF GROUNDS FOR JUDICIAL REVIEW

A. Introduction – An Incomplete Assessment

1. With the assistance of Business Link Suffolk, Advance Software Limited (“the Company”) submitted a “SMART” Feasibility Study funding application (European Commission approved State Aid) to the former Department Of Trade And Industry Small Business Service (DTI/SBS) in December 2002. Their ref: SEC/117/304.
2. In January 2003, DTI/SBS assessor Michael Carr visited my flat in Docklands, London. A meeting between myself & Mr Carr took place (approx. 1 hour). There were no others present.
3. Following a short discussion and demonstration of our early software prototype, Mr Carr advised that we should withdraw our funding application. He said that this was because we already had a “fairly advanced prototype”. I was offered no other options. He did not test the prototype, ask if the prototype had been tested or ask me to characterise the level of maturity of the software. His view that the software was “fairly advanced” was therefore the assumption of a lay person unfamiliar with the complex nature of computer software research and development.
4. At the time of his visit, I had no knowledge of the grant programme characteristics beyond the recommendation from Business Link Suffolk that it was the best fit for our circumstances. My mother (at that time, the company's financial director) had worked with Business Link to prepare the application. I provided minimal input as necessary because I was immersed in complex technical work. I was in no position to challenge the assessor's advice because I did not have much of an understanding of his evaluation criteria or operating constraints. With hindsight, I would have been better prepared if I had studied the grant programme guidelines before the meeting. Instead, I assumed he was capable of effectively carrying out his duties without my interference so I remained focused on technical work.
5. During this meeting, the views of the DTI's technical advisers were not disclosed. I was therefore unable to discuss their concerns with the assessor. The technical advisers' reports are included in this bundle (p25-30). To paraphrase, they both expressed doubt that the project objectives could be met. A later Freedom Of Information Act request revealed this information. With hindsight, I should have pressed Mr Carr for this information, but at the time I assumed he could do his job without my interference.
6. **David** Evans letter on p37 states : (there are references in this summary grounds to both David & Roy Evans)

| |
|--|
| “The DTI/SBS did not have the capacity to appraise technical aspects of projects in house ...” |
|--|

7. The DTI assessor was therefore not properly qualified to consider the technical aspects of our application.

The consideration of a prototype is a technical aspect. However, without consulting with his technical advisers, the assessor formed an opinion that our prototype was “fairly advanced”. He advised that “because of this”, we should withdraw our grant application. Mr Carr made a decision outside his competence. His view was assumption driven (a guess) following a brief demonstration that aimed to gain his confidence (to impress him). His conclusion was incorrect, the prototype was nowhere near as sophisticated as he assumed it was. A competent technical expert would have advised that the only way of characterising a prototype is to test it. Had our prototype been tested, its significant limitations would have been clearly identified.

8. To the best of my knowledge, DTI technical advisers were never made aware of the existence of our early prototype which formed part of our application. Their reports (p25-30) give no indication that they had any knowledge of its existence. You cannot demonstrate technical capability from application documents alone. Such ability is best demonstrated by showing partial delivery of objectives in the form of an early prototype – those who can, do. Had the advisers been given the opportunity to examine the prototype that we submitted as part of our application, perhaps they would have been less dismissive of our ability to deliver.
9. A review of the **SMART “Guidelines For Officials”** describes how Mr Carr was supposed to process our application. It reveals that instead of advising us to withdraw our funding application, correct procedure was for the assessor to score the funding application using the funding programme's standard “**marking frame**” form. The guidelines clearly state that the marking frame was a “risk management tool”. Failure to complete = failure to de-risk.
10. The assessor's behaviour was contrary to correct project evaluation procedure because SMART Guidelines section 7.2.4. “Marking Frames” on page 135 states that the only circumstances under which the assessor was not required to complete the marking frame document was when he was “**convinced**” the project did not quality.

11. As the assessor's view (p23-24) was significantly different from his technical advisers opinions (p25-30), he cannot have been “**convinced**” that the project did not qualify. He should therefore have consulted with his advisers and scored the application by completed the Marking Frame following writing of the Case Minutes after the meeting.

12. I put it to the Court that this failure to complete a necessary form because of an incorrect conclusion reached by an improperly qualified civil servant who disregarded the input of his technical advisers was behaviour contrary to correct evaluation procedure. The purpose of working with technical advisers is to receive insight and technical advice in areas where you are not sufficiently experienced. To fail to reach a consensus opinion by discussing the outcome of the initial meeting with his advisers was unprofessional and damaging. Mr Carr conducted insufficient analysis and so failed to reach a meaningful conclusion.

13. After the meeting with Mr Carr, the three directors of the company discussed his advice and decided that it was not in our best interests to withdraw our funding application. This is because no subsequent constructive follow up or suggested redirection into some more appropriate funding programme was offered.

14. We therefore informed the DTI that we did not want to withdraw our application and asked them to complete their evaluation. We began an appeal against the DTI assessor’s decision to recommend withdrawal of our funding application.

B. The Marking Frame

15. I draw the Court's attention to the first entry of the Marking Frame form on page 1 marked “Innovation”.

15.1 In order to be awarded a high score, the proposal must be

| |
|---|
| technically new in world terms, involves T/T (technology transfer) from research. |
|---|

15.2 I put it to the Court that our 3D web browser prototype was technically new in world terms then as it is today (have *you* seen anyone using a 3D web browser yet ?) and so the application should have been awarded a high score in this section, not rejected !

15.3 Furthermore, the technology transfer from research that we needed to show in order to gain a high score **was** our early prototype, which we submitted as part of our application !!! We were excluded from support for doing the exact thing we needed to do in order to receive a high score !!!! The assessor was incompetent !!! The output of software research is an early prototype.

I invite the Court to have this important point independently confirmed by technical experts of your choosing.

C. The DTI Appeal

16.1 A clear appeal route was never presented, however a series of emails lead to the reply from Dr Stephen Kennett on bundle page 189. Note how Dr Kennett refers to the stage of having “a prototype” as being an exclusionary characteristic. The prototype he refers to was the output of our concept study, which was the prior research we needed to have done in order to achieve a high score in the first marking frame category. He rejects our appeal for doing exactly what was required !!! There is no such thing as “the prototype stage” in evolutionary (computer software) research and development. Prototyping is a process. A series of prototypes of increasing sophistication are produced. You produce your first one the day you start work. The DTI held an overly simplistic view of a complex process. Please see point 134 for further details.

16.2. When Dr. Kennett returned from holiday, instead of completing a competent reconsideration of our application in light of the information I presented, he suggested (page 33) that we reapply into SMART's successor “The Grant For Research And Development”. Lack of funding prevented a secondary application, so I pressed on with our appeal. On page 34, Stephen Kennett acknowledges our project has merit by referring to “the product you wish to develop”. This shows he understood our prototype was not as advanced as originally assumed. He took no further action.

17.1 Our appeal was passed to DTI “SMART” fund manager, Roy Evans. My first phone call to him began with him telling me that we would "get no money" before I was offered any opportunity to discuss the case with him. This is acting prejudicially. I cannot provide supporting evidence for this phone call.

17.2. Roy Evans was never willing to do anything constructive or helpful. I was only able to extract minimal information from him via use of the Freedom of Information Act and emails to Ministers. He took as long as possible to provide minimal information.

17.3. Roy Evans rejected the input of his technical advisers and declined our application without ever completing a competent reconsideration. He made a decision to reject our application on 19th August 2004. (p43). I refer the Court back to point 6 above.

18. As far as I am able to determine, the DTI never discussed the outcome of my meeting with Mr Carr with their technical advisers. Roy Evans simply declined our funding application. It was never scored against the marking frame.

19. Please see Roy Evans letter of the 15th February 2005 on page 47.

19.1. Firstly, please ignore all instances of "As you know" which Roy Evans prefixes sentences with to imply (incorrectly) that I agree with him. He also tries to tell me I agreed with his case officer, when this is false. By incorrectly advising that we withdraw our application, the case officer acted contrary to SMART project evaluation procedure and gave advice against our best interests. Placed in an impossible no-win situation, I tentatively accepted his advice, pending discussion with the other directors of the company because no alternative routes forward was offered. This is not the same as reaching agreement. We had three directors, only one was present at the meeting. A final decision of how we wished to proceed required that we discuss the outcome of the meeting. Perhaps I should have queried Mr Carr's advice more at the time, but I (incorrectly) assumed he knew what he was doing and that he was acting in our best interests. He gave misleading advice contrary to our best interests that has been very damaging.

19.2. Paragraph 2 : Roy Evans acknowledges "no marking frame was ever completed for your application".

19.3. Paragraph 3 : Roy Evans dismisses the input of his technical advisers :

"the external advice did not have any bearing on the result of your application"

I once again draw the Court's attention to **David** Evans letter on p37.

If Roy Evans had a lack of confidence in his technical advisers' input, correct procedure would have been to seek input from alternative advisers, not to dismiss the technical advice altogether. He failed to reconcile the differing viewpoints of his assessor and the technical advisers by dismissing the partial conclusion reached by the technical advisers (who never saw our prototype). He failed to undertake sufficient analysis of the problem. This is ostrich behaviour. Stick your head in the sand to avoid being able to see a problem and hope it goes away, or as they say in the civil service "kick it into the long grass". There was no competent reconsideration of our application.

20. Contrary to Roy Evans attempts to force his opinion upon me, I know that when considering any complex technical proposal, the input of experts in the field should be properly considered and where possible, their advice should be followed. I also know that complex, ambitious, potentially world class projects such as our new 3D Internet web browser should be supported by the DTI. They had previously supported a similar project from the BBC, details included on p55.

21. No amount of 'as you know' nonsense will change the fact that Roy Evans rejected the input of his technical advisers in what I can only conclude was an attempt to deliberately obscure the contradictory positions taken by his confused case officer, who thought our project was "fairly advanced" (and so in his view did not qualify for support) and the position of the technical advisers who expressed doubt that we would be able to achieve the project objectives. Roy Evans tried (fairly successfully, it would seem) to cover up the mistake.

22 I remind the Court of **David** Evans letter on p37.

"The DTI/SBS did not have the capacity to appraise technical aspects of projects in house ..."

23. I put it to the Court that Roy Evans should not have dismissed his technical advisers input. Correct procedure was to complete the marking frame because there was uncertainty as to whether or not our project qualified. In my view, the DTI should have informed their technical advisers that their assessor had witnessed a demonstration of what seemed to be a "fairly advanced" prototype, and so perhaps some of their concerns might have been laid to rest by examining it. The DTI could, and in my opinion should have invited the technical advisers to examine the prototype and to reconsider their opinion. This would have been a route to reaching a consensus opinion, which is how informed decisions are normally reached between technical and non technical collaborators.

24. Instead, Roy Evans dismissed this suggestion by saying it would be “impractical and prohibitively expensive for technical experts to visit every applicant”. Perhaps so, but not every applicant submits a prototype. An on site visit was never required – the technical advisers could have evaluated the software on their computers in their offices (as many others have subsequently done). If meeting directly with the technical advisers was required, I could have gone to them. Refusing to complete a proper reconsideration (reach consensus) because everyone else has to make do with their insufficient, haphazard shambles of an evaluation process is not fair, reasonable, accurate or professional.

25. Our appeal was rejected without a competent reconsideration ever being undertaken. I fail to see how it was unreasonable of us to ask the DTI to complete their evaluation by discussing the status of our prototype with their technical advisers and scoring our project against the marking frame document.

26. I put it to the Court that contrary to Roy Evans opinion that it is too expensive to properly consider funding applications, it is in fact too expensive to ***not*** properly consider funding applications. This is because incomplete, inaccurate analysis leads to poor targeting of limited financial resources at a somewhat random distribution of projects.

27. It appears that funding was targeted at those who demonstrated no ability (had no prototype) and who simply described a desire to undertake some research and development. Anyone can talk. Putting together impressive sounding application documents is not so hard. Saying and doing are two very different things. Funding wannabes does not seem to me to be the best use of limited public research and development funding. Refusing to offer assistance to those who demonstrate clear ability is nothing short of insanity and a perversion of the evaluation process.

28. Numerous appeals to various DTI Ministers and senior civil servants regarding the above failed to overturn Roy Evans decision. They were simply not interested in addressing my concerns.

29. No marking frame document was ever completed for our project, nor did any DTI appointed technical adviser ever test or consider our prototype. There was no secondary follow meeting to establish a consensus position.

30. I ask the Court to consider whether the DTI acted maladministratively by failing to undertake a competent reconsideration of our application as described in Section 7.4 of the SMART Guidelines For Officials document on p136 of this bundle. Further discussion on p168/ annex 6 and in the pre-action protocol section p185 onwards.

D - The Parliamentary Ombudsman Initial Investigation

31. As we were unable to resolve the dispute with the DTI., I submitted a complaint to the Parliamentary Ombudsman with the assistance of Rt. Hon. John Gummer, M.P. Parliamentary Ombudsman reference: PA-6994

32. Following an exploratory study, Parliamentary Ombudsman case officer Karen Quayle produced a report.

33. The report did not acknowledge that the DTI had acted maladministratively, so I notified the Parliamentary Ombudsman that further consideration was required. A second Ombudsman case officer (Julia Whysall) was allocated.

E - The Parliamentary Ombudsman's Tier 1 Report

The following is my response to the Julia Whysall's report of 3rd August 2006. It should be read/cross-referenced in combination with that report which begins on page 169 this evidence bundle.

34. Julia Whysall “completed her enquiries” without ever speaking or corresponding directly with me in any way. She never met with me, viewed, tested or had our prototype tested, yet formed an opinion of the likelihood of whether we would be successful, both in our technical work and grant application (had the application been scored as it should have been).

35. Julia Whysall submitted a report that contained many false assumptions and illogical conclusions. When one examines her report, it is clear that she did not comprehend the nature of the DTI failure.

36. Points 1-4 are correct.

37. Point 5 – please see summary grounds point 13 above.

36. Point 6 – the case has been discussed with Business Link Suffolk on several occasions. Their opinion is on p31.

37. Point 7-20 – correct.

38. Paragraph at end of second page (following point 20)

“Proposals must lie within the interests of the DTI” - I don't think this was a requirement, but I'm not 100% certain. In any case, the DTI should have had an interest in next generation Internet technology.

The rest of the paragraph is accurate, though it should be noted that discretionary powers must be used reasonably.

39. “Point 1: That neither Mr Carr nor any other DTI official or consultant / adviser interacted with the software and therefore no technical expert assessed the project”

39.1 The point itself is correct.

39.2 Ms Whysall does not acknowledge that the advice received was not disclosed at the meeting, so I was given no opportunity to comment on it. What is the point in receiving this advice if it is not discussed ? Why did it take a Freedom Of Information Act request to access it – it should have been freely offered ! Why keep it secret ?

39.3 I address the Patent Office assessment in section F as it is incorrect.

39.4 Ms Whysall concluded that the technical advisers were satisfied they had sufficient information to make an adequate assessment.

I see no evidence they were ever made aware of the existence of our prototype. Neither explicitly indicated they knew it existed and stated explicitly that they did not want to inspect it. Indeed one of them asked to be kept informed of process if the project proceeded. I have been denied identity and contact information so cannot discuss progress with this individual. Technical experts know that prototypes must be tested in order to reach any meaningful conclusion regarding their characteristics. Both experts did reach approximately the same conclusion based on insufficient information. Ms Whysall's conclusion that they were satisfied they had sufficient information is inaccurate speculation. They simply did the best they could with what they had.

39.5 The discretionary decision (by Mr Carr) was not reached in accordance with correct procedure ! He should have completed the marking frame because his view (that our prototype was “fairly advanced”) differed significantly from his technical advisers doubt over whether the project was technically feasible. Where there is significant doubt as to whether technical objectives can be met, further study is required. This is called a “feasibility study”.

40. Point 2 : “That Mr Carr was not properly qualified to carry out the full assessment”

Please see **David** Evans letter – p37.

| |
|--|
| “The DTI/SBS did not have the capacity to appraise technical aspects of projects in house ...” |
|--|

I do dispute the way the assessment was made. Contrary to Ms Whysall's view, I believe I have provided evidence of maladministration. No competent reconsideration was made, contrary to SMART “review and complaints procedure”. Please see my feedback at the end of the Parliamentary Ombudsman's report at the end of page 168 of this judicial review bundle for further details. This failure was considered further in the pre-action period, details p185,189,p193/8.

As Ms. Whysall states at the top of page 171 of this JR bundle, “it is only if it can be shown that the DTI did not follow correct procedure and they were maladministrative in the way they operated the scheme that the Ombudsman can intervene”

If our prototype was as advanced as the DTI + Ombudsman seem to think it is, why do we not have a product at market in use by the general public ?

The answer is because it was not as sophisticated as they all seem to think it was. Even now, in September 2009, functionality is very limited. The software only runs on Windows, a number of technical flaws (“bugs”) remain that must be fixed before the software is ready for use by the general public, the level of functionality is severely constrained. The software only operates well on fast (=expensive) computers because it has not yet been tuned to run on slower equipment (“optimised”).

41. Ms Whysall continues ... “Even if Mr Carr had not recommended this course of action (withdrawal), the application would probably not have been approved on other criteria such as technical innovation, commercial viability market need”

“probably not” is reaching an uninformed conclusion of a project she had not seen or considered. She has a dismissive tone throughout which is not helpful. She reaches an uninformed conclusion. The criteria she raises are points from the marking frame.

Let's take a quick look at the categories she highlights :

41.1. **Technical Innovation** – Have you seen anyone using a 3D web browser ?

If not, wouldn't such a thing be new (innovative) ?

If you are going to make a judgment as to the level of technical innovation you need to look at what we are doing !

No amount of fancy words on one side or other of the argument are going to enable a meaningful answer to this question to be reached. You need to look at the screen, see what we're doing and consider : is this new ?

41.2. **Commercial Viability** – There are 1 billion Internet users worldwide. If we generate a small revenue stream directly or indirectly from a small percentage of this audience, we're viable and profitable.

For example, In return for setting Google as the default search engine on the Firefox browser, Google pays Mozilla (the Firefox browser IP holder) a substantial sum – in 2006 the total amounted to 57 million US dollars.

I'm not suggesting we'll raise anywhere near this sum in the near future, but we should be able to generate sufficient revenue from search and advertising for this project to be commercially viable. This will allow us to distribute our browser and tools for free, enabling us to reach the maximum audience (thereby increasing the value of the association). Please see Metcalfe's Law for any explanation of how the value in a network grows at the network increases in size.

41.3 **Market Need** – Does anyone need a 3D web browser ? Right now, no. There are no 3D websites, this is emerging technology. However, as 3D websites become popular, you will need a 3D browser to be able to visit them. To gain an understanding of the likelihood that this will take place, please examine Linden Labs product “Second Life”, which is not a 3D web browser, but it is close. This is enabling technology. It's a little chicken and egg.

42. “Mr Carr had no input into the decision and advice provided by the external advisers”

Correct. She says this like it was a good thing. Was it so hard for him to contact them following the meeting to discuss the outcome ? I'm sorry, not all projects are easy to evaluate. That's no excuse for failing to properly consider the application.

43. “it seems to me that even if Mr Carr had not been involved in your case your application would probably have been unsuccessful”

Ms Whysall has never seen what we are doing and has never tested our prototype, so is therefore in no position, even as a lay person to form any kind of decision as to whether or not our application would have been successful had correct procedure been followed ! Her job was to consider whether correct procedure had been followed, not to speculate or second guess how our project might have been scored had Mr Carr followed correct process, which he didn't, which she failed to identify. Her negative wild speculation is irrelevant, inappropriate and unhelpful.

44. Point 3 is correct, however it should be noted that the original application was prepared largely by our financial director at the time (my mother) and Business Link Suffolk. Both of whom, in my opinion did a great job of preparing the application documents.

45. Point 4 : “The Ombudsman would need to see clear evidence of maladministration” .

They did - the marking frame was not completed contrary to the approved scheme requirements, neither during the initial evaluation nor during the reconsideration (such that it was).

46. Point 4a : Complaint handling – contrary to Ms Whysall's view, the DTI did not handle the complaint constructively. There was no competent reconsideration, if there was the marking frame would have been completed.

47. Point 4g. He's retired now, so that problem fixed itself.

48. Point 4h : “The Ombudsman has not upheld your complain and therefore no recommendation of redress is appropriate”

I therefore ask the Court to consider the content of this Judicial Review application and to overrule if you consider it appropriate to do so.

49. Point 5: Ms Whysall considers the meeting between myself and Mr Carr and the nature of the application withdrawal.

49.1 I have already addressed this in the introductory section. As explained above, I was not informed of the existence of the technical adviser reports until after Mr Carr's visit, so was given no opportunity to query / discuss.

49.2 As far as I can determine, there is no substantial difference in the accounts of the meeting. Mr Carr did suggest that we withdraw our application. I was offered no alternatives, so accepted his advice, assuming it was in our best interests. I expected constructive follow up with some alternative proposal. None was ever presented. The directors of the company discussed the situation and decided that withdrawing our application was not in our best interests. We therefore began an appeal. Review of the SMART guidelines indicates he should never have offered this advice. The application was submitted, it should have been scored because Mr Carr cannot have been *convinced* the application did not meet the criteria for support because the technical advisers opinion was very different from his own view. He should not have rejected their input.

49.3 “...withdraw the application rather than wait for it to be rejected ..”

The next correct stage in the process was not to wait, it was to score the application against the marking frame. This required further discussion (& consideration) to enable the assessor to reach a decision for each category in the form. We were unreasonably denied this opportunity.

49.4. “Had the application not been withdrawn, it would certainly have been rejected”

Again, further uninformed, unhelpful, negative, inaccurate speculation without sight or testing of the prototype. Which category or categories on the marking frame does Ms Whysall believe we would have scored badly in and why ? She does not say.

49.5. “as the application progressed it would probably not have been successful in any event”

How does she know this ? Further unhelpful, wild, inaccurate, negative speculation. Scoring the application using the marking frame form was the correct way of determining eligibility, not second guessing by someone who hasn't even seen what we are doing.

50. Point 6 : “I have concluded that no injustice arose from the application being withdrawn rather than rejected”

This conclusion is irrational nonsense. The application should neither have been withdrawn or rejected, it should have been scored and properly evaluated. She assumes the scoring of our application would have resulted in a rejection. This is baseless speculation outside the remit of the Parliamentary Ombudsman.

51 Points 7 & 8 : Ms Whysall fails to acknowledge that the DTI acted maladministratively, then claims that the project has no commercial merit without justifying that position. I have addressed this above, so won't repeat.

52. Point 9 : I agree that the DTI was presented with sufficient information to determine whether our project met the eligibility criteria. Had they not rejected their technical advisers input, they would have been more likely to have reached a sensible conclusion.

“evidence suggests that the application would probably have been rejected on other grounds”

| |
|---|
| She fails to comprehend the contradiction. Two wrongs do not make a right !!! |
|---|

53. Point 10 : I operated Advance Software from a Ministry of Defence (Defence Diversification Agency (“DDA”)) run business incubator day in day out for an extended period. The officer running the facility became familiar with the project, my capabilities and this dispute. He undertook his own analysis as part of his duties, which as far as I am aware was never considered by the DTI. Michael Carr met me for an hour or so. To reject the DDA's input is as poor judgement as the rejection of the technical advisers input. It further demonstrates DTI arrogance and the refusal to consider a well reasoned appeal. They were never wrong.

54. Point 11: The DTI's definition of an "exceptional project" is flawed. Their definition defines an "expensive project", not an exceptional one. Just because something is expensive does not mean it is exceptional. Conversely, just because a project is delivered efficiently (at low cost) does not mean it is not exceptional.
55. Point 12 : "The scheme you applied for did not expect to see a prototype".
56. Not everyone would have a prototype available for inspection when they submit Feasibility Study applications. We did because we had undertaken prior exploratory research (a "Concept Study") and the output of that study in our case was an early prototype.
57. It is interesting to note that, in order to be considered for a Development Award (the next phase in the scheme after feasibility), you must have first undertaken a successful feasibility study (whether supported under the scheme or not), and so therefore, at the point of consideration for a Development Award you must have already created a fairly robust prototype because you cannot demonstrate feasibility without one !
58. If the assessment was that we had already demonstrated feasibility (which I dispute – this work was underway but was a long way from being complete), correct procedure was to consider our application for a Development Award, not to reject / withdraw the application !
59. If Development Award applicants were not expected to have prototypes available for inspection, then this is further evidence of DTI incompetence, mismanagement and oversimplification of the evaluation of technical projects.
60. How were we supposed to achieve a high score in the first marking frame category (technology transfer from research) if we were unable to show the results of that research (early prototype) that we were transferring into a commercial project ?
61. It is common to undertake an exploratory study prior to seeking external funding because it is necessary for the applicant to think through their idea (concept) sufficiently to determine whether the concept is sufficiently sound to be worthy of further study.
62. Mr Carr's assessment that he believed we had a "fairly advanced prototype" is evidence that he thought we had a sound concept, nothing more. Our concept study took the form of an interactive 3D computer graphics application prototype because that is the medium that I work with..
63. Point 13 : The Ombudsman failed to address my concerns before completing her work. I have provided feedback at every stage. I cannot help it if this feedback is ignored or not understood. I am doing my best to explain, but you are not research and development engineers and I am not a lawyer. Questions welcome on anything that is not clear.
64. Point 14 : Julia Whysall should not have attempted to speculatively assess the project without sight of the prototype and the assistance of a technical competent adviser. Her uninformed negative, inaccurate, wildly speculative conclusions are irrational nonsense.
65. Point 15: There was no second meeting, no follow up discussion with the technical advisers, no scoring of the application. What review procedure ? Roy Evans simply saying "You'll get no money" is not a review procedure.
66. Point 16: I agree there has been no lack of clarity in explaining that the DTI rejected our application due to their assumption that the prototype was "fairly advanced". It was not tested, so this was a speculative view not an accurate conclusion. There has been a lack of clarity in explaining why the technical advisers input was disregarded.
- Again Ms Whysall fails to comprehend the contradiction between the DTI assessors speculation as to the level of maturity of our prototype and the technical advisers view of the difficulty of successfully meeting the project objectives.
67. Point 17 : Not present.
68. Point 18: Ms Whysall fails to comprehend that the evaluation was flawed and that by failing to complete the marking frame, the DTI acted maladministratively. I am not satisfied the DTI gave my views adequate consideration.
69. Point 19: We applied for funding to assist with a technical "Feasibility Study". As we have had to proceed without a fair and reasonable state aid contribution, this work has taken considerably longer than it would have otherwise done had the DTI assisted. The effect of this refusal to assist is documented in the damages section.

70. Point 20 : “I have seen no evidence the DTI did not follow correct guidelines”

Again, Ms Whysall fails to comprehend the nature of the failure. The marking frame was not completed, contrary to procedure, contradictory conclusions were not reconciled, there was no attempt to reach consensus, technical advice & Ministry of Defence input was rejected. The DTI assessor & technical advisers reached very different incompatible conclusions, therefore further study was required to resolve the contradiction.

Julia Whysall : “I do not consider there is **evidence** of maladministration in the way the decision was reached”

Bundle page 21 : **The marking frame** – it was never completed, either during the initial evaluation or the “reconsideration”, contrary to approved scheme requirements.

Bundle page 47 : **Roy Evans rejects technical advisers input.**

Bundle page 37 : David Evans states :

“The DTI/SBS did not have the capacity to appraise technical aspects of projects in house ...”

No competent reconsideration took place, contrary to review & complaints procedure.

I ask the Court to consider whether an abuse of discretionary powers has occurred. Roy Evans did not have the expertise to overrule his technical advisers. He failed to appoint alternative technical advisers as he should have done if he lacked confidence in the input of his initial advisers. You can't just dismiss technical advice because it doesn't fit into some nice little fairy tale land picture you've painted for yourself ! The evaluation went badly wrong due to a lack of analysis and an insufficient consideration. Roy Evans wasn't big enough or smart enough to acknowledge, understand or try to address the shortcomings of the initial assessment. The same holds true for the numerous Ministers and senior civil servants above him who I have tried to explain this failure to on many occasions. They simply don't want to hear it. The honest truth is that it is difficult to evaluate technical projects.

Oversimplification and rejection of valid arguments because you have no mood to consider an application or appeal properly is poor decision making contrary to the objectives of this grant programme.

F - The Patent Office Assessment

71. Addressing Ms Whysall's final point, I do not believe the Patent Office's consideration was maladministrative.

There conclusion, however was incorrect.

72. The Patent Office assessment of “low innovation” was made by running a patent search for similar technologies. When you look up “3D Internet browser”, it gets a lot of patent hits because many organisations are working in this area. This does not mean the software is not innovative. You cannot conclude level of innovation from a basic patent search. The level of consideration is too narrow to produce meaningful results.

73. At a later date, I demonstrated our prototype to Tony Davies of the Patent Office at a business event. He indicated that the software did indeed appear to be innovative. He advised he is not in a position to revise the earlier finding without an order to re-evaluate (which the DTI never requested, as far as I know).

74. Another example is this. Say I design a car engine that is incredibly fuel efficient. Would this be a genuine innovation ? Of course it would. However, a patent search for fuel efficient engines will turn up many of entries because there is plenty of interest in this area. The Patent Office conclusion would be that this would be a “low innovation” proposal, which is nonsense.

75. The Patent Office conclusion is wrong.

Lots of patent matches = significant interest in this area of study, not necessarily low innovation.

G – The Parliamentary Ombudsman's Final Decision (Tier 2)

76. I complained about the flaws and irrational, nonsensical conclusion of Julia Whysall report directly to Ann Abraham, the Parliamentary Ombudsman, who refused to consider the matter further.

77. Ann Abraham sided with Julia Whysall who says in effect, that it does not matter what the DTI have done because she does not think I can do my job.

78. The Ombudsman incorrectly concluded that the DTI followed their own internal procedures even though the clearly identified, *necessary* marking frame form was never completed and improperly qualified civil servants rejected technical advice ! This is not a rational conclusion.

79. I received the following legal advice :

“The Ombudsman's function is to review the DTI's decision making process. Her powers are very limited. She is only concerned with whether the correct processes and procedures have been followed and as such, her jurisdiction is limited. **She cannot substitute her own views about whether or not a grant should have been awarded**”

- James Packer, Joint HOD/Director/Solicitor (Public Law) at Duncan Lewis & Co.

80. I put it to the Court that making technical decisions is outside the competence and remit of the Parliamentary Ombudsman. “She cannot substitute her own views about whether or not a grant should have been awarded” - yet Julia Whysall did precisely this : “Had the application not been withdrawn, it would certainly have been rejected”.

81. I also put it to the Court that the entire point of a Feasibility Study award is to assist with determining whether a technical proposal is achievable. By rejecting our complaint, the Ombudsman adversely affects this study, making it more likely that her prophesy of our failure will be realised. This is not her function.

82. Determination of technical feasibility is the role of a research and development engineer or engineering team. It is not the role of the improperly qualified Parliamentary Ombudsman.

83. Uninformed speculation as to whether the project is technically feasible by improperly qualified lay persons is not particularly helpful, however it does illustrate that there remained (at the time of consideration of this complaint) uncertainty as to whether the technical objectives could be achieved.

84. Where there is technical uncertainty, best practice is to undertake a Feasibility Study.

85. We applied for financial assistance (State Aid) to help us undertake precisely this study and have been denied this assistance because of a government failure to properly consider our application.

86. I put it to the Court that we should not continue to be penalised because the DTI and Parliamentary Ombudsman were unable and/or unwilling to complete their analysis.

87. I understand that the Administrative Court has the power to set aside a decision as being one that is not rationally open to a decision maker, even if the correct procedures have been followed.

It may well be that the Parliamentary Ombudsman and her staff have followed their own internal procedures “correctly“. The Ombudsman's conclusion is however both irrational and incorrect. She has failed to identify the contradictory conclusions reached by the DTI and their technical advisers and has considered each partial conclusion separately when this is not correct analytical thinking. I demonstrate technical competence online, in public on a daily basis. For the Ombudsman to state that “she does not believe I can achieve technical objectives”, when I clearly demonstrate the opposite is both beyond her remit and utter nonsense. To reject the administrative failings of the DTI when consideration of such failings is the remit and responsibilities of the Parliamentary Ombudsman process is incompetence and irrational behaviour.

88. Consideration of my technical capabilities is not the remit or competence of the Parliamentary Ombudsman.

Does the Court agree that she should have confined herself to a consideration of whether or not the DTI have acted maladministratively ?

H - Legal Points

89. The term “maladministration“ isn't defined under UK law, so the best I have been able to do is to present several incomplete definitions of the term.

90. Because of the lack of a formal definition, the Parliamentary Ombudsman must exercise discretion in determining where maladministration has or has not occurred.

91. There are however limits on discretionary powers - they must be used reasonably.

- This is known as Wednesbury reasonableness following the case that established the principle.

92. I ask the Court to consider whether you agree that the evidence and analysis I have presented amounts to “maladministration”.

93. In light of the Ombudsman's unreasonable refusal to acknowledge the DTI's mishandling of this application, I submitted a private court summons application to Westminster Magistrates Court against Ann Abraham accusing her of fraud. This was because in my view, she deliberately refused to acknowledge clear maladministration because she does not appreciate my direct challenge to her nonsensical ruling. It is the role of the Ombudsman to acknowledge maladministration where it has occurred, not to make non-nonsensical technical assumptions or to second guess how our application might have been scored.

94. Chief Magistrate Workman declined the summons request because he said that no criminal offence was disclosed.

95. I asked for his decision to be judicially reviewed, thereby asking the Court to consider whether the Parliamentary Ombudsman's refusal to acknowledge clear maladministration was a criminal offence (your ref: CO/421/2009).

96. The Divisional Court ruled that it was not and suggested that I found some other remedy.

97. The Divisional Court said the Parliamentary Ombudsman is not dishonestly causing me to suffer a financial loss.

98. I am advised that in order to establish the offence of fraud, a jury would have to be satisfied, beyond reasonable doubt that the Ombudsman acted in a dishonest manner intending to cause me to suffer a financial loss. I cannot present any additional evidence beyond that which has already been disclosed to the Court which would lead a jury to conclude that the Ombudsman is acting dishonestly or that she is deliberately intending to cause me a financial loss. Therefore, as it is the view of the Court that no criminal offence has been committed, so be it. I understand that the Parliamentary Ombudsman has no power to directly award a financial remedy even if she wanted to, so perhaps this alone means she cannot be guilty of the offence of Fraud.

99. I do not however consider the decision of the Parliamentary Ombudsman to be correct or rational. Her failure to acknowledge what is to my mind clear maladministration is financially damaging because it takes significant time and effort to appeal against her unjust ruling. Funding to which we might otherwise have received by now has still not materialised. The additional delay and complexity this causes prevents other work from being undertaken as the company remains severely under resourced.

100. I understand that the Administrative Court has the power to set aside a decision as being one that is not rationally open to a decision maker, even if the correct procedures have been followed. I therefore ask the Court to consider whether the decision of the Parliamentary Ombudsman is rational. Does it make sense ?

101. It is a basic principle of justice that where there is a wrong, there should be a remedy.

I - Timing

102. I apologise that this application is so late. Due to insufficient resources and an excessive workload I have been unable to devote the time required to complete this application until now.

103. I understand that the 3-month time limit is only extendible in limited circumstances because the Court takes the view that public bodies should be permitted a degree of certainty when carrying out their functions, particularly where budgetary issues are involved.

104. I ask the Court to consider whether that same courtesy can be extended to Advance Software Limited.

J - List Of Issues

105. As far as I am aware, SMART grants were awarded to all applications that met the eligibility criteria. No-one has provided a reasonable explanation of how or why our project failed to meet the eligibility criteria. The grant programme was not a competition.

106. My review of the funding programme guidelines appears to show that our application would have met the funding programme eligibility criteria had the application been properly processed.

Please see bundle page 110 : **SMART Guidelines For Officials - Section 3.10 - Software Projects**

Our project meets these requirements and did so when 'evaluated' in January 2003.

107. We had to demonstrate genuine technical novelty in order to qualify for "SMART" support.

Please see bundle page 122 : **SMART Guidelines For Officials - Section 5.2.1 - Innovation**

We presented the output of our concept study (our early prototype) in order to demonstrate genuine technical novelty. This was a requirement for software projects, however, we were excluded for doing exactly what was required of us to meet the programme requirements !

108. A grant that (in my opinion) we qualified for and that should have been awarded has still not been paid and the knock on effects have been significant.

109. The rules under which projects were supposed to be evaluated were clearly disregarded.

110. DTI technical advisers were never given an opportunity to inspect our prototype and so formed their view based on our application documents alone. They were not given the opportunity to make informed decisions because significant information was withheld from them. The lack of sight of the prototype, or even as far as I am aware knowledge that it even existed resulted in an unfairly pessimistic views of our proposal.

111. When you are undertaking R&D of new products, you have no revenue stream. The purpose of R&D grants is to assist companies who are making new products, as this period of corporate development is extremely challenging.

112. If those who are clearly undertaking research and development cannot access research and development funding, one wonders where the money goes

113. Due to the lack of thorough analysis, it appears the system was wide open to fraud. As the DTI demonstrated no grasp of what was required to properly analyse technical applications, it must have been relatively easy to bluff an application through if you understood how they operated.

114. The failure to properly consider applications resulted in at best a lottery weighed heavily in favour of those who understood the weaknesses in the system, and heavily against those who submitted genuine applications !!! At worst, the weaknesses in the system may have been used corruptly to approve applications based on undocumented non-application specific criteria. I have no proof of the latter and simply raise it as a concern. As far as I am aware the grant programme evaluation procedure remains largely unchanged in "SMART"'s successor, "The Grant For Research And Development".

115. Having an early prototype at the time of evaluation meant that the R&D process had begun. It did not mean that technical feasibility has been conclusively demonstrated. At the time of evaluation, we were a long way from having demonstrated technical feasibility on the key areas of technical risk (namely robust, seamless integration of web pages within the 3D environment). Many key components were either missing, incomplete or not functioning correctly.

116. I attempted to demonstrate the software in as good a light as possible to Mr Carr in order to gain his confidence. It appears this demonstration was overly successful in that he was left with the impression that the software was nearly complete, which was not the case.

117. The Administrative Court are legal experts. You are not, however research and development ("R&D" experts), nor computer programmers. I am concerned that you will not understand some of the above. Please ask if anything is unclear. Our software is available to Court appointed technical advisers on request. Demonstration on request.

K - Skeleton Argument

118. DTI technical advisers concluded that it would not be possible for us to build the product we proposed in our application documents. In their view, the project was not technically or commercially feasible.

119. DTI assessor Michael Carr concluded, following short demonstration designed to impress / gain his confidence that the project did not qualify for an R&D grant because in his view we had already demonstrated technical and commercial feasibility. He did not even consider the application for a "Development Award" as he should have done if he felt feasibility to already have been proven. He characterised what he had seen as a "product".

118 & 119 cannot both be true – they are contradictory positions !
An objective cannot be both impossible to achieve and simultaneously already accomplished !

Where there is a contradiction, further study is required. There should have been a reconsideration.

120 Our early prototype showed the potential of the concept, but it was extremely limited in capability. There were a large number of difficult technical obstacles still to overcome. We had not, at the point of Mr Carr's visit undertaken any significant testing. Therefore, at the point of Mr Carr's visit we had not proven whether it was feasible to realise the project or not. That he assumed otherwise was the result of an insufficiently rigorous analysis.

121 The project's stated aims and objectives were ambitious and difficult to meet, but not impossible.

122. The technical advisers never inspected our the prototype – their reports were based only on the application documents. They expressed excessive doubt over our ability to achieve project objectives because we were never given any opportunity to demonstrate ability to them. The DTI assessor, who failed to comprehend the complex nature of computer software research and development expressed excessive optimism that we had something 'fairly advanced' and outside the scope of the grant programme. In the middle lies the truth. We had an early prototype.

123. A feasibility study was required to refine the concept and to determine whether the many difficult technical obstacles that lay in the way of a robust solution could be overcome. We applied for funding to help with this study, but were unfairly denied this support.

124. We should have been given the opportunity to discuss concerns with the technical advisers and to work with them to identify areas of key risk which would be addressed during our feasibility study. No such process took place.

125. There appears to be a lack of comprehension of the evolutionary R&D process by the assessor who seemed to be of the view prototype = feasibility already proven, which is not necessarily the case. It depends how sophisticated and robust that prototype is. To measure the level of sophistication and robustness of a prototype you must test it. Our grant application was rejected due to a lack of comprehension of the status of the project .

126. The experts advisers, with some kind of a grasp of how technically difficult it was to realise the technical objectives of such an ambitious project naturally expressed doubt that a small start up company could achieve these objectives. This was especially the case because they were never given the opportunity to inspect our early prototype. Some of their concerns would have been laid to rest were they able to evaluate the prototype. Conversely, the non-technical civil servant assessor perceived our early prototype to be far more developed than it actually was because he falsely assumed it to be robust and include all manner of completed functionality. He did not test the prototype, so simply imagined how it might behave. You can only comprehend the behaviour of interactive things by interacting.

127. Flipping from one side to the other of a contradictory analysis does not resolve the contradiction. In order to resolve the contradiction, you must study the subject in more depth. There must be a reconsideration.

128. The DTI have stated that they did not test prototypes because they claim it is too expensive.

A number of individuals and organisations (around 100) have tested our software prototype (at various stages of development). This has cost nothing. The reason is because many are interested in new technology and so will test for free because the subject interests them. This group are called "beta testers" and includes hobbyists, professionals and academics. I appreciate that it is not possible to test most physical product prototypes at low cost in the same way as we do in the software industry because of duplication and delivery costs. However, to refuse to test software prototypes because it's too expensive to test physical prototypes does not make sense. Software R&D takes full advantage of low cost testing to enable rapid evolution of prototype iterations. The SMART scheme identified Software Projects as having particular characteristics and requirements. Low cost prototype testing via external beta testing forms part of the characteristics of software project research and development.

129. The Ombudsman's Argument For Not Acknowledging Maladministration

During the Pre-Action Protocol period, the Parliamentary Ombudsman stated :

"The Ombudsman is therefore entitled to conclude, in the initial investigation into your complaint and in the two subsequent reviews of this investigation, that the non-completion of the Marking Frame in respect of your application did not amount to maladministration"

130. During the initial consideration, the DTI assessor may have made a genuine mistake by considering our prototype to be evidence that the project status was outside the scope of the grant programme. This mistake lead him to the erroneous conclusion that it was not necessary to complete the marking frame. This would not have happened if he had comprehended rather than rejected the technical advice he had received.

131. On appeal, it should have become clear that the initial assessment was flawed and that the project may indeed have been within the scope of the grant programme. As this may have been the case, a competent reconsideration would have included follow up with the technical advisers and a scoring against the marking frame which may or may not have resulted in support. That no such scoring ever took place is **evidence** a competent reconsideration never took place. The administrative error is that the marking frame was not completed during the reconsideration.

132. During the entire period of their analysis, the Ombudsman has played Devil's Advocate with the argument - what if the DTI were right & this didn't fit ? What should have been done ? Considering the case from this perspective is fine, however, they should also have played Devil's Advocate on the other side too and think, what if it did ? (does). What then ? What should the DTI have done ? Did they do it ? Would not a competent assessor acting in good faith have completed the marking frame during the reconsideration to be sure they were making the right decision ?

That this form was never completed is evidence that no competent reconsideration ever took place.

133. A competent consideration or reconsideration looks at a situation from both sides. The DTI refused to consider the possibility they might be wrong. The Parliamentary Ombudsman has done the same.

134. The Evolutionary Software Research & Development Methodology

I include this explanation because there appears to be a lack of understanding of the software prototyping process.

Software prototypes evolve iteratively from one into the next (just as legal documents do – you call these drafts).

Here's the process :

- a) Build simple concept realisation that approximates project objectives. In our case a simple 3D graphics engine. This is prototype 1 (n=1).
- b) Consider the most significant limitation of current prototype (within the bounds of the project specification) and **research** possible solutions.
- c) **Develop** a solution to the current problem, using staff skills and experience augmented by knowledge acquired from step (b). If unsuccessful, use knowledge acquired from experience of failure to better understand the current problem, then perform step (b) again to research possible solutions to the now better understood problem. Repeat until successful.
- d) If it is not possible to solve the current problem within a reasonable period of time, sometimes it helps to put that problem on hold and to address one or more other sub-problems identified within the current prototype in order to simplify the overall problem complexity. The most difficult problems are easier to solve in a simplified environment.
- e) Once the current problem is solved, the prototype has now been enhanced – it is better.
 - We now have prototype n+1.
- f) If the prototype does not yet meet the project specification, go to step (b)

Note that steps b-f form an R&D cycle.

On complex projects, parallel R&D cycles are worked through simultaneously by different individuals/teams. As R&D cycles are completed, the prototype evolves into a better and better approximation of the product you are attempting to realise. It evolves.

Evolutionary R&D is made possible by the use of computer aided design techniques. Unlike physical products, it is very easy to make changes using a computer. It is therefore easy to experiment with alternate structures, layouts, techniques, designs, etc.

The evolutionary research and development technique (iterative prototype refinement) is best practice in the field of computer software research and development.

Further reading :

The C++ Programming Language, by **Professor** Bjarne Stroustrup.

Chapter 23, on software design :-

- **Successful software development is a long term activity.**
- **Experimentation is essential for all non-trivial software development.**
- **Design and programming are iterative activities.**
- **The different phases of a software project, such as design, programming and testing, cannot be strictly separated.**

135. Commercial Viability

“SMART” acknowledges that feasibility studies must consider not just the technical feasibility but also the commercial feasibility of innovative new technologies (bundle page 45 & SMART guidelines).

It appears that the DTI were saying they viewed our early, feature limited, buggy, unstable, untested, unpolished, graphically challenged prototype to have been a commercially viable product. This may explain why none of them are running successful companies. In the real world, new software products are only commercially viable (in a highly competitive global market place) if they are rock solid, feature rich, fast, responsive, innovative, aesthetically pleasing and are backed up with solid technical support. We have not yet reached that level of sophistication now (September 2009) and were clearly a long way from a commercially viable product at the time of Mr Carr's visit.

136. Competitive Analysis.

To create a commercially viable solution, we must deliver a product with capability beyond that of our competitors. We cannot undercut on cost because most web browsers are delivered free to end users.

137. Competitive web browsers include Microsoft's Internet Explorer, Firefox, Chrome and Opera. All are delivered free to end users. Revenue is generated from business to business deals, including placements and advertising. Did the DTI truly believe we had a product that was superior to Microsoft's Internet Explorer ? If so, where was the support ?

138. In the real-time 3D arena – the closest competitor is an American product called Second Life. In order to be competitive in the real-time 3D graphics field, one must deliver visually superior content. This is done by delivering visually superior graphics technology (a “graphics engine”). In 2002/3, our graphics engine was very, very, basic. It contained the absolute minimum functionality to enable concept experimentation. This early technology may have impressed the civil service (“fairly advanced”), but it does not impress a demanding public who are used to experiencing near photo-realistic real-time 3D content in modern video games.

139. In order to introduce an open platform featuring a new media format, standards compliance or standards introduction are a requirement. The DTI never asked how we proposed to define 3D website content. For the record, I've considered existing open 3D file formats including X3D and Collada. In my opinion, no existing format is ideal for 3D web use, so I'm developing a new format which I've named XSG – eXtensible Scene Graph. This format is being peer reviewed informally online and by a leading London university. Further details on request.

L - Consideration By The Court

140. I ask the Court to consider whether the marking frame document should have been completed, either during the initial assessment or during the reconsideration.

141. I ask the Court to consider whether the former DTI should have rejected the technical advice they had received.

142. I ask the Court to consider whether the Parliamentary Ombudsman's position that it does not matter what the DTI have done because in their view, we can achieve our project objectives is unfair, inaccurate, negative speculation beyond the competence and remit of the Parliamentary Ombudsman.

143. I ask the Court to consider whether the refusal of the Parliamentary Ombudsman to acknowledge that the former DTI should have scored the application against the marking frame (either during the initial assessment or the reconsideration) is irrational.

144. If the Court agrees that it is, I ask you to set aside that decision and to consider whether the former DTI's refusal to score our application and rejection technical expert advice in favour of "low cost " inaccurate assumptions during both the initial assessment and the "reconsideration" is maladministrative.

M - Conclusion

145. The Court is invited to acknowledge that rejection of technical advice by improperly qualified civil servants has lead to erroneous uninformed decision making.

146. The Court is invited to acknowledge that to make *informed* decisions you must accept input from trusted experts in areas where you are not sufficiently experienced to form an accurate opinion.

147. The Court is invited to acknowledge that the former DTI should have trusted the input of their technical advisers and should have discussed their technical advisers concerns with the applicant during the initial assessment.

148. The Court is further invited to acknowledge that no competent reconsideration took place, contrary to SMART Review and Complaints Procedure.

149. The Court is asked to consider whether the refusal of the Parliamentary Ombudsman to characterise the former DTI's mishandling of this grant application as maladministrative is erroneous in law.

150. If the Court feels that it might be, you are invited to renew this application, to grant permission for this case to be considered further and in due course to quash the decisions of the Parliamentary Ombudsman.

N - Damages

151. Advance Software has suffered significant damage because the DTI were incompetent.

152. "SMART" funding to which (in my view) we were entitled to due to the nature of our work has still not materialised.

153. The value of the "SMART" Feasibility Study award we applied for was £45,000.

154. The denial of this State Aid has prevented the company from growing at an optimal rate and has reduced our ability to compete with others who receive financial assistance from the state, both in the UK and beyond. The lack of support from those who are tasked with supporting business in the UK reduces the likelihood of our work being taken seriously by other and casts false doubt upon our ability to deliver.

155. Operating without this funding has significantly slowed progress on our project. I do not know how to quantify that loss. The difficulties caused by the failure of the DTI to act reasonably have been significant.

156. The additional workload required to thoroughly understand and document the legal position has taken significant time and effort that could and should have been spent focusing on the research and development of the company's products.

O - Chronology Of Events

| Date | Bundle Page(s) |
|---|--|
| 1st December 2002 | Application Form : p65, Project Proposal : p75 |
| The Company submitted a “SMART” feasibility study grant application to the former DTI. | |
| 20th January 2003 | Expert 1 : p25 Expert 2 : p28 |
| DTI expert advisers undertake a project assessment based entirely on application documents. They were never given an opportunity to view/inspect our prototype. | |
| 30th January 2003 | 23, 24 |
| DTI case officer Michael Carr visits the Company to discuss eligibility for a “SMART” feasibility award, advises the company to withdraw our grant application. | |
| April 2004 | 55 |
| BBC publish a white paper on a similar project part funded by the DTI. | |
| 10th June 2004 | 41 |
| Nigel Griffiths MP acknowledgement of communication – redirects us to Business Link. | |
| 6th August 2004 | 189 |
| Dr. Stephen Kennett's flawed reconsideration, excludes support because “we'd already reached the stage of having a prototype”. When I start a new software project, I will have an initial prototype running within a couple of days. As would all other competent software engineers. Should all such projects be excluded because two days work has been done ? This is irrational nonsense, as explained further in my reply to Dr. Kennett and in subsequent follow up. | |
| 18th August 2004 | 43 |
| Roy Evans, DTI declines our SMART application, states our project did not meet the criteria for a “SMART” award. | |
| 20th October 2004 | 31 |
| Peter Button states Business Link Suffolk considered our project worthy of a grant application. | |
| 9th November 2004 | 44 |
| Roy Evans, DTI decides on behalf of the entire Department Of Trade And Industry that our support for our project is not appropriate, despite the DTI supporting a very similar BBC project (under a different funding programme). | |
| 13th January 2005 | 45 |

Roy Evans states our project does not qualify for financial support because we already have a 'fairly advanced prototype'.

20th January 2005 46

One of many emails I sent to the DTI attempting to appeal their unreasonable refusal to assist.

15th February 2005 47

Roy Evans disregards technical advice, acknowledges marking frame was not completed.

15th March 2005 49

One of many emails I sent to the Secretary Of State For Trade And Industry, attempting to appeal the DTI's unreasonable refusal to assist.

4th April 2005 48

Roy Evans states DTI has nothing further to add to previous correspondence.

26th April 2005 34

Dr Stephen Kennett (DTI) acknowledges he has not seen our 3D website, but can see the relevance of our project and the "product we wish to develop"

May 2004 – July 2005 35

The company was incubated at the Defence Diversification Agency / London Development Agency business incubator at Innova Science Park. (one month absence in Oct/Nov)

12th August 2005 36

Defence Diversification Agency state they cannot assist further.

2nd October 2006 179

The Parliamentary Ombudsman refuses to acknowledge maladministration.

31st October 2006 42

Rt. Hon. John Gummer MP advises we may make a legal challenge through the courts.

30th December 2006 53

BBC publish article on James Dyson, illustrating the complexity of the prototyping process.

12th November 2007 BACK COVER

The Times newspaper prints an article stating the UK government is failing to effectively support research and development.

9th June 2008

Court Summons application against the Parliamentary Ombudsman submitted to Westminster Magistrates Court.

28th September 2008

37

David Evans (DIUS Director, Innovation) states the DTI did not have the capability to appraise technical aspects of projects in house, refused my Freedom Of Information Act request for the expert's identities.

9th September 2009

197

The parties agree that the pre-action protocol period has begun.

23rd September 2009

Pre-action protocol period ends, without agreement being reached between the parties.

P - Persons Referred To

Michael Carr

DTI case officer who performed DTI's on site visit.

Dr. Stephen Kennett

DTI civil servant, who did not properly consider our appeal.

Roy Evans

DTI "SMART" grant fund manager (reported directly to Nigel Griffiths MP)

David Evans

Department for Innovation, Universities And Skills Director With Responsibility For Innovation Policy.

Nigel Giffiths MP

Former DTI Parliamentary Under-Secretary Of State For Small Business, Enterprise And Construction.

Patricia Hewitt MP

Secretary Of State For Trade And Industry who ignored our valid appeal.

Alan Johnson MP

Secretary Of State For Trade And Industry who ignored our valid appeal.

Alistair Darling MP

Secretary Of State For Trade And Industry who ignored our valid appeal. Now Chancellor Of The Exchequer.

Rt. Hon. Gordon Brown MP

The Prime Minister.

Karen Quayle

Parliamentary Ombudsman initial case officer.

Julia Whysall

Parliamentary Ombudsman external review officer, who wrote the Ombudsman's "tier 1" report.
Formed a conclusion outside her competence and beyond the Parliamentary Ombudsman's remit.

Ann Abraham

The Parliamentary Ombudsman.

Roger Hetherington

BusinessLink Suffolk adviser who helped us submit a “SMART” funding application.

Peter Button

BusinessLink Suffolk Chief Executive – advised our project was worthy of an application.

Ian Lawson

Defence Diversification Agency (DDA) London Business Incubator Manager.

James Dyson

Businessman, entrepreneur and inventor who took four years and 5127 prototype iterations to *successfully* complete his first product.

DTI Technical Adviser 1

Identity Withheld.

DTI Technical Adviser 2

Identity Withheld.

Stephen John Henry Williams

Managing Director of Advance Software Limited. The judicial review claimant.

Rt. Hon. John Gummer MP

Member Of Parliament who helped us submit a complaint to the Parliamentary Ombudsman (Conservative).

Rt. Hon. Mark Prisk MP

Member Of Parliament, Shadow Minister For Small Business, Enterprise & Construction (Conservative)

Q - Organisations Referred To

Business, Innovation & Skills Department (BIS)

The responsible department following closure of the former DTI.

Department For Trade And Industry (DTI)

Closed – now part of BIS

Department For Universities, Innovation & Skills (DUIS)

Closed – now part of BIS.

Department For Business, Enterprise And Regulatory Reform (BERR)

Closed – now part of BIS.

Ministry Of Defence / Defence Diversification Agency (DDA)

Provided business incubation and advice (the DDA has since been closed).

European Commission / Competition Directorate-General (DG)

Under European Union Community Law, State Aid can only be granted under terms and conditions approved by the Commission. The Competition DG is responsible for considering eligibility for State Aid.

This case also has European Commission DG Competition reference EH - CP282/2006.

British Broadcasting Corporation

This organisation who undertook a similar project, which was part funded by the former DTI.

Advance Software Limited

The “SMART” grant applicant (“the company”), previously called “Deep Thought Software Limited”.

The company number (England And Wales) is 3970355.

Smart Appraisal Marking Frame- Feasibility Studies

| Project Officer | | | | Authorising Officer | | | |
|---|----------------|-----------------------|---|--------------------------------|----------------|-----------------------|--|
| Mark | Weight | Total | Rate the following on a score of 1-5 | Mark | Weight | Total | |
| TECHNOLOGICAL ASPECTS | | | | | | | |
| | x5 | | Innovation <i>High – technically new in world terms; involves T/T from research</i> <i>Low: New only to the applicant; minor/low risk technology.</i> | | x5 | | |
| | x2 | | Assessment of R&D challenges/technical risks <i>High – large degree of R&D required with clear objectives and methodology;</i> <i>Low: Little R&D challenges with limited technical risks.</i> | | x2 | | |
| | x1 | | Intellectual Property Rights <i>High – complete protection;</i> <i>Low: non-protectable output.</i> | | x1 | | |
| COMMERCIAL ASPECTS | | | | | | | |
| | x2 | | Commercial Potential <i>High – strong need, clear demand</i> <i>Low: sales depend on stressing technical or other novelty</i> | | x2 | | |
| | x3 | | Exploitation Prospects <i>High – clear route to exploitation with sound business plan;</i> <i>Low: speculative venture with no exploitation plan</i> | | x3 | | |
| APPLICANT/BUSINESS ASPECTS | | | | | | | |
| | x2 | | Management Abilities <i>High – good all round strength/experience;</i> <i>Low: lack ability or deficient in certain skills</i> | | x2 | | |
| | x2 | | Additionality <i>High – well documented case; support essential;</i> <i>Low: circumstantial need.</i> | | x2 | | |
| | x2 | | Viability <i>High – sound business plan; no cause for concern</i> <i>Low: both business and project could fail.</i> | | x2 | | |
| | x1 | | Applicant/Company Track Record <i>High – highly successful in field;</i> <i>Low: failed to exploit opportunities</i> | | x1 | | |
| WIDER ASPECTS | | | | | | | |
| Good 1 to 5 | Neutral = 0 | Adverse = -1 to -5 | Environmental Impact <i>Positive, neutral or negative impact (to include impact on social environment as well as natural)</i> | Good 1-5 | Neutral = 0 | Adverse = -1 to -5 | |
| Good 1 to 5 | Neutral = 0 | | Design Impact <i>Good - Project incorporates good design principles/enhances design capabilities;</i> <i>Neutral - design is not considered important..</i> | Good 1-5 | Neutral = 0 | | |
| Wider Aspects sub total | | | Averaging and decision to be completed by Authorising Officer | Wider Aspects sub total | | | |
| Score | | | Average Score /100 | % | Score | | |
| Signed:/dated Project Officer | | | Signed/dated: Authorising Officer | | Support | Reject | |
| Any Additional Instruction/Comment by Authorising Officer: | | | | | | | |

Commercial in Confidence

Small Business Service
Regional Team for the East of England
The Business Centre
Histon
Cambridge
CB4 9LQ
Switchboard: 01223 713900
www.businesslink.org

Julia Derrett
Tel: 01223 484541
juliaderrett.sbs@eeda.org.uk

Fax: 01223 713940

Mr Steve Williams
Deep Thought Software Ltd
Moorside Lodge
Blythburgh Road
Westleton
Suffolk
IP17 3AS



Our Ref: SEC/117/304
Date: 06/01/2003

Dear Mr Williams

Smart Application

Thank you for your application for a Smart award, which was received on 24/12/2002. Your project will now be sent to our expert technical advisers for comment and a patent search will be performed. Once this is complete an appraisal officer will be in touch. This initial process should take approximately two weeks.

During the appraisal process we might require further information from you in connection with your project or business. We might also contact you to arrange a meeting either at your premises or at the Small Business Service.

Our target is to reach a decision on your application within 30 days. Whilst we will make every effort to give you a decision by **06/02/2003**, we cannot guarantee that this will be achieved. You will need to know that we are currently taking around 40 days to decide cases.

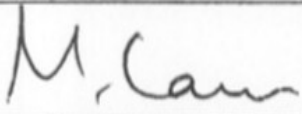
Should you have any further questions in connection with the appraisal process please do not hesitate to give me a ring.

Yours sincerely

A handwritten signature in black ink, appearing to read "Julia Derrett".

Julia Derrett
SBS Regional Team for the East

VISIT REPORT

| | |
|--|--|
| Applicant: Deep Thought Software Ltd | File: SEC/304 |
| Date of Visit: 30.1.03 | Place: 82 Studley Court, 4 Jamestown Way London |
| Present: Mick Carr, Steve Williams. | |
| Purpose of Visit: To discuss the company's eligibility for a Smart Feasibility Award. | |
| Matters discussed/Issues Raised: Mr Williams showed me that he has developed his project to a prototype stage. I told him that because of this, he did not qualify for a feasibility award, and that he had gone too far down the development path to qualify for a development grant. On this basis, Mr Williams agreed that I should withdraw the application. | |
| Further Action: Mr Williams is to pursue other methods of funding the final development and marketing of his "product". | |
| Signed:  | Date: 30 January 2003 |

SBS East

The Business Centre
Station Road, Histon , CB4 9LQ

Mick Carr

Smart Team
Tel: 01223 484536
Fax: 01223 484543
Michaelcarr.sbs@eeda.org.uk

Mr S Williams
Deep Thought Software Ltd,
82 Studley Court
4 Jamestown Way
London
E14 2DA



30 January 2003
Our Ref: SEC/117/304

Dear Mr Williams

ADVANCE-3D – SMART APPLICATION

Following our meeting this morning, I confirm that, as agreed, your application for a Smart feasibility award has been withdrawn.

This is because your project has reached a fairly advanced prototype stage already, and the purpose of a feasibility award is to assist companies in proving their concept prior to a development stage.

You explained that you would now explore other avenues of funding to “fine tune” your 3D Browser and take it to market. I have been unable to identify any further DTI schemes which could help you in this task.

I am sorry that the project was not eligible for Smart funding and wish you success in taking it further.

Yours sincerely

MICK CARR
SBS EAST

Smart – Expert Advice

| | |
|------------------------------|---------------------------|
| SBS Reference: | SEC/117/304 |
| Appraiser Reference: | [REDACTED] |
| Applicant: | Deep Thought Software Ltd |
| Project Title: | Advance-3D |
| Advice required from: | [REDACTED] |
| Type of Project | Feasibility |
| To be returned by | 20 January 2003 |

| | | | | | | | |
|--|-------------|--|---|---|---|---|------------|
| RATING | HIGH | 5 | 4 | 3 | 2 | 1 | LOW |
| INNOVATION | | X | | | | | |
| Technology new in world terms: involves T/T from recent research | | New only to the firm concerned: trivial & low risk technology | | | | | |
| <p>Please indicate how the proposal differs from existing technology:</p> <p>There is not currently a web browser that seamlessly integrates 3d and 2d technologies. Neither is there a 3d browser plug-in that allows integration of ordinary hypertext (html) links</p> | | | | | | | |
| RATING | HIGH | 5 | 4 | 3 | 2 | 1 | LOW |
| ASSESSMENT OF R&D CHALLENGES/TECHNICAL RISK: | | | | | X | | |
| Clear and realistic technical objectives. Challenging R&D with identified technical risks that will need to overcome | | Technical objectives unclear or impractical. Little or no technical risk | | | | | |
| <p>How do you rate the applicant's chances of achieving the technical objectives?</p> <p>The technical challenges are very high, as are the risks of failure, particularly in view of the applicants' stated intention to provide a cross-platform web client. There is little evidence within the application of a realistic assessment of the technical objectives, and no evidence of how it is proposed to overcome them</p> | | | | | | | |

| | | | | | | | |
|---|-------------|--|---|---|---|---|------------|
| RATING | HIGH | 5 | 4 | 3 | 2 | 1 | LOW |
| COMMERCIAL POTENTIAL/ MARKET NEED/EXPLOITATION ROUTE | | X | | | | | |
| Strong need in world markets | | Sales depend on stressing technical or other novelty | | | | | |
| <p>Please explain how the proposed end product differs from what already exists in the market; are the market prospects good? Are the exploitation routes realistic and effective?</p> <p>The main market for a 3d browser would be for Games, and there is an enormous games market world-wide. There would also be a wide range of other possible markets – medical, engineering, building design etc. Given that the project succeeded and a product did emerge then there would be a market, but most people are used to getting their browsing software for free, and the size of the market might not lead to proportionate profits. Licensing to ISPs is one commercial exploitation route proposed and is probably the most feasible, however, even that may not be particularly profitable, given the technology's dependence on high-speed, broadband connection.</p> | | | | | | | |

Commercial In Confidence

| RATING | HIGH | 5 | 4 | 3 | 2 | 1 | LOW |
|--|------|---|---|---|---|---|--|
| ENVIRONMENTAL IMPACT | | | | X | | | |
| The project will have a beneficial impact on the environment: sustainable technology; health and safety; quality of life | | | | | | | Potentially adverse environmental impact |
| <u>What will the impact be (if any)?</u> Neutral environmental impact. | | | | | | | |

| RATING | HIGH | 5 | 4 | 3 | 2 | 1 | LOW |
|---|------|---|---|---|---|---|--|
| DESIGN IMPACT | | | | X | | | |
| The project shows awareness of good design practice; enhances the applicant design effectiveness and project value | | | | | | | Design not considered : adds little to the applicant's project |
| <u>What will the impact be (if any)?</u> Difficult to assess from the application. In such a technically difficult area any design that worked would be a good design – until a better one came along. | | | | | | | |
| DO YOU KNOW THE APPLICANT? Yes No NO | | | | | | | |
| <u>If "Yes" please include a view on the competence of the applicant to carry out the project in your comments below:</u> | | | | | | | |

| | | | |
|---|--|----------------|-----------------------|
| With the information you have, would you recommend | | Rejection X | of the Smart proposal |
| <u>If you have any other comments relevant to the proposal or your recommendation please add them here:</u> | | | |

| Please indicate your knowledge or expertise in the subject area | |
|--|---|
| Recognised world/national/sector expert or practitioner | |
| Over 5 years practical knowledge of the subject area | X |
| Less 5 years practical knowledge | |
| No practical knowledge of the subject, but some policy or related knowledge | |
| New to the subject area with limited or no knowledge. <u>If you have ticked this category can you suggest an alternative source, if possible:</u> | |
| Comment: | |

Commercial In Confidence

| | | |
|---|---|--|
| Name of person who completed the form | | |
| Directorate / Establishment | | |
| Direct Telephone No: | | |
| We do appreciate the time and effort you put into this proposal. Do you wish to be kept informed of the progress on the application and project if approved | Yes <input checked="" type="checkbox"/> X | |
| Please return the completed form to: | <p>Email : juliaderrett.sbs@ceda.org.uk</p> <p>Address : Small Business Service, Regional Team for East Of England The Business Centre Histon Cambridge CB4 9LQ</p> <p>Direct Line 01223 484541 Fax: 01223 713940</p> | |

| | |
|--------------------------|---------------------------|
| Government Office | SBS – East |
| Ref | SEC/117/304 |
| Applicant | Deep Thought Software Ltd |
| Project Title | Advance-3D |
| Project Type | Feasibility Study |

Innovation

Rating 3

How the proposal differs from existing technology:

The proposal is to investigate technology to develop an enhanced graphics web browser which enables 2D and 3D viewing from the same browser. Currently, as the applicant acknowledges, this is through plug-ins, proprietary engines and virtual reality. Whilst [REDACTED] are unaware of browsers which automatically incorporate both areas of functionality, 3D developments are mainstream and systems are often developed alongside the browser technology.

Assessment of Technical Risk

Rating 2

How do you rate the applicant's chances of achieving the technical objectives?

The applicants have talked about the theory and identified that they will focus on Win2k and Win XP. Porting to other platforms will be necessary.

The applicants aim to use open source software which may have serious integration issues. There is little discussion on standards like VRML, or proprietary software that is currently used to display 3D content. This product would have to be compatible with a wide range of standards and file formats to be workable and this has not been discussed.

Commercial Need

Rating 3

How proposed end product differs from what already exists in the market

Whilst there is a need to view both 3D and 2D, there are a wide range of plug-ins on the market which enable 3D content through mainstream browsers. This will be a major competitor to this project. Another key point is that Microsoft are the main competitor in this environment, which is why plug-ins are the way forward for smaller organisations. Releasing a browser to compete with Microsoft is unlikely to have

commercial success. It is highly likely that both Netscape and Microsoft are working on versions which incorporate 3D functionality.

Use of VRML (VR Modelling) already has online environments in 3D and the applicants will have to compete with these. Products like the one shown (<http://www.mootools.com/plugins/us/3dbrowser/main.asp>) are file browsers for both 3D and 2D (although not Internet based).

Environmental Impact

Rating N/A

What will the impact be if any?

Design Impact

Rating 2

What will the impact be if any?

The applicants have provided a 6 months Gantt chart which would be considered ambitious for feasibility. Most products do plug in as they don't attempt to compete with Microsoft. The Gantt chart implies that a basic version will take 6 weeks to complete (prior to porting)

Do you know the applicant: No

Recommendation: Reject

Additional Comments

[REDACTED] would reject this application. Whilst specific browsers are not known, this proposal does not discuss the basic 3D modelling issues or suggests areas of research for the 2D solution. Equally the number of plug-ins, combined with the dominance of Microsoft and Netscape would at the very least require collaboration to be successful.

Expertise in subject area

Recognised Expert

Over 5 years practical experience ☒

Less the 5 years practical experience

No practical experience

Name of Person who completed the form: [REDACTED]

Establishment: [REDACTED]

Telephone Number: [REDACTED]

Please keep me informed of progress ✓

Business Link for Suffolk

BLS Enterprises Ltd Felaw Maltings 42 Felaw Street Ipswich Suffolk IP2 8PN
Telephone 01473 417000 Facsimile 01473 417070
e-mail info@bls.org.uk www.bls.org.uk



Our Ref:

Advance Software Limited
14-18 Heddon Street
Mayfair
London
W1B 4DA
ENGLAND

20th October 2004

Dear Mr. Stephen Williams

SMART Award

Thank you for your e-mail of the 18th October. In response to your question "Why did Business Link Suffolk advise us to submit for a Smart Feasibility Study award", based on your explanation of the work needed with your invention at the time of the meeting in November 2002, it was considered worthy of an application. As you are aware, we do not make the decision as to whether an award is made.

Consequently, would you please direct any future correspondence through Roy Evans of the SBS.

Yours sincerely

MR. PETER BUTTON
Chief Executive



INVESTOR IN PEOPLE



Subject: DTI dispute, and community law
From: "PRISK, Mark" <PRISKM@parliament.uk>
Date: Tue, 20 Jun 2006 16:24:34 +0100
To: "HARBOUR Malcolm" <malcolm.harbour@europarl.europa.eu>, "DOVER Den"
<den.dover@europarl.europa.eu>, "CHICHESTER Giles" <gchichester@europarl.eu.int>
CC: <steve@advance-software.co.uk>, <IanFDavison@aol.com>

Colleagues

The attached complaint has been forwarded to me about the very poor way in which the DTI has handled an important new idea. Mr. Williams wants help with the relevant Community Law. Any thoughts?

regards

Mark Prisk MP
Shadow Minister, Small Business & Enterprise
(Hertford & Stortford)

From: Steve Williams
Sent: 19 June 2006 10:52
To: VINES, Peter; PRISK, Mark
Subject: [Fwd: Dispute]

Dear Sirs,

For those not currently aware, please find attached a document which introduces our technology. DTI were first made aware of this project in January 2003, and have since this date, refused to offer us any financial assistance whatsoever. Their explanation of why we do not qualify makes no sense and is in my opinion, wholly unreasonable. Whether the DTI's actions (or in this case lack thereof) constitutes a breach of Community Law, I do not yet know, as I am unfamiliar with the legislation. If the Conservative Party is able to point me in the direction of the British Government's relevant responsibilities under the various treaties and agreements that form Community Law, the assistance would be appreciated. Software demonstration on request, questions welcome.

Best regards,
Steve Williams

Director, Advance Software Limited.

Small Business Service

St Mary's House, c/o Moorfoot, Sheffield S1 4PQ
Enquiries 0845 001 0031 DTI Minicom 020 7215 6740
www.sbs.gov.uk

Dr Stephen Kennett

Director, Channel Management
Direct 0114 279 4430
dr.steve.kennett@sbs.gsi.gov.uk

Mr S Williams
Advance Software Limited
14 – 18 Heddon Street
Mayfair
London
W1B 4DA



16 September 2004

Dear Mr Williams

When we spoke on the phone on 14 September, I undertook to forward to you the current guidance notes for applicants for Grant for Research and Development to allow you to start thinking about how any future applications to the Department could be pitched. These notes apply nationwide.

I know you recognise that the scheme is now a competition with specific closing dates and that there can be no suggestion of any commitment by the Department in advance of a decision on the case.

I also promised – as it was not clear when London would next hold a competition – to check and see if any other region has a Grant for R&D competition open at present. The West Midlands does currently have a competition open – closing at 17.00 8 October. You suggested that your project could be mobile being dependent on funding, but plainly you will want to consider carefully the implications of undertaking the project in the West Midlands were you to be successful in being offered grants – of which there is no guarantee. Revised costings and deliverability would be areas that case officers would look at. The application point for the West Midlands is on the single paper publicity sheet – I know you will want to think very carefully about switching the potential location of activity primarily given your report on the positive nature of discussions with LDA.

Yours sincerely,

A handwritten signature in blue ink that reads "Stephen Kennett".

S R Kennett

From: Stephen Williams [<mailto:steve@advance-software.co.uk>]

Sent: 26 April 2005 11:41

To: steve.kennett@sbs.gsi.gov.uk; I D Lawson

Subject: Our website ...

Dear Dr Kennett,

Major Lawson said you had looked at our website. This is unlikely as our website is 3D and can only be accessed using our "Infinity" 3D Internet browser, which can be downloaded from advance-software.co.uk/download. The html "webpages" that you may have seen are by no means representative of the content within the 3D site.

Regards,

Stephen J.H. Williams

Delivery-date: Tue, 26 Apr 2005

Sender: Steve.Kennett@sbs.gsi.gov.uk

Stephen



IMPORTANT.

Yes, you are absolutely right. Now you have challenged me - it was a different project's web site that I viewed at the end of last year. The underlying point I was making though was that I could see the relevance of the project you are undertaking and the product you wish to develop.

SK



IF SO,

WHY WAS THERE NO

FOLLOW UP & SCORING

OF THE APPLICATION ?

To whom it may concern

Advance Software Ltd

This is to certify that the above company was being incubated at the unit at Innova Science Park from May 2004 until July 2005. The company took leave of absence for a period of 4 weeks in October November 2004 but remained on the waiting list until a better suited unit could be made available. The company vacated the incubator in July 2005 after successfully producing a working B model prototype of their product.

Ian Lawson

Technology Diversification Manager

Defence Diversification Agency

London Business Innovation Centre

Innova Science Park

Enfield Middlesex

EN3 7XU

Tel 0208 350 1350 - 1351 (Fax) or 1348 (Direct)

Mobile 07766 134473

[Mailto:idlawson@dda.gov.uk](mailto:idlawson@dda.gov.uk)

<http://www.dda.gov.uk>

The "Infinity" browser offering is an outstanding piece of work deserving the highest of praise and is more advanced now than the next generation "Windows" offering from the Microsoft Corporation if their Beta releases to be believed. Well done!

When DDA (London) gets its investment funding, and we are negotiation with the London Boroughs and the LDA to set up a fund I will invite you to apply that is if course should you still need it.

Try and keep your cool, I must say that you have done reasonably well in that respect given the enormous pressure and stress you have had to put with.

Yours ever

Ian Lawson

Technology Transfer Manager (London Region)

Defence Diversification Agency

London Business Innovation Centre

Innova Science Park

Enfield Middlesex

EN3 7XU

Tel 0208 350 1350 - 1351 (Fax) or 1348 (Direct)

Mobile 07766 134473

[Mailto:idlawson@dda.gov.uk](mailto:idlawson@dda.gov.uk)

<http://www.dda.gov.uk>



Connecting Business to Technology

Sir Frank Whittle Building Cody Technology Park
Ively Road Farnborough Hampshire GU14 0LX

Mr Stephen J H Williams
Managing Director
Advance Software Ltd
London Business Innovation Centre
Enfield
Middlesex
EN3 7XU

t: 01252 396 389 f: 01252 392 119

www.dda.gov.uk

Our Ref: DDA/HQ/1.2.8

Date: 12th August 2005

Dear Mr Williams,

I am writing to thank you for your e-mail of 2nd August to Damien McDonnell. I am replying on his behalf.

I note that you have contacted Mr John Gummer MP for assistance and that he has passed your complaint to the Ombudsman. In these circumstances, I regret there is nothing the DDA can do and you will need to await the results of that approach.

I am sorry that we could not be more helpful on this occasion.

Yours sincerely,

Tony Titchmarsh

Tony Titchmarsh
Operations Director

Mr S Williams
Advance Software
14-18 Heddons Street
Mayfair
London
W1B 4DA

29 September 2008

Dear Mr Williams,

RE: FREEDOM OF INFORMATION ACT REQUEST

I am writing further to your email of 1 August 2008 in which you ask for an independent review of your freedom of information request of June 2008.

You have asked the Department to provide the identity and contact information for individuals who advised on technical aspects of your applicant for a Smart award in 2002. As you know, the Department earlier withheld this information under Section 40 of the Freedom of Information Act 2000. As the Director with overall responsibility for DIUS' Innovation Policy, I have carried out an independent review of that decision.

Firstly, I can confirm that the identity of the individuals concerned is considered to be personal data. The Department has a legal obligation under the Data Protection Act 1998 to protect this information. This obligation supersedes our obligations under the Freedom of Information Act. The individuals have not given their consent to release this information and to do so without consent would constitute unfair processing.

I have also considered whether it would serve the public interest to identify the organisations that provided the advice.

It is important that the public has confidence that the Smart scheme was properly administered. An important aspect of this was the ability of the Small Business Service (SBS) to appraise all aspects of a grant application, including the technology. The SBS did not have the capacity to appraise technical aspects of projects in house and it drew upon the advice of a range of independent expert advisers. To give the public confidence in this process,

and to guard against any potential conflicts of interest, the SBS published a list of its advisers on the DTI website.

In order to be as open as possible with unsuccessful applicants it was the practice of the SBS to provide feedback on why applications had been unsuccessful. This did not extend to providing copies of the technical advice, although I note that you were in fact provided with a copy of the technical assessments on 15 February 2005, albeit with the advisers' contact details redacted.

In considering whether to provide this information now I have to balance the public interest in the transparency of the appraisal process with the public interest in the efficiency of that process.

As you know, Smart has been replaced by Grant for Research and Development and the scheme is now administered by the Regional Development Agencies (RDAs). RDAs also publish a list of their advisers on their websites and the advisers that commented on your application continue to provide advice to RDAs on applications for Grant for Research and Development.

It is important that all the advisers feel able to provide full and frank advice to the RDAs. There is a risk that their advice would be inhibited if unsuccessful applicants were given copies of the advice together with the adviser's contact details. If advisers were to lose confidence in the process and began to temper their advice, or even withdraw their services altogether, RDAs would find it difficult to assess the quality of proposals. It is likely that this would result in a reduction in the number of grants awarded or inefficient use of taxpayers money.

Whilst a number of years have passed since your application, these risks have not diminished with the passage of time.

On balance, I do not believe the public interest would be served by releasing the advisers contact details and I uphold the decision to withhold this

information under Section 40 of the Freedom of Information Act 2000. I am further withholding the names of the organisations concerned under Section 36 (2)(b)(i) (prejudice to the effective conduct of public affairs – free and frank advice).

If you are not content with the outcome of this review, you have the right to apply directly to the Information Commissioner for a decision. The Information Commissioner can be contacted at:

Information Commissioner's Office
Wycliffe House
Water Lane
Wilmslow
Cheshire
SK9 5AF

Yours sincerely

David Evans

DAVID EVANS



National Audit Office
157-197 Buckingham Palace Road
Victoria
London SW1W 9SP

GTN 3935
Switchboard 020-7798 7000
Facsimile 020-7

Mr. Stephen Williams
Advance Software
Suite 56
London Business Innovation Centre
Innova Science Park
Enfield
Middlesex EN3 7XU

Direct Line 020-7798 7575
Room C311
Reference
Date 9th May 2005

Dear Mr Williams,

SMART GRANT

I am writing in response to the e-mail you sent to the Comptroller & Auditor General on 11 April and the subsequent material you sent to Jon Cable at this office. As the Director responsible for value for money audit on the Industry and Trade area I have been asked to reply.

As you may know, the Comptroller and Auditor General is responsible for the audit of the financial statements of government departments and related public bodies. He is also has power to examine the economy, efficiency and effectiveness with which public bodies have used public money.

We have examined the material you sent us and have made inquiries at the Small Business Service. I should state that the National Audit Office is not able in cases such as yours to second guess whether the decision to refuse your company a grant was correct or not. If unhappy with a decision, the normal course of action for the applicant would be to seek a review through the appeal process. I understand that in this instance your case was reviewed and that you received a reply from Dr Steve Kennett upholding the original decision.

As your letter mentions, you may wish to consider raising the issue with your local Member of Parliament who has the discretion to refer your case to the Parliamentary Ombudsman.

Yours sincerely
Peter Gray

Peter Gray
Director, Industry and Trade Area (Value for Money Audit)



INVESTOR IN PEOPLE

10 June 2004

Nigel Griffiths MP

PARLIAMENTARY UNDER-SECRETARY
OF STATE FOR SMALL BUSINESS,
ENTERPRISE AND CONSTRUCTION

Mr Steve Williams

advance-software.co.uk
steve@advance-software.co.uk

Dear Steve,

Advance Software Limited – DTI Grant Application.

Thank you for your recent e-mail to Steven Timms MP. I am responding as Minister responsible for Small Businesses and Enterprise.

I have asked Ms Judith Rutherford, the Chief Executive of London Business Link to ensure a member of her team contacts you to discuss the funding options available.

Business Link London is based at 3rd Floor, Centrepont, 103 New Oxford Street, London, WC1A 1DP. Telephone 0845 6000 787 and email hotline@bl4london.com. They also have a website at www.businesslink4london.com.

I hope this advice is helpful, and please do not hesitate to contact me again if there is anything else you feel I can do.

Best wishes.

Yours sincerely,

Nigel

Department of Trade and Industry

1 Victoria Street
London SW1H 0ET

5503

Direct Line +44 (0)20 7215 5528

Fax +44 (0)20 7215 5675

Minicom +44 (0)20 7215 6740

Enquiries +44 (0)20 7215 5000

92957



10 June 2004

Nigel Griffiths MP

PARLIAMENTARY UNDER-SECRETARY
OF STATE FOR SMALL BUSINESS,
ENTERPRISE AND CONSTRUCTION

Mr Steve Williams

steve@advantage-software.co.uk

Dear Steve,

Advance Software Limited – DTI Grant Application.

Thank you for your recent e-mail to Steven Timms MP. I am responding as Minister responsible for Small Businesses and Enterprise.

I have asked Ms Judith Rutherford, the Chief Executive of London Business Link to ensure a member of her team contacts you to discuss the funding options available.

Business Link London is based at 3rd Floor, Centrepoint, 103 New Oxford Street, London, WC1A 1DP. Telephone 0845 6000 787 and email hotline@bl4london.com. They also have a website at www.businesslink4london.com.

I hope this advice is helpful, and please do not hesitate to contact me again if there is anything else you feel I can do.

Best wishes.

Yours sincerely,



Department of Trade and Industry

1 Victoria Street
London SW1H 0ET

Direct Line +44 (0)20 7215 5528

Fax +44 (0)20 7215 5675

Minicom +44 (0)20 7215 6740

Enquiries +44 (0)20 7215 5000

Mr S Williams
Advance Software Limited
14-18 Heddon Street,
Mayfair
London
W1B 4DA

Date 19 August 2004

Bay 709
Kingsgate House
66-74 Victoria Street
London
SW1E 6SW

Tel +44 (0)20 7215 8563
Fax +44 (0)20 7215 4002
Enquiries +44 (0)20 7215 5000
Minicom +44 (0)20 7215 6740

www.dti.gov.uk
Roy.Evans@SBS.gsi.gov.uk

Dear Mr Williams

As requested when you called on 17 August and you asked me to send you a letter using the word "declined", I am writing to confirm that your application for a Smart award reference SEC/117/304 and received in the Small Business Service office in Cambridge on 24 December 2002 did not meet the criteria for an award. It was declined a Smart award.

Yours sincerely

R W EVANS

"SO WRONG THAT NO
REASONABLE PERSON
COULD SENSIBLY TAKE
THAT VIEW"
LORD DENNING MR
THE TAMESIDE CASE 1977
AC AT 1026



Department of Trade and Industry

Mr S Williams
Advance Software Limited
14-18 Heddon Street,
Mayfair
London
W1B 4DA

Date 9 November 2004

Bay 709
Kingsgate House
66-74 Victoria Street
London
SW1E 6SW

Tel +44 (0)20 7215 8563
Fax +44 (0)20 7215 4002
Enquiries +44 (0)20 7215 5000
Minicom +44 (0)20 7215 6740

www.dti.gov.uk
Roy.Evans@SBS.gsi.gov.uk

Dear Mr Williams

Thank you for your email message of 3 November. I regret that you have been unable to find funds to support your project but DTI, having considered your application and appeal, has concluded that support from the Department is not appropriate in this case.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Roy Evans', is written over a light blue horizontal line.

R W EVANS

Mr S Williams
Advance Software Limited
Suite 56, London Business Innovation Centre
Innova Science Park
Enfield
Middlesex EN3 7XU

Bay 709
Kingsgate House
66-74 Victoria Street
London
SW1E 6SW

Tel +44 (0)20 7215 8563
Fax +44 (0)20 7215 4002
Enquiries +44 (0)20 7215 5000
Minicom +44 (0)20 7215 6740

www.dti.gov.uk
Roy.Evans@SBS.gsi.gov.uk

Date 15 February 2005

Dear Mr Williams

Thank you for your email messages of 18 and 20 January. You requested copies of the external technical advice which the Department sought on the Smart application submitted by Deep Thought Software Limited in December 2002. This information is enclosed.

You also requested a copy of the marking frame in use at the time of your application. I enclose a sample copy. No marking frame was completed for your application as it was withdrawn from the appraisal process before that stage was reached. WHY?

As you know, the external advice did not have any bearing on the result of your application. Your application did not meet the criteria for support because your project had reached a fairly advanced prototype stage. Your application was assessed against the same criteria as all others at the time. It would be impractical and prohibitively expensive for technical experts to visit every applicant for a grant to discuss the application. In addition the majority of applicants, unlike you, do not have a prototype to test. At your meeting with Mick Carr on 30 January 2003 you agreed with him that your grant application should be withdrawn because the project had reached a fairly advanced prototype stage, as confirmed in Mr Carr's letter of the same date.

Yours sincerely



ROY EVANS

Helen Williams

From: "Stephen Williams" <steve@advance-software.co.uk>
To: <Roy.Evans@SBS.gsi.gov.uk>
Cc: <steve.kennett@sbs.gsi.gov.uk>; <mpst.young@dti.gsi.gov.uk>; "Griffiths MPST" <MPST.Griffiths@dti.gsi.gov.uk>; <mpst.hewitt@dti.gov.uk>; <ryanj@parliament.uk>; "Webster Ian (Mr IC)" <Ian.Webster@dti.gsi.gov.uk>; <psdpm@odpm.gsi.gov.uk>; "I D Lawson" <idlawson@dda.gov.uk>; "Helen Williams" <helen-w@ukonline.co.uk>; <ministers@hm-treasury.gsi.gov.uk>; <roger.hetherington@bls.org.uk>; "Vinod Bhandari" <vbhandari@bl4london.com>; <peter.button@bls.org.uk>
Sent: 20 January 2005 13:19
Subject: SEC/117/304 appeal (continued ...)

Dear Mr Evans,

I refer you to your letter of 13th January 2005, a copy of which is available to those who do not have it on request.

Section 7.2.2 of your Smart Guidelines for Officials document, November 2002 states:-

7.2.2 Expert sources of advice (technical, market and financial)

In appraising projects, besides drawing on their own technical expertise, there may be a need to consult with specialist sources of advice on whether a proposal constitutes a "significant technological advance".

I will refer to this specialist source of advice as a "technical expert".

Please confirm at your earliest convenience that neither the DTI nor any DTI appointed technical expert has ever tested our software. Please also confirm that no DTI appointed technical expert has ever seen our software, nor have they spoken with or communicated in any way with any representative of our company. I am awaiting a copy of the report that I understand that the DTI commissioned on our project based solely on the information in our SMART application (a report on a report). Please explain how it is possible to conduct a proper evaluation of a project that is underway without testing of the prototype and dialogue between your appointed technical expert and the technical staff of the organization undertaking the project. Please explain how you reached the qualification of "fairly advanced" in your letter of the 13th January 2005 without such analysis. I propose that based on your poor, incomplete evaluation of our project, you are not in a position to know whether our proposal constitutes a "significant technological advance". I understand that both the Data Protection Act and the Freedom of Information Act grant us the right to see all documents which contain information about us. I would also like to see your "Marking Frame" document, as described in section 7.2.4 of your Smart Guidelines for Officials document, November 2002. Our fax machine number is 02083501351. I am meeting with Joan Ryan MP (Labour) tomorrow to discuss this dispute. My parents are meeting with John Gummer (Conservative) on Saturday to discuss the matter with him. We have found a solicitor who is interested in representing us if it is necessary to take the dispute to the Administrative Court for resolution. The Legal Services Commission and Department for Constitutional Affairs have expressed interest in the case. A speedy resolution of this matter would be appreciated.

Regards,

Stephen J.H. Williams
 Managing Director

S Projects
 must demonstrate
 novelty

TT from
 rescan vs.
 prior commitment
 CONTRADICTION.



Department of Trade and Industry

Mr S Williams
Advance Software Limited
Suite 56, London Business Innovation Centre
Innova Science Park
Enfield
Middlesex EN3 7XU

Bay 709
Kingsgate House
66-74 Victoria Street
London
SW1E 6SW

Tel +44 (0)20 7215 8563
Fax +44 (0)20 7215 4002
Enquiries +44 (0)20 7215 5000
Minicom +44 (0)20 7215 6740

Date 15 February 2005

www.dti.gov.uk
Roy.Evans@SBS.gsi.gov.uk

Dear Mr Williams

Thank you for your email messages of 18 and 20 January. You requested copies of the external technical advice which the Department sought on the Smart application submitted by Deep Thought Software Limited in December 2002. This information is enclosed.

You also requested a copy of the marking frame in use at the time of your application. I enclose a sample copy. No marking frame was completed for your application as it was withdrawn from the appraisal process before that stage was reached.

As you know, the external advice did not have any bearing on the result of your application. Your application did not meet the criteria for support because your project had reached a fairly advanced prototype stage. Your application was assessed against the same criteria as all others at the time. It would be impractical and prohibitively expensive for technical experts to visit every applicant for a grant to discuss the application. In addition the majority of applicants, unlike you, do not have a prototype to test. At your meeting with Mick Carr on 30 January 2003 you agreed with him that your grant application should be withdrawn because the project had reached a fairly advanced prototype stage, as confirmed in Mr Carr's letter of the same date.

Yours sincerely

A handwritten signature in dark ink, appearing to read 'Roy Evans', is written over a faint, larger version of the same signature.

ROY EVANS



Department of Trade and Industry

Mr S Williams
Advance Software Limited
Suite 56, London Business Innovation Centre
Innova Science Park
Enfield
Middlesex
EN3 7XU

Date 4 April 2005

Bay 709
Kingsgate House
66-74 Victoria Street
London
SW1E 6SW

Tel +44 (0)20 7215 8563
Fax +44 (0)20 7215 4002
Enquiries +44 (0)20 7215 5000
Minicom +44 (0)20 7215 6740

www.dti.gov.uk
Roy.Evans@SBS.gsi.gov.uk

Dear Mr Williams

Your email message of 15 March to the Secretary of State has been passed to me for reply. The Department has nothing further to add to previous correspondence on this matter.

Yours sincerely

A handwritten signature in blue ink, which appears to read 'Roy Evans', is located below the 'Yours sincerely' text.

ROY EVANS



Advance Software

Suite 56
London Business Innovation Centre
Innova Science Park
Enfield
Middlesex
EN3 7XU

15th March 2005

DTI/SBS Reference: SEC/117/304

Dear private secretary,

Please consider the following urgent, and for the immediate attention of your office's elected representative.

1. I have received your reply to our letter of 25/2/05 (included) granting our request (thank you).
2. We note that the Secretary of State for Trade and Industry or one of her representatives accepts (as is the case) that the events summarized in our letter of 25/2/05 were unforeseen circumstances beyond our control.
3. In his letter of 15th February, 2005, Department of Trade and Industry representative, Roy Evans states that "the external advice did not have any bearing on the result of your application". This is a bizarre statement to make. Why seek advice from external experts if one does not intend to incorporate findings from that report into ones assessment of a situation that one is not qualified to reach a conclusion on alone ?
4. In the same letter, Roy Evans also states "Your application did not meet the criteria for support because your project had reached a fairly advanced prototype state already".
5. In a meeting with a venture capital company recently, they expressed surprise that SMART funding had been withheld from our company for reasons of having a "fairly advanced prototype". The venture capital company are aware of at least one project that they are associated with that had a "fairly advanced prototype" at the time of evaluation (i.e. similar circumstances) that qualified for and was awarded a SMART award grant.

6. DTI/SBS has failed to provide clarification of the exact reasons for withdrawal/rejection of our SMART application. Despite being asked to do so, they have not quoted clauses from the "SMART Guidelines for Officials", November 2002 which would clearly exclude our project from support. They have had more than enough time to provide a clear explanation.

7. Section 3.10 of the "SMART Guidelines for Officials", November 2002 (under which it is agreed our project is to be evaluated) clearly states the criteria that software projects must meet to qualify for a SMART award. Our project clearly meets the criteria now, and did when our SMART application was submitted.

8. In his letter of 13th January, 2005, Roy Evans (DTI/SBS) states that "SMART is a discretionary award scheme".

9. In a telephone conversation some time ago, Roy Evans told me that all projects evaluated under SMART that met the qualification criteria have been awarded the grant.

10. It would seem that the only reason for rejection of our SMART application is the discretionary nature of the SMART award. DTI/SBS appear to be abusing their discretionary powers to unreasonably and irrationally withhold funding from our company.

11. Unreasonable and irrational use of discretionary powers is something that we will take up with Sir John Bourne at the National Audit Office, the Prime Minister's office, and through the courts, if necessary.

12. The unreasonable and irrational withholding of grant funding from our company that we clearly qualify for is causing significant personal distress and hardship to some of my friends, my family and myself. Please contact Department of Work and Pensions and Enfield Council for further details of the personal hardship I am suffering as a direct result of DTI inaction. My National Insurance number is NX466206B.

13. The unreasonable and irrational withholding of a SMART award from our company that we clearly qualify for is damaging the company by severely limiting our ability to make progress with our research and development activities due to lack of funding.

14. The unreasonable and irrational withholding of a SMART award from our company that we clearly qualify for is damaging the company by severely limiting our ability to make progress with potential investors due to their questioning of the significance and robustness of our technology due to lack of support from the DTI.

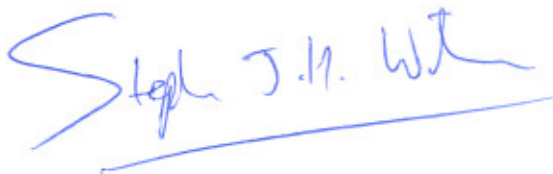
15. At the suggestion of a civil servant, we have considered taking legal action via the route of judicial review through the Administrative Court. I have taken legal advice from senior lawyers in the public law department of a large, reputable international law firm. They have advised me that such action would at best result in a quashing order of the DTI/SBS poor decision making to date. We do not currently have the funds to undertake such action.

16. I have discussed these matters with Vinod Bhandari of BusinessLink/London, appointed by Ms Judith Rutherford, Chief Executive of BusinessLink/London at the request of the Parliamentary Under Secretary of State for Small Business, Enterprise and Construction (ref: 92957). Please contact Vinod for his assessment of the situation.

17. I have discussed these matters at length with the Defence Diversification Agency's Technology Diversification Manager for London. Please contact him for his assessment of the situation.

While it was clearly unforeseen that the DTI Small Business Service would act so improperly, irrationally, unreasonably and unprofessionally for such an extended period of time, resolution of this situation still appears well beyond our control. However, resolution, is not (I imagine, I am no expert on such matters) beyond the control of the Secretary of State for Trade and Industry to address. I hereby ask her to intervene on our behalf to bring this stressful and time consuming episode to a mutually acceptable conclusion. Further details and supporting documentation on request. Questions welcome. The latest beta version of our new 3D Internet browser "Infinity" can be downloaded and evaluated from advance-software.co.uk/download at your convenience.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Stephen J.H. Williams', with a horizontal line drawn underneath it.

Stephen J.H. Williams
Managing Director

Advance Software Limited.
Tel: 0785 5655234
Email: steve@advance-software.co.uk

Confirmed received by Claire Ball 6/4/05

5,127 PROTOTYPES!

Home TV Radio Talk Where I Live A-Z Index

Search

UK version International version About the versions

Low graphics Accessibility help

BBC
NEWS

WATCH The News in 2 minutes

News services

Your news when you want it



Last Updated: Saturday, 30 December 2006, 01:12 GMT

E-mail this to a friend

Printable version

Knighthood for Dyson entrepreneur

James Dyson, the engineer who reinvented the vacuum cleaner, says his recipe for success is simple: he makes things that people want to buy.

It may sound easy - but Mr Dyson, who received a knighthood in the honours list, was not an overnight success.

A former art-school student, he says it took him four and a half years and 5,127 prototypes to refine his design.

Mr Dyson's patience paid off. He is about to have a "Sir" before his name, and he heads a firm worth about \$1bn.

Speaking of his long haul to the top, Mr Dyson said that while it may have sounded tedious, it was in fact fascinating.

"Each failure, the 5,126 failures taught me so much," the 59-year-old explained. "Success teaches you nothing. Failures teach you everything.

"Making mistakes is the most important thing you can do."

Exporting jobs

Mr Dyson was born in 1947 in Norfolk, the son of academic parents. After school, he studied at the Royal College of Art between 1966 and 1970, where he learnt furniture and interior design.

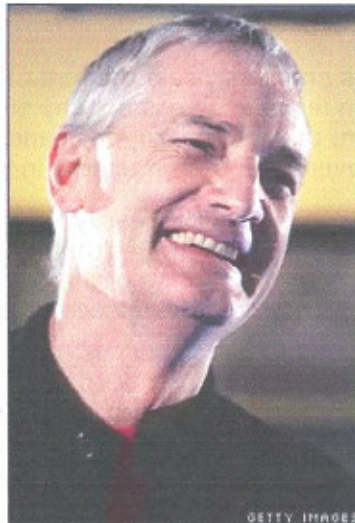
Following four years at engineering firm Rotork, Mr Dyson set up his own firm in 1974 and developed the Ballbarrow, which replaced the wheelbarrow's traditional wheel with a ball.

According to his company website, Mr Dyson stumbled across the idea for the bagless vacuum cleaner while renovating his country house in the Cotswolds.

“ To survive against Chinese producers, we can't just rely on shallow styling. We need technology and design that they don't have ”

James Dyson

In 1983, his pink G-Force vacuum cleaner was featured on the front cover of Design Magazine. A decade later, the Dyson DC01 came onto the UK market selling for about



James Dyson has been a champion of UK design and engineering

VIDEO AND AUDIO NEWS

Famous faces on the Queen's New Year Honours List

WATCH

SEE ALSO

Dyson school 'to boost engineers'

10 Jul 06 | Education

Jobs to go from Dyson call centre

20 Mar 06 | Wiltshire

Dyson has £25m riding on a ball

15 Mar 05 | Business

RELATED INTERNET LINKS

Dyson

Dyson Foundation

The BBC is not responsible for the content of external internet sites

TOP BUSINESS STORIES

Firm seeks to ease bird flu fears

No more Mars bar ads for children

Bush submits \$2.9 trillion budget

News feeds

MOST POPULAR STORIES NOW

MOST E-MAILED MOST READ

Briefcase 'that changed the world'

Deal ends Beatles' Apple battle

Men jailed for online rape plot

21/7 accused 'made frantic calls'

Promise to 'stamp out' bird flu

Most popular now, in detail

£200.

Today, the company has about 1,400 staff in the UK, with about 4,000 others working in production plants in Malaysia and China.

Despite his successes, Mr Dyson has been criticised for his decision to ship so many production jobs abroad.

Paul Kenny, general secretary of the GMB said: "Do people now get a knighthood for services to exporting jobs?"

'Country's future'

Mr Dyson has previously said that critical comments have little effect on him - and he is not shy of fighting for what he believes in, taking on vacuum-cleaner firm Hoover in a legal battle over patent infringement in 1999.

Despite selling products that are easily recognisable by their bright colours, Mr Dyson argues that cute designs are not enough to ensure the success of a product, and wants the UK to do more to promote engineering and technology.

"To survive against Chinese producers, we can't just rely on shallow styling," he said. "We need technology and design that they don't have.

"As long as we continue to innovate and produce products that have better features and work better, we can compete."



James Dyson wants the UK to be an engineering centre of excellence

Earlier this year, Mr Dyson revealed plans to set up the Dyson School of Design Innovation in Bath, which will aim to encourage young people to consider engineering careers.

"I have spent 35 years making things in a country that often has little regard for its manufacturers," he once said.

"It has left me more convinced than ever that engineering is this country's future."



R&D White Paper

WHP 084

April 2004

The broadband platform: streamed 3D interactive mixed media in the home

M. Price *and* B. Weir

The broadband platform: streamed 3D interactive mixed media in the home

M. Price and B. Weir

Abstract

The future 'broadband platform' could be any device that is attached to the broadband-enabled home network. In this paper, we focus on the use of PCs and games consoles to provide a shared experience of streamed 3D interactive mixed media. We describe two demonstration applications which are being developed to provide a better understanding of what can be achieved with streamed 3D interactive mixed media using suitable computer game technology.

This document was originally published in the proceedings of the 7th United Kingdom Simulation Society Conference, Oxford, UK, 29-31 March 2004.

Additional key words: broadband, interactivity, streaming, television, radio, computer games.

White Papers are distributed freely on request.
Authorisation of the Chief Scientist is required for
publication.

© BBC 2004. All rights reserved. Except as provided below, no part of this document may be reproduced in any material form (including photocopying or storing it in any medium by electronic means) without the prior written permission of BBC Research & Development except in accordance with the provisions of the (UK) Copyright, Designs and Patents Act 1988.

The BBC grants permission to individuals and organisations to make copies of the entire document (including this copyright notice) for their own internal use. No copies of this document may be published, distributed or made available to third parties whether by paper, electronic or other means without the BBC's prior written permission. Where necessary, third parties should be directed to the relevant page on BBC's website at <http://www.bbc.co.uk/rd/pubs/whp> for a copy of this document.

THE BROADBAND PLATFORM: STREAMED 3D INTERACTIVE MIXED MEDIA IN THE HOME

M. PRICE, B. WEIR

*BBC Research & Development,
Kingswood Warren,
Tadworth,
Surrey KT20 6NP
marc.price@rd.bbc.co.uk*

Abstract: The future ‘broadband platform’ could be any device that is attached to the broadband-enabled home network. In this paper, we focus on the use of PCs and games consoles to provide a shared experience of streamed 3D interactive mixed media. We describe two demonstration applications which are being developed to provide a better understanding of what can be achieved with streamed 3D interactive mixed media using suitable computer game technology.

Keywords: broadband, interactivity, streaming, television, radio, computer games.

1 INTRODUCTION

The broadband-enabled, networked ‘home platform’ (hence ‘broadband platform’) offers a huge range of new possibilities in mixed media. The ability to interconnect a TV set-top box, a PC, a games console, and on a wider scale, home networks of other households, allows a new shared experience of streamed 3D interactive mixed media.

In this paper, we focus on the idea that the ‘broadband platform’ is either a PC or a games console. However in general, it could be any device that is connected to the home network. It is difficult to predict exactly how the features of the future ‘broadband platform’ will be successfully exploited in broadcast applications. One thing we can say for sure though, is that **it will not be television**. Like the spoken word of radio has not replaced books, and indeed, television has not replaced radio, any attempts to make the ‘broadband platform’ replace television will almost certainly fail.

There are a huge number of exciting ideas for future content with the interactivity of a computer game, and the controlled narrative of a professional broadcast. Hence, the broadcaster would be negligent to ignore the ‘broadband platform’. If the evolution of the platform needs to be driven according to the needs of the user - in the BBC’s case, the licence-payer - then we need to establish new techniques, procedures, and creative practices, for producing its content.

BBC Research and Development has been actively pursuing the technical side to this topic since 1996, when we began to explore new developments of cur-

rent Virtual Production technology [1]. This paper briefly reviews that work in section 2. We then move on to describe recent ‘works-in-progress’: the ‘Virtual Media Lounge’ which explores the use of a computer game engine to mix streamed audio and video content with 3D interactive content; and the ‘Massively Multiplayer Online Event’, which makes use of an interesting feature of massively multiplayer online games. These are described in sections 3 and 4. Finally, possibilities of future work are described in section 5.

2 BACKGROUND

Television production is increasingly making use of 3D models, in applications including post-produced animations and Virtual Production. These models are rendered to produce 2D images during the production process. However, with the ever increasing power of 3D graphics processors in home PCs, and new developments in 3D technology, BBC Research and Development has been considering how the broadcaster can maintain content in its 3D form all the way through the programme chain. Hence in 1996, BBC Research and Development teamed-up with 7 academic and industrial partners on a 3 year collaborative project known as PROMETHEUS [2], within the DTI’s LINK programme. The aim of the project was to prove the feasibility of an end-to-end 3D programme chain, from content production, through delivery, to fatigue-free 3D display.

The project built upon previous work in Virtual Production, where tools were developed to allow the

scenery in conventional television production to be replaced with a 3D virtual environment. In order to achieve 3D television production from this starting point, the actors and their interactions with the world around them also had to be 'virtual'. In other words, the actors had to be realistically modelled in 3D, and the resulting models then placed into the 3D virtual environment.

In PROMETHEUS, actor models were created using a range of techniques:

- Texture-mapping of live video onto 3D geometry (planes, simple curved geometry, and rough actor models);
- Animation of avatars, which are created by a 3D 'photo booth', and animated according to data obtained from marker-free, vision-based motion capture methods (for both face and body);
- Simulation of virtual clothing.

In order to deliver 3D television content to the viewer, it needs to be encoded in a way which preserves the model-based nature of the content, so that the viewer can independently control viewpoint and, if they wish, view it with a 3D display. In PROMETHEUS, delivery of 3D content used MPEG-4 BIFS [3]. Display of the decoded and rendered MPEG-4 scene used a 3D display, based on the principle of Integral Imaging [4], to provide a glasses-free, full-parallax display, which can be viewed simultaneously by several people. A more detailed review of the project is given in [5].

The PROMETHEUS project was concluded in September 2002. Since then the Virtual Production team at BBC Research and Development has been considering how this body of work could be built upon in the future. In doing so, the following points have been borne in mind.

- PROMETHEUS was intended to exploit both the computational and networking capabilities of the future home platform. However, it partially failed from inception by not considering the 'return-path' (ie from viewer to broadcaster) and interactivity (beyond movement of viewpoint).
- Very few authoring tools and players which implement the BIFS and other 3D specifications of the MPEG-4 standard are commercially available. Those that are available are very new to the market and not particularly well established even today (throughout PROMETHEUS, we were unable to find a fully functional player which supported the MPEG-4 specifications we required). In contrast, commercial computer game engines are very mature and well established, and they

generally implement most of the features that we would like to exploit on the home platform.

As a result of this, we are exploring the use of computer game platforms as the basis for the future 'broadband platform'. The planned outcomes of this exploration are demonstration applications, showing a variety of simple, cost-effective ways in which this technology could be exploited. The remainder of this paper discusses two of these applications.

3 VIRTUAL MEDIA LOUNGE

The idea of the Virtual Media Lounge is to exploit 3D game hardware and software to enhance the TV viewing (or radio listening) experience. The intention is for this application to run on either a PC or a game console. The concept of the application is as follows.

The user connects to a broadcaster-hosted 'lounge-server' with a (freely available) 'MediaLounge' application. The application is based on a 3D game engine (we are currently using the 'Crystal Space' open source game SDK [6]). The application downloads a 3D virtual world from the lounge-server, which consists of buildings - perhaps a city - and natural features. Each of the rooms in each of the buildings is a 'virtual media lounge'.

When the MediaLounge connects with the lounge-server, it also connects with a local DVB-server process that is hosted on the home-networked set-top box - at its simplest, this would be a DVB card installed in a PC attached to the home network. The DVB server streams all broadcast audio and video content requested by the MediaLounge application, over the local home network. Each virtual media lounge within the downloaded 3D world contains a virtual TV or radio, which is an appropriately shaped polygon with a tag to identify its A/V source - essentially, the tag is a channel ident. The MediaLounge application detects each tag, and maps the appropriate streamed video and audio content into the virtual environment, at the relevant locations. The user selects the desired lounge, and hence the desired channel, by navigating through the virtual world.

Each of the virtual media lounges could be created according to designs by celebrity interior (or exterior) designers. It could also be made possible for users to create their own lounges, and submit them to the server for general use.

The virtual world is downloaded and stored locally so that each MediaLounge application uses a private copy of that world. In other words, it is not a single, massively shared virtual world. However, the MediaLounge application functions a lot like a networked

game engine. It can be instructed by the user to act as a 'server', to allow a small group of elected 'friends' to connect and share the same virtual world. Alternatively, it can be instructed to be a 'client', where it searches on the internet for all other MediaLounges that are in 'server' mode, and reports those that it has permission to connect with - ie it checks whether the user has been elected as a 'friend'. Hence, the broadband connection allows the user to interact with other occupants of the virtual world, creating a shared media experience beyond the boundaries of the user's real room. The interactions could use any type of available interface, not just text or speech. For example, it might be interesting to use a biofeedback device to share emotional responses to dramatic events in the embedded media.

The embedded media stream is not restricted to just TV and radio. For example, the home DVB server could be much more general purpose, serving 'time-shifted' audio and video content (as with a personal video recorder), pre-recorded content from CD, DVD, etc, or even home-made content such as photograph slideshows or videos. Indeed, there is no reason why the virtual world should not contain portals to 3D games.

Each occupant of a room is assigned an avatar. At any point in time, the avatar is located according to the location of the viewpoint that the corresponding occupant has adopted. The avatar itself would be some form of 3D humanoid model. In its most simplest form, this model could consist of a blank rectangle, showing the user's name or a recent photograph, and the most recent text input from them. In its most elaborate form, it could be an accurate, animated model of the actual person it is representing (obtained using whatever scanning technology is available to the user). In between these extremes, it could be some kind of stylised model that has been authored by the user.

From our perspective, the idea of adapting the video texture-mapped polygon actor model technique, as used in PROMETHEUS, is the most interesting. This technique works by creating simple geometry (a rectangle, or a semi-spheroidal polygon) and texture-mapping it with a live video. In this case, the video input could come from a webcam pointing at the corresponding user, which is encoded into a very low bit-rate video stream. This could be accompanied with a low bit-rate audio stream from a microphone, or with text.

A virtual world could also contain artificial characters, with in-built AI behaviours. For example, it might be fun to watch a pop programme, and dance with the other virtual room occupants with the aid of a 'dance mat', and the artificial characters could be 'Pan's People' style computer-generated dancers.

The images in figures 1 and 2 are snap-shots of the MediaLounge application in its current state of development. Here, we see different viewpoints of a Virtual Media Lounge in a wooden floored, stone building. The lounge has a virtual TV, which is tuned to BBC2.

4 MASSIVELY MULTIPLAYER ONLINE EVENT

The Massively Multiplayer Online Event (MMOE) concept builds upon recent developments in online gaming, streamed multimedia content, and domestic broadband. Current Massively Multiplayer Online Games (MMOG), such as EverQuest [7], PlanetSide [8] or The Sims - Online [9], take place in so-called persistent worlds, gaming spaces where a user can log in at any desired time to play the game. The content is typically that provided by the game environment (creatures, dungeons, objects, etc) or by other players (social interactions). There are rarely any 'live' events in such games, and such live events are considered bonuses, rather than core components of the game.

The MMOE concept turns this model upon its head. The gaming environment exists only as a substrate for orchestrated events controlled by some third party. In order to demonstrate this, we have developed a broadband gameshow application (called 'Manhunt Island') using the 'Flashpoint' game engine [10]. The player experience is described as follows.

The player, with the gaming software installed on his home platform, logs onto the event website. When the event begins, the player is presented with a window displaying an audio/video stream from a studio. The streamed content from the studio shows a presenter (host) describing the event rules. In this case, the player takes the role of a bounty hunter on a large island. The aim of the game is for the player to track down and capture one of a number of escaped convicts that are being controlled by guests on the show. The presenter is then shown introducing the guests and transforming them into avatars, which are then inserted into the game-world. When this introduction is complete, the game launches.

The players find themselves in the game-world and must follow a series of clues in order to capture one of the escaped convicts within some allotted time. Meanwhile, the studio guests controlling the convicts are trying to avoid being captured. While the game is underway, an audio commentary is streamed to the players describing the state of the game. The game ends either when all the convicts have been captured, or after some specified period of time. The audio/video stream from the studio is presented to the player again and the presenter congratulates the winners and hands out

prizes.

5 WHERE NEXT?

In 8 years we have progressed from conventional Virtual Production to the stage of exploring prototype services which draw-upon the emerging commodity technology of the broadband-enabled home. The prototype Virtual Media Lounge application described in section 3, will continue to be developed - we are planning to set it up as an open source project in the near future. We plan to port it to a suitable games console, so that it can be demonstrated as a shared experience on several platform types.

Beyond this, we anticipate that further work would involve development of more elaborate artificial characters for insertion into lounges, so that the experience is more compelling. For example, we could have Virtual Lounges which play out music of a selected genre, and are not only occupied by avatars that are controlled in real-time by other users, but also artificial characters, who facilitate activities within the virtual room, along the lines of a club or a party.

Developing this idea further, the entire virtual world could be given behaviours which adapt the colours, geometry, and physics of the surroundings according to characteristics of the music. It could also be used for a TV music channel (such as 'The Hits', 'MTV', etc), where the music videos are played-out on a large virtual video-wall.

As mentioned in section 3, the idea of using affective feedback from users to provide input to the overall environment would also be an interesting line of study. Again, there are many ways in which it could be applied. Affective input could be biofeedback, or it could be derived using vocal intonation and gestural information [11]. However, of more interest would be a device which can acquire bio-signals remotely.

There is also the possibility of using the Media Lounge as the underlying platform for the MMOE. The introductory video could be played out on a large window, which is also tagged as a portal into the shared virtual world of the event. The user views the introductory video and then traverses the portal into the game event. If the MMOE Lounge is entered when no event is scheduled to begin, the video window could play-out a kind of newsreel, showing related news articles, action replays of exciting game-play, celebrity interviews, and award events for the most skilled players.

There are a number of technical as well as aesthetic trade-offs in considering all of these options. Avatars, AI, 3D rendering, stream encoding and decoding, etc, all require processing power on the local host. Net-

work latency effects need to be handled gracefully. This is particularly pertinent with any kind of shared dancing experience. This would need to be handled with buffering so that the resulting lag is fixed according to the beat of the music. Possible differences in hardware need to be accommodated through scalability. There are obviously issues regarding security, and how the system would work with in-place security measures (eg fire-walls). There are also issues regarding the handling of the sheer volume of users of the MMOE. However, these issues cannot be tackled until we have a reasonable involvement from interested clients.

6 SUMMARY

This paper introduced the idea of the 'broadband platform', a generic term we have coined to refer to any device that is connected to the broadband-enabled home network. Our past investigations on the development of our Virtual Production technology for use with the 'broadband platform' were reviewed. Then we described our current work, where we are exploring the use of computer game technology for streamed 3D interactive mixed media.

7 ACKNOWLEDGEMENTS

We acknowledge the contributors of the 'Crystal Space' project - especially Jorrit Tyberghein and Eric Sunshine - for their ongoing technical support on the use of the 'Crystal Space' game SDK.

BIOGRAPHY



Marc Price: Marc completed an Electronic Engineering Technician apprenticeship at 'Klark Teknik', in 1986, and after a period in industry, obtained a BEng Electronic Engineering (with first class honours) from the University of Central England in

1992. Marc then studied for a PhD at King's College London, where he investigated and developed signal processing theories for synthesising and analysing several novel classes of digital filter. Shortly after receiving his PhD in 1996, he took a position with the BBC R&D department. Initially, Marc worked on archive retrieval, on which he has a patent pending. In 1998, Marc took a sabbatical postdoctoral position at King's College London, to follow-up some of his earlier research with applications in high quality speech coding. Marc returned to BBC R&D in October 1999, to work in the general area of virtual production. Since then, Marc has contributed to the PROMETHEUS and

ORIGAMI projects, and pursued his interests in multimodal 3D interactive media.



Bruce Weir: Bruce graduated from Sheffield University in 1995 with a degree in Physics. He then worked at Smith & Nephew Group Research Centre in York for 12 months. Following this, Bruce studied for a PhD at the Cavendish Laboratory in

Cambridge, on the crystal structures of electroluminescent polymers. After receiving his PhD in 2000 he joined BBC R&D, working on virtual production technologies and thinking about how narrative in computer games can be improved. He is currently designing AI control systems for robotic cameras.

REFERENCES

- [1] O. Grau, M. Price, G. Thomas, 'Use of 3D Techniques for Virtual Production', *Proceedings of SPIE Photonics West Symposia*, Vol4309, January 2001.
- [2] <http://www.bbc.co.uk/rd/projects/prometheus/>
- [3] P. Woodward, Y. Paker, A. Pearmain, 'Implementing virtual studios in MPEG-4', *Proceedings of IEEE CAS Workshop on MPEG-4*, 2001.
- [4] M. Lippmann, 'Epreuves Reversibles Donnant La Sensation Durelief', *J. Phys*, No. 821, 1908.
- [5] M.Price, et al, 'Real-time Production and Delivery of 3D Media', *Proceedings of International Broadcasting Convention*, 2002.
- [6] J. Tyberghein, et al, <http://crystal.sf.net>
- [7] <http://everquest.station.sony.com/>
- [8] <http://planetside.station.sony.com/>
- [9] <http://thesimsonline.ea.com>
- [10] <http://www.flashpoint1985.com/>
- [11] M.Pantic, L.Rothkrantz, 'Toward Affect-sensitive Multimodal Human-computer Interaction', *IEEE Proceedings*, Vol.91, No.9, September 2003.



Figure 1: A TV Lounge: View from the Door



Figure 2: A TV Lounge: View from Inside

Smart

Application Form

Feasibility Studies and Development Projects

Official use only

Date received _____

Ref No _____

Region _____

Objective Area _____

Case officer _____

- * Please read the Guidance Notes carefully before you complete this form.
- * Please type your answers, or write in black ink using BLOCK LETTERS. This form is available electronically at: <http://www.businesslink.org/smart>
- * To apply you must complete the application form and provide a detailed Project Proposal, as set out in the Guidance Notes
- * Where boxes are provided please mark the correct box with a tick.
- * We will publish information from Questions 1-17 of this form if you receive an award.

Applicant Details

1. In what capacity are you applying?
(Individual, sole trader/proprietor,
partnership or company)

Company

2. Your business name or your name
(if an individual /sole trader) or
the name of the proprietor or a
partner (if a partnership)

Deep Thought Software Ltd

3. Your business address

Moorside Lodge
Blythburgh Road
Westleton
Suffolk

Postcode IP17 3AS

Website

www.advance-3d.com (Not live yet)

4. Who should we contact to discuss your application:

Name

Steve Williams

Position in organisation

Technical/Managing Director

Telephone number

07811 593161

Fax

e-mail

steve-w@dircon.co.uk

5. Where is the main work on the
project to be done if different
from the address at Q.3

82 Studley Court
4 Jamestown Way
Virginia Quay
London

Postcode E14 2DA

6. If this application is on behalf of a
registered company what is your
Company Registration Number?

3970355

Applicant Details

7. Place and date of incorporation

Date 11/04/2000

Place Select from list below

or Tick box:

England and Wales ☒

Northern Ireland ☐

Scotland ☐

8. Is your company a member of a group?

Select from list or Tick box: Yes ☐ No ☒

If YES, please give the name and address (including postcode) of the ultimate holding company

n/a

Postcode

and the Company Registration Number and place of incorporation of the ultimate holding company

CRN: n/a

Place:

9. Please give the total number of employees (full time equivalent) in:

Your business 2

Your group

10. Do you, or any other partner or director of your business, have any interests in, or control over, any other business(es)?

Select from list or Tick box: Yes ☐ No ☒

Number of employees

If YES, please give details (continue on a separate sheet of paper if necessary). Please give the total number of employees (full time equivalent) in these businesses

Details:

11. What are (for an existing business) or will be (if a start up) your main business activities? Describe the products you make, or the services you provide (include catalogues or brochures as annexes, if available)

Deep Thought Software Ltd is a 3D graphics research and development company.

Project Details

12. What SIC Code(s) does your business fall under?

72.20

13. What type of project do you propose to undertake?

☒ Feasibility Study

☐ Development Project

14. Please give a brief title of the project (maximum 30 characters)

Advance-3D

15. Please give a brief description of the project (maximum 100 words)

The purpose of this project is to assess the possibility of developing technology that will allow the development of an enhanced graphics web browser. Such a product will maximise the opportunities available through high speed internet connectivity and newly developed hardware capabilities. There are also secondary objectives which, if achieved, will greatly enhance the commercial potential for this emerging technology.

16. How long do you expect the project to last?

Years 6 Months

17. Please indicate the broad area of technology into which your proposed project falls. This has no bearing on your chances of winning an award but is valuable information for us in planning future programmes.

Please tick one box only

| | | |
|-----|-------------------------------|-------------------------------------|
| 801 | Manufacturing technology | <input type="checkbox"/> |
| 802 | Materials technology | <input type="checkbox"/> |
| 803 | Information technology | <input checked="" type="checkbox"/> |
| 804 | Biotechnology | <input type="checkbox"/> |
| 805 | Environmental technology | <input type="checkbox"/> |
| 806 | Communications | <input type="checkbox"/> |
| 807 | Instrumentation and control | <input type="checkbox"/> |
| 808 | Heat and mass transfer | <input type="checkbox"/> |
| 809 | New testing methods | <input type="checkbox"/> |
| 810 | Separation techniques | <input type="checkbox"/> |
| 811 | Tribology, wear and corrosion | <input type="checkbox"/> |
| 812 | Medical technology | <input type="checkbox"/> |
| 813 | Other | <input type="checkbox"/> |

Project Details In Confidence

18. What are the main risks to you or the business of carrying out this project (for example, financial, technical)?

The main technical risk will be failure to achieve the stated objectives due to insurmountable technical hurdles together with stability/functionality risks arising from necessary use of open source software.

Without funding help, the company will not be able to progress this research and would fail to develop commercial products that will allow it to recoup the major investment it has made to date.

19. How do you intend to exploit the results of your project (tick all that may apply)?

☒ Licensing to others

☒ Dissemination of information, publication etc.

☒ Manufacture and sale of products

☐ Use process development for own benefits

☐ Other (give details)

20. What effect do you expect your project to have in terms of volume and value on:

Sales? £1 million annual turnover minimum, £10 million annual turnover quite achievable

Profit? £500,000 per annum to £5,000,000 per annum

21. When do you expect the effects at Q.20 to start?

Autumn 2003

22. Using at least one of the criteria below, when would you judge your project to have been successful?:

| | | |
|----------------------------------|----------|------------------------------|
| When | | Units have been sold. |
| When | £200,000 | Revenues have been received? |
| When the project has contributed | £100,000 | Towards profits? |

23. By what date do you expect the target(s) at Q.22 to have been reached?

December 2003

Project Cost Estimates In Confidence

24. Please give a summary of estimated project costs by project year, under the headings below (you might not need to use all of these boxes). You should include only those costs relating to the research and development phase of the project – not those relating to the production implementation phase. You may prefer to use the spreadsheet available on the website at

| | Year 1 | Year 2 | Year 3 | £ |
|--|------------|--------|--------|------------|
| Pay of personnel engaged on the project (exclude external consultants) | £34,000.00 | | | £34,000.00 |
| Overheads (provide breakdown on separate sheet) | £3,400.00 | | | £3,400.00 |
| Materials consumed during the project | £3,000.00 | | | £3,000.00 |
| Consultancy fees | | | | |
| Sub-contract charges | £3,000.00 | | | £3,000.00 |
| Fees for trials and testing | | | | |
| Other external costs (please specify on a separate sheet) | | | | |
| Preparation of technical manuals | | | | |
| Intellectual property costs | £16,000.00 | | | £16,000.00 |
| Capital equipment and tooling | £1,500.00 | | | £1,500.00 |
| Market assessment | £500.00 | | | £500.00 |
| Training | | | | |
| Other (please specify on a separate sheet) | | | | |
| Gross Total | £61,400.00 | | | £61,400.00 |
| Less estimated residual value of equipment, tooling and scrap material to the business at the end of the project | £750.00 | | | £750.00 |
| Net Total Project costs | £60,650.00 | | | £60,650.00 |

25. Please give a breakdown of the pay of personnel (e.g. salary or drawings) to be engaged in your project. The total should agree with the "Pay of personnel" figure entered in the table at 24. You may prefer to use the spreadsheet available on the website at

| Name (or post to be filled) | Use Hourly or Daily or Weekly Rate as applicable | | | Number of Hourly/Daily/Weekly Units to be worked on project | Total cost (unit rate X number of units) |
|-----------------------------|--|------------|-------------|---|--|
| | Hourly Rate | Daily Rate | Weekly Rate | | |
| Steve Williams | | £200.00 | | 80.00 | £16,000.00 |
| Ian Fennelly | | £150.00 | | 120.00 | £18,000.00 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Total Pay of Personnel | | | | | £34,000.00 |

Financial Information In Confidence

26. We require that the following information is provided to demonstrate the viability of your business and project:

Accounts If your business is established, and required to have its accounts audited, supply your last two years' audited accounts. If these are more than three months old, you must also provide up-to-date management accounts; or, if the business is exempt from the audit requirement, your last two years' annual accounts. If these are more than three months old, you must also provide up-to-date management accounts; and if your business is part of a group, accounts for parent and ultimate holding companies should be provided on the same basis.

Cashflow Please provide a forward cashflow projection. Show anticipated income and expenditure for your business for the period up to at least a year after the conclusion of the project, including the costs and income associated with the proposed project.

You may wish to use the cashflow spreadsheet available on the website at

Assumptions Please explain below any assumptions used in arriving at the income and expenditure figures in the cashflow projections.

27. What was the annual turnover in your most recent accounts in:

Your business? £ 34689

Your group? £

28. What was the balance sheet total (total assets net of depreciation) in:

Your business? £ 5992

Your group? £

29. When did that financial year end?

30/04/2002

30. Show fully how you intend to fund the project, listing all private and public sources you intend to draw upon (e.g. internal resources, share capital, banks, development agencies, government departments, NESTA European Community, universities etc). You must provide any written confirmation of finance with your application.

| Source of funding – private sector | Amount |
|------------------------------------|-------------------------|
| Deep Thought Software Reserves | £16,400.00 |
| | £ |
| | £ |
| Source of funding – public sector | Amount |
| Smart Feasibility Award | £45,000.00 |
| | £ |
| | £ |
| | TOTAL £61,400.00 |

Other Information In Confidence

31. What would be the likely effect of your not being offered an award? (e.g. delay, abandonment, seek funds elsewhere etc)?

Without the Smart Feasibility support funding the company will have insufficient funds to pursue this research and development and so the project would, regrettably, probably have to be abandoned.

32. Have you or your business applied, or been connected with an application, for other public sector assistance before?

tick box: Yes ☒ No ☐

If Yes, please give details on a separate sheet of paper.

33. Have you sought support for this project from any other public sector source of assistance?

tick box: Yes ☐ No ☒

If Yes, please give details on a separate sheet of paper.

34. Have you, or any other partner or director of your business, ever been prosecuted for fraud or disqualified from becoming a director?

tick box: Yes ☐ No ☒

*If Yes, please give details on a separate sheet of paper (but **do not** include it in your project proposal). Depending on the circumstances a positive response to this question will not automatically disqualify you from obtaining an award.*

35. Have you, or any other partner or director of your business, ever been a proprietor, partner or director of a business which went into bankruptcy, liquidation or receivership?

tick box: Yes ☐ No ☒

*If Yes, please give details on a separate sheet of paper (but **do not** include it in your project proposal). Depending on the circumstances a positive response to this question will not automatically disqualify you from obtaining an award.*

Declaration – please read this carefully before signing In Confidence

This form contains information which is personal data for the purposes of the Data Protection Act 1998 and in respect of which the Department of Trade and Industry is obliged to supply the following information:

The data controller is the Department of Trade and Industry.

The information you provide will be used for the following purposes:

(i) Processing and appraising your application under the Smart scheme. Your application may be referred to other Government departments or outside organisations who are contracted by the Small Business Service to provide technical expertise in confidence.

(ii) If your application is unsuccessful, unless you disagree, your name and address (but not details of your project proposal) will be passed to your local Business Link. This is so that the Business Link can perhaps consider with you whether there are any suitable alternatives to Smart for taking your proposals forward, or whether they can help you in any other way.

Place a **tick** in this box if you do not wish your name and address to be passed to the Business Link ☐

(iii) If your application is successful, we will publish information from questions 1-17 of your application form both in hard copy and on the internet in a directory of award recipients. The directory is publicly available: it is intended to provide information for potential applicants and investors on the types of Smart project, and individuals and businesses, that receive Smart awards.

Subject to (i) to (iii) above, the information you provide will not be disclosed to any other organisation for any other purpose other than in relation to cases of suspected fraud.

The Department of Trade and Industry's representative for the purposes of the Data Protection Act is:

The Data Protection Act Officer
Department of Trade and Industry
LG139
1 Victoria Street
London SW1H 0ET
Tel: 020 7215 0029

If you are a registered company, an Executive director must sign; if you are a sole trader, the Proprietor must sign; and if you are a partnership, a partner with authority to bind the other partners must sign.

If you give information which you know or suspect is untrue or misleading you may be committing an offence which could lead to prosecution.

I declare that the information on this form and any other information given in support of this application is correct to the best of my knowledge and belief. I agree that if this application is successful, the information in Question 1-17 can be published in hard copy and on the Internet in a directory of award recipients.

Signed



Date 22/12/02

Name (BLOCK LETTERS) STEPHEN J. H. WILLIAMS

Position in your organisation MANAGING DIRECTOR

How did you find out about Smart?

INTERNET SEARCH.

checklist In Confidence

Have you attached copies of

| | YES (Tick Box) | Annex No. in your proposal | Remarks |
|---|-------------------------------------|-------------------------------|--|
| A detailed project proposal? (See paragraphs 27-46 of the Guidance Notes) | <input checked="" type="checkbox"/> | | |
| A project timetable? | <input checked="" type="checkbox"/> | | Section 6 of the proposal |
| Evidence of how you will fund your share of the project? | <input checked="" type="checkbox"/> | 3 | |
| Evidence of any intellectual property rights relevant to the project? | <input checked="" type="checkbox"/> | | See section 5 of the proposal |
| A copy of a patent application (where applicable?) | <input type="checkbox"/> | | not applicable yet |
| CVs for key personnel employed on the project? | <input checked="" type="checkbox"/> | 2 | |
| Accounts: if your business is established and required to have its accounts audited, supply your last two years' audited accounts. If these are more than three months old, you must also provide up-to-date management accounts; or: if the business is exempt from the audit requirement, your last two years' annual accounts. If these are more than three months old, you must also provide up-to-date management accounts; and: if your business is part of a group, accounts for parent and ultimate holding companies should be provided on the same basis. If you fail to supply any of these items your application is likely to be rejected. | <input checked="" type="checkbox"/> | 5 | Published accounts to March 2002 and management statements to 30/11/02 |

Where to return your application

Send your completed application to the SBS Smart team for the Region where you intend to work on your Smart project (this may be different from the region where you are located). Consideration of your application may be delayed if you send it to the wrong region. See www.businesslink.org/smart to obtain details of SBS regional teams, or call Business Link on 0845 600 9 006.

Deep Thought Software Ltd.

Smart Feasibility Award Project Proposal

Advance-3D

December 2002

Contents

| | | |
|------------|--|-----------|
| 1. | Project Summary | 3 |
| 2. | Project Overview | 3 |
| 3. | Objectives | 4 |
| 3.1 | Technical Objectives | 4 |
| 3.2 | Commercial Objectives | 4 |
| 4. | Technical Description | 5 |
| 5. | Innovation | 5 |
| 5.1 | Innovation for the industry sector | 5 |
| 5.2 | Intellectual property situation | 6 |
| 6. | Project Timetable | 6 |
| 7. | Commercial Exploitation | 7 |
| 7.1 | Market details | 7 |
| 7.2 | Competition | 7 |
| 7.3 | Future market developments | 8 |
| 7.4 | Planned exploitation issues and strategies | 9 |
| 8. | Business Background and Project Management | 9 |
| 8.1 | Established business profile and ownership | 9 |
| 8.2 | Project team | 9 |
| 8.3 | Project management | 10 |
| 9. | Use of Available Funds | 10 |
| 9.1 | Availability of funds from own sources | 10 |
| 9.2 | Company history of R&D spend and internal project approval | 10 |
| 10. | Need for Smart Support | 10 |
| 10.1 | The importance of Smart funding | 10 |
| 10.2 | Other sources of finance that will be used | 10 |
| 11. | Project Costs | 11 |

Appendices

1. Evidence of political and commercial interests fuelling market growth
2. CVs Steve Williams, Ian Fennelly, Matthew Joynes, Helen Williams
3. Evidence of funding from own sources
4. Project cash flow forecast
5. Company accounts and cash flow forecast

1. Project Summary

Deep Thought Software Ltd, are a small computer software design and development company based in rural East Suffolk. It has been established for 2½ years and has focussed its activities on creative approaches to internet web exploration. In the process of this activity it has conceived of the idea and generated possible approaches towards the development of a 3D web browser that will allow the operator to browse 3D and traditional 2D web sites from the same platform. This will be a major innovation opening-up the full commercial potential of such technology to allow users to explore the internet in a new and exciting manner.

Therefore the overall objective of this project is to assess the possibility of developing technology that will allow the development of a 3D web browser capable of full, seamless integration with existing 2D web sites. There will be a number of subsidiary technical objectives, realisation of which will greatly enhance the ultimate potential for this emerging technology.

To investigate this a technical research programme has been identified that will involve expenditure totalling £60,650. Funds of around £15,650 are available from private sources and so a Smart Feasibility Award of £45,000 is being requested in order for this project to proceed.

2. Project Overview

The pace of technological advance in recent years has fuelled an expectation from the computer user consumer base of more and more product innovation. In order to access the internet, users typically use web browsers such as Microsoft Explorer™ and Netscape Navigator™ based around a standard 2D format. This has been the norm for a fair number of years.

Recent advances in home computer processing and graphics technology (3D accelerators) allows development of advanced graphical applications. Competitive pressures have led to the availability of such advanced processors and graphics accelerators at very low prices. As a result any modern PC will inevitably feature such processing and graphics technology.

Alongside these developments in hardware technology has come the advent of high bandwidth internet connections. This has led to the expectation of widespread availability of high speed broadband services to a, currently, relatively underdeveloped market.

It is the government's stated objective to encourage the development and take-up of high-speed broadband services by industry and consumers over the next few years. The UK is seen to be somewhat lagging behind the other European countries in development and use of broadband technology.

While on the supply side, BT is committed to increasing the availability of broadband to 90% of the UK population by 2005, a demand has to be stimulated to generate high levels of service take-up. People have to be able to see clear benefits for buying and using such services.

One means to fuelling such demand will be to utilise the combination of new hardware technology and high-speed internet connectivity to develop exciting new 3D web-sites and 3D web browsers. The high visual impact and stimulating virtual environment possible through such products will undoubtedly create high levels of interest and desire for such technology.

The 3D browser is now a possibility using the technology that has become available. However, in order to be able to exploit the commercial opportunity, a major technical challenge is still presented by the need for any 3D browser to allow for a seamless, full integration of current, traditional 2D web-sites. Without this capability the 3D browser will not facilitate any hyper-links with any existing web-sites and clearly will have no commercial value. The technology to provide such integration does not exist.

The applicants, through their experience of working at the forefront of internet software development for several years have conceived a solution to this challenge of providing integration and operability of 2D web-sites within the 3D context.

This project will feature a programme of research and development in the areas of 2D integration and porting to other platforms. These applications will first and foremost be focussed on the most commercially prevalent operating systems, Microsoft Windows™ 2000 and Windows XP. However, to allow for full commercial exploitation, the ability to port to non-Microsoft platforms such as MacOS X and Linux and top the mobile phone platform, Symbian. Also it will be necessary to provide support for 3D authoring packages allowing this technology to be used widely in new web-site design. These additional aspects will pose their own sets of technical problems that will have to be overcome in this work. Consequently a programme of research and development has been devised that will cover a period of six months and this is the subject of the application for Smart funding.

3. Objectives

3.1. Technical objectives

Through this programme of technical feasibility assessment it is intended to achieve the following objectives:

- 3.1.1.** To have fully researched and developed a technical solution and been able to demonstrate full integration and operability of the 2D web page renderer within the 3D context.
- 3.1.2.** To have devised software solutions that will enable this technology to support non-Microsoft operating platforms such as MacOS X, Linux and Symbian.
- 3.1.3.** To have devised technical solutions that will allow development of "user-friendly" interfaces.
- 3.1.4.** To have devised technical solutions that will enable this technology to support as many 3D authoring packages as possible.
- 3.1.5.** To have devised technical solutions that will allow the development of full sound capability within the 3D browsing context.

3.2. Commercial objectives

Using the technology arising from this feasibility study it is intended to develop a range of product options. Therefore commercial objectives can be stated as follows

- 3.2.1.** To develop a product that could be sold through consumer retail outlets. (Advance-3D 1.0)

- 3.2.2. To develop a product that could be sold to internet service providers to provide promotional demonstration CDs. This is a more likely opportunity.
- 3.2.3. To develop proprietary tools for web-site design agencies (Advance-3D Author)

4. Technical Description

In order to achieve the applicants' vision of a 3D web browser with full, seamless 2D web-site operability there are several, significant technical challenges that need to be resolved through this programme of research. Particular risks include, failure of the project to complete due to insurmountable technical hurdles and stability/functionality risks arising from use of open source software (Mozilla).

The need to use open source software together with the applicant's own proprietary developments will raise other issues of a legal nature. There will be the need to ensure proper protection of the applicant's intellectual property while fully complying with the user commitments agreed for using the open source software.

Together, these challenges amount to a high level of technical risk associated with this project. However, the applicants believe that they have the capability to resolve these challenges through the following programme of work:

- 4.1. Working-up a solution that will allow full integration and operability of 2D web pages using the Mozilla open source technology base.
- 4.2. Porting of software to other key platforms, particularly MacOS X, Linux and Symbian
- 4.3. Building the appropriate interface to facilitate easy use of tools and to ensure connectivity to existing packages.
- 4.4. Resolutions of the technical issues to enable development of complete sound functionality.
- 4.5. Working with appropriate intellectual property agents in order to resolve any issues of potential conflict arising from the use of open source software as the basis for further development.
- 4.6. Working with intellectual property agents in order to formulate a patent application in order to provide full international protection of the invention.

5. Innovation

5.1. Innovation for the industry sector

There are no commercially available products that provide this functionality at present and industry intelligence has it that nothing is being developed that will solve the technical issues identified. (Having been at the forefront of the industry for a number of years, the applicant is as well placed as anyone to have this knowledge.) Searches have been made on the US patent site and on the site <http://gb.espacenet.com>. These searches have revealed just one patent that claims to match 3D web browsing technology with 2D web viewing, WO 159540 "2D/3D web browsing system". However, examination of this patent indicates that the authors propose a system for switching

between 2D & 3D content, not seamlessly embedding 2D content within the 3D environment as this invention does. Therefore it can not offer anything like the same experience for the user as the products that will result from this study.

Therefore we believe that the ideas behind this project proposal represent true innovation world-wide:

- 5.1.1. It will allow the development of the first commercial quality web browser with a 3D user interface (similar to many "first person" video games e.g. Quake)
- 5.1.2. It will lead to the first commercial quality 3D graphics engine to seamlessly integrate 2D-web content into the 3D core.







5.2. Intellectual property situation

Currently, all the technical intellectual property behind this invention is being protected through the rigorous use of confidentiality agreements.

The need to use some open source software on which to base the programme may raise some issues. As part of the agreement for using open source software, one commits to making all developments you make to it available in the public domain. This project will involve a relatively unique situation in combining open source software with the applicant's own proprietary material. Proper professional support will be used to ensure that the open source software is used as it should, while the intellectual property arising as a result of this programme is properly protected.

It is intended to submit a full international patent application to protect the technology arising as a result of this project and appropriate amounts have been included in the project costs (see Section 11) to allow for this.

6. Project Timetable

| | Feb 2003 | Mar | Apr | May | Jun | Jul |
|---|---|--|--|-----|-----|---|
| Project initiation, acquisition of hardware and software tools. |  | | | | | |
| 2D web page operability and full integration solutions |  | | | | | |
| Software porting to other platforms (e.g. MacOS X and Linux) | |  | | | | |
| User-friendly tools and connectivity solutions | | |  | | | |
| Audio functionality solutions | | | | | |  |
| Intellectual property issues and protection | | |  | | | |

7. Commercial Exploitation

7.1. Market details

It is currently estimated that 55% of the UK population have internet access and in the month of January 2002 one third of the population used the Internet¹. Considering other geographical markets it can be assumed that there are similar levels of usage throughout Western Europe and probably higher levels in the USA. Therefore there is a potentially huge market for any product developed to facilitate Internet access from anywhere in the world.

Clearly, successful commercial exploitation of products developed from technology arising from this project is dependent on the availability of "broadband", high-speed Internet access. In the UK it is currently estimated that broadband services are available to 66% of the population which is believed to be somewhat behind many other European countries.²

7.2. Competition

Compared to the technology behind this invention there are a few existing technologies that might be considered as possible competition. In comparison with what is being attempted through this programme the following points can be made:

¹ Data supplied by Business Link for Suffolk Information and Research Services

² <http://news.bbc.uk/1/hi/technology/2481785.stm> "E-summit to drive broadband" item, 19/11/02 –see Appendix 1

| Product | Strengths | Weaknesses |
|--|---|---|
| 3D plug-ins | <ul style="list-style-type: none"> Established technology operating within the existing desk top environment | <ul style="list-style-type: none"> The "look and feel" is that of the regular 2D desktop It will not provide the impact and excitement we will be able to offer |
| 3D closed-environment (video games) | <ul style="list-style-type: none"> Established technology | <ul style="list-style-type: none"> Only operable within the closed context of the video game Will not provide any Internet functionality |
| 3D open environment (virtual reality) | <ul style="list-style-type: none"> Established technology | <ul style="list-style-type: none"> Will not provide 2D content integration Thus it offers no chance for commercial exploitation at the present time. |
| Advance-3D (this invention) | <ul style="list-style-type: none"> Technology allows for full, seamless integration of 2D content within a 3D environment. Thus the products will be fully compatible with all current Internet material 3D visualisation provides exciting and imaginative formats that will drive uptake of new high-speed internet services | <ul style="list-style-type: none"> Technology has still to be developed, and tested –hence the need for this project. |

7.3. Future market developments

In the UK the government is pledged to spend over £1 billion on development of broadband for public services over the next three years. In parallel with this BT are committed to raising the availability of broadband from the current 66% to 90% of the population by 2005.³ This commitment to growth of the service together with the inevitable high level promotion that will accompany it will undoubtedly drive demand for the kind of products that are envisaged to arise following completion of this programme.

³ <http://news.bbc.uk/1/hi/technology/2481785.stm> "Blair pledges to kick-start broadband" item. 19/11/02 –see Appendix 1

7.4. Planned exploitation issues and strategies

In developing products of this nature for the Internet market we have to consider what reaction can be expected from existing providers, particularly Microsoft. We believe that they will respond to our developments in one of two ways:

- Development of their own product. If we are able to proceed with our developments speedily we believe that we will be able to gain at least a six month advantage which, given the size of the opportunity will provide substantial commercial rewards in itself. Having become the established product will allow us to develop a defendable market position.
- An approach to buy the company Deep Thought Software –in which case we would have to evaluate the offer against our own personal aspirations for this technology and the business.

Otherwise we envisage commercial exploitation will be through the development of web-browser products for retail sale or sold to Internet service providers to offer as “give-aways” in order to promote their services in an exciting manner. Through royalty payments or one-off payments from the ISPs substantial income will be generated.

There will also be a market for 3D web-authoring tools sold for several hundred pounds a time to professional web-site designers.

8. Business Background and Project Management

8.1. Established business profile and ownership

Deep Thought Software Ltd. was established and incorporated in April 2000 in order to develop innovative products to enhance the Internet browsing experience through the use of enhanced graphics technologies. 98% of the issued share capital is owned by its founder and managing director, Steve Williams.

8.2. Project team

| Name | Role | Background |
|----------------|---|--|
| Steve Williams | Managing Director Deep Thought Software Project Leader and Technology Investigator | <ul style="list-style-type: none">• 15 years software development with e.g. Psygnosis (Sony Inc subsid) and Activision |
| Ian Fennelly | Graphic Designer | |
| Matthew Joynes | Legal Business Consultant (IPR issues) | <ul style="list-style-type: none">• 10 years experience as a corporate and IT barrister based in London |
| Helen Williams | Financial Director –Project Manager | <ul style="list-style-type: none">• 40 years of corporate accounting |
| Mike Williams | Chairman –Project adviser | |

CVs for the key personnel can be examined in Appendix 2

8.3. Project management

Keeping this project to the objectives and timescales established from the start will be crucial to its ultimate success in terms of achieving an effective commercial payback. Therefore strong project management will be essential. For this reason Steve, the project leader has recognised the need to supplement his technical capabilities with those of his mother, Helen an experienced corporate accountant and father an experienced businessman. Besides on-going communication there will be regular (at least monthly) team meetings at which progress against the objectives and timings will be reviewed and appropriate action taken to correct any adverse variance.

9. Use of Available Funds

9.1. Availability of funds from own sources

As the company was established as a research and development organisation it, so far, has had no trading history and consequently has no reserves on which to draw. To date the company has been funded through an initial investment made by Steve Williams, the company founder from his own personal reserves. To proceed with this programme, besides the Smart award, the company will be securing funding through an extended overdraft facility with the bank. Initial meetings with bank personnel indicate that they will acquiesce to such an arrangement.

9.2. Company history of R&D spend and internal project approval

Deep Thought Software Ltd was established in order to develop graphically and technically innovative products for Internet applications. The aims and objectives of this feasibility project are fully in line with the company's whole "raison d'être". Therefore the company is 100% committed to this project and ensuring that it is a technical and commercial success.

10. Need for Smart Support

10.1. The importance of Smart Funding

As indicated above, the company has virtually exhausted the initial funding it had through the owner. While the bank have indicated that they are prepared to provide limited support alongside other funding, they are in no position to provide significant funding for a technically speculative project of this nature. Therefore funds from a provider dedicated to enabling research projects with a high level of associated technical risk to proceed such as Smart is essential for this work to go ahead.

10.2. Other sources of finance that will be used (supporting evidence needed)

An overdraft facility of £20,000 will be provided by the bank in order to provide for funding shortfalls and short-term negative cash-flow (see Appendix 3 for confirmation)

Company Name: Deep Thought Software Ltd.
 Linktrack Number: 40359
 Contract Number: 1128

11. Project Costs

| | | | |
|---------------|---|----------|---|
| 11.1 | Staff costs | £ 34,000 | 66% SW for 6 months @ £4,000 plus 100% IF for 6 months @ £3,000 |
| 11.2 | Overheads | £ 3,400 | 10% staff costs to cover accomodation and admin costs |
| 11.3 | Materials | £ 3,000 | software for 3D authoring tools, compiler for MacOS X and Linux, compiler upgrade for Windows |
| 11.4 | External Costs: -consultancy -sub-contract -trials and testing | £ 3,000 | additional software development support |
| 11.5 | Technical literature | | |
| 11.6 | Intellectual Property Costs | £ 16,000 | Resolution of open source software development issues, patent application and full international search |
| 11.7 | Capital Equipment | £ 750 | New version Apple Macintosh (£1,500 new less £750 residual value) |
| 11.8 | Market Assessment | £ 500 | travelling costs etc |
| 11.9 | Training costs | | |
| Total Project | | £ 60,650 | |

Appendix 4**Cashflow for Feasibility Project**

| EXPENDITURE | Feb | Mar | Apr | May | Jun | Jul | Aug | Total |
|-------------------|------|------|-------|-------|-------|-------|-----|-------|
| Salary | 5667 | 5667 | 5667 | 5667 | 5667 | 5667 | | 34000 |
| Overheads | 567 | 567 | 567 | 567 | 567 | 567 | | 3400 |
| Materials | 1500 | 1500 | | | | | | 3000 |
| Consultancy | | | | | | | | 0 |
| Sub-Contract | | | | 1000 | 1000 | 1000 | | 3000 |
| Fees T&T | | | | | | | | 0 |
| Tech Man's | | | | | | | | 0 |
| Patent/IPR | | | 2000 | 5000 | 5000 | 4000 | | 16000 |
| Capex | 1500 | | | | | | | 1500 |
| Market Assessment | 83 | 83 | 83 | 83 | 83 | 83 | | 500 |
| Total Expenditure | 9317 | 7817 | 8317 | 12317 | 12317 | 11317 | 0 | 61400 |
| Quarter Total | | | 25450 | | | 35950 | | 61400 |

INCOME

Smart:

| | | | | | | | | |
|------------------|-------|--|--|-------|--|--|-------|-------|
| -Grant at 50% | | | | 12725 | | | 17275 | 45000 |
| -Initial Payment | 15000 | | | | | | | |

| | | | | | | | | |
|------------------|------|------|--|------|--|--|--|-------|
| Applicants funds | 5000 | 6000 | | 5400 | | | | 16400 |
|------------------|------|------|--|------|--|--|--|-------|

| | | | | | | | | |
|-----------------|---|-------|------|-----|------|-------|--------|--|
| OPENING BALANCE | 0 | 10683 | 8867 | 550 | 6358 | -5958 | -17275 | |
|-----------------|---|-------|------|-----|------|-------|--------|--|

| | | | | | | | | |
|--------------|-------|-------|-------|------|--------|--------|-------|--|
| NET CASHFLOW | 10683 | -1817 | -8317 | 5808 | -12317 | -11317 | 17275 | |
|--------------|-------|-------|-------|------|--------|--------|-------|--|

| | | | | | | | | |
|-----------------|-------|------|-----|------|-------|--------|---|--|
| CLOSING BALANCE | 10683 | 8867 | 550 | 6358 | -5958 | -17275 | 0 | |
|-----------------|-------|------|-----|------|-------|--------|---|--|

| | | | | | | | | |
|---------------|-------|--|--|--|--|--|--|--|
| Project Costs | 61400 | | | | | | | |
|---------------|-------|--|--|--|--|--|--|--|

Residual Value

| | | | | | | | | |
|--------------------|-------|--|--|--|--|--|--|--|
| Net Eligible Costs | 60000 | | | | | | | |
|--------------------|-------|--|--|--|--|--|--|--|

| | | | | | | | | |
|--------------|-------|--|--|--|--|--|--|--|
| Grant at 75% | 45000 | | | | | | | |
|--------------|-------|--|--|--|--|--|--|--|

| | | | | | | | | |
|-----------|-------|--|--|--|--|--|--|--|
| 85% Limit | 38250 | | | | | | | |
|-----------|-------|--|--|--|--|--|--|--|

Forecast

Deep Thought Software Ltd

| | Month 13 | Month 14 | Month 15 | Month 16 | Month 17 | Month 18 | Month 19 | Month 20 | Month 21 | Month 22 | Month 23 | Month 24 | TOTAL |
|------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------------|----------------|----------------|----------------|------------------|------------------|
| | £ | £ | £ | £ | £ | £ | £ | £ | £ | £ | | | £ |
| Sales Turnover | 125,000 | 125,000 | 95,000 | 50,000 | 125,000 | 125,000 | | 125,000 | 125,000 | 50,000 | 125,000 | 125,000 | 1,195,000 |
| TOTAL SALES | 125,000 | 125,000 | 95,000 | 50,000 | 125,000 | 125,000 | 0 | 125,000 | 125,000 | 50,000 | 125,000 | 125,000 | 1,195,000 |
| Direct Costs | | | | | | | | | | | | | |
| Directors remuneration | 4,000 | 4,000 | 4,000 | 4,000 | 4,000 | 4,000 | 4,000 | 4,000 | 4,000 | 4,000 | 4,000 | 4,000 | 48,000 |
| Staff salaries (artist) | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 30,000 |
| Staff salaries (programmer) | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 36,000 |
| Staff salaries (admin) | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 30,000 |
| Telephone | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 1,800 |
| Print, post & stationery | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 1,200 |
| PR and advertising | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 12,000 |
| Travelling | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 2,400 |
| Insurance | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 3,600 |
| Sundry expenses | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 1,200 |
| Accountancy fees | 500 | 500 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 2,000 |
| Rent- (based on 300 sq ft @£35) | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 12,000 |
| Legal | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 12,000 |
| Software applications | 1,000 | | 1,000 | | | 1,000 | | 1,000 | | | | | 4,000 |
| Patent application | 3,000 | | | | | | | | | | | | 3,000 |
| Bank charges | | | | | | | | | | | | | 0 |
| Depreciation Office equipment | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 1,440 |
| TOTAL EXPENSES | 20,470 | 16,470 | 17,070 | 16,070 | 16,070 | 17,070 | 16,070 | 17,070 | 16,070 | 16,070 | 16,070 | 16,070 | 200,640 |
| OPERATING PROFIT (LOSS) | 104,530 | 108,530 | 77,930 | 33,930 | 108,930 | 107,930 | (16,070) | 107,930 | 108,930 | 33,930 | 108,930 | 108,930 | 994,360 |
| Bank interest payable (receivable) | 367 | 715 | 1,077 | 1,337 | 1,450 | 1,813 | 2,173 | 2,119 | 2,479 | 2,842 | 2,955 | 3,318 | 22,643 |
| NET PROFIT (LOSS) | 104,897 | 109,245 | 79,007 | 35,267 | 110,380 | 109,743 | (13,897) | 110,049 | 111,409 | 36,772 | 111,885 | 112,248 | 1,017,003 |
| CUMULATIVE PROFIT/-LOSS | 104,897 | 214,142 | 293,149 | 328,415 | 438,795 | 548,538 | 534,640 | 644,689 | 756,098 | 792,870 | 904,755 | 1,017,003 | |

NOTE:-

Advance 3D Contract 1

Advance 3D Contract 2

Advance 3D Contract 3

Web Author

Mr. & Mrs M A Williams
Moorside Lodge
Blythburgh Road
Westleton, SAXMUNDHAM
Suffolk IP17 3AS

Tel: 01728 648743

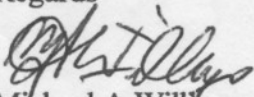
Mr. S J H Williams
Managing Director
Deep Thought Software Ltd
Moorside Lodge
Blythburgh Road
Westleton
Suffolk
IP17 3AS

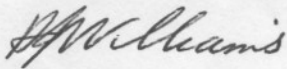
20 December 2002

Dear Stephen

Following the production of a cash flow statement for the Advanced 3D project, we can confirm that we will be able to cover the temporary shortfall of £17,275, pending receipt of monies from Smart Grant if obtained.

Regards


Michael A Williams


Helen J Williams

Curriculum Vitae : Stephen J.H. Williams

[Email: steve@advance-software.com](mailto:steve@advance-software.com)

Nationality : British
Age : 38
Location : London, United Kingdom.

Overview

I am an experienced C/C++ software engineer with approximately 15 years software development experience on Windows and Unix platforms. I have a thorough understanding of computer software research and development including systems analysis, team management, project management, software testing, technical support and technical authoring. I have worked for many well-known leading edge technology companies including Matrox Graphics, S3 Graphics, Activision, Sony (Psygnosis), and Argonaut I have spent the last 10 years specializing in real-time 3D graphics research and development. Key achievements include the development of the Storm3D graphics engine used in Activision's highly successful "Star Trek: Armada" video game. Star Trek: Armada is one of the most successful Star Trek video games of all time and sold in excess of 100,000 units.

Key Technical Skills

- Extensive Microsoft Windows (2000, XP, Vista) C/C++ application development experience including Win32, MFC and COM.
- Experienced developer of large, complex multi-threaded applications on numerous platforms.
- Experienced team player – I am used to working in large teams including those distributed over multiple worldwide locations.
- Used to working under pressure and meeting tight deadlines.
- Experienced with use of the standard template library (STL).
- Experienced with use of numerous software development tools including Microsoft Visual C++, Intel V-Tune, NuMega Bounds Checker, Purify.
- Experienced developer of high reliability real-time software applications.
- Extensive Microsoft Direct X programming experience, specializing in Direct X Graphics.
- Extensive knowledge of real time 3D graphics theory and application, including development of graphics engines and plugins for various 3D authoring packages including Soft Image and 3D Studio Max.
-

Qualifications

2/1 honours degree in Microelectronics Systems Engineering, from the University of Manchester Institute of Science and Technology (UMIST), England. Awarded 5th July 1993.

Additional Qualifications : Queen Elizabeth Secondary School, Kirkby Lonsdale, Cumbria, UK.
'A' level : Computer Science (A) , Physics (A),
Mathematics (B), Chemistry (C).
GCSE : 7 at grade 'A', 2 at grade 'B'.

Employment History

Director, Advance Software Services Limited, London, UK.

September 2005 to Present.

Advance Software Services Limited has provided S3 Graphics Inc., California, USA with real time 3D consultancy and software research and development services to complement their Chrome 3D graphics acceleration hardware.

Director, Advance Software Limited, London, UK.

April 2000 to Present

The company has provided real time 3D consultancy and software research and development services to Activision Inc, California, USA and Matrox Graphics Inc. of Montreal, Canada. In addition, Advance Software Limited has independently developed a 3D Internet browser which we have named "Infinity".

Graphics Engine Lead, Activision, Santa Monica, California, USA.

October 1998 – May 2000

I designed and developed the 3D graphics engine in Activision's Star Trek: Armada video game.

The game was a commercial success, selling in excess of 100,000 units, and received much praise in the gaming press.

Research And Development Team Leader, Sony (Psygnosis), Camden Town, London, UK.

Feb 1997 – October 1998

I lead a team of five engineers which developed a 3D graphics engine and associated tools which were used by 8 teams in 3 studios. Duties included team management, project management, engine and toolset research and development and technical support to the games teams.

Software Engineer, Argonaut Software/Technology, London, UK.

Feb 1995 - Feb 1997

Software development on projects including BRender, Argonaut's middleware 3D graphics library which was licensed by third parties including Microsoft. Prototyping BR-View, a 3D CAD visualisation tool written using BRender technology, device driver development, BRender sample code development, bug fixes, file format conversion tools.

Software Engineer, NextBase, Ashford, Middlesex, UK.

August 1994 to January 1995

Software development on NextBase's AutoRoute mapping/route finding software product range. NextBase has since been acquired by Microsoft who now publish Autoroute.

Software Engineer, Texas Instruments, Bedford, UK.

June 1993 to July 1994

I worked on various software development projects in the Design Automation Department on both Unix and Windows platforms. I was sponsored by TI whilst at university and worked for them during summer vacations.



**small
business
service**

Smart

GUIDELINES FOR OFFICIALS

**feasibility studies, development projects,
exceptional projects, micro projects,
technology reviews, technology studies**

These guidelines are published in accordance with The Code of Practice on Access to Government Information and Open Government. Copies can be viewed at the Victoria Street DTI Information Centre and at www.businesslink.org/smart

Approved by:

Adrian Piper – Director of Investment/Small Business Service

Signed:

dated:

November 2002

Smart - Guidelines for officials - Contents

1.0 Introduction

- 1.1 Background
- 1.2 Scheme Responsibilities
 - ❑ SBS Investment Directorate
 - ❑ SBS Regional teams
 - ❑ DTI Head Quarter Directorates

2.0 The Smart Scheme

- 2.1 Feasibility Studies
- 2.2 Development Projects
- 2.3 Technology Access
- 2.4 Exceptional Projects
- 2.5 Micro Projects
- 2.6 Technology Reviews and Technology Studies

3.0 Eligibility

- 3.1 Feasibility Studies
- 3.2 Development Projects
- 3.3 Technology Access
- 3.4 Exceptional Projects
- 3.5 Micro Projects
- 3.6 Technology Reviews and Technology Studies
- 3.7 Start Up businesses
- 3.8 State Aid Restrictions
 - ❑ 3.8.1 Sector Restrictions
 - ❑ 3.8.2 Support Limits Per Beneficiary
- 3.9 Independence Criteria
 - ❑ 3.9.1 Venture Capital
 - ❑ 3.9.2 Charities
 - ❑ 3.9.3 Academic Institutions and spin outs
 - ❑ 3.9.4 Trade Associations and Research and Technology Organisations
 - ❑ 3.9.5 Different classes of shares
- 3.10 Software Projects
- 3.11 Collaborative Projects
- 3.12 Parallel Projects
- 3.13 Habitual Applicants

3.14 Manufacture and Licensing

4.0 Eligible Costs

- 4.1 Technology Reviews and Technology Studies
- 4.2 Feasibility Studies, Development Projects, Exceptional Projects, Micro Projects
 - 4.2.1 Labour (Pay of Personnel)
 - 4.2.2 Overheads
 - 4.2.3 Materials/Consumables
 - 4.2.4 Consultancy
 - 4.2.5 Subcontract
 - 4.2.6 Fees for External Trials and Testing
 - 4.2.7 Preparation of Technical Manuals
 - 4.2.8 IP and Patent Costs
 - 4.2.9 Capital Equipment
 - 4.2.10 Hire Purchase/Leasing
 - 4.2.11 Market assessment
 - 4.2.12 Training
 - 4.2.13 Licensing New Technology
 - 4.2.14 Other Costs
 - 4.2.15 Project Management
 - 4.2.16 Ineligible costs
 - 4.2.17 Other public funds
 - 4.2.18 Loans
 - 4.2.19 SFLGS
 - 4.2.20 NESTA
 - 4.2.21 R&D Tax Credits
 - 4.2.22 TCS

5.0 Appraisal Criteria

- 5.1 Technology Reviews and Technology Studies
- 5.2 Feasibility Studies, Development Projects, Exceptional Projects, Micro Projects
 - 5.2.1 Innovation
 - 5.2.2 Technology – R&D Challenge
 - 5.2.3 Commercial Potential
 - 5.2.4 Exploitation Prospects

- 5.2.5 Management Abilities and the Project Team
- 5.2.6 Commercial and Financial Viability
- 5.2.7 Intellectual Property
- 5.2.8 Additionality
- 5.2.9 Wider aspects

6.0 Application Forms

- 6.1 Application Forms
- 6.2 Additional Notes for Applicants

7.0 Project Appraisal

- 7.1 Technology Reviews and Technology Studies
- 7.2 Feasibility Studies, Development Projects, Exceptional Projects, Micro Projects
 - ❑ 7.2.1 Assessment
 - ❑ 7.2.2 Expert Sources of Advice
 - ❑ 7.2.3 Visits
 - ❑ 7.2.4 Marking Frame
- 7.3 Open Government
- 7.4 Decision Review and complaints
- 7.5 Fraud
- 7.6 Project start date
- 7.7 Offer Letters
- 7.8 Notification of non-selection
- 7.9 SAMIS

8.0 Project Monitoring

- 8.1 Monitoring Visits
- 8.2 Checking progress
- 8.3 Independent Accountant's Report
- 8.4 Reminder Letters
- 8.5 Project Changes
- 8.6 Increases in Costs
- 8.7 Decreases in Costs
- 8.8 Business Expansion
- 8.9 Project Difficulties
- 8.10 Business Difficulties
- 8.11 Project Extensions
- 8.12 Repayment of Grant
- 8.13 Fraud
- 8.14 Taxation
- 8.15 Sale of Prototypes
- 8.16 Receivership
- 8.17 Change of Ownership

9.0 Post Completion Monitoring and Evaluation

- 9.1 Post Completion Monitoring
- 9.2 Scheme Evaluation

10.0 Publicity and Promotion

- 10.1 Award Ceremonies
- 10.2 Publicity Campaigns
- 10.3 Regional Seminars/Workshops
- 10.4 Smart Clubs
- 10.5 Announcement of Awards

11.0 Delegated Authority and Budget Management

- 11.1 Expenditure and Claims
- 11.2 Budget Management
- 11.3 SAMIS and RAB

1. Introduction

1.1 Background

These guidelines have been prepared by the **Small Business Service/Investment Directorate Programme Management** to help SBS Regional teams in England administer the Smart scheme – a grant scheme to encourage technology innovation.

Smart is a discretionary award scheme that contributes towards the overall aim of the Department of Trade and Industry:

To increase competitiveness and scientific excellence in order to generate higher levels of sustainable growth and productivity in a modern economy.

and towards the aim of the **Small Business Service (SBS) – a DTI Agency - to:**

build an enterprise society in which all small businesses thrive and achieve their potential.

Smart is a national scheme¹ providing awards to help individuals and SMEs research and develop technologically innovative products and processes or buy external consultancy to improve their use and exploitation of technology. Smart aims to:

improve the future competitiveness of the UK economy by supporting innovative SMEs, which are a dynamic source of new wealth, employment, exports and innovation and by encouraging more SMEs to become innovative; and

help contribute towards a climate which encourages investment in innovative technology by individuals, firms and financial institutions and which stimulates a market in technological advice.

Smart provides a package of assistance open to applications from enterprising individuals and SMEs. The scheme aims to help businesses to review the **use of technology, access technology**, and **research and develop** innovative technologies. By sharing risks relating to the R&D, the scheme encourages risk taking in new developments and technological innovation and helps lever reluctant private funds into R&D projects, which promise to establish sustainable business developments.

The current Smart scheme, as operated in England, was designed in consultation with SBS Regional teams, Business Links (BLs), DTI HQDs (HQDs) and intermediary organisations. **The scheme received Ministerial approval in March 1999. It comprises the following elements:**

| | |
|------------------------------------|----------------------|
| Feasibility Studies | Technology Access |
| Development Projects | |
| Exceptional (Development) Projects | |
| Micro Projects | |
| Technology Reviews | |
| Technology Studies | |

Feasibility Studies, Development Projects and Exceptional Projects were introduced in 1997 following the cross-Government review of Support for Business. They supersede the former SMART, SPUR, SPUR^{plus}, and RIN (Regional Enterprise Award for Innovation) schemes. Micro projects, technology reviews and technology studies were launched in October 1999.

These guidelines apply to the scheme as operated in **England only** ¹ under Section 5 of the Science and Technology Act 1965.

Smart is a discretionary award scheme. A rigorous selection process will determine the eligibility of a business and the appropriateness and merit of the work for support under this scheme.

All Applicants ² for awards must submit signed hard copies of application forms ³ to clarify their general eligibility and authorise the assessment process that involves undertaking various enquiries in the course of the appraisal.

1.2 Scheme Responsibilities

The Small Business Service (SBS) is responsible for the administration of the scheme in England to a high and consistent standard of delivery. The SBS Investment Directorate is the budget holder and will allocate funds from its budget to SBS Regional teams for the purpose of funding awards (N.B. except Technology Reviews and Technology Studies which are centrally delivered) and any necessary non-project expenditure (e.g. on the cost of technical advice or local promotion of Smart). Regional teams must manage their budget allocations in accordance with their commitment and expenditure targets. They must ensure prompt and accurate forecasting of commitment and expenditure in accordance with systems operated by the SBS to assist the prudent management of the programme expenditure.

The SBS wants to support as many Smart projects as possible from the overall budget. If Regional teams are unable to fund Smart awards which meet the criteria for support, they should contact SBS to establish whether extra funds can be made available. ⁴

Small Business Service/Investment Directorate – Programme Management

The Smart budget is held by the SBS Investment Directorate and allocations will be agreed and allocated to SBS regional teams for the local delivery of the scheme. The policy and programme management of the scheme is the responsibility of the Policy and Programme Management (PPM) unit in close liaison with the Finance and Information, Inventors (FII) unit who coordinate matters relating to the budget and publicity for the scheme. SBS Investment Directorate PPM is directly responsible for:

- developing and interpreting the policy underlying the scheme;
- overall programme management of the scheme to ensure consistent high levels of practice and service standards throughout England and that practices are in accordance with the scheme guidelines, open government and legal requirements;
- allocating the budget to the Regional teams and monitoring the expenditure;
- developing and interpreting the scheme criteria and providing guidance to govern the delivery of the scheme throughout England;
- identifying and establishing good practice by means of Continuous Improvement Assessments to ensure improving service delivery throughout England;
- developing and overseeing an overall marketing and promotion strategy for the scheme in consultation with Regional teams;
- producing promotional material and application forms and maintaining electronic media on BL website;
- controlling, analysing and providing statistical information and policy advice and monitoring the impact of the schemes on regional and national productivity and competitiveness;

¹ Scotland, Wales and Northern Ireland have respective responsibility for administering Smart and are subject to separate and respective Guidelines.

² "Applicant" refers to any individual or types of business operation (e.g. sole trader, partnership, company) applying for Smart assistance; "Award Recipient" refers to any Smart award winner (having accepted the offer of the award).

³ In due course application forms will be published on Smart websites in line with Government aims for increasing electronic business. At present, electronic application is not allowed and all applications must be signed.

⁴ SBS runs a course on Smart budget management and general finance matters. The frequency depends on demand. Contact SBS/FII for details.

- ensuring that Regional teams are kept fully aware of policy changes or events relating to the prompt and effective delivery of the scheme;
- maintaining close contact with Regional teams via regular visits to view and discuss practice and operations;
- organising Liaison Workshops to discuss programme and policy issues;
- organising training relating to practice and policy.

The SBS Investment Directorate Technology Acquisition (TA) unit based in London has direct responsibility for administering, monitoring and budget management for Technology Reviews and Technology Studies.

SBS Directors for Regional teams (DfRs)

The regional management of Smart will be managed by SBS DfRs who are responsible for:

- an agreed regional budget allocation, promotion, administration/delivery of the Smart scheme within a respective region;
- ensuring that the delivery of the schemes is adequately and appropriately resourced with the necessary skills to facilitate prompt and consistent delivery in accordance with national standards of service and targets governing the schemes;
- ensuring that the regional team operates in accordance with the scheme guidelines and standard Departmental practice;
- ensuring that the regional team has set up an appropriate approval system of delegated authority that complies with finance guidelines and facilitates the assessment, approval and payment systems for the schemes.

SBS regional team leaders

Each regional team will be headed by a team leader with responsibility for the planning and day-to-day management of the delivery of Smart in accordance with guidelines and the Good Practice Guide. These duties will include:

- Managing the assessment process in accordance with the guidelines, agreed targets, customer care, and standard SBS and departmental guidance relating to customer service, file and finance management, security classification and handling of classified material;
- Managing the monitoring and payments systems in accordance with guidelines, customer care, prompt payment targets, standard SBS and DTI procedures relating to customer service, file and finance management, security classification and handling of classified material and prompt payment targets;
- Managing promotional activities (publicity, marketing, Smart Clubs) within the region to ensure appropriate awareness and take-up;
- Liaising with the Programme Managers on regional performance, strategy, budget and publicity/promotion issues (and any other operational aspects relating to the delivery of the schemes within the respective region).

SBS Regional teams

SBS will agree local budgets and delegate authority to SBS DfRs for the purpose of administering agreed elements of the Smart suite in the regions.

SBS Regional teams are responsible for:

- the local delivery – administering, appraising and monitoring – of Smart in accordance with guidelines, national standards and agreed operating targets;
- financial management of their respective Smart allocations;
- regional marketing and promotion of Smart in consultation with the central programme management;
- the maintenance of project data on departmental systems (including ORACLE and SAMIS) and Smart database to agreed targets;

input to Smart policy-making (formally via Liaison Workshops run by SBS Investment Directorate, but also in ad hoc fora);
the timely provision of briefing on the performance of Smart within the respective region and/or case material on request;
the timely provision of input for budgetary requirements and ad hoc financial exercises;
signposting potential applicants to Smart Technology Reviews and Technology Studies where appropriate and liaising with the TA unit in London if required.
providing properly considered information to potential applicants and signposting to the most appropriate source of help;
consulting SBS Investment Directorate on any matters of policy which may have bearing on the administration and/or public perception of the schemes at a regional and/or national level.

Smart practice and service delivery must operate in accordance with guidelines, and any supporting guidance material prepared by the SBS central policy/programme unit. SBS Smart Regional teams provide the regional delivery of agreed elements of the Smart scheme and local promotion of the Smart scheme.

SBS Regional teams will allocate awards on the basis of the merit of projects and availability of funding within their budgets. Underspends and overspends can cause problems (e.g., by reducing the numbers of projects that could be supported or by reducing others' budgets), but accurate and timely forecasting can often effect accommodating measures. Regional teams will be asked by SBS to provide forecasts of expenditure in current and future years and Regional teams should endeavour to ensure that their forecasting is as accurate (and realistic) as possible so that any potential underspend can be reallocated at the earliest opportunity and to allow SBS to endeavour to accommodate requests for potential overspends. SBS DDfRs must contact SBS if they believe that their level of expenditure will change significantly from their most recent forecast.

Regional teams must produce and supply to SBS Investment/FII agreed business and project information relating to award recipients within their areas for inclusion in Smart Directories.

Project Officers should remind Applicants that they are not Award Recipients until the Offer Letter has been signed by a person within the business with the appropriate authority and returned to the Project Officer. Following the acceptance of the award, award recipients are free to publicise their award. A public announcement will be made by the SBS to confirm the awards in due course.

Regional teams should ensure that their project management and financial practices comply with these guidelines and other standard SBS and departmental guidance.

DTI Headquarters' Directorates (HQDs)

DTI HQDs, within their sectoral interests, are responsible for:

working with respective SBS Regional teams on the appraisal of **Exceptional Projects** and assisting with the monitoring of projects in agreement with Regional teams;
the timely provision of advice on project applications to Regional teams, enabling prompt appraisal of Feasibility and Development Award applications;
promoting Smart as appropriate, within sectors, during their normal duties;
identification and nomination of single contact points for the co-ordination of advice requests on applications emanating from the SBS Regional teams and Small Business Service (Feasibility Studies, Development Projects and Micro Projects);
the timely provision of input for budgetary requirements and ad hoc financial exercises.

HQDs are responsible for working with SBS Regional teams on the appraisal of **Smart Exceptional Projects** in accordance with these guidelines and guidance notes issued by the SBS Investment PPM.

HQDs are also responsible for residual monitoring of Exceptional Awards approved prior to 1 October 2000 or later agreed with the SBS Programme Management Secretariat.

HQDs are required to provide SBS/FII with regular financial forecasts for residual Smart projects. *Underspends and overspends can cause problems (e.g., by reducing the numbers of projects that could be supported or by reducing others' budgets), but accurate and timely forecasting can often effect accommodating measures. HQDs will, therefore, be asked each quarter by SBS to provide forecasts of expenditure in current and future years and HQDs should endeavour to ensure that their forecasting is as accurate (and realistic) as possible so that any potential underspend can be reallocated at the earliest opportunity and to allow SBS to endeavour to accommodate requests for potential overspends. However, at all times, HQDs must contact SBS/Investment/FII if they believe that their level of expenditure will change significantly from their most recent forecast.*

2. Smart

Smart is a discretionary grant award scheme. Feasibility studies, micro projects, technology Technology Reviews and Technology Studies are “de minimis” elements (that is, non-notified state aid and as such are subject to a €100,000 limit of such support over a 3 year period). Development projects and exceptional development projects are notified state aid.

Smart comprises the following elements operating in England:

2.1 Feasibility Studies

Feasibility Studies are projects of at least £30,000 eligible costs, of between 6 and 18 months duration, that investigate the technical and commercial feasibility of innovative technologies. Feasibility Awards are only available for “small” enterprises as defined by the EU (see Eligibility, Section 3). The award covers up to **75%** of eligible project costs up to maximum assistance of **£45,000**. Following the formal acceptance of the offer, one third of the award is paid at the start of the project. Applicants should aim to submit claims for payment to the SBS Regional team every quarter according to the conditions specified in the Offer Letter. Regional teams will retain **15%** of the award, except under exceptional circumstances, until the Project Officer confirms that the Award Recipient has completed the project satisfactorily.

Awards are made under this element to establish the feasibility of a proposed project to:

- confirm the original technical and commercial aims are viable;
- carry out any basic research⁵ needed to define the objectives;
- define the operational, technical and design aspects;
- consider action on any intellectual property arising from or needed by the project;
- determine the prospective benefits, including the potential outputs;
- determine the longer term market effects and the possibility of exploitation;
- set overall and phase objectives and target dates for the full project and subsequent exploitation; and
- define the economic, commercial and dissemination objectives.

Feasibility studies will involve planned research or critical investigation aimed at producing new scientific or technical knowledge, the objective being that such knowledge may be useful in developing new products, processes or services. The output of a feasibility project will typically be a Report on the technical and commercial feasibility of a proposed project to develop an innovative new product or process. In some cases, a feasibility study may produce an early bench-top or experimental working model (but not a preproduction prototype).

Target Turnaround: Applicants to be informed of decisions within 30 (calendar) days of receiving a fully compliant application and project proposal.

2.2 Development Projects

Development Projects are projects of at least £60,000 eligible costs, of 6 to 36 months' duration, involving the development of a pre-production prototype of a new product or process that involves a significant technological advance. Development Awards are available for all SMEs as defined by the EU (see Eligibility, Section 3). The award covers up to **30%** of eligible project costs up to a maximum of **£150,000**. Applicants are expected to submit quarterly claims to the administering office for payment according to the conditions specified in the Offer Letter.

⁵ * **Basic research** is defined as original theoretical or experimental work to achieve a new or better understanding of the laws of science, engineering and technology as they might apply to the full project. This may involve the creation of an early “bench top” experimental model.

Regional teams will retain **15%** of the award, except under exceptional circumstances, until the Project Officer confirms that the Award Recipient has completed the project satisfactorily.

Awards are made to assist the development and pre-production elements of a project to:

- carry out any research and development work needed to achieve the objectives;
- create a pre-production prototype of the product or process (i.e. up to but not including industrial application and commercial exploitation, but including pilot and demonstration prototypes);
- define the operational, technical, design and manufacturing aspects of the final product or process;
- consider the ownership or licensing of intellectual property arising from or needed by the Project;
- determine the prospective benefits, including the potential outputs;
- determine the longer term market effects and exploitation;
- set objectives and target dates for subsequent exploitation; and
- define the economic, commercial and dissemination objectives for exploitation.

A development project will shape the results of a feasibility study or industrial research into a plan or design for a new, altered or improved product, process or service for commercial use, including creating an initial prototype which could not be used commercially. It does not include the routine or general changes made to products, production lines, manufacturing processes, existing services and other operations in progress, even if those changes may represent improvements.

Target Turnaround: Applicants to be informed of decisions within 30 (calendar) days of receiving a fully compliant application and project proposal.

2.3 Technology Access

Technology Access projects are Feasibility Studies or Development Projects where “external costs”, in particular, ***consultancy, acquisition of technology and “buying-in” intellectual property rights***, exceed 25% of total project costs, but in so doing foster the effective transfer of technology and generate a more productive relationship between SMEs and the science and engineering base. Project Officers should encourage this type of project as it reinforces the Department’s aim to promote the links between the science and engineering bases and stimulates technology transfer.

Technology Access projects aim to create links, promote greater interaction and encourage technology transfer between the science and engineering base and the SME community. Such projects enable Applicants to use science and engineering base technologies which they are unable to develop themselves or which would be less efficiently produced by themselves.

Project Officers should establish whether such costs can be justified under the Technology Access rationale. Applicants must explain why work cannot be carried out more effectively and cheaply in-house and clearly demonstrate the advantage of buying-in the technology. This may include reasons such as the existence of the basic technology and that it would be both more time- and cost-effective to “buy in” than to ‘reinvent the wheel’.

Applicants may source technology from a suitable technology provider (such as a Research & Technology Organisation, Contract Research & Technology Organisation, University, HEI or other appropriate public or private body) providing Applicants can demonstrate that they need to undertake further and/or joint development work on the technology and that there is still significant technical risk involved in the project, in addition to any borne by the “technology provider”.

Overseas providers are acceptable where it is evident that the provider holds the relevant expertise. In such cases the Applicant should confirm that the UK would reap the benefits resulting from the project.

In cases where “external costs” exceed 25%, Project Officers should use their discretion to determine whether projects are supportable under Technology Access reasoning. Project Officers should use their discretion as to the reasonableness of external costs and the appropriateness of the external costs as a means of furthering Technology Access aims. Where Project Officers require confirmation or clarification of the nature of the project, Project Officers should seek advice from SBS on the appropriateness of the external costs.

Unacceptable reasons for supporting high levels of external costs would include those costs (for example, sub-contracting) associated with merely building an advanced prototype where the associated technical risk is perceived to be low.

In most cases where external costs do exceed 50% of the project costs, it would be hoped that such projects could be justified under Technology Access reasoning, but this will not always be the case. The principal point of issue is that the Applicant must convince Project Officers of the merit of the proposed work under Smart and the need for and the reasonableness of the “external costs” in the context of the respective project. Project Officers must carefully consider the reasonableness of the Applicant’s needs to progress an innovative project in the light of Smart reasoning and the aims of the scheme.

Project Officers can consult SBS/Smart Secretariat for any clarification.

Target Turnaround: Applicants to be informed of decisions within 30 (calendar) days of receiving a fully compliant application and project proposal.

2.4 Exceptional Projects

Exceptional Projects are development projects with larger than usual project costs due to the nature of the technology or market. High costs are not sufficient to warrant “exceptional” status. These projects must **represent a significant technological advance** and be of **strategic importance** to the industrial or technology sector and UK competitiveness. Such projects will involve higher than usual development costs, but in return must demonstrate the potential to generate a strategically “exceptional” value for money return on the public investment.

An exceptional development project is a technological development that is likely to have a major effect on the overall performance of an industry (and, ideally, across industrial sectors) in terms of the way it works, increasing its productivity or its sustainable development. Some exceptional projects will be more geared towards having a major effect on the quality of life or creating significant benefits for society at large (for example, medical or bio-technologies).

Exceptional Awards are based on the same eligibility and appraisal criteria as those operating for Development Awards, but they are available for larger projects with demonstrable strategic importance to the industry which in turn promises to improve UK competitiveness. Such projects will only be considered for an Exceptional Award if the project is developing a significant technology innovation that is of strategic importance for the national industry and offers a significant economic return in terms of benefits for UK wide industry and its competitive position in world markets.

These awards are negotiable potentially covering up to 30% of the eligible costs up to maximum assistance of £450,000. The fact that they are negotiable awards suggests that SBS Regional teams will need to identify just how much is actually needed (as opposed to desired) and negotiate the award accordingly. Minimum project size of £750,000.

These awards help SMEs to enter markets demanding particularly expensive R&D on leading edge technology (e.g. telecommunications, biotechnology, etc.). Such awards are only available for projects that have strategic significance for an industry sector. These awards have similar terms and conditions to Development Projects.

These projects require the SBS Regional teams to commission HQDs with the task of evaluating, estimating and elaborating a **strategic analysis of the proposed work**. SBS Regional teams and HQDs will need to work closely throughout the assessment process - on determining the appropriateness of the proposed work for consideration as an Exceptional Project in the first place, throughout the detailed assessment, and on the project monitoring.

Target Turnaround: Applicants to be informed of decisions within 30 (calendar) days of receiving a fully compliant application and project proposal.

2.5 Micro Projects

Micro Projects are small development projects of at least £5,000 eligible costs, lasting up to 12 months duration, involving the development of simple, low-cost prototypes of novel products or processes ready for commercialisation. The awards cover up to **50%** of eligible costs up to maximum assistance of **£10,000**. Micro Awards are open to individuals resident in England intending to start a business in England or “micro-businesses” employing fewer than 10 employees (0-9).

Target Turnaround: Applicants to be informed of decisions within 30 (calendar) days of receiving a fully compliant application and project proposal.

2.6 Technology Reviews and Technology Studies

Technology Reviews are consultancy projects to help businesses in England assess their use of technology against best practice in the sector. Awards of up to £2,500 are available to individuals resident in England intending to start a business in England or an SME based in England (see eligibility criteria in Chapter 3).

Technology Studies are consultancy projects to help businesses in England identify technology opportunities, which may lead to innovative products and/or processes. Awards of up to £5,000 are available to individuals resident in England intending to start a business in England or an SME based in England (see Eligibility criteria in Chapter 3).

*Applicants are invited to enter an **Agreement** with a potential technology provider (a Consultant) to carry out a Technology Review or Technology Study subject to approval of an application. The minimum requirements of such an **Agreement** are outlined at Appendix A of the Application Form, but Applicants must provide additional information in support of the proposed work and objectives.*

Target Turnaround: Applicants to be informed of decisions within 30 (calendar) days, with an internal aim of notifying Applicants of decisions within 10 working days of receipt of a fully compliant application.

3. Eligibility

The scheme is open to individuals intending to start up a business in England or SMEs operating in England. Applicants must clearly meet the eligibility criteria of the scheme and proposed projects must clearly fall within the respective remit of the scheme and the associated project costs must clearly fall within the eligible costs' categories and limits as operated under the scheme. Applications from Wales, Scotland, Northern Ireland, the Channel Islands, the Isle of Man or overseas are not eligible.

Proposals must lie within the interests of the DTI. Most technologies will be acceptable (if in doubt, Project Officers should contact SBS for advice). Although projects will find additional weight if they relate to technologies or sectors prioritised in the UK Foresight Programme, Smart will give all due consideration to projects that involve the *development* of new technologies to modernise traditional industries.

Smart eligibility rules use EC definitions of "micro", "small" or "medium" sized enterprises. These are defined in the Annex to the European Commission Recommendation (96/280/EC) which is incorporated in the Commission Decision (97/761/EC).

Smart R&D projects have a separate application form and guidance notes from Smart Technology Reviews and Technology Studies which are consultancies. Potential Applicants should always be advised to read the appropriate guidance notes before sending in an application. Applicants should seek any necessary clarification on eligibility or eligible costs before applying.

SBS Programme Management can advise on eligibility issues relating to any policy issues. However, on basic issues of eligibility relating to share-ownership or directorship or group associations etc, Project Officers should consult with the Department's solicitors or internal accountants or FRM/FASU for a properly reasoned view.

3.1 Feasibility Studies

The **FEASIBILITY** stage of Smart is open to individuals intending to start a business or an enterprise operating in England with fewer than 50 full-time staff ⁶ (or the equivalent) and either:

an annual turnover not exceeding **€7m**; or

a balance sheet total (total assets net of depreciation) not exceeding **€5m**.

The proposed eligible project cost must equal or exceed £30,000 and projects must be between 6-18 months duration.

The project activities must conform or be closely related to those listed under Feasibility Stage Awards in Chapter 2.

Businesses, which are **25% or more owned by another business** not falling within the Smart feasibility study eligibility criteria (except public investment corporations, venture capital companies or institutional investors - provided no control is exercised), are **NOT eligible**. This is **NOT** discretionary; it forms part of the EU definition of a "small" enterprise and DTI have informed the EU that the Feasibility Award is open only to "small" enterprises.

An enterprise is ineligible for Smart if 25% or more of its capital or voting rights is owned by another enterprise – or jointly by several enterprises – falling outside the Smart Feasibility eligibility criteria. The threshold of 25% may only be exceeded if an enterprise is held by public investment corporations, venture capital companies, or institutional investors, provided no control is exercised either individually or jointly (see also 3.9).

Also, a business may not be eligible for a Smart feasibility study award if it (or any partner or substantial shareholder in it) is associated with, related to, or in any other way connected with any other business where the total number of employees when added to those of the applicant business is 50 or more. If the associated businesses do not meet the conditions given above

⁶ Employees world-wide, including partners and directors

(unless they are public investment corporations, venture capital companies or institutional investors, and do not have any control over the business), the business will not be eligible for support as a feasibility study.

A company established by an academic institution in which the institution has a shareholding of 25% or more is not eligible for a Smart award (see 3.9.3).

Also, where a Smart Applicant business is related in some way to one or more businesses not falling within the Smart eligibility criteria, Project Officers will have to use their discretion to assess the applicant's eligibility. For example, example:

Mr Smith and Mr Jones each own 50% of the shares in Company, A which has 30 employees; they also own a separate Company B that also has 30 employees. Aggregated together they have 60 employees so neither company is eligible for Smart Feasibility Award.

Project Officers should ensure that Applicants are not using Feasibility Studies to support low-cost development projects. In normal circumstances a feasibility study **should lead to a significantly larger development programme and not directly to exploitation**. Development projects submitted as Feasibility Studies should be rejected, but Project Officers may wish to agree with the Applicant that the project proposal is appraised as a development project to save the Applicant time and effort.

Project Officers should ensure that Smart Feasibility Award Recipients fully understand that while the scheme allows for them to apply for a Smart Development Award, they will have to apply for the funding in the normal way and that their application will be subject to the normal appraisal procedure. Project Officers should make it clear that Feasibility Award Recipients should not expect to receive a follow-on Development Award as of right. Project Officers will also need to clarify the calculation involved with potential follow-on awards (see 3.8.2).

3.2 Development Projects

The **DEVELOPMENT** stage of Smart is open to individuals intending to start a business or an enterprise operating in England with fewer than 250 employees ⁷ (or the equivalent) and either:

an annual turnover not exceeding **€40m**; or

a balance sheet total (total assets net of depreciation) not exceeding **€27m**.

The proposed eligible project costs must exceed **£60,000** and the project must be between **6** and **36** months' duration and demonstrate a significant technological advance for the industry or sector concerned.

Businesses, which are **25% or more owned by another business** not falling within the Smart development projects' eligibility criteria (except public investment corporations, venture capital companies or institutional investors - provided no control is exercised), are **NOT eligible**. This is **NOT** discretionary; it forms part of the EU definition of a "small" enterprise and DTI have informed the EU that the Feasibility Award is open only to "small" enterprises.

An enterprise is ineligible for Smart if 25% or more of its capital or voting rights is owned by another enterprise – or jointly by several enterprises – falling outside the Smart Development Projects' eligibility criteria. The threshold of 25% may only be exceeded if an enterprise is held by public investment corporations, venture capital companies, or institutional investors, provided no control is exercised either individually or jointly (see also 3.9).

Also, a business may not be eligible for a Smart development (or exceptional) award if it (or any partner or substantial shareholder in it) is associated with, related to, or in any other way connected with any other business where the total number of employees when added to those of the applicant business is 250 or more. If the associated businesses do not meet the conditions given above (unless they are public investment corporations, venture capital companies or

⁷ Footnote 6 applies.

institutional investors, and do not have any control over the business), the business will not be eligible for support as a development (or exceptional) projects.

A company established by an academic institution in which the institution has a shareholding of 25% or more is not eligible for a Smart award (see 3.9.3).

Project activities must conform or be closely related to those listed under Development Project Awards in Chapter 2.

3.3 Technology Access

Technology Access reasoning can be applied to either feasibility studies or development projects and as such applications will be subject to the respective element's eligibility and appraisal criteria. The Technology Access reasoning is applied to the purpose of and benefits from the "buying-in" of technologies/knowledge to assist the technology innovation (i.e. the external costs associated with projects). Such projects should be encouraged, but Project Officers will need to carefully consider the project control and ownership of projects where a significant portion of the costs are external to the Applicant.

3.4 Exceptional Projects

The eligibility criteria for **EXCEPTIONAL** awards are the same as those for Development awards. Projects must have justifiably high R&D or market entry costs such that the resultant award would exceed £150,000. Projects must represent a **significant technological advance** and be of **strategic importance** to the technology sector, industry and the national economy.

It is the **strategic** nature of these projects that distinguish them from standard development projects. Applicants must clearly demonstrate the strategic impact of a project upon the well being of a technology sector. The strategic dimension must be beyond the company's own perspective and profits.

Where project costs border on that of a traditional development project, the SBS Regional team and HQD concerned should critically examine the project, preferably at the preliminary stage, to ensure that the proposed work merits "exceptional" status. Where the SBS Regional team and HQD agree that a project lacks "exceptional" status, the Applicant should be notified in accordance with Open Government imperatives and where appropriate the Applicant should be informed that the project could be considered as a standard development project if the Applicant is agreeable.

SBS Regional teams and DTI HQDs will need to work closely on the case appraisal of exceptional projects. SBS recommends that SBS Regional teams should conduct the appraisal against the Smart criteria in accordance with standard procedure. HQDs should evaluate and elaborate the strategic argument for supporting the work.

3.5 Micro Projects

MICRO Projects are open to individuals intending to start a business or an enterprise operating in England with fewer than 10 full-time staff (0-9 employees) and either:

an annual turnover not exceeding **€7m**; or

a balance sheet total (total assets net of depreciation) not exceeding **€5m**.

The proposed eligible project cost must equal or exceed £5,000.

Businesses, which are **25% or more owned by another business** not falling within the Smart micro projects' eligibility criteria (except public investment corporations, venture capital companies or institutional investors - provided no control is exercised), are **NOT eligible**.

An enterprise is ineligible for Smart if 25% or more of its capital or voting rights is owned by another enterprise – or jointly by several enterprises – falling outside the Smart Micro eligibility criteria. The threshold of 25% may only be exceeded if an enterprise is held by public investment corporations, venture capital companies, or institutional investors, provided no control is exercised either individually or jointly (see also 3.9).

Also, a business may not be eligible for a Smart award if it (or any partner or substantial shareholder in it) is associated with, related to, or in any other way connected with any other business where the total number of employees when added to those of the applicant business is 10 or more. If the associated businesses do not meet the conditions given above (unless they are public investment corporations, venture capital companies or institutional investors, and do not have any control over the business), the business will not be eligible for support as a micro project.

A company established by an academic institution in which the institution has a shareholding of 25% or more is not eligible for a Smart award (see 3.9.3).

Also, where a Smart Applicant business is related in some way to one or more businesses not falling within the Smart eligibility criteria, Project Officers will have to use their discretion (see example at 3.1 above).

3.6 Technology Reviews and Technology Studies

TECHNOLOGY REVIEWS and **TECHNOLOGY STUDIES** are open to individuals intending to start a business or an enterprise operating in England and businesses operating in England with fewer than 250 employees⁸ (or the equivalent) and either:

an annual turnover not exceeding **€40m**; or

a balance sheet total (total assets net of depreciation) not exceeding **€27m**.

*Applicants are invited to enter an **Agreement** with a potential technology provider (a Consultant) to carry out a Technology Review or Technology Study subject to approval of an application. The minimum requirements under such an **Agreement** are outlined at Appendix A of the Application Form, but Applicants are encouraged to provide additional information in support of the proposed work and objectives.*

Awards will cover:

for a **Technology Review** - the external review costs (the consultancy costs) up to a maximum of £2,500, providing the Applicant spends at least the equivalent of the external costs in terms of their own effort. If the Applicant fails to match these costs in terms of their own effort the grant will only match the costs that the Applicant has devoted to the project.

for a **Technology Study** - 75% of the external review costs (the consultancy costs) up to a maximum of £5,000, providing the Applicant spends at least the equivalent of the external costs in terms of their own effort. If the Applicant fails to match the consultancy costs in terms of their own effort the grant will only be 75% of the costs that the Applicant has devoted to the project.

Proposals submitted under the Technology Reviews and Technology Studies elements of the scheme must be realistic. Experience has shown that such activities require a concentrated effort by the appropriate people (i.e. from within the Applicant company **and** the Consultancy) to produce an effective result. The proposal should demonstrate that the Applicant:

- has selected a suitable Consultant and entered into a appropriate **Agreement** with them;
- will devote sufficient time and quality of their own effort to produce a good result;
- proposes a project that is good value for money in terms of both their own and the Consultant's work;
- requires the award to proceed with the project as proposed;
- is likely to act as a result of the findings; and
- will arrange for the work to be completed within a fairly short timescale.

Start-up businesses

Smart can be, and is, used to encourage the setting up of new technology based businesses in England.

⁸ Footnote 6 applies.

Smart awards can be used to attract inward investment from individuals or businesses based overseas intending to situate business ventures in England. In such cases, Project Officers must examine the longer term business development and benefits to the UK. Invest UK (responsible for encouraging inward investment) may, from time to time, advance such projects for the attention of the SBS.

3.8 State Aid restrictions

3.8.1 Sector restrictions

Certain industry sectors have restrictions on state aid under the provisions of the Treaty of Rome (Articles 87 & 88). The industries concerned are:

**Synthetic fibres;
Shipbuilding;
Steel;
Motor vehicles (including first tier component suppliers);
Agriculture and food processing;
Fisheries and aquaculture;
Coal;
Transport.**

Project Officers should seek advice from the appropriate sector/industry directorate, Government Department or European Policy Directorate (1a) for any projects falling within these sectors.

3.8.2 Support limits per beneficiary

Before making any Award, Project Officers must carry out a search on the Applicant (potential Award Recipient). This search may be carried out at different stages in the process to suit working practices. The purpose is to help minimise fraud.

There are certain ceilings applying to award beneficiaries, which result from the EC State Aids rules.

Any SME can have any number of development project awards (up to £150,000) and exceptional project awards (up to £450,000) as long as they meet the criteria and are for different projects. However, if a development project is a continuation (that is, the development work builds on an earlier Smart feasibility study) of a Smart feasibility study the maximum award which can be offered for the “follow-on” development project is £150,000 minus the award already received for the feasibility study.

There are stricter controls on types of support approved by the EC and categorised as “de minimis” (that is, state aid which does not have to be “notified” to the European Commission). Awards for feasibility studies, micro projects, technology reviews and technology studies fall into this category. No single beneficiary may receive more than €100,000 of “de minimis” assistance (including “de minimis” funds from other sources) in any three-year period. This is a “rolling period” which begins when the first payment of any “de minimis” support is made. *For example, where the first “de minimis” payment in a three year period is in respect of a feasibility study, the date of the first award payment (the up-front payment) will count as the start date of the period. Within the 3 year period following this payment, “de minimis” support received by a single beneficiary should not exceed the €100,000 limit.*

As an illustration: a business which received a £15,000 up-front payment (total award for project, £45,000) for a feasibility study on 1 April 1998, can receive no more than €100,000 minus £45,000 for a further feasibility study where the first payment occurs before 1 April 2001. Any other “de minimis” support during the period would also have to be taken into account and the award reduced accordingly.

If Project Officers are in doubt concerning the calculation of respective awards, they should discuss with internal accountants and/or contact SBS for advice.

The “de minimis” block exemption allows aid up to the threshold to each separate legal entity (i.e. each company in a group), though any business within a group must represent a viable business development.

Project Officers must take adequate steps to determine an applicant’s history of public funds to ensure that applicants comply with de minimis limits over a 3-year period. Project Officers must also inform applicants where Smart assistance is de minimis aid and appropriate written notification must take place when awards are made and when projects are completed.

(N.B see 4.2.19 and 4.2.20 on Small Firms Loan Guarantee Scheme and NESTA funding)

3.9 Independence criteria

3.9.1 Venture Capital

If venture capital companies own 25% or more of an Applicant’s business, the Applicant might still be eligible for support under Smart providing it can be demonstrated that no control is exercised by the venture capital company. There are no absolute guidelines on assessing such cases, and each must be considered on its merits. However, Legal Services have advised that:

- generally, if the venture capital company appoints a director within the Applicant company, this will indicate control being exercised;

- generally, if the venture capital company directs the Applicant’s directors to act in certain ways, and the directors follow these instructions, this will indicate control being exercised;

- if the holding by the venture capital company is high, this will suggest that control is exercised, but it will not necessarily be the case;

- if the Applicant has a right to buy back the venture capital firm’s shares at any stage, this cannot be taken as an indication that no control is exercised;

- Memoranda of Understanding and Articles of Association might provide evidence of control or otherwise;

- there will usually be a written agreement of some form between the two parties, setting out the rights of the venture capital company. This should be obtained.

3.9.2 Charities

The Smart application form refers to individuals, sole traders, partnerships, limited liability partnerships, and limited companies. Project Officers will need to consider each particular application to see whether organisations and the business activity it carries out fall within the rules of the scheme.

A Smart application from a registered charity can not be rejected solely on the grounds of the applicant’s charitable status as such status and eligibility for a Smart award are not mutually exclusive. A registered charity may be allowed to carry on a trade or business and make profits from such activities. The distinction is that any such profits may only be used to support the charitable objectives of the organisation, and may not be distributed to members as dividend or otherwise.

3.9.3 Academic Institutions and “spin out” businesses

Smart aims to encourage greater interaction and technology transfer between the SME community and the science and engineering base. Smart can facilitate the industrial and practical application of research, but it was not designed to fund academic research.

If an academic institution has a share holding of 25% or more in a business, then, under the current European guidelines the business is not eligible. The current definition of a small and medium sized enterprise is under consideration by the European Commission and as soon as the definition is amended Smart Regional teams will be notified of any policy changes affecting the involvement of academic institutions.

Where the involvement of an academic institution in a business complies with SME eligibility criteria, the business must clearly demonstrate that its principal commercial objective is to

develop products or processes for market exploitation. Project Officers should carefully examine applications from academic institutions to ensure that the applicant has properly developed a business plan with a practical exploitation route for the output/results of the project. Project officers must make sure that all Smart proposals represent viable business propositions that form the basis of practical business development projects (whether it involves kick starting a new business or growing an existing one).

Academic and non-academic staff of the institution employed full or part-time on the business's activities count against the qualifying employee limit. Where key members of an Applicant's R&D team remain in full employment with an HEI, officials should ensure that such members commit themselves adequately to the project. If necessary, the business should have a contingency plan in place should they leave the project.

Project Officers should check that any intellectual property involved is available to the Applicant, so that it is free to develop a product or process to its own benefit.

Technology Reviews and Technology Studies

Businesses established by academic institutions in which the institution retains a share holding are eligible to apply for assistance under the Technology Reviews and Technology Studies elements providing the consultant is not the institution itself or one or more of its staff.

In any instance, academic institutions, or businesses in which an academic institution retains a share holding, may take part in Smart Technology Reviews or Technology Studies as a consultant under the required Agreement with a legitimate Applicant.

3.9.4 Trade Associations (TAs) and Research and Technology Organisations (RTOs)

The Smart scheme is NOT designed to fund basic RTO research.

AIRTO (Applied Industrial Research Trading Organisation) members claiming tax exemption under section 508 of the Income and Corporation Taxes Act 1988 may be eligible to apply for Smart.

However, it would be necessary for a 'non-section 508' company within such a group to apply for, fund and carry out a Smart project, as the activities which qualify for Smart would rule out eligibility for tax exemption.

The size of the member organisation **as a whole** is the determining factor in eligibility for Smart.

Project Officers would need to ensure that there is a clear exploitation route for the output/results and that there is a clear business case for supporting projects. Applications to carry out R&D projects where there is no clearly viable exploitation route will not be successful.

RTOs may engage with other SMEs through Smart either by carrying out R&D under sub-contract or by providing technology consultancy.

RTOs can also take part in Smart Technology Reviews or Technology Studies as a consultant under the required Agreement with an Applicant.

In short, it is acceptable for an individual or SME which may not have the internal capability to carry out all its own R&D on a Smart project to subcontract some of the work to a suitable "technology provider" (though a clear case must be argued within a Smart proposal). For Smart technology reviews or technology studies, applicants must identify a suitable consultant in the respective area of technology or business to carry out the work. RTOs (and AIRTO) members are well-placed to work with Smart to provide such services to SMEs.

3.9.5 Different classes of shares

The eligibility criteria for Smart exclude enterprises 25% or more owned by one or more companies not falling within the definition of a "small" or "small and medium size" enterprise respectively (except venture capital companies etc.). Potential Applicants and Applicants (and Project Officers) sometimes ask whether ordinary shares and preference shares have different effects on eligibility. DTI solicitors provided the following advice.

"It should be stated at the outset that the name ascribed to a particular class of share by a company gives only an indication of the rights attaching to it in any particular company. To ascertain the true position regarding the rights attaching to various classes of shares it would be necessary to scrutinise the company's articles of association.

Broadly, however, ordinary shares will confer ownership of the company as well as voting rights (though there are also non-voting ordinary shares). By contrast, preference shares are shares the issue of which was authorised by the memorandum or articles and which are entitled to some priority over the other shares in the company. They usually carry a right to preference in payment of dividend (if a dividend is declared) at a fixed rate, and a right to preference in the repayment of capital in a winding-up.

In particular, it should be noted that unless the articles provide otherwise, preference shares carry the same voting rights at general meetings as the other shares. However, if as is common, the preference shareholders are expressly given a right to vote in certain specified circumstances, e.g. when their class rights are being varied, *prima facie* they have no right to vote in other circumstances. Preference shares may therefore be regarded as being more akin to debentures or loan capital rather than conferring ownership of the company, which is normally the exclusive privilege of the ordinary shareholders.

In summary, therefore, Project Officers would need to establish the preference shareholders' voting rights and influence on the company's day-to-day running to establish their effect on eligibility."

Project Officers should make full use of available databases to verify share ownership and associated directorships.

3.10 Software projects

Software projects must involve significant technical (programme) development that will produce a *technical effect* that covers one or more of the following criteria:



The software programming itself is innovative and will produce considerable benefit in its re-use and application;



The use of conventional software methods to produce an innovative application that is unique and will have commercial appeal/need;

The use of conventional software methods to produce an innovative service that is unique and will have commercial appeal/need.



Software projects should at the very least exhibit novelty, be capable of industrial application, generate a technical effect and be inventive to some degree.

Standard engineering tasks such as software porting and product enhancement are not considered to be sufficiently innovative in nature to merit consideration for an award.

In the case of ICT (information and communications technology) projects which involve software engineering, the degree of innovation and the technical risks associated with any software development will need to be viewed within the context of the technology advance relating to the wider technology development.

3.11 Collaborative projects

Projects involving collaboration between two or more small firms (Feasibility Studies) or two or more SMEs (Development and Exceptional projects) are eligible for support. The award for the project remains limited to the eligibility criteria detailed in Chapter 2.

Applicants wishing to collaborate with larger companies in Eureka projects may also be eligible providing that:

the award to the Applicant does not exceed the limits in Chapter 2;

the Applicant's portion of the project would result in a commercially exploitable product in its own right; and
the Applicant will own/control any Intellectual Property Rights (IPR) resulting from its input to the project.

In all collaborative ventures, Project Officers will need to ensure that an acceptable form of collaboration agreement is in place before an award is offered. Project officers should discuss the legal requirements relating to any offer letters with SBS PPM.

3.12 Parallel projects

The presumption should be that Applicants will not (be able to) run projects in parallel (either Feasibility or Development). The ability to run parallel projects, at the very least, undermines any additionality and/or could jeopardise project viability. If, exceptionally, a second concurrent Award appears to be appropriate, Project Officers must be fully convinced that the second project will not hamper the progress and exploitation of the first project. Indeed, the impact of new awards on earlier projects of Smart applicants should always be carefully considered. Project Officers must ensure that Applicants have fully complied with all the requirements of the earlier award before considering the possibility of a second award. In addition, Project Officers must be convinced that Applicants have taken adequate steps to exploit the commercial potential of earlier projects in accordance with original forecasts.

3.13 Habitual applicants and grant dependency

Smart is not a mechanism for supporting ongoing business development programmes.

Project Officers should check SAMIS (the Department's sponsorship database) to establish previous levels of support received by Applicants. Project Officers should assess levels of past support and investigate the exploitation phases of any work previously supported by the Department (or other Government sources). Project Officers must build previous levels of support into their consideration of the appropriateness of further support. Habitual applications raise questions concerning the Applicant's ability to manage and exploit projects and raise concerns over an Applicant's over-dependency on government support.

Project Officers will need to pay careful attention to "de minimis" limits when assessing cases involving past histories of grant (see 3.8.2 above).

Technology Reviews and Technology Studies

Applicants are not eligible to apply for a second **Technology Review** if they have received an earlier award for a **Technology Review** within the last 18 months prior to submitting their second application. They may, however, apply for a **Technology Study**.

3.14 Manufacture and licensing

Applicants should be aware of the limitations imposed upon manufacture and licensing outside of the EEA. Offer letters will impose the restriction upon product/process exploitation as the public investment in a private project aims to generate full benefits for the English, UK or EEA economies.

Project Officers must always consider the net return to the UK (or EEA) on a project supported by public funds (i.e. UK tax payers). If the "results" that are being developed are of more importance to industry outside of the EEA then the Project Officer will need to carefully assess the impact of supporting such work on the UK (and EEA) competitiveness and economies. In all cases of Smart, Project Officers will need to look for the value for money return on the public investment (that is, the net benefits for the UK/EEA based industries and the economic benefits).

4. Eligible Costs

Only costs that can be properly defrayed (i.e. invoices paid by the Award Recipient meaning that monies have left the Award Recipient's bank account - money has been spent) on the project are eligible for support (see note on "drawings" at 4.2.1). **"In kind" contributions are not eligible as "in-kind" costs cannot be certified in the independent accountant's Project Audit.**

Project Officers must determine the appropriateness of the work in meeting the objectives of the respective scheme element and the appropriateness and reasonableness and eligibility of the distribution of work and associated costs. Project Officers should use their discretion on the appropriateness and reasonableness of a project supported by their due diligence within the framework of these guidelines.

4.1 Technology Reviews and Technology Studies

Technology Reviews and Technology Studies are consultancy projects and are not therefore subject to the same constraints applying elsewhere within the Smart scheme. The actual cost (i.e. their time and reasonable expenses net of reclaimable VAT) of the selected consultant is likely to be the principal cost. The matching costs of the Applicant (their actual staff costs and reasonable staff overheads) will form the other share of eligible costs and will be subject to the above considerations.

The nature of Technology Reviews and Technology Studies is such that project costs will normally be subsumed under labour, overheads and consultancy costs:

Labour: costs should reflect current rates but are limited to no more than an annual full time equivalent salary of £30,000;

Overheads: geared towards the respective work (include national insurance and pension costs in overheads rather than labour costs). Overheads are capped at 100% of direct labour costs.

Consultancy: reasonable charges for specific "external" (independent third party) consultancy work essential to the respective project.

All costs must be justified and agreed prior to an offer of support.

Applicants should be referred to respective Guidance Notes accompanying application forms for further details.

Applicants are not eligible to apply for a second **Technology Review** if they have received an earlier award for a **Technology Review** within the last 18 months prior to submitting their second application. They may, however, apply for a **Technology Study**.

4.2 Feasibility Studies, Development Projects, Exceptional Projects, Micro Projects

Feasibility studies, development projects, exceptional projects and micro projects are concerned with research and development of innovative products and processes and as such the costs relating to this kind of work will involve a broad spectrum of expenditure.

All costs must be confirmed as "eligible" under this scheme, justified and agreed prior to an offer of support.

Applicants should be referred to respective Guidance Notes accompanying application forms for further details.

4.2.1 Labour (Pay of staff)

Labour costs must only include the pay of personnel employed directly by the company and directly engaged on the project. First-line supervision is allowed but not managers remote from the project, unless the Applicant can reliably calculate their contribution to the project. *National Insurance contributions and pension contributions are eligible for support but Applicants should*

include them in the amount for overheads. Directors' fees charged as consultants to their own companies are not eligible for award support. Shareholder employees paid by way of dividends are also not eligible for award support.

Limited Liability Companies have a separate legal identity from their employees (including directors), who are paid salary from which tax is deducted and accounted for to the Inland Revenue. When Applicants include salaries as eligible costs, they must incur and defray them before claiming award on them.

Partners and Sole Traders do not have a separate legal identity from their businesses. They own the business and accordingly they cannot pay (defray) themselves salaries. They take profits or losses from which tax is deducted and accounted for to the Inland Revenue. They may draw some money, but offset this against their capital/investment. This does not affect the tax position which is computed before any "**drawings**". The value of the work put in to a project by a partner or sole trader as "salary" is purely notional. This means that, when the Applicant makes a claim, it cannot be certified as "defrayed". The method of verifying labour expenditure should be agreed at the application stage.

Limited Liability Partnerships are corporate bodies with their own legal identity. Their status is defined by Limited Liability Partnerships Act 2000, and under this legislation LLPs in general terms are subject to Company rather than Partnership law. However, the relationship of the individual LLP members (as the partners are known) to the LLP itself is in some ways different from that of shareholders who are members of a limited liability company: this particularly applies to remuneration. For tax purposes the Inland Revenue regards the LLP as transparent, and the individual members are treated in the same way as partners with unlimited liability. For grant purposes, LLPs should be treated in the same way as ordinary partnerships in respect to the calculation of salary costs.

All labour costs, whether for directors, employees or "drawings" must be reasonable and fully justified in relation to the work being done. Labour costs must be consistent with established labour charges within a respective business. *For example, if a senior employee undertakes work that could be done by a junior the eligible cost should be based on the salary rate appropriate to the junior.* **The rate of remuneration (hourly, daily or weekly rate) and an analysis of individual's labour put into the project should be agreed at the earliest possible stage of assessment, and the project costs should be modified if necessary before the project is approved.** Project Officers must be convinced that labour costs are reasonable within the context of any project and Applicants must fully justify the costs of labour involved with the proposed work. Applicants must also maintain timesheets to record this information for the attention of Project Officers on request and the Independent Accountant's Project Audit.

4.2.2 Overheads

An allowance covering items of general application across the business (e.g. rent, rates, telephone), often too small or too difficult to establish for a specific project, is eligible. The rate should be agreed with the Applicant at the earliest possible stage of the assessment and should be reasonable (compared with current overhead rates based on accounts – where appropriate) but will be reviewed during the monitoring stage.

Employer National Insurance, pension charges and healthcare contributions related to the labour directly involved in the project should be included under overheads. Such costs must be reasonable and appropriate to the project and exclude ineligible items such as surplus capacity. Overheads are capped at a maximum of 100% of direct labour costs.

Capital equipment purchased by Applicants during Feasibility Studies who apply for Development Awards should include any continuing depreciation on this capital as an overhead (rate to be agreed at the earliest possible stage of project assessment, but should normally be in line with the depreciation rates used in the annual accounts).

The purchase of land and buildings specifically for the project is not eligible for support. Land or building rented or leased wholly and exclusively for the project is not eligible for support, except as part of general overheads.

4.2.3 Materials and consumables

Items that have an expected useful life of over a year should be considered to be capital. However, items that have a value of less than £500 may be classed as consumables and included under materials. **This should be clarified and agreed at the appraisal stage (but in any case, before an offer is made).**

All bought-in materials used for the project should be materials purchased from third parties. All items such as materials, equipment or subcontracts, purchased from subsidiaries and associated companies must be charged at cost within the group. Inter-group/associated companies may not add profit or overhead allowances to these charges. When profit has been included, the Applicant (or, if necessary, Project Officers) must make a deduction for profit and overheads, even if this is on an estimated basis. Applicants may include the cost of raw materials up to the normal limit of trial wastage in the industry. However, where scrap material has a significant resale or re-use value, the cost allowed should be net of the estimated disposal value. This should be checked at the final claim/monitoring stage.

Costs have not been defrayed where work/materials/services were obtained *free of charge* (i.e. in-kind contributions). Such costs are therefore not eligible.

4.2.4 Consultancy

Reasonable charges for external consultancy work essential to the Smart project are eligible. This cost relates to services obtained from third parties.

Consultancy includes external costs to the company for “intellectual and associated facility” (that is, advice and use of physical resources such as laboratory equipment) support from experts such as Universities and/or technology providers. All labour costs associated with working with consultants should be included under labour costs. Who is being used? What are they doing and why are they doing it? This should be clarified and agreed at the earliest possible stage of project assessment. Confidentiality agreements should be in place with the Applicant and any third-party. The third-party should have no rights to the Intellectual Property resulting from the project.

External costs relating to specialist input must be fully justified. Applicants must justify the need to access the specialist services and explain why work cannot be carried out more effectively and cheaply in-house. Project Officers must be convinced of the appropriateness of the work and the reasonableness of the associated costs in the context of the total project costs and in relation to the objectives of the type of support being sought under Smart.

Directors' fees charged as consultants to their own companies are not eligible for award support.

4.2.5 Subcontract

The reasonable charges for external sub-contract work that is essential to the project are eligible. Sub-contract work usually refers to the purchase of a service/building of a piece of kit requiring specialist facilities or equipment but requires no “intellectual input” for example design of printed circuit boards, building of rigs. Confidentiality agreements should be in place with Applicant and third-party. The third party should have no rights to the Intellectual Property resulting from the project.

Where external costs (such as sub-contracts, consultancy, fees for trials and testing, acquisition of technology and “buying-in” intellectual property rights) exceed 25% (individually or collectively) of project costs, Project Officers should carefully examine the distribution of and justification for the external costs. Applicants must justify the need for the specialist services and explain why work cannot be carried out more effectively and cheaply in-house. Project Officers have the discretion to determine the reasonableness of costs such as sub-contracts in relation to the type of project and the objectives of the type of support being sought under Smart. In cases where any external costs exceed 25% of total costs, Project Officers must ensure that the costs are fully justified and reasonable. Project Officers should take greater care to clarify the detail of sub-contracts (especially a single sub-contract) accounting for more than 50% of project costs. In such cases, Project Officers should examine where the risks lie, and be convinced that the project (i.e. not just the IPR) is owned and controlled by the Applicant. Project Officers will also need to consider the actual extent of technology or knowledge transfer as a consequence of the

project. Project Officers should examine closely the fees charged when one consultant or sub-contractor carries out a major part of the project. This examination must ensure that the contractor or consultant really is a third party and that they do not inflate the charges and discount them later. If Project Officers have any doubts relating to the appropriateness of the external costs or business relationships with sub-contractors, they should seek clarification from the Applicant and advice from internal accountants.

Who is being used and what they are doing and why they are doing it should be clarified and agreed at the earliest possible stage of the project assessment. Any sub-contractor associated with the Applicant or who is a subsidiary or a member of the same group of companies, must exclude its profit from any charge, even if this element has been estimated. All labour costs associated with working with the sub-contractor would be included under labour costs.

Where Company A (Award recipient) has subcontracted work on commercial terms to Company B and company A works for company B and the resultant 'netted' value of work is invoiced by company B to company A, only the netted value of work is eligible for award support.

Where an Award Recipient has sub-contracted work to an organisation part financed by public funding and that body properly invoices the Award Recipient, double funding is not considered to have taken place.

Applicants may source technology from a suitable technology provider (such as a Research & Technology Organisation, Contract Research & Technology Organisation, HEI or other appropriate public or private body) as long as they need to undertake further and/or joint development work on the technology and there is still technical risk involved in the project, in addition to any borne by the "technology provider".

In cases where "external costs" exceed 25%, Project Officers may wish to consider proposals under Technology Access reasoning (see Technology Access 2.3) which may lend additional support to the project application. In most cases where external costs do exceed 50% of the project costs, it would be hoped that such projects could be justified under Technology Access reasoning, but this will not always be the case. The principal point of issue is that the Applicant must convince Project Officers of the need for and the reasonableness of the "external costs" in the context of the respective project. Project Officers must carefully consider the reasonableness of the Applicant's needs to progress an innovative project in the light of Smart reasoning and the aims of the scheme. Project Officers can consult SBS/Smart Secretariat for any clarification.

4.2.6 Fees for external trials and testing

Fees for trials and testing are eligible (e.g. EMC testing), but Certification fees (e.g. EMC Certification) are not eligible as such costs are considered to be post-pre-production stage). The Applicant should advise who they are using and why. Confidentiality agreements should be in place with the Applicant and any third-party. The Third-party should have no rights to the Intellectual Property resulting from the project.

Who is being used, what they are doing and why they are doing it should be agreed at the earliest possible stage of project assessment.

All labour costs associated with working on trials and testing activity should be included under labour costs.

4.2.7 Preparation of technical manuals

The cost of preparing draft operating, service and maintenance manuals is eligible (but must be separately identifiable as defrayed expenditure in the independent accountant's Project Audit) but printing such manuals for general commercial supply will not qualify.

4.2.8 Intellectual property and patent costs

Costs for confidentiality agreements, Copyright or any other protection directly associated with the project and protection and maintenance of the IPR are eligible; for example, software

The costs associated with taking out and maintaining a patent to protect the Intellectual Property Rights arising out of the project (including the cost of patent searches) are eligible for support. It is particularly important to ensure that those applying are not held back because they cannot afford to patent the results of their project. In all cases, Project Officers should satisfy themselves that patenting to the extent proposed is necessary. For example, there is little point in applying for world-wide patents, if the Applicant cannot obtain appropriate protection through registering patents in the major markets for the product/process.

Project Officers will need to bear in mind that Smart projects are focused on R&D work and that patent costs (or costs of intellectual property protection) will only form a minor (supporting) part of overall project costs.

4.2.9 Capital equipment (net value)

A full list of the capital equipment should be agreed at the earliest possible stage of the project assessment. Project Officers should agree the residual value and useful life of equipment with the Applicant prior to purchase. Without clear evidence of the useful life of equipment, 5 years represents a typical useful life for mechanical equipment and 3 years for computer hardware. The depreciation rates used should normally be in line with those used in the annual accounts. Interest payments on hire purchase and leasing of equipment are not eligible for support. The residual value should be deducted at the time of the claim (i.e. net amount).

Capital equipment purchased for the project is eligible for support on the following basis.

If the Award Recipient does not complete the project, support will be at **75%** (Feasibility Award) or at **30%** (Development, Exceptional and Follow-on Awards) of cost, less residual value when halted.

If the project finishes, support will be at **75%** (Feasibility Award) or up to **30%** (Development, Exceptional and Follow-on Awards) of depreciation costs for the life of the project.

Project Officers should view the capital equipment during the final monitoring visit.

If Applicants wish to include existing equipment they must demonstrate that there is a real cost to the Applicant.

If an item of capital is purchased at the feasibility stage and subsequently used for the development stage the continued depreciation may be considered as an eligible cost and is included as an overhead.

4.2.10 Hire purchase and leasing

Costs for hire purchase/leasing for items directly associated with the project are eligible but not any associated interest charges. The Applicant should consider such costs as being "incurred" at the time of signing the lease/agreement, and "defrayed" as each instalment is paid.

4.2.11 Market assessment

The Applicant can not use more than **15%** of the Award on the cost of limited market assessment (but not marketing or sales costs) to ensure that the project will satisfy the identified market need.

Project Officers should be aware of the differences involved with the types of activity associated with marketing:

Marketing is ineligible as this activity implies taking a product to the market and determining the suitability for the sale. This is *post project* activity and for this reason is not eligible.

Market Surveys are ineligible as these will take a general view of the market, determine its boundaries and its population in terms of existing value, unit sales, players, etc. This information is needed as part of an application and should therefore have been carried out before the application is made.

Market Research is ineligible as this kind of research usually relies on an in-depth enquiry or investigation into a particular subject to uncover any new facts. This activity may need to be carried out on a particular market or particular market sector to see if there is further information available and as such should form part of any application.

Costs associated with a project specific **market assessment are eligible**. This activity consists of work during the lifetime of the project to identify possible future markets for the end product/process when completed and as such the associated costs are considered to be supportive of the development and exploitation phases of a specific project. This would usually take the form of some kind of market interrogation, near to project completion when something saleable is emerging from the project. Market Assessment will also be geared towards keeping the project abreast of the any changes within an identified market, such as market requirements that would influence the design of the product or process being developed with Smart support. Project Officers must determine the appropriateness of any respective work associated with a market assessment. For example, Project Officers may need to determine the appropriateness of aspects of market surveys and market research as genuine elements of a market assessment. In such cases, Project Officers should ensure that the market assessment focuses on serving and supporting the project and its objectives.

Attendance at conferences are not eligible as part of a market assessment, but Project Officers may consider the eligibility and appropriateness of a limited number of strategically important presentations of project results in support of the project development.

In all cases, Project Officers must consider the appropriateness of the work to serving the technical work and the reasonableness of the associated costs in the context of the project objectives and costs and the objectives of the type of support being sought under Smart.

4.2.12 Training

Training costs that are specific to the project are eligible. **Training must be appropriate and vital to the successful completion of the Project.** Such training, to ensure a successful launch, may include familiarisation training of technical staff and, in some cases sales staff, to new technology that has been licensed-in specifically for the project. Training which the Applicant would do anyway, including that covering company image or policy – should be excluded. Continuing training or training costs, related to sales or distribution of products or processes, are NOT eligible.

4.2.13 Licensing in new technology

The cost to the project of licensing in new technology from technology providers (not involved in the project), which the project will build upon or utilises, is eligible.

Applicants may source technology from suitable technology providers (e.g. RTOs, Contract Research & Technology Organisations, HEIs or other appropriate public or private body). This is subject to them demonstrating they need to undertake further and/or joint development work on the technology and there is still technical risk involved in the project, in addition to any borne by the “technology provider”.

Where it makes sense, we should encourage licensing-in (for example, where it would be more expensive or time consuming for an Applicant to develop an appropriate technology itself). What is being used and why it is required should be agreed at the application stage. The Applicant should provide satisfactory evidence that a licensing agreement is in place and that this covers both the development and exploitation stages of the Project.

Where imported technology accounts for a significant portion of the cost of the project, Project Officers should satisfy themselves that the Applicant is proposing additional development to integrate the new technology into the project.

If more than 25% of the overall project costs are associated with the purchase of new technologies, Project Officers may consider the proposed work in terms of Technology Access reasoning (see Technology Access 2.3).

4.2.14 Other costs

Any "Other Costs" must be agreed at the earliest possible stage of project assessment (e.g. travel and subsistence).

An Applicant may use up to 5% of award for the purchase of those Business Link services that do not attract a subsidy from public funds.

4.2.15 Project management

Project management costs are usually the fees paid to external consultants directly employed to co-ordinate work on the Project. The cost of in-house staff working in this capacity should be included as labour costs. This item may also cover other costs, such as hire of meeting rooms directly arising from project co-ordination activities.

4.2.16 Ineligible items

The following are not eligible costs:

- input VAT (except in those cases where it is not recoverable from Customs and Excise - evidence of this should be obtained);
- bad debts;
- interest, service charges and interest arising from hire purchase, leasing and credit arrangements;
- advertising and entertaining;
- profit earned by a subsidiary or an associated business on work sub-contracted under the project;
- inflation and contingency allowances expressed as an arbitrary overall addition to eligible costs;
- capital equipment and tooling for manufacturing production;
- continuing training or training costs related to sales or distribution of the developed product or process;
- the cost of printing operating, service and maintenance manuals;
- directors fees charged as consultants to their own business;
- product/process marketing and sales costs;
- free-of-charge work (in-kind contributions), materials or services; and
- labour costs of trainees and graduates, where supported financially by other public bodies;
- certification costs;
- fees for Independent Accountants' Certificates (end of project for Feasibility Studies and with first and last claim for Development Projects);
- work undertaken before the start of the project and after the end of the project (as defined in the letter of offer).

4.2.17 Other public funds

Project Officers will need to check that Applicants are not using other public funds **against the Smart project costs**. By way of an example, an Applicant may apply for a feasibility study award for which the project costs are £120,000. The Smart award could be used to support half of the project (i.e. £45,000 = 75% of £60,000 which is 50% of the project) with, for instance, TCS contributing towards the other half of the project costs. The respective scheme criteria would, of course, need to be met by both halves of the project. **Project Officers must ensure that the costs against which the Smart award is to be applied are clearly distinct and appropriately defined before any offer is made to allow focused monitoring of the respective costs.** Project Officers may need to take advice from internal accountants when clarifying the costs and on receipt of claims.

In cases where Project Officers have identified "double-funding" against the Smart project costs, they must deduct the other public funding support from the Smart Award on a pound-for-pound basis.

e.g. (in the case of a development project):

| | |
|-------------------------------|-------------------|
| Project costs | = £150,000 |
| 30% award would be | = £ 45,000 |
| BUT | |
| Local Authority offers | = £ 5,000 |
| So Smart Award now | = £ 40,000 |

This reduction should be treated administratively as a reduction in the rate (percentage) of award. (26.667% in the example above).

Where Applicants are seeking support from universities or organisations through projects, which are attracting European Structural funding support, it should be noted that double-funding may be an issue and the funding situation should be carefully examined.

4.2.18 Loans

Project Officers should take appropriate steps to check the bases and implications of loans as part of an Applicant's share of project funds. The existence of "soft" (as opposed to commercial) loans may indicate that the loan provider has some connection with the Business which may affect the status of the Smart application (e.g. because of possible double-funding, or breaching *de minimis* or other State Aid rules - see 3.13 and 4.2.17 above).

Where such "soft" loans exist, the Project Officers should check the eligibility and appropriateness of the source of a loan and the terms and conditions attached (including penalties or bonuses for early repayment, penalties for late payment, and rules for calling-in loans, as well as the rate of interest charged).

No single fixed or variable rate is applied to Smart (or other DTI schemes) to determine whether a loan is "soft" or commercial. A loan with a low interest rate might not be "soft", as the low rate might result from a competitive market, or from the supplier obtaining a cheap supply of finance but still on a competitive commercial basis.

Where the appropriateness of a loan is in doubt, Project Officers should seek advice from internal accountants.

4.2.19 Small Firms Loan Guarantee Scheme (SFLGS)

In the case of the SFLGS which is *de minimis* aid, it is the customer benefit element of the loan that is viewed to be public aid. When a Smart applicant is using a SFLGS guaranteed loan to fund the private share of a Smart project, Project Officers must ensure that a) the benefit is deducted from any Smart award to ensure that no more than 75% of a project costs are covered by public money; and b) that the *de minimis* limit of €100,000 has not been exceeded over a 3 year period. Project Officers should ask for a copy of the SFLGS written notification from applicants in the course of project assessment.

The benefit aspect of the guaranteed loan must also be deducted from all Smart awards in exactly the same way as we would currently deduct other public funds from a Smart project.

Smart is about sharing risks by sharing costs, but Project Officers must ensure that applicants are undertaking their share of the risks by providing significant private source funding to cover their share of projects and to confirm their stake in the risk taking dimension of a Smart project.

4.2.20 National Endowment for Science, Technology and Arts (NESTA)

NESTA funds are "public funds". All Lottery money is public funds because the Government decides how it will be used (in so far as a number of independent bodies are responsible for allocating National Lottery funds within the framework set by Government policy).

NESTA funding cannot be used to cover an applicant's share of Smart project costs.

There is, however, some *confusion* over whether support for Invention & Innovation (one of several "funding programmes" operated by NESTA) constitutes "state aid". NESTA did, however, initially agree to take a cautious approach by limiting support to within the "de minimis" limits.

NESTA have developed a range of ways in which to take "stakes" in the projects it invests in (e.g. equity, royalties, etc). Such funding is believed to be justified (by NESTA) under the Market Economy Investor Principle (MEIP) – that is, this type of funding is considered to be of a "commercial nature" in that it is being offered on the same terms as those applied to private investors.

The nature of such funding is now in question and until NESTA have confirmed the status of the funding arrangements with the European Commission, there remains an element of confusion with how these funds can interact with other public support schemes and the impact on how we administer Smart. In the interim, the nature of these funds does present other public grant schemes with an issue that must be managed.

For practicality purposes, in the course of project assessment Project Officers must clearly determine the basis of any NESTA funding received by the respective applicant (in other words, you need to consider the terms and conditions of the NESTA award).

If the basis of the award is some kind of equity stake or royalties (i.e. funding on a purported commercial basis), you need not effect the de minimis calculation (at least for the time being as the Commission has not ruled on whether such use of public funds constitutes "state aid") though you must inform the applicant in writing that at a later time, if the European Commission deems it necessary, we may need to reclaim any monies to enforce the de minimis limit governing non-notified state aid.

If NESTA funding is offered on terms other than of a commercial nature, the de minimis calculation must be carried out as normal.

4.2.21 R&D Tax Credits

Generally, Smart applicants (or potential applicants) should be urged to seek professional advice on tax matters.

As a general rule, however, a company can not claim R&D tax credits in relation to any expenditure of an R&D project if it receives a Smart award for the same project. But the company can claim the normal 100% tax deduction for current R&D spending on the project not met by the award. (N.B. the company can claim R&D Tax Credits in relation to R&D expenditure on other R&D projects it may be carrying out for which it does not receive a Smart award. The general rule does not apply if the company only receives a Smart award towards a feasibility study or a micro project award. The company can claim R&D tax credits on R&D project expenditure not met by these awards.

4.2.22 TCS (formerly Teaching Company Scheme)

It is possible for a Smart award to be given to a company which is participating in a TCS Programme. Indeed, there are circumstances where we may even wish to encourage simultaneous Smart projects and TCS Programmes, or the following-up of one with the other. For instance, knowledge gained through a TCS Programme may be highly beneficial to a subsequent Smart project. However, care must be taken to ensure that:

- there is no double-funding;
- where Smart and TCS closely align the work done must be clearly attributable to one project or the other even though in practice it may be essential for the success of both.

Smart project costs must not include any costs relating to a TCS Programme (so no labour costs for the TCS Associate, and no equipment which is being used for the TCS Programme). Also, none of the TCS Associate's time should be factored into the Smart project: a TCS Associate is supposed to work exclusively on the TCS Programme. However, it is recognised that occasionally the Associate's knowledge might be used on an informal basis for other work - including Smart - outside those hours scheduled for the TCS Programme.

By way of further background, the Government award element is paid to the knowledge partner (e.g. an HEI, RO). It is the knowledge partner who employs the Associate, not the company, although the Associate will undertake most of their work in the company. This employment arrangement exists partly to ensure that the Associate does not get drawn into other work by the company, outside of the project.

5. Appraisal Criteria

The appraisal criteria are outlined in the respective **Guidance Notes** accompanying Application Forms. Guidance can also be obtained from the respective Marking Frames, which indicate the parameters governing the criteria for the scheme elements (see Annexes to Guidance Notes).

5.1 Technology Reviews and Technology Studies

It should be noted that Technology Reviews and Technology Studies assist consultancies that lead to the introduction of “best practice” (Technology Reviews) and innovative products or processes (Technology Studies) and as such operate in accordance with distinct criteria.

Applications must demonstrate that:

the aims of the project are consistent with the purpose of Technology Reviews or Technology Studies;
the business and project are financially viable;
the grant is essential for the proposed work to proceed;
the preferred consultant has the relevant expertise and costs are competitive;
the proposed work represents potential value for money.

Applicants must demonstrate they are likely to act on the outcome of any supported activity, normally by implementing an agreed action plan.

Applicant companies and/or their group of companies must be financially sound. Project Officers should examine the profitability, liquidity and soundness of the Applicant Company in a bid to assess the viability of the business and the project. If necessary, Project Officers should seek further advice from the internal accountants.

Intellectual Property Rights should be fully taken account of during research and implementation plans where it is appropriate to do so. Applicants should assure that they retain any IPR (intellectual property rights) arising from a project, particularly in the case of technology studies.

It is not acceptable for a cash rich enterprise, especially at the larger end of the eligible size range, merely to cite lack of funds as the only reason for seeking support. Additionality (that is, the need for the public grant) must always be clearly demonstrated.

5.2 Feasibility Studies, Development projects, Exceptional projects, Micro projects

5.2.1 Innovation

For a Feasibility Award, projects must demonstrate **genuine technological novelty**.

For a Development Award, firms must demonstrate that the project, if successful, would represent **“a significant technological advance for the UK industry or sector concerned”**. Products and processes will satisfy the criteria, if they are innovative and represent the first time development of a technology in the UK or the novel application of technologies that have already been applied in other sectors in the UK. Those which are innovative for the business only are not acceptable.

For an Exceptional Award, the Applicant must demonstrate that the proposed work does represent **“a significant technological advance” for the industry or technology sector and is of “strategic importance” to UK industry and the national economy**. Exceptional projects are generally related to sectors where R&D costs are exceptionally high.

Applicants under the Micro projects element must demonstrate within proposals that projects possess a **degree of technological novelty or innovation** and offer a potential value for money return on the public investment.

*In the case of Technology Reviews and Technology Studies, all activities should be **intended to lead to “best practice” for Technology Reviews and innovation for Technology Studies within the Applicant’s business**. The exact nature of the innovation may often be unclear until work has been completed but the intent to seek innovation must be clear within the study project application.*

5.2.2 Technology – R&D challenges and associated technical risks

Project proposals must demonstrate that the proposed work represents a significant technological advance with significant technical risks associated with the technology challenge.

Project Officers should identify the technical objectives of the project and assess the likelihood of achievement. They should satisfy themselves that the Applicant has thoroughly assessed the technical elements of the project and the risks involved. The Project Officer should examine project proposals to ensure that where the Applicant is “buying in” expertise that appropriate centres of expertise are being utilised. *In some cases, where there is doubt, Project Officers may wish to advise the Applicant to reassess the project team or resources and “work up” the proposal using an outside consultant before reapplying. In such cases, the Project Officer may wish to advise the “withdrawal” of the project application to allow resubmission within the 12-month period that would normally apply to any case that has been rejected.*

5.2.3 Commercial potential and market need

Project applications must clearly elaborate the **market prospects** for the proposed product or process.

Projects Officers will need to consider whether the Applicant has assessed the overall market size, existing competition (i.e. competing businesses and products) and has justified a realistic market need for the proposed output from the Smart project.

The respective HQDs should be able to advise on market potential. RTOs will also be able to advise on the potential.

5.2.4 Exploitation prospects

Project applications must clearly demonstrate that the Applicant has considered the most realistic exploitation routes for realising the identified commercial potential of the product or process.

Project Officers will need to determine whether the Applicant has explored realistic and effective ways of exploiting the Smart project.

There is no obligation for Applicants to demonstrate that projects will either create or safeguard jobs. DTI and the SBS will use information on the numbers employed solely for evaluation and publicity purposes. Nevertheless, there should be a net benefit to the UK/EEA⁹ through Smart. The sort of exploitation desired in the UK/EEA is substantive, that is sales, exports, employment, technical capability, value-added and wider benefits accruing locally, rather than simply benefiting from licence income.

The Smart Offer Letter restricts the manufacture outside the EEA of Smart-derived technology. Some organisations offer assistance in exploiting Intellectual Property through licensing. The drawback is that they are quite happy to license to the USA, Japan or any other country, as long as they receive royalties. Project Officers should make it clear to Applicants/Award Recipients that the DTI seeks exploitation world-wide, with substantive benefits accruing in the UK/EEA. They should consult respective Project Officers before entering into any agreements for others to

⁹ The EEA comprises the EC states: **UK, Ireland, France, Germany, Italy, Greece, Belgium, Netherlands, Luxembourg, Spain, Portugal, Denmark, Austria, Finland and Sweden; plus, Iceland, Norway, and Liechtenstein.**

exploit their results, where the agreement might result in the UK/EEA only receiving royalties in return for some or all of the exploitation. The DTI would not necessarily turn down requests for licensing arrangements. However, Applicants/Award Recipients would need to satisfy Project Officers about the commercial logic on possible alternatives and the timing, for the introduction of such arrangements.

A point to consider is the net effect on the balance of payments. The Award Recipient might receive royalties from, for example, a US manufacturer who could in turn export back into the UK. In such circumstances, there could be a net balance of payments deficit.

Licensing - particularly through an internationally operating organisation - can be fraught with difficulties, putting Award holders at risk of breaking the Offer Letter condition restricting manufacture to the European Economic Area (EEA) for five years from commencement of the project. Project Officers must carefully consider the ramifications of any licensing arrangement.

The respective HQDs should be able to advise on the proposed methods of market penetration and exploitation. Research and Technology Organisations will also be able to advise on the potential.

5.2.5 Management abilities and the project team

Applicants must demonstrate that they have, or will “buy in”, the necessary management and technical expertise and resources to ensure that the project is brought to a successful completion.

The Project Team should be clearly identified and roles elaborated.

CVs should confirm the background of the Project Team. Any sub-contracts or consultancy should be clearly identified and the roles of the sub-contractors and consultants clearly elaborated within proposals.

5.2.6 Commercial and financial viability

Project Officers must examine the financial viability of both the project and the Applicant.

Applicants must provide *realistic* forecasts of trading and cash flow, showing the forecast project costs for three-monthly intervals and of the revenue expected from the project. Officials will need to compare the cumulative negative cash flow with the financial backing available. Where at all possible, Applicants should show such forecasts both without support, and with support (award) and project enhancement being taken into account. Where possible, Project Officers should ask Applicants to show the rates of return on the different cases.

It is crucial that Project Officers assess the financial viability of businesses applying for an award. Project Officers should check whether the business/company and/or the group of companies is financially viable and can finance the project. It is also reasonable to check that Applicants are not becoming dependent on support. Project Officers should conduct initial FVT (Financial Viability Tests) to assess the financial standing (looking mostly at profitability, liquidity and soundness) of businesses. If appropriate, Project Officers should seek advice from internal accountants. **In all cases where total project costs exceed £1m internal accountants or FRM/FASU must be consulted.**

The statutory requirements for SMEs to have their annual accounts audited are contained in the Companies Act 1985 (“the 1985 Act”) and subsequent amendments. In particular, section 249A of the 1985 Act (as amended by Statutory Instrument 2000 No. 1430, which came into force on 26 May 2000) exempts small companies (as defined in section 247 of the 1985 Act) from being required to provide audited accounts for a financial year in which turnover is not more than **£1 million** and the balance sheet total is not more than **£1.4 million**.

It will be necessary to obtain from the Applicant a financial statement for both the Applicant’s business and the project itself.

Project Officers should undertake all necessary steps to verify the accuracy of information provided by Applicants. A combination of visits and general database checks will often suffice.

Where there are outstanding financial concerns about the information supplied, Project Officers should discuss their concerns with the Applicant who should be given the opportunity to provide additional supportive information to clarify the position. Where appropriate, Project Officers should seek a letter providing financial guarantees for a subsidiary from a parent company.

5.2.7 Intellectual property and patents

Awards should only be made to Applicants who can demonstrate ownership of or the rights to exploit the Intellectual Property. Where a patent search shows that no patent has been taken out in respect of the same or a very similar technology, Project Officers should advise Applicants to protect their Intellectual Property Rights in the new technology in the most appropriate way.

All Intellectual Property arising from projects supported under the scheme must be owned by the Applicant. Project Officers should advise Applicants that it is the responsibility of Applicants to make adequate arrangements to protect their rights in any relevant Intellectual Property. It is the responsibility of the Applicant and not the Department, to ensure that Projects are adequately protected. It is the sole responsibility of the Applicant/Award Recipient to pursue resolutions over any disputes over ownership or infringement of IPR.

Project Officers should make clear to Applicants and Award Recipients the importance of Intellectual Property Rights (IPR) and safeguarding these by, for example, patenting, registration of design etc. Where necessary, Applicants should be advised to carry out an intellectual property audit before starting their research. Such an audit should clarify ownership and will identify any restrictions that might apply to the use of existing licences and thus prevent exploitation.

Project Officers should make no payments (including up-front payments), if there are IPR agreements with third parties still outstanding. In this respect, Project Officers should consider whether such agreements must be in place, before an Applicant can accept its offer – Project Officers should use a pre-condition covering this in the offer letter. **A copy of signed IPR agreements must accompany the acceptance of the offer.** Project Officers should consult SBS Smart Secretariat, if this pre-condition will take longer than the normal two-month acceptance period.

Patent Office Searches supplied by Applicants or those conducted as part of the project assessment by the Smart Office will assist the Project Officer to determine the general level of innovation and any likelihood of IPR infringement.

5.2.8 Additionality

All Applicants must demonstrate a need for Smart support.

Financial additionality involves the applicant's need for Smart assistance. Has the applicant demonstrated that without the Smart injection of funds, the proposed work could not be progressed or would only progress very slowly and thus lose its competitive edge or a window of opportunity? Are financial resources already tied up or is the project a departure from the usual activities undertaken by the applicant and as such represents a risk that needs to be ameliorated by a Smart award.

It is standard practice to seek advice from internal accountants on the financial aspects of the Project or business, but in some cases Project Officers may not see the need for a financial appraisal (e.g. where there financial information relating to the work is very straightforward). If there are any doubts over financial additionality or viability, Project Officers should draw this to the attention of internal accountants for comment. Particularly suspect would be companies set up by a consortium of financiers or with reserves ostensibly set aside for other projects within the business.

In cases where the project costs exceed £1m, projects must be reviewed by FRM/FASU or internal accountants to determine the financial additionality associated with the proposed work.

For Exceptional Awards, Project Officers must ensure that financial additionality is appraised by internal accountants or FRM/FASU with a view on the most appropriate rate of award to be offered (i.e. up to 30% of project costs up to a maximum of £450,000). The negotiation of award levels (below 30%) is a fundamental consideration to ensure best value for money.

Typical Additional Benefits

a project proceeding that would otherwise not have been carried out; or,

the project proceeding in an enhanced form typically by either being undertaken sooner, completed over a significantly shorter period or carried out on a larger scale.

Typical Inhibiting Factors

inability to obtain funds; however a claim of "no funds" would not be acceptable from a cash rich company;

reluctance to accept the financial risks; (here the finance would be available but the project might over-extend the company in relation to its existing resources);

reluctance to accept technological risks; (here the principal uncertainty might lie in whether the project would be successful technologically, and would, if unsuccessful, result in unacceptable losses);

failure to meet the rate of return required by a company (or group), failure to achieve sufficient priority in the plans of a company (or group).

In general, additionality is undermined if work has already started before an offer is made. *This does not preclude feasibility studies, or prior exploratory work.* Exceptionally, a project may be considered additional, if work has started and then stopped through lack of funds, or if there is a sound case for the acceleration of the remaining stages of a project. However, in such cases, Applicants must clearly demonstrate the additionality involved and Project Officers must be fully convinced of the argument.

A comprehensive financial additionality should be conducted by can be used where appropriate.

The case for additionality may also involve an aspect beyond *financial* additionality – **project additionality**. Project additionality involves the wider considerations that should be taken into account when looking at the *need* for Smart assistance. In some cases where financial additionality is weak (that is, the applicant appears to have access to the necessary funds to progress the work without the Smart award) there may still be strong *project additionality* to warrant an award (that is, the work involves unusually high risks that need to be shared). For example, there may be valid *project* additionality if an applicant is undertaking R&D for the first time, or is innovating into a new area of technology, or is deviating from core business, or is likely to miss a specific “window of opportunity” for the technology being developed. Such undertakings should involve demonstrably high technical and commercial risks that warrant sharing the costs and risks by means of an award.

Project Officers should, in such cases, carefully consider the potential value for money return on the Smart award – that is, the tangible economic returns and the effect that the work may have on encouraging innovation and stimulating competition within a market. In those cases where *project additionality* is argued to override *financial additionality*, projects would be expected to score highly against the key appraisal criteria – innovation, technical, market and exploitation.

5.2.9 Wider aspects

Project Officers will need to take into account the wider impact or implications of projects, that is factors beyond the economic return.

Environment

The “environmental” impact of projects should always be given consideration when assessing the merit of the proposed work. This consideration should include the impact of the project output on

the natural (e.g. waste, recycling, materials used, the production process, etc) and social (i.e. living, working, etc) environments. It is not just “green” issues that warrant consideration, but also the wider impact on the *quality of life* and/or general *health and safety* that merit attention. Project Officers should also consider the way that projects may reinforce other Government initiatives.

In short, Project Officers should use this area of assessment to include a broad interpretation of the “wider impact” of a project – “wider” in the sense of the impact beyond the monetary returns.

Design

Smart does not aim to progress *design projects* per se, but *design* must be considered to be an important aspect of any engineering project. Project Officers should ensure that design is taken into account even where design is not recognised by the Applicant. The most salient design considerations under Smart are related to the creation of an added value ‘product’ in that the proposed work accounts for the ease and cost-effectiveness of production, best use of materials and technology available, effectiveness, suitability for purpose, quality within commercial parameters, value to the customer/end-user, maximising sustainability. Moreover, Project Officers should also take into account the impact that the Smart project will have on promoting best practices within business operations – for example, introduction of a best practice briefing process; working in multifunctional teams which include designers on the management and development of the project, etc.

6. Application Forms

6.1 Application forms

A single type of application form covers feasibility studies, development projects, exceptional projects and micro projects (that is, the research and development projects). Technology Reviews and Technology Studies share an application form. Application forms can be obtained via SBS Smart Regional teams, Business Link operators, the DTI and SBS websites and the DTI Publications store on their orderline: 0870 1502 500 (quoting the appropriate brochure references). Electronic applications are available at www.businesslink.org/smart

The Smart application form has been simplified to serve two purposes:

- 1 to allow Project Officers to quickly establish the basic eligibility of the applicant;
- 2 to have the applicant verify the accuracy of the given information and to authorise officials to carry out an assessment on the work which will involve a series of data checks.

To discourage a “grant mentality” and to encourage a more “commercially” minded approach towards seeking business support in the public sector, applicants are encouraged to prepare a short project proposal outlining the commercial merit of a project. The project proposal is not meant to be a lengthy document, but it must be focused on supplying a business case for support. The guidance notes steer applicants through the basics of the project proposal to make sure that the proposal is focused on relevant information. The project proposal will help Project Officers to determine the potential value for money return on the public support and help applicants plan and manage commercial projects (and in cases where the project is not chosen for support, the proposal may be used to seek support elsewhere). Proposals should involve a proposal detailing a technical innovation which forms the basis of a viable business proposition. The preparation of such a proposal should help applicants focus beyond the technical piece of work; beyond the laboratory, the workshop or workbench to the market prospects and the means of realising the commercial potential.

Business Link operators or consultants may advise and assist the applicant in preparing an application (for which there may be a fee). Also, SBS Regional teams may carry out seminars or workshops to advise on the process.

Stocks of hard copies of application forms and guidance notes are available from SBS Regional teams. An electronic version can be downloaded from the Business Link website: www.businesslink.org/smart

Applicants must complete the application form and prepare a short project proposal in accordance with the advice given in the guidance notes for applicants. Project applications must be submitted to the nearest SBS regional team to the place where the project is to be based.

Application forms for technology reviews and technology studies should be submitted to SBS Investment Directorate, Victoria Street, London.

Applicants can send in electronic copies of the application form and proposal at their own risk.

Applicants considering submitting an application form for an “Exceptional Award” should be advised to complete and submit a **Preliminary Proposal (see Guidance Note for Applicants – Smart Exceptional Projects)** before submitting a formal application.

For all Awards, Applicants must reveal sufficient detail to allow the proposed work to be assessed against eligibility and appraisal criteria. Officials can discuss projects and procedures with potential applicants, but if Applicants need help with financial or technical problems, they should be directed to local Business Link operators for such help. Business Link operators may charge for such services.

6.2 Additional “Notes for Applicants”

From time to time, SBS will alert SBS Regional teams and HQDs (usually via Bulletins) to the need to draw issues to the attention of potential applicants by means of “Notes for Applicants”. Such notes will be posted on the website and should be included with hard copies of application forms and guidance notes. SBS regional team leaders should ensure that their teams are aware of any additional material to be issued with application forms or any new issues relating to the policy or delivery of the scheme.

Additional notifications will be added to this “Note for Applicants”. SBS will advise on revisions or when the “Note” should be withdrawn.

7. Project Appraisal

SBS Regional teams are responsible for the appraisal and decision-making relating to Smart feasibility studies, development projects, micro projects, and exceptional projects. The Small Business Service/Investment Directorate is directly responsible for the appraisal of Technology Reviews and Technology Studies.

Smart project applications will be appraised in accordance with internal procedures and the Smart guidelines.

7.1 Technology Reviews and Technology Studies

Applications will be reviewed by Project Officers against the respective criteria. The proposed work will be examined to ensure that the purpose of the work, the need for public support and the costs are appropriate. Project Officers will seek approval of their recommendation from an Authorising Officer.

If the basic criteria are met under these elements, applications will be assessed against a Marking Frame. Markings other than 'reject' mean the project is supportable. The more detailed marking is to provide later analysis of applications that might, when taken with post monitoring data, allow Scheme refinement (e.g. a change in criteria to support projects likely to have greater impact).

The Marking Frame criteria are:

for a Review - is it the intent and is it likely that the proposal, if a grant is given, will establish a route for the applicant to achieve best practice for the sector? To score highly an Applicant will need to demonstrate (usually within the description of what the Applicant wants to achieve and the **Agreement**) that the project would ultimately help them to exceed best practice for the sector. A low mark still indicates sector best practice is a potential outcome as proposals falling short of this should be given a recommendation that the application be rejected;

for a Study - is it the intent and is it likely that the Study, if a grant is given, will establish a route to innovative solutions? To score highly an Applicant will have to demonstrate (usually within the description of what the Applicant wants to achieve and the **Agreement**) that the project is likely to ultimately help them to establish highly innovative products or processes for the sector. A low mark still indicates sector innovation is a potential outcome as proposals falling short of this should be given a recommendation that the application be rejected;

Are there realistic aims for the project? To score highly an Applicant will have to demonstrate that they have selected a suitable area of their activities for investigation and that the project has clear and achievable objectives. A lower mark should be awarded when the Project Officer considers that the objectives may only be partly achievable. This might, for example, be because the Project Officer believes from the information provided that the Applicant has selected too broad an area for investigation. If the Project Officer considers that the objectives for the Technology Review or Technology Study are unrealistic then the application should be recommended for rejection;

Is the work to be carried out in a reasonable timescale? To score highly an Applicant will need to demonstrate that they are prepared to devote sufficient time and effort to complete the project in a relatively short timescale and that the **Agreement** commits the Consultant to doing likewise. Experience shows that concentrated effort produces a better result than, say, an hour or two many times over an extended period. The Project Officer will also have to consider whether the objectives for the project will be achievable within the number of days the Applicant and their chosen Consultant (or consultancy) are proposing to devote to the

work. If the plan is not over a reasonable timescale, consideration should be given to recommending that the application be rejected.

Are the applicant's pay rates and overheads good value for money and properly explained? To score highly, an Applicant will have to provide a clear explanation on how they have calculated their pay rates and overheads. High markings can also take into account extra effort by the Applicant over that required to match the Consultant. If the Project Officer considers that the Applicant's pay rates and overheads are inflated beyond reasonable rates then consideration should be given to recommending that the application be rejected.

Does the applicant intend to act on the results of the consultancy? The Applicant should have clear objectives for what they want to achieve from undertaking the project and how they might implement the recommendations and this should be clear from the response to question 12 of the application. The **Agreement** is also taken into account, however, as it will demonstrate how well thought through the intent is. If there is no intent to act on any favourable report within a reasonable timescale the application should be recommended for rejection;

Is the Award essential for the project to proceed? To score highly, an Applicant will have to explain convincingly why they need financial assistance and what the effect would be if they were not to receive support. A typical additional benefit might be a project going ahead that would not otherwise do so. It is not acceptable for a cash rich enterprise at the larger end of the size allowed merely to cite lack of funds as the only reason for seeking support. If the Project Officer considers that the Applicant has not demonstrated that the grant is essential for the project to proceed within a reasonable timescale then a recommendation that the application be rejected should be given;

Consultant's expertise for the project? The Project Officer will need to assess whether the consultant (or consultancy) selected by the Applicant has the necessary technical expertise to undertake the Technology Review or Technology Study. If they have a track record in the Scheme this may be taken into account. If it is not clear how to assess their expertise, further information should be sought. If the Project Officer considers that the consultant does not have sufficient expertise to carry out the project in a way beneficial to the Applicant then a recommendation that the application be rejected should be made; and

Are the consultant's costs value for money? Costs of £500 per day would be considered a reasonable rate for a mainstream consultant. Excessively high or low costs (e.g. over £1k a day or under £100 a day) should be looked at critically to assess whether the project will be worthwhile. In most circumstances excessively high or low consultant costs should receive a lower mark. If the Project Officer considers that the consultant's costs are not good value (e.g. travel costs exceed the work cost) then consideration should be given to recommending that the application is not appropriate for support.

Technical advice is not usually needed or sought for these elements though Applicants are expected to explain the potential technical advance within the application, usually within the description of what they wish to achieve and within the **Agreement**. *DTI Sector Directorates' views may be sought if required, particularly where an applicant submits an application for a Technology Study following completion of a Technology Review.*

7.2 Feasibility Studies, Development Projects, Exceptional Projects, Micro Projects

The process for appraising projects will involve a detailed assessment of project proposals leading to a recommendation to be reviewed by an Authorising Officer. The process must involve the Project Officer who will appraise the proposed work and an Authorising Officer (an official with the appropriate levels of delegated authority to commit expenditure) who will review the assessment and decide on the appropriateness of the proposed work for funding under the Smart scheme. If the Project Officer considers the project to satisfy the appraisal criteria, the project should be marked and scored against the Marking Frame (see 7.2.4). The Authorising Officer is required to review the Case Minute and Marking Frame where a case is being recommended for support. The Authorising Officer should review the marks and confirm a final

score by counter-marking and/or signing the Marking Frame. Where an Authorising Officer has counter-marked a project, the average score will indicate a final understanding of the merit of the project in relation to the appraisal criteria. If Authorising Officers do not counter-mark, they are still required to sign the Marking Frame in support of the Project Officers' marks and final scores. Budgetary constraints and minimum levels of innovation and risk will need to be considered by the Authorising Officer in making the final decision.

The removal of the competitive basis of the Smart scheme means that Project Officers can discuss concerns about the project application with the Applicant **before the application is submitted and during the project assessment.** This will provide Applicants with the opportunity to confront concerns raised by the Project Officer and where possible confront issues within a reasonable timeframe to the satisfaction of the Project Officer.

The assessment process must be operated in full compliance with Open Government initiatives that call for transparency and systematic decision-making processes. **SBS Regional teams are asked to ensure that their internal systems (which may be based on local imperatives and availability of resources) are in accordance with "best practice" systems (as advised by SBS).**

7.2.1 Assessment

Project Officers will assess project applications against the eligibility and appraisal criteria governing the Smart scheme. In the course of project assessment, Project Officers will draw on the necessary technical, financial, market and IPR sources of advice (e.g. RTOs, Patent Office, Internal accountants, DTI Sector Directorates). In cases where an administering Official has personal knowledge of an Applicant, other than as part of their official duties, the personal interest should be declared (i.e. the personal or vested interest and potential conflict of interests). Where such circumstances arise, the Official concerned must take no further part in the appraisal of the respective application.

Project Officers will need to clearly establish the general eligibility of applicants and projects (see Section 3) before progressing a more detailed assessment of the proposed work.

The detailed assessment will involve standard checks on the validity of information associated with projects and checks for duplicated or related award applications around the UK via the Department's database (SAMIS).

Project Officers will develop a comprehensive assessment of the proposed work against all areas of the scheme criteria. The assessment will lead to a recommendation on the suitability of a project for support under Smart. Projects that merit support should be marked and scored using the respective appraisal Marking Frame (see 7.2.4).

If a project appears to change its nature from a Feasibility Study to a Development Project during the course of assessment, the SBS Regional teams may, at its discretion, appraise the proposed work as a Development Project, **but must inform the Applicant of their decision before proceeding along these lines as the applicant will be required to provide additional information on the funding availability among other things.** The alternative would be to reject the project application as unsuitable for support in which case the Project Officer should provide the Applicant with specific reasons justifying the decision in accordance with Open Government initiatives.

If Project Officers discover that action is being taken by another Government Department relating to an Applicant's activities, they should investigate this action and only proceed with an appraisal if they are satisfied that the conclusion of that action will not adversely affect the future of the Project.

Exceptional Projects

In the case of Exceptional Projects, the SBS recommend that the SBS Regional Team conduct the standard assessment, but commission the respective HQD to evaluate, estimate and

elaborate the “strategic” case behind the proposed work. SBS Regional teams are asked to work in close liaison with the respective HQD on such cases – involving the HQD in meetings and visits and keeping them aware of the general assessment.

Case Minutes

In the course of assessing the eligibility and merit of projects, Project Officers will develop a comprehensive **case minute**¹⁰ in which they develop their reasoning against the scheme criteria and arrive at a conclusion either recommending rejection or support. The process should ensure that the case minute establishes a clear view on the proposed work.

Project Officers will appraise project proposals along the lines set out in these guidelines. The case minute should be supported by the following documents (on the project file):

- the scored Marking Frame. The Marking Frame, agreed with SBS, will help Officials to identify areas of concern that may require risk monitoring, establish the overall merit of project and enable SBS to monitor assessment considerations across sectors and regions to ensure national consistency;

- all** expert advice, including the financial appraisal (file document reference identified in Case Minute);

- the **forecast spend profile** for each 3 monthly period throughout the course of the project (preferably outlined within the Case Minute);

- Where appropriate and agreed with the Applicant, a dedicated table showing all the significant **milestones** with dates (N.B. such a chart, if agreed outside of the project proposal, should have a specific reference in the respective Offer Letter).

The case minute should be presented on the project file to an Authorising Officer to allow the Authorising Officer the opportunity to check the process, reasoning and paperwork relating to the Project Officer's recommendation. The Authorising Officer will also need to take account of the overall merit of a project and budgetary constraints before making a decision on the appropriateness of the project for support.

7.2.2 Expert sources of advice (technical, market and financial)

In appraising projects, besides drawing on their own technical expertise, there may be a need to consult with specialist sources of advice on whether a proposal constitutes a “significant technological advance”.

SBS maintains contracts and agreements with a number of external organisations for the provision of technical advice on Smart applications. These should be considered as the first choices for obtaining external advice. Up to date contact details can be obtained from SBS and will be distributed regularly.

A list of potential sources of technical advice will be maintained on the Smart Website by SBS/FII and referred to in the Guidance Notes accompanying Application Forms. Applicants can view the list on the businesslink.org website or request a copy of the list from SBS Regional teams.. SBS Regional teams should notify Applicants of any “local” advisers that could be used (perhaps, on a one-off basis) in the course of an assessment. Applicants should be aware of the appraisal process and be provided with the opportunity to object to the use of any particular advisers. If Applicants do object to the use of any source of advice, they must justify their objection. This procedure is in recognition of the fact that many of the advisers (whether in Executive Agencies or the private sector) are engaged in a wide variety of dealings with other businesses and could therefore be faced with conflicts of interest when handling Smart applications. The key requirement is to ensure that Applicants are aware of what the appraisal process involves and that they are given the opportunity to consider any implications.

¹⁰ The Case Minute has been designed to bring practice into line with standard practice as operated within the DTI on other schemes.

Project Officers should seek the views of the DTI HQDs on market (and if able, technical) aspects. Project Officers must consult HQDs where there is potential overlap with an existing scheme in a given technological field. This is necessary before making an offer to ensure the appropriate funding scheme is being utilised. More appropriate schemes should be used in preference to Smart if an alternative scheme can effectively meet the needs of Applicants.

Technical and Market Advice

Technical and market advice is sought to determine the merit of projects in relation to the appraisal criteria and to substantiate whether the proposed work represents or will lead to a significant technological advance for the industry. In the case of Exceptional Projects, in addition to representing a technology advance, projects must be viewed in terms of their “strategic importance” to the national industry and UK competitiveness in general.

Project Officers should use the appropriate proforma to request advice from HQDs and/or external organisations (e.g. Research and Technology Organisations/Research Agencies).

Project Officers may wish to draw to the attention of the technical advisors that there may be pressure to release technical and market advice in line with the Code of Conduct on Access to Government Information. However, it has been agreed in test cases that the release of comments is currently covered by one of the Code’s exemptions.

If neither HQDs nor regular external advisors are able to provide advice, other private sector organisations may be considered. However, contact with such organisations must be undertaken with the Applicant’s consent and must make a suitable confidentiality agreement with the third party. Where such sources are likely to be used on a regular basis, SBS should be notified with a view to arranging a single, central contract.

Where a suitable source of expertise cannot be identified, Project Officers should invite the Applicant to nominate independent sources. Ideally, the Applicant should provide 3 to 5 sources. Where an Applicant can only quote a single source, Project Officers will need to examine the relationship between the Applicant and the source closely to ensure that any advice given by the source will be totally impartial.

Many projects will require technical advice from, for example, the respective HQD or an external organisation. When seeking external technical advice for projects, Project Officers should try to ensure that the cost of that advice is not disproportionate to the overall project costs and likely award.

Project Officers should consult the relevant HQD to avoid any overlap and possible competition with existing schemes.

Exceptional Projects

Smart Exceptional Projects require SBS Regional teams to liaise closely with the respective HQD than with traditional projects. The SBS Regional team should commission the assistance of the respective HQD to evaluate, estimate and elaborate on the strategic importance of the proposed work. The HQD is expected to comment on and justify any strategic argument for supporting the work.

For Smart projects, the cost of technical advice from Government and private sources is charged to the Smart programme budget. It is the responsibility of Project Officers to identify and make contact with the source of technical advice and to account for the quality of the advice.

Project Officers should ensure that they take on the ownership of and responsibility for all comments fed back to Applicants. Advice taken will serve to support decisions. Project Officers own and are responsible for the final recommendations, which are arrived at with input from sources of advice. The specific source of comments should not be divulged without the prior and express consent of the source of advice, and then only under exceptional circumstances (please note that it has been agreed in test cases that the release of comments is currently covered by one of the Code's exemptions).

Patent Office Searches

Project Officers will, in many cases, need to seek advice from the Patent Office on the novelty of projects and on the infringement position. Although SBS has national agreements with RAs and Patent Office, SBS Regional teams pay for their own specialist advice sought at the discretion of Project Officers. Applicants may be provided with the full results of Patent Searches (except the covering letter) for their information.

Financial Advice

Project Officers should seek appropriate levels of advice on the financial aspects of projects and business operations. In cases where the project costs exceed £1m, a full financial appraisal must be undertaken by either internal accountants or FRM/FASU.

7.2.3 Appraisal visits

Feasibility Studies, Development Projects, Exceptional Projects

Project Officers are advised to conduct an initial appraisal site visit in support of the project assessment. Such visits establish the credibility of the Applicant's abilities and resources. Appraisal visits provide Project Officers with a good opportunity to discuss the proposed work in more detail and clarify outstanding areas of confusion or ambiguity relating to the project. A Visit Report should cover all areas of discussion and outline the conclusions drawn from the meeting. In the case of Exceptional Projects, SBS Regional teams should liaise with the respective HQD Project Officer and conduct a joint visit where it is considered appropriate.

Micro Projects

Project Officers will make visits where there is an appropriate need.

7.2.4 Marking frames

Feasibility Studies, Development Projects, Exceptional Projects and Micro Projects

Marking Frames should be used in support of Case Minutes. The Marking Frame is a risk management tool and its overall score will reflect a general view on the overall merit of projects and individual marks will provide a guide to areas of the project that may need to be carefully monitored if an award is made.

The respective Marking Frames should be used to score projects against the appraisal criteria governing respective elements of the Smart scheme. In the case of Feasibility Studies, Development Projects, Micro Projects and Exceptional Projects the appraisal criteria cover: innovation, technology challenge and technical risks, management abilities, commercial prospects, exploitation potential, and wider aspects such as environmental and design impact. The Marking Frame should be completed by the Project Officer following the writing of the Case Minute reviewing the project and drawing conclusions on the merit of the proposed work. The marks should indicate areas of strength and concern within projects (alerting Project Officers to areas that may need careful monitoring) and the final score should provide the overall merit of the work and the degree of risks involved with the work. *Marking Frame need not be used if Project Officers have been convinced that criteria have not been addressed to a level that could justify marking and scoring of the project.*

The Authorising Officer should conduct an additional scoring to provide an average final score that indicates the overall merit of the project in relation to the appraisal criteria. The Authorising Officer will confirm or negate the recommendation made by the Project Officer.

If any area of the Marking Frame is given a “2” mark, the project should be considered as high-risk in this area. Projects that receive a series of “2” marks, but receive an award, should be categorised as “**High Risk**” to alert the appropriate level of project monitoring. A “2” marking in business viability or project management will automatically alert Project Officers to the need for “high risk” monitoring. *SBS Regional teams should ensure that they have a system in place that provides easy indication of the risks involved with projects under their jurisdiction.*

Open Government and recent cases of complaint have raised the need for accurate and systematic scoring.

(N.B. Although the purpose of the Marking Frame has changed since the removal of the competition framework, there may be a need at some time in the future to reintroduce the Marking Frame as a selection tool under competition conditions.)

7.3 Open Government

As with all Government information, requests for information relating to the Smart scheme or to individual Smart proposals and projects are subject to the **Code of Practice on Access to Government Information**.

Information requested must be disclosed unless refusal can be justified against one or more of the exemptions provided by the Code. SBS Regional teams, DTI Headquarters’ Directorates and SBS should presume that Smart Applicants will have the right of access to information in the majority of the casework relating to their projects, if they so request. There are, however, a few items, which can be properly withheld in line with Code exemptions. For instance, there are circumstances where technical advice may be withheld on the basis that its release would harm “the frankness and candour of internal discussion” and commercially sensitive information may also be withheld from third parties.

The Code of Practice also commits departments to give reasons for administrative decisions to those affected. Applicants that have not been selected for an award should always be informed of the specific reasons for non-selection. Project Officers must ensure that full reasons are given and that these reasons are accurate and justified. The purpose of the Code commitments is to provide openness and accountability so that administrative decisions are seen to be made fairly and according to clear rules. It also serves to reassure those affected that the decision has been given adequate consideration and that all relevant factors have been taken into account. Giving reasons can also help those affected by decisions to point out any important information that may have been overlooked. The Code promotes better-informed decision taking. No information need be supplied which is covered by an exemption under the Code.

In general, all Smart administrative processes should be as open as possible. If officials are in any doubt over what can or cannot, should or should not, be divulged they should contact SBS Smart Secretariat for advice.

7.4 Review and Complaints procedures

Smart operates a decision review procedure. All SBS Regional teams must ensure that they have the procedure in place to accommodate any challenges. In accordance with Open Government initiatives, Applicants must be informed of specific reasons for non-selection of an award (see 7.8), subject to the exemptions contained within the Code. If Applicants can address all of the reasons for non-selection, the project application can be resubmitted (or reactivated) for a decision review undertaken with the assistance of a senior officer. The review process is fully outlined in the Guidance Notes for the Review Procedure and Complaints Procedure). Applicants should, however, be notified that re-submissions will only be reviewed once. If the project

application fails to satisfy the scheme criteria on the second attempt, the project application will not receive further consideration.

Complaints should be handled in accordance with “Service First” principles. SBS Regional teams should ensure that they have a formal internal procedure in place (see Smart Guidance Note on Review Procedure and Complaints Procedure). Complaints relating to non-disclosure or cases involving the disclosure of “sensitive” information should be discussed with the DTI Open Government Unit during the deliberation.

7.5 Fraud

Project Officers must make every effort to prevent fraudulent use of awards. Fraud can occur in a variety of ways including:

- misrepresenting eligibility;
- attempts to claim for costs that have already or not been defrayed; and
- claiming for expenditure that is not eligible.

Project Officers must ensure that reasonable checks on the data supplied by the Applicant are always conducted throughout assessment and monitoring stages.

Before an award is offered, Project Officers should check the credentials and associations of the business/Applicant/other participants through checks through the appropriate databases. Applicants should be aware of the need for the transparency of their business details. An Award should not be made until the Project Officer is satisfied with the accuracy of the data. This may mean that the Applicant will be required to provide additional evidence of clarification relating to those issues that the Project Officer considers to be of concern.

7.6 Project start date

An Applicant can only start a project after returning a signed copy of the official Offer Letter. Those wishing to start before formal acceptance do so at their own risk. Applicants can only claim against eligible expenditure defrayed from the date stated in the Offer Letter and, if they have accepted the formal offer of support. Project Officers should inform Applicants that any work on a project undertaken in advance of returning the signed acceptance is at their own risk. In any case, work before an offer is ineligible and casts doubt on the additionality argument for receiving any Award.

Officials may, under exceptional circumstances and without prejudice, allow Applicants to carry out pre-work, e.g. incur expenses in ordering equipment with a long lead-time. This must not exceed 10% of the total project costs and permission must be given by an Official authorised to approve a subsequent offer. Project Officers must inform SBS of any such agreement.

Officials should not give Applicants reason to assume an Award will be forthcoming before an announcement at the completion of the appraisal process. If Project Officers think that an Applicant may have assumed this is in error, they should seek advice from DTI solicitors (Legal Services A4) and SBS Programme managers (PPM).

Project Officers may agree to an Applicant's request to delay the start of a project of up to three months. This may be negotiated before acceptance of an Offer Letter. In such a case, any advanced payments should be withheld until the project starts.

7.7 Offer letters

Before offering an award, Project Officers should have undertaken all reasonable checks to verify the accuracy of the credentials of Applicants. Awards should not be offered where there are doubts concerning the foundation of any of the information forming part of the project application.

Award Recipients are not “successful” until they have accepted written offers by signing and returning a copy of the respective offer letter (i.e. a complete copy with original signatures). Offer Letters contain a deadline by which acceptance by the Applicant should be received (e.g. this period can vary between 1-3 months, but in most cases 1 month should suffice). A reminder

should be sent within 2 weeks of the expiry of the acceptance date. If the offer is not accepted by the given deadline and the Applicant fails to respond adequately to the reminders, a general presumption will be that the Applicant no longer wishes to proceed. A letter notifying the Applicant of the situation should be sent to confirm the withdrawal of the offer.

Feasibility Studies, Development Projects, Exceptional Projects, Micro Projects

There are three proforma Offer Letters in use. Each offer confronts a specific type of eligible business operation: i.e. Sole Traders, Partnerships and Companies, and Project Officers should ensure that the appropriate offer letter is issued to cover the particular type of business. A model standard Offer Letter for award winners can be sent to potential applicants on request. Modifications to offer letters to cover conditions that may be appropriate to a particular project should be cleared with DTI's Legal Services Directorate (LEGALA4) and SBS Smart Secretariat. This is important, because apparently innocuous changes can have major effects on the interpretation of the Offer Letter.

The names of Award Recipients should not be announced until Project Officers have received the signed acceptance contained in the Offer Letter. *SBS Regional teams should also ask Award Recipients for a description of their project and business for inclusion in the Directory of Smart Awards.*

The DTI Finance Handbook Chapter 9 Section 4 clause 9.4.2 states that "the no-obligation-to-pay (NOTP) date should be set between six months and one year after the project is due to be completed: only exceptionally should it be longer than this".

Technology Reviews and Technology Studies

There is a standard Offer Letter for **Technology Reviews** and **Technology Studies**. A model Offer Letter can be sent to potential applicants on request. If modifications are required to cover special conditions appropriate to a particular project these must be cleared with DTI's Legal Services Directorate.

7.8 Notification of non-selection

Project Officers must ensure that all letters informing applicants of non-selection comply with Open Government initiatives to provide clearly elaborated and supported reasons for non-selection.

Letters of non-selection must inform unsuccessful applicants of full, specific and clear reasons for the lack of success.

7.9 SAMIS and RAB

Project Officers must ensure that details of offers are entered on SAMIS within 5 working days of an offer letter being dispatched. This is important, as SBS and others will use SAMIS data in monitoring and forecasting expenditure and in preparing briefing for Ministers. The maintenance of accurate records relating to projects on SAMIS is the responsibility of respective Project Officers.

Commitments and payments must be promptly maintained on SAMIS and RAB in accordance with standard requirements. Prompt profiling and receipting must be maintained.

SBS Regional Team leaders are responsible for ensuring that SAMIS and RAB requirements are fulfilled to ensure that central monitoring of administration and budgets can be performed.

8. Project Monitoring

Each SBS regional team is responsible for the diligent monitoring of Smart award projects in their regions. Monitoring will be conducted in accordance with the guidelines.

Regional teams should ensure that they have a formalised internal procedure for handing-over project responsibilities to a monitoring team/officer. Regional teams will have their own hand-over systems to accommodate local conditions, but it is important that regional teams make the hand-over as smoothly and effectively as possible to ensure that monitoring teams take on their responsibilities with a good understanding of a respective project's background. We would suggest that following approval of support, the Project Appraisal Officer should discuss the project with the Project Monitoring Officer (i.e. the officer to be named in the respective offer letter) who should then contact the applicant to introduce him/herself, clarify the role of the Monitoring Officer and discuss and agree the eligible costs and start-date with the respective applicant. All Offices will be responsible for ensuring that there is some kind of formalised hand-over procedure in place.

The overriding principle for monitoring work is that resources devoted to this activity should reflect the amount of public funds at risk and the extent of that risk. Ideally, different Project Officers should carry out project appraisal and project monitoring activities.

Monitoring is aimed at ensuring that support is being used for the intended purpose and according to the conditions in the Offer Letter. Project Officers with responsibility for monitoring projects should be named and details provided within respective Offer Letters.

Project Monitoring will involve:

- ❑ monitoring the technical and commercial progress of the project and claims for payment against the agreed work plan (as outlined on a Gantt chart) and set milestones (ideally costed);
- ❑ checking the financial viability aspects of the project and business (N.B. "high risk" projects may require additional systematic checks by internal accountants);
- ❑ assessing the effect of any changes to or within the project (e.g. change of project direction and objectives) or business (e.g. take-over, business name change, changes within the project team);
- ❑ deciding whether any repayment of support might be requested, where compliance with the terms and conditions of the offer has not taken place;
- ❑ checking and advising on the marketing/exploitation aspects of the project and encouraging, where appropriate, the use of Business Link services to assist with the exploitation phase; and
- ❑ notifying HQDs about projects and their progress, where they have requested such information.

At the very least, monitoring will involve thorough checking of claims for payment and related documentation. Whatever level of monitoring is deemed appropriate, project officers must ensure that there is a sufficiently adequate audit trail to justify the making of any decision or payment. As a matter of course records of telephone calls, visit reports (and so on) should be recorded on file.

8.1 Monitoring visits

Feasibility studies, development projects, and exceptional projects

SBS regional teams will decide the frequency of monitoring visits.

Project Officers should ensure that they conduct at least one visit to the work site prior to payment of the first claim (primarily to spot early problems and as a prevention of fraud) and one visit at the end of the project, before final payment (to verify that the Award Recipient has completed the project and that the project has expended in accordance with the offer letter and the actual work done, and to remind the Award Recipient of the continual obligations under the

offer letter in relation to the exploitation phase. A discretionary “mid term review” visit may also be considered as a prudent measure. If following the examination of project reports or claims there are concerns relating to the progress or direction of projects or about the status or stability of the business, Project Officers must consider additional monitoring measures to protect the public investment in projects.

SBS regional teams should ensure that they have systems in place that allow for the identification and continual recognition of “High Risk” projects. Such projects will warrant more intensive monitoring and SBS regional teams should allow for this eventuality within their administration systems. The degree of monitoring should always be proportionate to the degree of risk involved with the work and the size of the award.

If a third-party (e.g., a DTI HQD official) is needed to help monitor a project for any reason, the role of that third-party should be fully explained to the Award Recipient, particularly if they are involved in any other related activity. The Award Recipient should be given the opportunity to object to this involvement, if it feels there could be a potential conflict of interest.

Micro Projects

SBS regional teams are responsible for the monitoring of Smart micro projects (with the exception - unless otherwise agreed - of projects appraised centrally by the SBS Investment Directorate which will be monitored by SBS PPM). Appropriate levels of monitoring will be at the discretion of regional teams and appropriate arrangements made to ensure that the work and project output are in accordance with the original work plan and offer letter.

Technology Reviews and Studies

Technology Reviews and Technology Studies projects will usually take place very quickly once the award is offered. Normally, monitoring will be based on the outcomes (action plans and the like). However, visits to randomly selected project companies will be carried out for a formal check of project documentation. The visits will take place at any time during the life of the project or during the “no obligation to pay” period.

A status report of Technology Reviews and Technology Studies is prepared each month and issued to SBS Regional teams to keep them informed of projects in their area.

8.2 Checking progress with the project and claims for payment

Project Officers should check progress against objectives and milestones agreed with the Award Recipient. If there is significant slippage or performance otherwise falls short, Project Officers should identify the reasons for the lack of progress. If there are significant changes in conditions in the prospective market, the Project Officer should determine how they might affect the project. Such developments could lead to changes in the conditions of support or even repayment.

Monitoring will mainly focus around claims for payment against an award. Under normal circumstances, the information accompanying claims should allow the Project Officer to reach a reasoned view on project progress and the appropriateness of the claimed amount. The following questions should always be considered when checking claims:

Has the Award Recipient understood and accepted the offer letter and any variations or preconditions?

Does the Independent Accountant’s Report (when required) seek to vary terms (if necessary, the SBS Regional team should consult internal accountants and SBS PPM)?

Has the Award Recipient provided all the relevant documents, including sufficient financial information (e.g. company accounts, management accounts ¹¹, if the company accounts are more than 3 months old, etc) and are they acceptable?

Is the project proceeding to plan? Are there any significant changes in the nature of the project, the size or incidence of project costs or the prospects of technical or commercial success?

Does the initial claim cover the whole period from the start date?

¹¹ Applicants should be advised that Project Officers will require sufficient financial information at appropriate times to substantiate ongoing business viability. Although **formal** management accounts are not a specific requirement of Smart, the maintenance of such financial information is often sound business practice.

Is there any overlap in claim periods?

Was the claim received by the “No Obligation To Pay”(NOTP) date (N.B. Project Officers must follow the guidance in Finance Handbook Chapter 9 Section 4 for late claims)?

Does the claim cover a period of at least 3 months (the Department does not normally pay more frequently than quarterly)?

Does the claim recognise that the Award Recipient must actually have defrayed expenditure?

Do the eligible costs and payment in claims add up to totals consistent with the Offer Letter? The build up of payments should be watched closely, as payments are normally restricted to 85% of the total payable until the project has been completed;

Does the spend profile vary significantly from that provided with the project proposal? If so, why? (This is especially important for Feasibility Studies, to ensure that claim payments plus the up-front payment do not result in any need to recover award due to an underspend); and

Does the FINAL claim indicate that the Award Recipient has completed the project? Does the accompanying Project Report verify that all the project objectives have been met in accordance with the original workplan?

If for any reason a delay in payment of a claim is likely, the claimant should be advised and the reasons for the delay should be explained. Project Officers should ensure that they feed any unusual circumstance of a project or a Award Recipient back to SBS, so that SBS Programme Management can modify the policy and guidelines, if necessary.

NOTE: FRM states (see Finance Handbook) that in the case of late claims arising out of the Science and Technology Act (1965) where a request for payment is received after the NOTP date, the request must be referred to FRM1c. The exception is where the claim is received within four months of the NOTP date and is not more than £50,000. These should be referred to Head of Management Unit (for example, DfRs).

8.3 Independent Accountant's Reports

Independent Accountant's Reports on project expenditure are required for feasibility studies and development projects. The Department's offer letter covers the specific requirements (qualifications of the accountant and format and content of Reports). All award recipients must agree to the requirements as a condition of offer acceptance.

Failure to supply an Independent Accountant's Report in the designated format from an appropriately qualified accountant will result in the withdrawal of the offer of grant and where appropriate the recovery of any grant.

8.4 Reminder letters

Project Officers must send a **reminder letter** to Award Recipients **one month before the project end date and another one month before the NOTP date.** There is no obligation for the Secretary of State to pay claims submitted after the NOTP date.

8.5 Project changes

If there are significant changes to a project, Project Officers must consider any new objectives, assess how far the objectives have moved and assess if the project still merits support. After due consideration, Project Officers should recommend to an officer with appropriate delegated authority to either continue support (with any modifications or special conditions) or to withdraw support (with possible repayment claims).

An amendment to the original offer should be issued where support is to be continued.

8.6 Increases in costs

The DTI will not normally increase its support, if costs rise. Where the Award Recipient is unable to cover such extra costs from the resources available to it, the Project Officer should consult internal accountants and explore with the Award Recipient the prospects of someone else completing the R&D. In such a case, SBS should be notified.

8.7 Decreases in costs

Where the overall cost of a project falls below the minimum project cost relating to a respective element of the Smart scheme (e.g. £30,000 for feasibility studies, and £60,000 for development projects, £750,000 for an Exceptional Projects, £5,000 for Micro Projects), Project Officers must obtain written clarification of the reasons for the decreased costs and determine (with advice from FRM/FASU or internal accountants, if necessary) whether the decrease is reasonable and justified. In such cases, SBS Programme Management should be notified. Project Officers will take into consideration such clarification when establishing whether to vary or scale down the level of support.

8.8 Business expansion

It is acceptable to continue support under Smart, if an Applicant's business expands through normal recruitment to take its workforce beyond the employee criterion either during the course of project assessment or the project duration. However, if expansion is due to a take-over, buy-out, merger, etc, the change of circumstances should be handled under "Changes of Ownership" (see 8.17).

8.9 Project difficulties

Technical difficulties or other factors may mean that the development is unlikely to become a technical success or commercial exploitation becomes impossible. If the Award Recipient abandons the project, Project Officers should terminate support formally in writing at the earliest opportunity. In such cases, the Award Recipient must provide a written account of the reasons for abandoning the project. The Project Officer will need to take a view on the appropriate course of action to be undertaken.

8.10 Business difficulties

If the Award Recipient's business is near insolvency, the continuation of support could lay the DTI open to claims from creditors if the business subsequently folded. Project Officers should seek urgent advice from internal accountants or FRM/FASU and Legal Services (LEGALA4).

8.11 Project extensions

Project Officers must only grant extensions to projects under exceptional circumstances.

Extensions of the end date in the offer letter should only be allowed if the Award Recipient shows that:

- ☐ all reasonable steps have been taken to meet the original deadline; and
- ☐ the extension would enable the completion of the project; and,
- ☐ the exploitation prospects have not changed significantly.

Extensions must not be agreed where:

- ☐ the "no obligation to pay" date has passed; or
- ☐ the Award Recipient is at fault; or
- ☐ there are reasons to doubt that the Award Recipient would complete the project; or
- ☐ the prospects for exploitation have significantly diminished.

The Project Officer should ensure that the Award Recipient maintains progress on the project from the start and, wherever possible, identify potential slippage at the earliest time. Where slippage has occurred or is likely to occur, it is the duty of the Project Officer to ensure that the Award Recipient puts in place an agreed plan to complete the project within the original time scale.

Project Officers must present a reasoned argument on the project file for granting an extension and the case for the extension must be approved and signed off by an Authorising Officer. In the course justifying the need for the extension, Project Officers should consider, **among other things**:

- ☐ Would an extension undermine the original additionality argument?
- ☐ What is the additionality argument for an extension?

- ☐ When did the need for the extension become apparent?
- ☐ What is the current financial position of the project?

As part of programme monitoring visits, SBS Programme Management will examine the arguments for extension to assess the merit of extensions and quality of project monitoring.

Where companies and Project Officers follow good practice, slippage (and the consequent need for a time extension) should come to light at an early stage. Thus there is a general presumption that the later a request for an extension is submitted, the less likely it is to be granted.

FRM makes no specific response to requests for extension being received after the project end date and before the NOTP date. These, like late claims, have budget implications and therefore Project Officers should consult FRM1c.

Project Officers must refer all extensions requested after the expiry of the NOTP (no obligation to pay) date to FRM1c for approval and notify SBS of such cases.

8.12 Repayment of awards

Awards should be reclaimed if the Award Recipient has not complied with the terms of the Offer Letter.

When considering reclaiming award, Project Officers must follow the procedures laid out in Chapter III paragraph 3.11-3.15 of Accounting Memoranda (normally held by Finance Officers).

In particular, Project Officers must consider claiming repayment, if:

- the project is in jeopardy (the Project Officer should establish the reasons and the extent to which the Award Recipient is responsible);
- the project has not progressed satisfactorily (the Project Officer must establish reasons, since an unforeseen technical hitch or unexpected loss of key personnel may point to an extension rather than a reclaim of award, if the project is likely to get back on course in a reasonable time scale);
- substantial changes in nature or scale of the project have occurred (the Project Officer should consider whether the reduced project might itself have been approved);
- the Award Recipient business has gone into liquidation (if there is evidence of laxity or deliberate concealment from the Project Officer of the likelihood of liquidation, then advice from DTI solicitors (Legal Services A4) should be sought);
- change of ownership of the business (normally an assurance by the new owner about the continuation of the project would mean that the Department was unlikely to exercise its discretionary right to reclaim award);
- an asset no longer used for purpose of the project (in most R&D cases, physical assets are not major parts of the project and normally all that is required is a reduction in eligible costs and a proportional scaling down of the award).

Project Officers should advise AMEY Services in Newport and FRM1c, should any decision to seek repayment be made. Project Officers are required to raise respective invoices for submission to the 'Receipts' section at AMEY quoting a 'Payment Due Date'.

Where a Project Officer has unsuccessfully attempted to seek repayment of the award, there is a need to apply to FRM1c for write-off proceedings.

In such cases, where repayment is contemplated Project Officers are advised to seek guidance from appropriate sources (e.g. Senior Officers, Programme Managers, FRM1c, LEGALA4). Project Officers should refer to any guidance issued by SBS Programme Management.

8.13 Fraud

Project Officers must make every effort to prevent fraudulent use of awards. Fraud can occur in a variety of ways including:

- misrepresenting eligibility;
- attempts to claim for costs that have not been defrayed; and
- claiming for expenditure that is not eligible.

Project Officers must ensure that reasonable checks on the data supplied by the Applicant are always conducted throughout assessment and monitoring stages.

The importance of effective monitoring is underlined by the very real possibility of fraud. This is evidenced by recent cases which, whilst illustrating the effectiveness of existing procedures, underline the need for vigilance:

Examples:

A Smart Award Recipient was convicted of forgery and false accounting in respect of the Smart award. Project Officers were first alerted to the problems when the Award Recipient was only able to provide photocopies of invoices.

Project Officers made repeated calls to a local university's laboratory facilities where the Award Recipient was supposed to be working on the project only to discover that the Award Recipient had not been seen at the facility for over 6 months!

Checks made by Project Officers suggested that an Award Recipient used the name and letterhead of a local accountant without the accountant's knowledge to falsify claims.

8.14 Taxation

Award Recipients (or their accountants) sometimes ask if a Smart award is taxable. It is sensible to consult professional advisors on tax issues. However, Project Officers may give the following broad guidance.

All Government awards, irrespective of whether they relate to revenue or capital expenditures, are liable to tax under current legislation. For tax implications Award Recipients should seek appropriate professional advice.

8.15 Sale of prototypes

The research and development project (feasibility studies, development projects, exceptional development. micro projects) offer letters stipulate that:

"Prior to completion of the Project the...[award recipient].. must not sell any prototype whose costs have been included as eligible costs, without first obtaining the consent of the Secretary of State."

It then goes on to say that:

"Consent may depend on the...[award recipient]... paying to the Secretary of State a proportion of the net proceeds of sale (up to 75% Feasibility project and 30% Development and Exceptional projects) after deducting costs of any necessary refurbishment of the prototype."

Note that there is an absolute obligation not to sell without consent but there is discretion to either waive the payment altogether, or to require payment of a lower percentage. Project Officers should consider each case on its merits but might wish to consider the options (particularly where the prototypes are being sold with a view to, for example, gaining data on performance):

- ☐ allowing the Award Recipient to hand out a (specified) number of prototypes without paying anything to the Secretary of State; or
- ☐ specifying that the Award Recipient only has to pay a proportion of the net proceeds of sale to the Secretary of State, if the charges the customers pay exceed a specified amount.

8.16 Receivership

When a Smart Award holder (past or present) goes bankrupt or into liquidation, the respective Project Officers must register DTI's interest by writing to the Receiver and making a claim for repayment of all award paid to the firm. If the Receiver finds another business, which is willing to accept a transfer of the project on the terms set out in the original offer letter, and if that business is acceptable to DTI, the Department would be willing to consider transferring of the project. If such a transfer were successfully completed, the Department would be able to reduce its claim in the receivership.

Where it does prove possible to keep a project alive, Project Officers should seek DTI solicitors' (Legal Services A4) advice on the terms of the agreement between the Department and the new owners of the project.

Project Officers are advised to consult the most recent accounting guidance for details of procedures and any guidance issued by SBS Programme Management.

8.17 Change of ownership

Project Officers must investigate any circumstance where a business changes its name to determine the consequences of the name change. Project Officers should take care when processing claims for payment that the Award Recipient business is still eligible to claim against the award.

Where a company has only changed its name, the Company Registration number will remain the same. However, Project Officer's should confirm the status and determine possible consequences of any changes to company names by obtaining a copy of the Companies House Certificate of Change of Name, before authorising any payment.

If a business has merged with or been purchased by another, the Project Officer must identify whether the new business still meets the scheme criteria, especially additionality. Where the new business meets the scheme criteria, the Project Officer should consider the need to obtain a letter of undertaking from the new business/company. Also, the Project Officer may consider the need to implement a Novation Agreement. Project Officers should notify SBS Smart Secretariat in cases where Novation Agreements are being considered before approaching Legal Services Directorate. All action must be approved by an Authorising Officer with the appropriate level of delegated authority to commit expenditure against the Project.

Where the new business does not meet the scheme criteria, the Project Officer should consider the recovery of any award payment already made. Normally the Department pays grant up to the date that the change takes place. Whether a new business does or does not meet the scheme criteria, Project Officers should seek initial advice from SBS (policy) and where necessary additional advice from the Department's solicitors (Legal Services A4) and internal accountants or FRM/FASU.

9. Post Completion Monitoring & Evaluation

9.1 Post Completion Monitoring (PCM)

There is no formal requirement to monitor projects beyond the no obligation to pay (NOTP) date, but some Award Recipients will be approached for potential case study purposes.

Project Officers should remind the Award Recipients of conditions and schedules attached to offers that relate to *continuing obligations*. It is important draw these conditions to the attention of Award Recipients at the time of final payments.

SBS Programme Management are considering a more continuous system of PCM to assist with programme management, evaluation and policy development. A centrally co-ordinated system of Continuous Programme Assessment (CPA) incorporating Post Completion Monitoring (PCM) of projects and Continuous Improvement Assessments (CIA) of service delivery is to be introduced aimed at ensuring that the programme continues to respond effectively to the needs of the business community and is delivering value for money on the public investment.

Where practical and, if necessary, in conjunction with Business Link services providers in England, SBS Regional teams and HQDs should attempt to record the longer-term performance of the companies and the projects. As the scheme progresses, there will be a greater need to demonstrate value for money and to provide suitable awareness and case study material to support a variety of national and regional activities. Such activities will include annual Achievement Awards for projects offered support more than four years prior to each annual Smart launch.

The role of Business Link operators in monitoring projects is still under consideration and involves discussions between SBS, SBS Regional teams and the Business Links themselves. The SBS will be examining ways of securing greater collaboration between schemes administered by the SBS and BLs.

SBS has and will continue to maintain a register of past Smart, SMART and SPUR Award Recipients. The register will record simple background information on Smart Awards as agreed with the respective Award Recipients. The register will be used to identify candidates for a variety of awareness activities, Awards and evaluations.

9.2 Scheme evaluation

The SBS will evaluate all programmes periodically. Smart was evaluated in September 2001.

To assist with evaluation, SBS Regional teams should maintain their case files in good order. When sending files to a central registry, SBS Regional teams should mark Smart case files for destruction at a minimum of 10 years after the date of the last action to facilitate future evaluations.

Evaluation Reports are available from the DTI's Publications Orderline (telephone number 0870 1502 500):

Evaluation of Smart (including SPUR) 2001 (September 2001) URN 01/1189

Or

Executive Summary and Case Studies (URN 01/1190)

Assessment Paper No. 27, "An Evaluation of the Small Firms Merit Award for Research and Technology (SMART)", November 1994) URN 94/644;

10. Publicity and Promotion

SBS is responsible for establishing and implementing an overall marketing and promotion strategy for Smart, in consultation with SBS Regional teams over the local needs and local publicity campaigns. SBS is responsible for producing scheme literature, publicity material and co-ordinating style and logos used on all Smart material.

SBS Regional teams are responsible for regional marketing and promotion of Smart (and the Enterprise Grant Scheme), in consultation with SBS/FII.

10.1 Award ceremonies

SBS Regional teams are required to hold award ceremonies each year for all Award Recipients.

The objectives of the award ceremonies are:

- to provide Award Recipients with the opportunity to meet other Smart Award Recipients;
- to make potential private backers aware of the future investment possibilities in Smart Award Recipients;
- to enable Award Recipients to discuss problems with a Project Officer;
- to gain publicity for DTI/SBS Regional teams and the Smart scheme; and
- for Award Recipients to meet their monitoring officers, if they have not already done so.

SBS suggests that, in normal circumstances, a cost of around £200 per Award Recipient is a suitable level of expenditure on award ceremonies.

Award recipients should be presented with Smart awards (e.g. plaques) provided by SBS Investment Directorate/FII.

SBS will produce a "Directory of Smart Awards" covering all Award Recipients. The directory will be produced biennially. SBS Regional teams, in conjunction with Award Recipients, must provide SBS with material on each Smart project for the directory.

Each year, SBS will arrange a **Smart Achievement Awards** competition and the consequent Achievement Awards Ceremony. This will also involve producing a case studies booklet about the Award Recipients. SBS will liaise with SBS Regional teams on the competition and ceremony.

10.2 Local or sectoral (HQD) publicity campaigns

SBS Regional teams may arrange or assist with any local unpaid publicity (e.g. newspaper articles about Smart Award Recipients) and to participate in events arranged by outside organisations to promote Smart. SBS Regional teams should consult with COI to assist with Press Notices.

SBS Regional teams are responsible for preparing local mailing lists of potential Applicants, which can involve consultation with other organisations, e.g. Central Office of Information (COI), Business Links or SBS.

SBS Regional teams will pay for local marketing and publicity from their delegated budget allocation.

HQDs may publicise Smart directly with companies in their sector(s), particularly if the activity is likely to generate suitable proposals for Exceptional Projects. HQDs should inform SBS Regional teams of any activities within their regions.

10.3 Regional seminars and workshops

SBS Regional teams may wish to hold local promotional events, e.g. seminars or workshops to promote SBS support and clarify scheme requirements to potential Applicants.

10.4 Smart Clubs

Each SBS Regional team may wish to contribute some of its allocated Smart budget towards the costs of a regional Smart Club to help promote Smart and Smart companies. Such clubs can help commercial exploitation, networking and business opportunities.

To attract a subsidy, at least some of the activities of the clubs must align with the Science and Technology Act of 1965 (the Act under which Smart is funded). Among other things the Act permits:

- research;
- supporting scientific research or the dissemination of the results of scientific research;
- fostering the practical application of the results of scientific research.

SBS sees the establishment of Smart Clubs at regional, national and sectoral (with DTI HQD participation) levels as a mechanism for promoting best practice, technology transfer and strategic collaborations for UK industry to benefit from market opportunities that may be beyond the reach of any single Smart business.

10.5 Announcement of Awards

Applicants should be reminded that they are not Award Recipients until the Offer Letter has been signed and returned to the Project Officer. Following acceptance of the offer, the respective Project Officer responsible for monitoring the work can agree to private announcements of the award. A public announcement will be made by the relevant SBS Regional team to confirm the awards as appropriate.

SBS regional teams will make their own plans for the announcement of their Award Recipients (in consultation with SBS Investment Smart/FII).

SBS Investment Smart/FII will compile national Directories of Smart Awards for distribution (usually twice a year) to strategic outlets (for example, Business Link operators, banks, venture capital organisations and so on). Each SBS regional team is required to compile its own regional directory of Smart awards (containing business and project details) which can be passed on to SBS Investment Smart/FII to be included in the national directory.

11. Delegated Authority and Budget Management

SBS will allocate budgets to the SBS Directors for Regions (DfRs), who may sub-allocate to nominated senior officials within FRM guidelines. Officials may only commit expenditure and approve payments in accordance with financial authority delegated to them in writing by appropriate persons. SBS does not need copies of delegated authorities within SBS Regional teams, but SBS Regional teams must ensure that appropriate levels of authority are operating within the internal processes.

SBS DfRs must request funding on an ad hoc basis from SBS to cover Exceptional Project Awards. SBS Regional teams should operate in accordance with the procedure outlined in the “Guidance Notes” relating to Smart Exceptional Projects.

SBS will consult SBS Regional teams regarding allocations for non-project activities.

11.1 Expenditure and claims

The payment of awards must be in accordance with offer letters. Project Officers should discuss any (requests for) variations with SBS/Smart Secretariat.

Project Officers should aim to process and ensure payment of all fully documented correct claims within 30 calendar days of receipt in accordance with prompt payment targets.

All **Feasibility Award** recipients receive an advance payment of one third of the total award after the SBS Regional Managers receives the signed, accepted Offer Letter and before the project is due to start. Where an Applicant requests a delayed start, the Project Officer should forward the advance to arrive by the start date. **Advanced payments should be recouped by abating claims at a rate of 50%.**

As an additional measure to avoid overpayment of an award, Project Officers should withhold 15% of the Award until the Applicant satisfactorily completes the project. Project Officers should closely monitor the build up of payments.

Project Officers should ensure that Applicants submit an audit of project expenditure certified by a qualified independent accountant (that is a project audit) in support of the final claim for Smart Feasibility and Development Awards. For Development Awards and Exceptional Awards, recipients must provide an Independent Accountant's Report covering project expenditure with the first and final claims in accordance with their offer letters for these types of project. The final Independent Accountant's Report must cover all expenditure for the entire period of the project. Smart Award Recipients must keep all invoices connected with the project for checking by an accountant and/or the project officer.

As a rule, once an Applicant has accepted an offer of award, it cannot be increased to accommodate increased project costs. Where the Award holder needs to change the project, it must apply in writing before the project end date. If Project Officers with approval of an Authorising Officer accepts a variation, offer letters must be amended by issuing a formal amendment signed by an Authorising Officer. Project Officers should consult Legal Services A4 if they need help in drafting amendments.

11.2 Budget management

All SBS Regional teams have responsibility for effective budget allocation management relating to Smart projects for which they are responsible. SBS require Regional teams and HQDs to submit expenditure returns and forecasts based on any budget allocations at certain times (although SBS will try and obtain data as much as possible direct from shared information systems). Forecasts should be realistic and accurate. SBS Regional teams and HQDs should identify and notify SBS at the earliest possible opportunity of any predicted significant under or overspends. SBS Regional teams anticipating an overspend should contact SBS for advice. SBS Regional teams should note that the overall Smart Budget can often be adjusted by SBS to accommodate regional variations of expenditure and commitment if given all due notice.

11.3 SAMIS and RAB

Project Officers must record business and project details and changes relating to applications, offers, claims and payments on SAMIS within 5 days of any action taking place. SAMIS is also used to gather data from across regions and the system is dependent on all regions maintain accurate records. It may be used by SBS or various DTI directorates to obtain information, for instance, for Parliamentary Questions. Any failure to maintain up-to-date information could therefore have serious implications, such as incorrect reporting to Parliament.

RAB must be maintained promptly and efficiently and in accordance with any DTI and SBS guidance.

Smart MT database should be promptly maintained to ensure efficient administration and management of the scheme.

Proposed New Commercial Research And Development Grant Programme Architecture

| Phase | Concept Study | Feasibility Study | Prototype Refinement | Trade | Product Refinement | Trade | ... |
|---------------------------|--|---|---|---|--|---|-----|
| Company Activities | Analyse project objectives. Product Research. Conceptual Analysis. Write Concept Report. | Determine whether possible to realize by attempting to build a working prototype. Prototype research & development (with bias towards more research). Propose solutions, method and/or strategy for solving the problems that must be overcome, prioritize difficulties. Address hard ones first. Market Research | Productisation and refinement of early working prototype into a commercial quality product Product research & development (with bias towards more development). Market Research | Take first generation products and services to market. Begin R&D on second generation products. Sales Public Relations Advertising Marketing Market Research | Enhance products and services with the aid of feedback from the market(s) about first generation product(s). Complete R&D on second generation products. Sales Public Relations Advertising Marketing Market Research | Take second generation products and services to market. Begin R&D on third generation products. Sales Public Relations Advertising Marketing Market Research | |
| Outputs | Optionally, an Early Prototype Concept Report Business Plan (First Draft) | Working Prototype Feasibility Report Business Plan (Second Draft) | First Generation Commercial Products & Services. Employment Opportunities Business Plan (Third Draft) | Revenue to Company Dividends to Shareholders Revenue to HM Revenue & Customs (Various Taxes) Employment Opportunities Benefit Of First Generation Products Business Plan (Fourth Draft) | Second Generation Commercial Products & Services Revenue to Company Dividends to Shareholders Revenue to HM Revenue & Customs (Various Taxes) Employment Opportunities Benefit Of First Generation Products Business Plan (Fifth Draft) | Revenue to Company Dividends to Shareholders Revenue to HM Revenue & Customs (Various Taxes) Employment Opportunities Benefit Of Second Generation Products Business Plan (Sixth Draft) | |
| Government Tasks | Review Concept Report and give feedback with the assistance of properly qualified Technical Advisers. Patent Office search. Approve Feasibility Study Award if the application meets the "Project Qualification Criteria". | Analysis of working prototype with assistance of properly qualified Technical Consultants. Analysis of business plan Approve Prototype Refinement Award if the technical consultants confirm the prototype is sound. | Market Research Test Product Analysis of business plan Approve Product Launch Award if analysis confirms the product and business strategy is sound. | Monitor progress & advise on possible eligibility for other grants that the company may qualify for that are targeted at specific problems the government wants to address. | Monitor progress & advise on possible eligibility for other grants that the company may qualify for that are targeted at specific problems the government wants to address. | Monitor progress & advise on possible eligibility for other grants that the company may qualify for that are targeted at specific problems the government wants to address. | |

Parliamentary Commissioner Act 1967

**Report by the Parliamentary Commissioner for Administration
(the Ombudsman) to**

The Rt Hon John Gummer MP

of the results of an investigation into a complaint made by

Mr Stephen Williams

on behalf of

Advance Software Limited
14-18 Heddon Street
Mayfair
London
W1B 4DA

1. Mr Williams is the Managing Director of a company called Advance Software Limited ("the company"), who are developing a broadband 3-dimensional internet browser entitled '*Infinity*'. The company's complaint is about the Department of Trade and Industry's (DTI) discretionary decision to refuse them a feasibility study grant under the Smart scheme, and about the handling of the subsequent review of that decision. The main grievances are that:
 - the DTI case officer who assessed the company's application reached his decision without consulting a qualified technical expert;
 - DTI failed to provide a reasonable explanation for why the application had been rejected;
 - DTI failed to give reasons why the application was turned down on review;
 - the review procedure was not clearly explained;
 - the official who reviewed the application did not ~~inspect or~~ test the software, did not appoint a technical consultant to test it, and no DTI appointed technical consultant ~~did not~~ discussed ed the project with the company; and

The official who reviewed the application with the company, Mick Carr did discuss the project with me, albeit briefly, and without a sufficient technical background to understand what I was telling him. He therefore did not reach any meaningful conclusions, from his short (half hour or thereabouts) inspection of our early prototype. DTI appointed "technical experts" did not discuss the project with us, both simply wrote short reports based solely on our application documents. To evaluate interactive computer software products, it is *necessary* to interact with the software. No DTI representative, or appointed advisor has yet done so.

- when Mr Williams had asked DTI if the company's application had been considered for an exceptional project award (another part of the Smart scheme), they had not replied.
2. Mr Williams believes that maladministration by DTI has caused him and his company a serious injustice; the refusal of the grant is hampering further research and development of the web browser and has slowed down business growth contrary to the stated aims of the grant scheme. He says he had (and still has) great difficulty keeping the company going and is having to spend a considerable amount of time trying to secure finance from other sources. The company's relationship with their bank is said to have been adversely affected and Mr Williams has paid bank charges that he would not otherwise have incurred.

As to whether our relationship with our bankers at that time (HSBC) has been adversely affected, this would be a matter for HSBC to comment on and we welcome their input. I do know that we owe them £17,030, that banking facilities have been withdrawn, and that we are unable to access further debt finance at this time. I also know that HSBC have had to put in a considerable amount of time and effort into understanding the situation we find ourselves in. This time, effort and expense would not have been necessary if the DTI had acted reasonably.

3. Mr Williams also maintains that the problems he experienced with DTI and the heavy workload and financial difficulties that followed lay behind the late filing of accounts with Companies House, for which they sent him a £500 penalty notice. Following representations from the company about the situation, Companies House agreed, exceptionally, not to collect the penalty.

Smart grants

4. Smart, as it was known, was the DTI Small Business Service's package of support *'to help individuals and small and medium-sized businesses review their use of technology, access technology, and research and develop technologically innovative products and processes'*. Smart included grants for feasibility studies, the purpose of which (according to the document *'Smart Guidance Notes & Application Form'* which I refer to as the Guidance for Applicants throughout this

report) was to help applicants '*assess the technological and commercial prospects for **turning innovative technology into new products or processes***'. More details about Smart and feasibility study grants are annexed to this report.

The Parliamentary Ombudsman's jurisdiction

5. When a complaint is referred to the Ombudsman, her role is to decide if there has been maladministration and, if there has, she then considers whether any injustice was caused as a result. Where maladministration has caused an injustice that has yet to be remedied, the Ombudsman will seek redress from the department complained against, such that will put the aggrieved person back, as far as possible, to the position he or she would have been in had there been no maladministration.

This complaint is from a private company limited by shares, not a person. I suggest amending the text to say "put the aggrieved person or legal entity back to the position he she or it would have been had there been no maladministration"

6. There are, however, limits to the Ombudsman's remit. Section 12(3) of the Parliamentary Commissioner Act 1967 provides that the Ombudsman may not question a discretionary decision taken without maladministration. Dissatisfaction or disagreement with a decision does not in itself provide grounds for the Ombudsman's intervention, even where she might have reached a different conclusion on the same facts. Mr Williams' complaint predominately concerns DTI's discretionary decision not to award a grant, and so this investigation has focused on the basis of that decision, with a view to establishing if it was taken maladministratively.

We accept that you cannot question a discretionary decision taken without maladministration, however DTI are abusing their discretionary powers to excuse a clear error in procedure and flawed, incorrect conclusion by their case officer. This abuse of discretionary powers is **ILLEGAL**. Discretionary powers must be used reasonably. There is no legal basis to DTI's refusal to pay the grant.

7. Where the Ombudsman does find evidence of maladministration in the exercise of discretion, it is not open to her to overturn the decision or to substitute her judgment for that of the department concerned. The normal remedy in such circumstances would be to ask the department in question to review the decision and to do so in such a way that is free from maladministration. It may, of course, be the case that the reconsideration will produce the same decision as before. It is not for the Ombudsman to judge the merits of the company's application or to assess the level of innovation that their web browser represents.

Main events leading to the complaint

8. With the assistance of Business Link (which is primarily funded by DTI), the company - then called Deep Thought Software Limited - applied for a Smart feasibility study grant on 22 December 2002. The application was for a project *'to assess the possibility of developing technology that will allow the development of an enhanced graphics web browser'*. The application was sent to the Cambridge Small Business Service.
9. The application was to be appraised for eligibility against eight separate criteria, including the level of innovation, the likelihood of technical success and whether the grant was necessary for the project to proceed. In making an assessment, a Small Business Service Regional Office normally seek advice from one or more organisations with expertise in the area of technology with which the application is concerned, and they also ask the Patent Office to carry out a patent search. Accordingly, Cambridge Small Business Service sent the company's application to the Patent Office, and to two external organisations who were sources of technical advice. On the basis of the documentation provided, both external organisations recommended that the application be rejected, while the Patent Office estimated that the overall level of innovation of the project was fairly low. (Mr Williams disagrees with the Patent Office's assessment, but that does not form part of this complaint.) [Indeed.](#)
10. Following receipt of the recommendations a case officer from Cambridge Small Business Service arranged to visit Mr Williams, essentially to explore the shortcomings identified by the technical advisers. Mr Williams did not see the technical advisers' assessments until sometime later, following a request made under the Freedom of Information Act. The meeting took place on 30 January 2003 at Mr Williams' home. According to Mr Williams, during that meeting the case officer asked him various questions about the product, his business strategy, and about his research and development activities. Mr Williams demonstrated to the case officer what he (Mr Williams) subsequently described as a prototype of his 3-dimensional web browser. The case officer pointed out to Mr Williams that feasibility study grants could only be used to fund research and development up to the point of a pre-production prototype being made. He considered that the company's project was beyond that stage and thus too far advanced to qualify for such a grant.
11. According to DTI, Mr Williams agreed with the case officer that his application would be *'withdrawn'*, rather than *'rejected'*. DTI have said that they did that so that if Mr Williams approached alternative sources of finance, any negative impression given by the word *'rejected'* could be avoided. For his part, Mr Williams told me that he accepted that the case officer had proposed that the application be withdrawn, as the best way forward, but that did not mean he agreed with the decision; only that he could not see a better alternative.

| [This is correct.](#)

12. I have seen the case officer's notes of the meeting, his report of the visit which set out the matters raised and discussed, and his letter to Mr Williams confirming the decision. The visit report said the project was too far advanced to meet the criteria for a feasibility study grant and also too far advanced for a development grant. The letter said that '*as agreed*' the application had been withdrawn because the project had reached a fairly advanced prototype stage.

13. According to DTI, shortly after 30 January 2003, Mr Williams telephoned Business Link. They said that Mr Williams had told Business Link that the case officer had recommended that the application be withdrawn. ~~By DTI's account, Business Link did not recall Mr Williams being unhappy at the outcome and he appeared to understand what had happened.~~ At the time of the company's application, the Guidance for Applicants stated that applicants who felt they had cause for complaint or who felt that the appraisal process was flawed should contact the office that appraised their application. By Mr Williams' account, he did not complain about the decision or the circumstances surrounding the decision, because at the time he lacked experience of disputing such decisions.

I am sure BusinessLink Suffolk can speak for themselves and I do not appreciate DTI trying to second guess what they may have thought that I might have thought, which I didn't. This is more of Mr Evans 'as you know' nonsense.

14. On 29 April 2004 Mr Williams telephoned Cambridge Small Business Service and followed up with an e-mail message. His e-mail said that '*Infinity*' was available for testing and evaluation, and on 1 May he said he thought that Grant for Research and Development (which had replaced Smart in June 2003) should offer '*a little help at the end bringing a product to market*'. The Small Business Service advised Mr Williams to approach Business Link in his search for funds. We did !!!! They advised we should make a SMART application, which we did !!! (I should explain that awards made under Smart and its successor - Grant for Research and Development - may not be used to launch a product.) Launch & R&D activities take place simultaneously under the evolutionary research & development model. I have provided evidence. It is not my fault if DTI do not understand how this process works. The last 10% takes 90% of the time, etc. My explanation in this email could have been better. Sorry.

15. ~~In March 2004, At some point~~ Mr Williams contacted the Defence Diversification Agency (set up by the Ministry of Defence to promote the exchange of technology between the civil and defence sectors), who run a '*business incubator*' in conjunction with the London Development Agency. Mr Williams' company was incubated there from May 2004 to July 2005.

16. Meanwhile, on 6 July 2004, Mr Williams had discussed his case with a DTI official (Mr R), and e-mailed him the following day. (At the time Mr R had no specific responsibility for Grant for Research and Development, but he had previously been responsible for delivering Smart in the East Midlands.) Mr Williams said in his e-mail to Mr R that he had demonstrated an '*early prototype*' to the case officer, and that it was not clear what had happened to the

application. He said he had been informed verbally that the application had been withdrawn and that it did not meet the scheme criteria because he had begun building an early prototype. He described his approach to research and development: research, development and feasibility analysis were being undertaken simultaneously. Mr Williams told Mr R that he was confused about how to proceed. (Mr Williams contends that DTI do not understand this ‘*iterative*’ approach to research and development, and thus reached invalid conclusions about the extent to which the company had proved that a 3-dimensional web browser was feasible.) [Correct, you are describing the evolutionary research & development process.](#)

17. Mr R told Mr Williams in reply that he should appeal if he felt DTI had made a mistake and gave him the contact details of the Director responsible for Grant for Research and Development and for Smart. On 9 July 2004 Mr Williams emailed Mr R and copied it to the Director, saying that he wished to appeal against the decision of 30 January 2003, and asked the Director how he could take that forward.
18. On 13 July 2004 the Director e-mailed Mr Williams, saying that matters were normally settled by the relevant appraisal team, or else Mr Williams could write to or e-mail him explaining the issues. The Director said that he would need to seek advice from the appraisal team and that he would review the file. He would need to understand why there had been such a gap between the application’s withdrawal and the lodging of an appeal; he wanted to know the full reasons for the appeal and Mr Williams’ arguments on why the company’s application met the scheme criteria.
19. Mr Williams replied to the Director the same day saying, amongst other things, that it had taken numerous e-mails and telephone conversations with officials from DTI, Business Link and the Ministry of Defence to find out that the Director was the person he should have contacted. He said it had been a ‘*long, slow and frustrating process to slowly work through DTI contacts*’. He said that the appeal centred around the fact that the company and Business Link believed they met the award criteria for a feasibility study grant. Mr Williams said also that Mr R had told him that DTI were not allowed to ‘*withdraw*’ applications. On a more general point, he said that the Smart and Research and Development grant architecture needed improving.
20. The Director sent an e-mail to Mr Williams on 6 August 2004, following his review of the application, upholding the case officer’s decision. He said that he had wanted to discuss the case personally with those involved before responding. The Director accepted that there may have been some confusion on the case officer’s part about the withdrawal of the application, but said he found it hard to understand why Mr Williams had waited over a year before challenging the decision. The Director said that, in his view, the interview of 30 January 2003 had focused on the issue of the ‘*prototype*’ - and it was the case officer’s assessment that the project had already reached the prototype stage. [“The prototype stage”](#)

means very little. Prototyping is a long and complex process involving intense research and development and is generally recognized to consist of several stages. In software engineering, we call these alpha and beta. Other sectors use different terminology. The Director said that advice from technical experts within DTI had not supported the case for funding, and he confirmed that the decision not to support the application was correct. He was wrong.

21. On 9 August 2004 Mr Williams e-mailed the Director. He said that he had not consented, as such, to the application being withdrawn. He had waited over a year before trying to move forward for several reasons. First, he had no idea what had happened; it was his first involvement with DTI and Business Link. It had taken *'a long time to analyze and form a strategy for moving matters forward'*. Secondly, there had been an unexpected family bereavement. Thirdly, his mother had resigned as finance director (as a result of the application having been illegally withdrawn by DTI) and he had only recently taken on her role, seeking to ensure the company had sufficient resources to bring the product to market.
22. On 17 August 2004 the National Product Manager for Grant for Research and Development (Mr G) replied to Mr Williams' e-mail of 9 August. He said that the application had already been considered twice and would not be considered a third time (Smart documentation said that applications would only be considered twice). Mr G said that the decision *'would not change'* THIS IS PREJUDICIAL BEHAVIOUR !!! and that there was little point in Mr Williams continuing what he described as his lengthy correspondence and frequent telephone calls. Mr Williams continued to correspond with DTI.
23. In September 2004 Mr Williams wrote to a DTI Minister about his company's grievances against DTI, to which Mr G replied by e-mail on 14 October. Mr Williams wrote back to Mr G on 18 October, taking issue with much of his response. Amongst the numerous comments made and questions asked, Mr Williams asked whether DTI had considered if the project qualified for an exceptional projects award. They did not reply.
24. On 12 July 2005 Mr Williams wrote to Mr John Gummer MP, explaining events to date. Mr Williams copied the letter to the Secretary of State, to the Defence Diversification Agency, and to the National Audit Office. He said that *'once it had become clear that DTI had acted improperly'* he had appealed against the decision. However, DTI had not given him a fair hearing. He felt that a competent technical expert should have interacted with the software; an expert would have realised that just because something looked impressive, it did not mean that it was nearly complete. He felt that Mr G had acted prejudicially in telling Mr Williams that he would *'not get any money'*. Mr Williams complained that DTI had failed to explain why he was not entitled to funding. DTI's failure to help him had meant that for a long time he had worked without drawing a salary. He, his family, friends and shareholders had suffered significant distress. He asked Mr

Gummer to suggest a remedy. On 26 July, Mr Gummer referred Mr Williams' complaint to the Ombudsman.

Comments from Mr Williams

25. During the course of the investigation, Mr Williams telephoned and e-mailed the Ombudsman's Office many times. The main points of relevance to emerge from these exchanges are as follows. In Mr Williams' view, the company's application met the criteria for a feasibility study grant (and development grant) and DTI had abused their discretionary powers in refusing an award. He felt that the case officer's engagement was satisfactory as far as it went, but he had not done enough work and had not consulted technical advisers before reaching a decision as to the nature and status of the prototype that had been demonstrated to him. In Mr Williams' opinion, the prototype demonstrated was not nearly as advanced as the case officer had thought and a closer study of the software would have shown just how much more work there was to do. He had made some incorrect assumptions. The internet browser may have looked impressive and well developed, but there were a number of features that had not been worked on, or were too unreliable to demonstrate. Mr Williams said that he had not consented to the withdrawal of the application; the case officer had decided on that course of action and had left him no alternative.
26. Mr Williams frequently said that in order to explore whether it was ~~even~~ feasible to develop a commercial quality 3-dimensional internet browser, it was necessary to develop a working prototype, but at the time of visit by Mr Carr, the prototype that we had at that time did not include that did not mean that all the necessary components of the project ~~had been~~ developed to the point that where they were sufficiently robust as to have proven that the project was feasible ~~and could be realized~~. Hence the need for a feasibility study ! He used the analogy of flight - those wanting to explore if manned flight was feasible had first to design and build a rudimentary aircraft. It was simply not possible to say if flight was possible without attempting it, and the same held true for the company's web browser. Mr Williams said that research and development are not always distinct and sequential stages; it is often an iterative, evolutionary process with both activities being done in parallel, sometimes simultaneously and cyclically. Mr Williams said that this common approach to research and development does not sit well with DTI's criteria, and he was convinced that Smart had not been sufficiently flexible to deal with software projects. Mr Williams believed that the case officer and the Director (at the review stage) should have consulted a qualified technical expert, who would have better understood the process that was being followed and the extent of the software's development. A qualified expert would have reached a very different conclusion.
27. On the subject of the review process, Mr Williams said that the Director had neither engaged in a proper dialogue with him or his company, nor appointed an expert to evaluate the software. He thought that the Director had reached a

swift conclusion so that he could close down the case before going on holiday. Mr Williams regarded the assessment of the project as incomplete.

28. More generally, Mr Williams repeatedly voiced concerns that DTI's current grant schemes do not deliver what they set out to achieve and do not support innovation or UK businesses. He hoped the National Audit Office would look into that. He said that DTI do not carry out research and development themselves, and so were "assessing" projects and processes that they knew little about. He said that that contrasted starkly with the Ministry of Defence, who do carry out research and development and better understand what is involved. Mr Williams felt DTI could learn lessons from the Ministry. He was also aggrieved that DTI had ignored representations, said to have been made by the Defence Diversification Agency, that the company were entitled to a grant.

"said to have been made" - You can confirm this by speaking with the Defence Diversification Agency. Major Lawson is on 0208 3501348, or mobile 07766 134473, email idlawson@dda.gov.uk. Professor Damien McDonnell, Chief Executive of the DDA is also familiar with the case.

Enquiries of DTI

29. During the investigation I made several enquiries of DTI, mainly focused on the way in which they had dealt with the company's application, but touching on how software projects were assessed more generally under Smart. I also asked for more information about the review process.
30. In reply, DTI recognised that there was no rigid dividing line between research (which the Smart feasibility study grant covered) and development (which the Smart development project grant covered), but were satisfied that Smart had been flexible enough to cope with software projects. That was evidenced by the fact that at least 492 software projects had been supported by the time Smart had closed in 2003. This is flawed logic. A statistic showing a certain type of project has been supported by DTI does not mean that there are no fundamental problems with the grant programme. DTI are easily satisfied because they are lazy.
31. DTI told me that officials assessing applications could not possibly be technically qualified across the wide range of technologies presented to them through Smart applications. For that reason DTI used external sources of advice on technical aspects of a project. The organisations consulted in Mr Williams' case had considerable experience of software projects and of research and development. DTI said that it would have been impractical and disproportionately expensive to arrange for technical experts to visit all Smart applicants. In the year April 2002 to March 2003, DTI had received a total of 1,274 Smart grants. A total of 884 awards were made totalling £46,497,665, of which 497 were for feasibility studies,

totalling £19,540,142. By the time Smart closed in 2003, at least 492 software projects had been supported with Smart grants. [But not ours, why ?](#)

32. On the question of the company's application, the case officer's view was that the internet browser that Mr Williams had demonstrated to him was too far advanced to qualify for a feasibility study grant (and also for a development grant). [Mr Carr was an unqualified layman who did not complete a professional evaluation of our project.](#) The case officer had said so to Mr Williams, who had raised no objection to the decision to withdraw the application at the time and appeared to accept it; [Advance Software does not, and has never accepted the withdrawal of our application. We began an appeal as soon as it became clear how to proceed.](#) they did not believe that Mr Williams had been in any way coerced into withdrawing the application. [Advance Software does not, and has never accepted the withdrawal of our application.](#) In DTI's view, Mr Williams had not disputed the January 2003 decision because he had concurred with it. [.This is incorrect. I had not disputed the decision at the time as I did not know how to proceed. I was inexperienced at disputing HM government decisions.](#) -It was only after Mr Williams had spoken to Mr R in July 2004 that he indicated that he was unhappy that the application had been withdrawn. [Advance Software does not, and has never accepted the withdrawal of our application.](#)
33. On the review process, DTI told me that the Director had reviewed the full case file; he had spoken to a number of officials including the case officer and staff in the headquarters of the Small Business Service; he had also spoken to Mr Williams. The Director had reviewed the case, looking at the information that had been presented to the case officer and at his conclusions; and at the reasons for the significant time gap between the withdrawal decision and the appeal. Having reviewed all the information then before him, the Director had concluded the application did not meet the scheme criteria and so the original decision stood.
34. I also took the opportunity to ask DTI if the company's project had been considered for an exceptional project award. In reply DTI told me that an exceptional project had higher than usual project costs; the minimum project cost had to exceed £500,000. As the company's project costs were put at £60,650 (net), the application would not have been considered for an exceptional project award. [Exceptional and expensive do not mean the same thing. DTI should get a dictionary.](#)

Findings

The case officer's assessment

35. Mr Williams' complaint dates back to the events of 30 January 2003. DTI decided that his application did not meet the criteria for a feasibility study grant, because the case officer (who was not properly qualified) considered that he had been shown a pre-production prototype. The project was thus judged too far advanced to qualify for a feasibility grant (and indeed too far advanced for a development project grant). The final sentence here is nonsense. If a project is 'fairly advanced' (whatever that ambiguous term might mean), that does not mean that you have necessarily demonstrated technical feasibility. Only when all necessary technical hurdles have been overcome, have you demonstrated technical feasibility. Please discuss this with Professor McDonnell.
36. There is no dispute that Mr Williams showed the case officer an early prototype of the internet browser (Mr Williams himself has described the software in such terms), but there is strong disagreement about the degree of development that the prototype represented. DTI thought it amounted to more than an early bench-top or experimental working model, as permitted in the Guidelines for Officials (Annex paragraph 3), thus obviating the need for a grant to carry out a feasibility study, while Mr Williams felt the prototype - as demonstrated - did not prove the feasibility of a 3-dimensional web browser. It was work in progress. We had not yet proven that it was possible to achieve the project's technical or commercial objectives.
37. It is not for the Ombudsman to arbitrate or to make a ruling one way or the other. Essentially, in order to uphold Mr Williams' complaint I would have to conclude that the case officer's assessment was taken with maladministration, given the information that was available to him at the time of his visit, and viewed against Smart's purpose and criteria. DTI's behaviour is at best, wholly unreasonable (which would be maladministrative), and at worst illegal. -Mr Carr was not sufficiently qualified to determine the status of the project alone. He did not seek the advice of a properly qualified technical consultant. His own technical advisers - who only read our application documents reported that they did not believe that it would be possible for us to realize the project. He thought already were 'fairly advanced', Is there not a contradiction here that should have been properly investigated ???
38. In considering this aspect of Mr Williams' complaint, my starting point was DTI's guidance. It is evident from the Guidelines for Officials (Annex paragraph 3), that the output from a feasibility study will generally be a report. Was the output of the Quinetiq scramjet project feasibility study a report ? No, it was a very fast rocket. Documents are theory and cannot prove projects are feasible. I have explained in other documents presented to your office that the output of a feasibility study is a working prototype. Please verify with others who work in R&D and who understand the process. DTI do not. -The existence of an early bench-top or experimental working model is permissible but a pre-

production prototype is not. I have also looked at the Guidance for Applicants, which describes a feasibility study in terms of helping applicants assess the technological and commercial prospects of their chosen product or process (paragraph 4). For those seeking to develop a pre-production prototype, a development project grant was available (obviously subject to the relevant criteria being met). DTI do not know what they are doing ! This is incompetence.

39. Was the case officer entitled to conclude that the prototype that Mr Williams showed him was something more than an experimental working model (~~in software terms~~)? Having carefully considered the stated purpose behind ~~a feasibility study grant~~ the SMART programme, I am satisfied that the case officer was entitled to conclude as he did. I have seen no evidence that leads me to conclude that his decision was wholly unreasonable or inconsistent with the guidance and the aims of Smart. I know that Mr Williams fundamentally disagrees with the case officer's assessment, but that does not make the assessment wrong. The assessment was wrong, and with respect, your conclusion is incorrect too. You have seen plenty of evidence. Please complete your investigation. A demonstration of our current generation technology is available on request which will show that the project is still in a very early state. There is still a vast amount of R&D left to do by us and others in this new, exciting field ! You need to inspect Infinity so you can determine whether you believe our project shows merit, and therefore whether it should qualify for support.
40. I might add that if I believed that the case officer's decision had been taken with maladministration, I would have asked DTI to consider the application afresh. They have effectively already done this, via the review process. What have they done ? They just drag Roy Evans out every so often to say "no, go away." Mr Evans is not properly qualified to be the national product manager for the grant for research and development. How many commercial research and development projects has he worked on ? What experience of the field does he have to qualify him to hold this position ? Improperly qualified staff make poor decisions as they do not properly understand the process. R&D is hard !

Evaluation by qualified technical experts at application and review stages

41. But what of Mr Williams' complaint that DTI should have consulted a qualified expert to evaluate and test the software before determining the application? I think the first point to make here is that the design of the Scheme was for DTI to decide, and I note that they had due regard to the European Commission's framework for state aid (Annex paragraph 5). As with all government schemes that distribute public funds, a balance has to be struck between designing a scheme that is broadly fit for purpose, but which is not excessively expensive to administer. DTI's view (paragraph 31) is that it would have been disproportionately expensive to have technical experts visit all applicants. (In my view, to do so for some applications and not others might be regarded as inequitable.)

42. On balance, I am not yet persuaded that there are grounds for questioning or criticising DTI's stance on testing, and I make no criticism of DTI for not arranging for a technical expert to assess the web browser, either at the application stage or as part of the review process. It must also be borne in mind that even if the project had been evaluated as Mr Williams wished, and not considered to be a developed prototype, both external experts recommended that the application be rejected, while the Patent Office considered the level of innovation to be low. The Patent Office is wrong. That suggests to me that the award of a grant was far from certain, irrespective of what might have emerged from any testing. From a position of increased knowledge, rather than speculation, better decisions can be made.
43. Mr Williams is concerned that DTI's technical advisor's did not discuss the project or application with him during the review stage. I understand the point that he makes, but in a review or appeal situation I believe the reviewing body is entitled to expect the appellant to have put his or her case plainly and comprehensively. In that regard, I note that the Director informed Mr Williams that he needed to fully understand his grounds for challenging the decision and, indeed, invited him to write in (paragraph 18). Mr Williams did reply, restating the company's belief that their application met the criteria. If Mr Williams had concerns that DTI might not be in possession of all of the facts when reviewing the company's application, or if there were further points he wanted to discuss, the onus rested with him to ensure that he put his case as fully and unambiguously as he could. That was all the more important given that Mr Williams had not sought to challenge DTI's decision for well over a year.

DTI failed to provide a reasonable explanation for why the application came to be withdrawn and why the review was unsuccessful

44. DTI's literature stresses that unsuccessful applicants should be told why their project has not been supported. In Mr Williams' case, DTI told him that his company's project was too far advanced to meet the criteria for a feasibility study grant. I agree that the explanations, both after the initial decision and the review, were brief and not detailed, but given the reasons being conveyed, I struggle to see what else DTI could meaningfully have added. It is not so much that DTI did not fully explain their reasons; more that Mr Williams fundamentally disagreed with what they had to say. I do not think there is anything I can usefully add to that.

The review procedure was not clearly explained

45. The Guidance for Applicants told applicants that if they had cause for complaint or believed that the appraisal process was flawed, they should contact the Government Office for the Region that assessed their application. Officials had clear guidance on the review process. While I agree that the information available to Mr Williams did not explain the process to any great extent, I am not persuaded that he was disadvantaged by that. Whatever the reason for the difficulties Mr Williams said he had contacting someone who could help with his review, the application documentation indicated that the matter could be taken

further, and conveyed sufficient information to enable someone wishing to challenge a decision to begin the process (or at least to find out more about it). In any event, once Mr Williams had made it plain that what he wanted was for the decision to be reviewed, the review duly proceeded (albeit not to his satisfaction). For the record, the company's application appears to have been reviewed at a more senior level than provided for in the review guidance notes for officials (Annex paragraph 6).

Exceptional project award

46. Finally, I turn to Mr Williams' complaint about not having been told if the company's project had been considered for an exceptional project award. There is nothing in the papers I have seen to suggest that DTI did respond to that question, but whether that was simply an oversight or otherwise, I cannot be certain. In any event, Mr Williams now has the answer to his question and so I see no benefit in pursuing this further.

Conclusion

47. I found no evidence that DTI's discretionary decision had been reached maladministratively, or that they were at fault for not arranging for a technical expert to evaluate the software. I know that Mr Williams feels very aggrieved by DTI's actions, but I am satisfied that they did not act maladministratively.

| [Advance Software Limited respectfully disagrees.](#)

Karen Quayle
Senior Investigating Officer
duly authorised under Section 3(2) of the
Parliamentary Commissioner Act 1967

May 2006

Background to Smart

1. Smart provided grants to individuals and small and medium sized enterprises to help with the costs of researching and developing new, technologically innovative products and processes. Grants were available on a discretionary basis for three types of research and development project - feasibility study, development project and micro project. Mr Williams applied for a feasibility study grant. The amount available was 75% of eligible project costs up to a maximum of £45,000.
2. The '*Guidelines for Officials*' says that Smart awards for feasibility studies are made to establish the feasibility of the proposed project through:
 - a. confirming the original technical and commercial aims are viable;
 - b. carrying out any basic research needed to define the objectives;
 - c. defining the operational, technical and design aspects;
 - d. considering action on any intellectual property arising from, or needed by, the project;
 - e. determining the prospective benefits, including the potential outputs;
 - f. determining the longer term market effects and the possibility of exploitation;
 - g. setting overall and phase objectives and target dates for the full project and subsequent exploitation; and
 - h. defining the economic, commercial and dissemination objectives.
3. The '*Guidelines for Officials*' says that '*Feasibility studies will involve planned research or critical investigation aimed at producing new scientific or technical knowledge, the objective being that such knowledge may be useful in developing new products, processes or services. The output of a feasibility project will typically be a Report on the technical and commercial feasibility of a proposed project to develop an innovative new product or process. Not in the real world, it isn't. Reports cannot prove feasibility as they are all theory !! In some cases, a feasibility study may produce an early bench-top or experimental working model (but not a preproduction prototype)'. There is no clear distinction from one to the other, under the evolutionary R&D model, a project morphs from a simplistic prototype that does next to nothing on day one of the project realization, through into a complex, commercial quality product, then through into version 2, 3, 4, etc.*

4. The Guidelines say that in appraising projects, there may be a need to consult specialist sources for advice on whether a proposal constitutes a significant technological advance. Project officers are advised to conduct an initial appraisal site visit. The purpose of the visit was described as establishing the *'credibility of the Applicant's abilities and resources. Appraisal visits provide Project Officers with a good opportunity to discuss the proposed work in more detail and clarify outstanding areas of confusion or ambiguity relating to the project'*.
5. The European Commission publishes a framework for permissible levels of state aid for research and development activities. A Smart feasibility study equated to *'industrial research'*, which the Commission defined as *'planned research of critical investigation aimed at the acquisition of new knowledge, the objective being that such knowledge may be useful in developing new products, processes or services or in bringing about a significant improvement in existing products, processes or services'*. The framework then defined *'precompetitive development'* (the equivalent to a Smart development project). It described this activity as *'the shaping of the results of the industrial research into a plan, arrangement of design for new, altered or improved products, processes or services, whether they are intended to be sold or used, including the creation of an initial prototype which could not be used commercially'*. The European Commission's framework indicates that development follows research. DTI followed the Commission's approach when defining the scope of the Smart scheme.
6. Grant for Research and Development was introduced in June 2003 and eventually replaced Smart grants. In April 2004 DTI introduced competition for Grant for Research and Development. In 2003 (before the introduction of competition) there was an additional guidance note for officials especially about handling requests for decision reviews (appeals). The guidance called *'Review and Complaints Procedures'* said that decisions were open to review, but that the *'onus was on the applicant to challenge the specific reason for non-selection'*. Under the procedure, where an applicant was challenging the decision not to award a grant, the Project Officer (i.e. the official who had made the original decision) would reconsider the project in the light of the applicant's representations. If the Project Officer's decision was to still to refuse a grant, the decision had to be confirmed by the Authorising Officer.

Advance Software has attempted to challenge the specific reasons for non-selection.

Our early prototype was nowhere near as advanced as the DTI assessor believed it to be. Testing would have confirmed this. The project goals are ambitious, but achievable, contrary to DTI technical adviser opinion. Our current (September 2009) beta testing partially confirms this. The official who made the original decision did not reconsider. He should have discussed the outcome of his initial assessment with his technical advisers and should have explained to them why his view was so different from theirs. This would have been the first step in a competent reconsideration. There is no evidence Mr Carr (or indeed anyone else) ever spoke to the technical advisers following our initial meeting.

In Confidence

Mr Stephen Williams
Advance Software Limited
14 - 18 Heddon St
London
W1B 4DA

3 August 2006

I write further our previous correspondence by e-mail, and to Trish Longdon's letter of 1 June 2006 confirming that in light of your dissatisfaction with the report of Karen Quayle dated 4 May 2005, your case would be reviewed. I have now completed my enquiries and am in a position to provide you with the conclusions of my review. The outstanding concerns raised in your letter and agreed by e-mail were:

1. That neither Mr Carr nor any other Department for Trade and Industry (DTI) official or consultant / advisor interacted with the software and therefore no technical expert assessed your project.
2. That Mr Carr was not properly qualified to carry out the full assessment.
3. That the complaint is from a private company not you as Stephen Williams an individual, and that the Ombudsman's report should reflect that by referring to an aggrieved legal entity.
4. That you consider the DTI have abused their discretionary powers:
 - (a) By refusing to answer relevant questions.
 - (b) By delaying in responding to reasonable questions.
 - (c) That Mr Evans has not properly considered the appeal.
 - (d) That DTI's understanding of what constitutes a feasibility study is flawed.
 - (e) That DTI's appeal process is virtually non existent / has not been explained sufficiently.
 - (f) That DTI has ignored advice eg from the Defence Diversification Agency that the project has merit.
 - (g) That Mr Evans has not been properly supervised / should be disciplined.
 - (h) That DTI have not accepted mistakes or offered redress.
 - (i) That DTI failed to follow guidance and as a result your company has been denied funding for which your company considers it qualifies.

5. That you do not accept the application was freely withdrawn and began an appeal as soon as it was clear how to proceed.
6. You consider DTI's account of your discussion with Business Link Suffolk was inaccurate speculation.
7. That DTI did not understand that launch and research and development activities can take place simultaneously.
8. That you dispute that the prototype seen by Mr Carr was at a stage that excluded it from the SMART scheme.
9. That you remain unhappy with DTI's decision not to review the SMART application properly.
10. That you consider the Ombudsman should obtain evidence from the Defence Diversification Agency in consideration of your complaint.
11. You dispute that your project should not have been considered for an exceptional project award.
12. You consider DTI's external advisers were wrong in their conclusions.
13. You are unhappy you were not given the opportunity to comment on the Ombudsman's report before it was issued in its final form.
14. You consider that the Ombudsman should consider obtaining expert technical advice from someone with a computer science background in order that she can assess whether your project has merit.
15. You consider DTI review procedure was not clearly explained.
16. You consider DTI have not provided reasons for why the application came to be withdrawn and why the review was unsuccessful.
17. Incorrect Patent Office characterisation was not queried.
18. That DTI did not comprehend that the output of a successful feasibility study was a working prototype.
19. That DTI considered prior commitment to a project to be a negative characterisation of an application.
20. That DTI are not following guidelines to help Small and Medium sized Enterprises (SMEs) research and development of technologically innovative products.

I have carefully considered the SMART scheme guidelines and the Ombudsman's jurisdiction. SMART was a discretionary grant award scheme operated by DTI. Eligibility criteria had to be met and included that the project must fall within the remit of the scheme and the proposals must lie within the interests of DTI. Appraisal criteria was set out in guidelines and included that projects must demonstrate genuine technological novelty (for feasibility grants) or a significant technological advance (for development awards), that projects must have commercial potential, and that the project must be financially viable. DTI were required to assess each application against the criteria and to make an assessment of whether the application met the criteria. They had discretion to decide whether the application fulfilled the criteria.

The Ombudsman's powers are limited with regard to discretionary decisions such as these. Section 12(3) of the Parliamentary Commissioner Act 1967, which sets out the Ombudsman's powers, provides that the Ombudsman may not question a discretionary decision taken without maladministration. If procedures are followed when the decision is taken, then the Ombudsman is not permitted to intervene in that decision. It is only if it can be shown that the DTI did not follow the correct procedure and they were maladministrative in the way they operated the scheme that the Ombudsman can intervene. Even in this scenario, the Ombudsman could still not replace her judgment for that of DTI officials; the most she could achieve would be to ask for the decision to be looked at again.

I shall now set out my findings with reference to your numbered points above:

Point 1: That neither Mr Carr nor any other DTI official or consultant / advisor interacted with the software and therefore no technical expert assessed the project.

The application by your company was considered by the Patent Office and two external organisations who provided advice to DTI before Mr Carr's visit. Both external organisations recommended the application be rejected and the Patent Office's assessment was that the level of overall innovation of the project was low. Mr Carr then visited and discussed the project and concluded it was too advanced to qualify for a SMART grant. The process followed by DTI through use of external advisers, Patent Office check and a site visit was in accordance with the guidelines for the scheme. On the basis the correct procedure has been followed, the Ombudsman has no power to query the technical decisions reached.

I note that you query the type of testing chosen by DTI in their evaluation and consider that an expert should have interacted with the software. The guidelines permit DTI to exercise discretion as to the methods of assessment used. The technical experts who were consulted were satisfied that they had sufficient information from your application to make an adequate assessment and both independently reached the same decision. As stated above, where correct procedure has been followed, as is the case here, the Ombudsman has no power to intervene in the discretionary decision reached. The fact that two external sources were used, who both considered that the application should be rejected, in my opinion suggests the DTI's assessment process had a degree of independence. The fact that you disagree with the technical judgment reached by the advisers does not mean that the Ombudsman has any power to intervene in a discretionary decision that has been reached in accordance with the correct procedure.

Point 2: That Mr Carr was not properly qualified to carry out the full assessment.

In essence this is the same point as the one above in that you dispute the way the assessment was made. DTI have discretion how to assess eligibility for the criteria and the Ombudsman cannot intervene in this process where there is no evidence of maladministration. Mr Carr concluded your prototype was too advanced to be eligible for the scheme and his decision has been reviewed by senior staff as part of the appeal process and upheld.

Mr Carr's visit led to a decision that the application be withdrawn (which is discussed further below). Even if Mr Carr had not recommended this course of action, the application would probably not have been approved on other criteria, such as technical innovation, commercial viability, market need. Mr Carr had no input into the decisions and advice provided by the external advisers who advised rejection of the application. Therefore, it seems to me that even if Mr Carr had not been involved in your case, your application would probably not have been unsuccessful.

Point 3: That the complaint is from a private company not Stephen Williams as an individual and the Ombudsman's report should reflect that by referring to an aggrieved legal entity.

The report refers to your role as Managing Director of Advance Software. All correspondence during the investigation has been with yourself and not with any other members of the company. I do not consider the report is unclear in its terms of reference, it clearly sets out that the alleged injustice relates to you personally and to your company and I do not consider that the wording needs to be changed.

Point 4: That you consider the DTI have abused their discretionary powers:-

- a) By refusing to answer relevant questions.
- b) By delaying in responding to reasonable questions.
- c) That Mr Evans has not properly considered the appeal.
- d) That the DTI's understanding of what constitutes a feasibility study is flawed.
- e) That the DTI appeal process is virtually non existent / has not been explained sufficiently.
- f) That DTI has ignored advice eg from the Defence Diversification Agency that the project has merit.
- g) That Mr Evans has not been properly supervised / should be disciplined.
- h) That DTI have not accepted mistakes or offered redress.
- i) That DTI failed to follow guidance and as a result your company has been denied aid for which your company considers it qualifies.

The relevance of discretionary powers relates to the decision whether or not to grant an application either on first presentation or on appeal. The majority of your examples above relate not to the making of the decision, but to the way your complaint about that

decision was dealt with. As stated above, in order to make a finding that discretionary powers were used incorrectly, the Ombudsman would need to see clear evidence of maladministration in the way discretionary powers were exercised, and I do not consider you have been able to identify any such failings. Whilst I appreciate that you do not accept DTI's findings, methods of making technical judgments or interpretation of the guidelines, this difference of opinion does not mean that correct procedure was not followed.

The majority of your points above are dealt with elsewhere in this letter. Of those which are not my findings are:

Points a & b: Complaint Handling

I consider that DTI have responded to your queries about your appeal and have sought to provide answers both through their own complaint process and the Ombudsman's report.

Point g: Mr Evans

The Ombudsman has no remit in relation to personnel issues which are matters for the relevant employer.

Point h: Redress

The Ombudsman has not upheld your complaint and therefore no recommendation of redress is appropriate.

Point 5: That you do not accept the application was freely withdrawn and began an appeal as soon as it was clear how to proceed.

The explanation given by DTI was that when Mr Carr performed his site visit it was on the basis that evidence had already been received from external advisers that the application be refused. In accordance with the guidelines a visit still took place which was an opportunity for your company to put its case further. During that visit you demonstrated your project and Mr Carr concluded that the project was already too advanced to qualify for the SMART scheme, and recommended that you withdraw the application rather than wait for it to be rejected as a rejection may hinder your company's attempts to secure funding elsewhere.

I acknowledge that your recollection of this visit and the decision to withdraw the application differs from Mr Carr's. I do not consider that it is possible to reconcile these versions of events after the time that has now passed. Had the application not been withdrawn, it would certainly have been rejected. I therefore do not consider that your company has suffered any injustice from Mr Carr's suggestion the application be

withdrawn, as had the application progressed it would probably not have been successful in any event.

Point 6: You consider DTI's account of your discussion with Business Link Suffolk was inaccurate speculation.

I note that DTI have given an account of your discussion with Business Link which you dispute. Again, given the time that has passed and your own admission that you cannot recall the exact nature of your conversation with Business Link, I do not consider investigation is likely to shed further light on that telephone discussion.

The relevance of the discussion related to whether or not you were happy for the application to be withdrawn. For the reasons given above (Point 5) I have concluded that no injustice arose from the application being withdrawn rather than rejected and therefore I do not consider that the content of this discussion had any bearing on the outcome to your complaint.

Points 7 & 8: That DTI did not understand that launch and research and development activities can take place simultaneously. You also dispute that the prototype seen by Mr Carr was at a stage that excluded it from the SMART scheme.

This complaint again takes issue with DTI's interpretation of the SMART criteria and also with the issue of whether or not your prototype was sufficiently advanced to place you outside the SMART scheme. Given that the DTI had discretion to make such technical assessments, the Ombudsman has no power to intervene where no evidence of maladministration is provided. I would again emphasise that even if the application had not failed on the grounds of the project being at too an advanced stage, it would probably have failed on other grounds as set out in the external advice eg commercial merit.

Point 9: That you remain unhappy with DTI's decision not to review the SMART application properly.

The SMART application was reviewed under the appeal procedure. Even though your application had been withdrawn rather than rejected, DTI agreed to treat the complaint in the same way as a rejected application and thus your company suffered no injustice in the way the complaint system was operated.

Karen Quayle set out in detail at paragraph 33 of her report the review process your appeal underwent, which I agree is fully in line with the guidelines for appeal. I therefore find no maladministration in the handling of your appeal.

I accept that you consider further evidence should have been taken into account and further assessment of your project undertaken. The decision whether your project met

the eligibility criteria was one which DTI had the discretion to make and I am satisfied that they had sufficient information to do so. The appeal was rejected on the grounds that the prototype was too advanced to be included in the scheme. Even if this had not been the case, the evidence suggests that the application would probably have been rejected on other grounds.

Point 10: That you consider the Ombudsman should obtain evidence from the Defence Diversification Agency in consideration of your complaint.

DTI have discretion about which advice to rely on when making technical assessments. The fact that your company or any other body take a different view does not mean that DTI's decision was necessarily maladministrative. Provided DTI made the decision in line with guidelines and knowledge available at the time, the Ombudsman has no power to intervene. The Ombudsman has no power to substitute her decision for that of DTI, nor to advise that DTI take advice from external bodies into account.

Point 11: You dispute that your project should not have been considered for an exceptional project award.

You state that you dispute DTI's interpretation of what constitutes an exceptional project. DTI have stated that only projects with costs in excess of £500,000 would qualify under the exceptional project scheme. Having reviewed the SMART guidelines for Exceptional Projects (para 3.3) it is clear that the award would need to exceed £150,000 amongst other criteria and that as your project costs were put at £60,650 your project would not have qualified.

Point 12: You consider the DTI's external advisers were wrong in their conclusions.

I acknowledge that you take a different view on the merits of your project than the DTI external advisers. The external advisers' reports show a knowledge of the type of technology you were seeking to develop and identified a number of reservations about its merits across a number of grounds. DTI sought two independent opinions which I consider demonstrates a fair and objective assessment process. The fact you disagree with the reports is not sufficient reason for the Ombudsman to intervene with the decision process. You state that the DTI external advisers have not seen your prototype. The scheme you applied for did not expect to see a prototype and assessment was on the basis of the submitted application. Therefore your application has been assessed by external advisers in the same way as any other.

Point 13: You are unhappy you were not given the opportunity to comment on the Ombudsman's report before it was issued in its final form.

The process for preparing a report for the Ombudsman has been clearly explained to you. The Ombudsman's officers prepare a draft report on which they invite comments from relevant parties and then prepare a final report. You had the opportunity to comment at the draft report stage and your comments were taken into account in preparing the final report. Therefore I am satisfied the correct procedure was followed and that you had the same opportunity as the DTI to put forward your views.

Point 14: You consider that the Ombudsman should consider obtaining expert technical advice from someone with a computer science background in order that the Ombudsman can assess whether your project should have received funding.

The Ombudsman has no power to substitute her decision for that of DTI. As she has no remit to make such a technical decision there is no merit in seeking such evidence. Even if your complaint about maladministration in the decision making process had been upheld, the most the Ombudsman could achieve is to ask the DTI to review the decision again. DTI have discretion what technical advice to rely on in their decision making process and there is no evidence to suggest that their process for obtaining such evidence has been maladministrative in your case.

Point 15: You consider DTI review procedure was not clearly explained.

I note that following your appeal, significant e-mail correspondence was exchanged about how the review process operated. In addition, following your complaint, further explanations have been provided to you by DTI and through Ms Quayle's report. I do not consider that any outstanding injustice arises from any confusion you may have had about the process. Confusion about the process was not the reason your appeal was unsuccessful.

Point 16: You consider DTI have not provided reasons for why the application came to be withdrawn and why the review was unsuccessful.

Reasons have been given, namely that your prototype was too advanced, as to why your application did not meet the scheme's criteria. Whilst I acknowledge that you do not accept that finding, I do not find that there has been any lack of clarity in communicating the decision to you. I acknowledge that you dispute the application was "withdrawn", as stated above, I do not consider that further investigation will add to what is already known about this issue.

You have also now had sight of the external advisers' reports which show that even if your application had not failed on the grounds of the prototype, it would probably not have succeeded on other grounds.

Point 18: That DTI did not comprehend that the output of a successful feasibility study was a working prototype.

The issue as to whether or not the stage of your prototype put it outside the eligibility criteria is a discretionary decision DTI were within their powers to make. In the absence of any evidence of maladministration in the making of that decision, the Ombudsman has no power to query it. DTI have considered this issue at the application and review stage and I am satisfied they have given your views adequate consideration.

Point 19: That DTI considered prior commitment to a project to be a negative characterisation of an application.

The scheme for which you applied was for funding at the early stage of a project. DTI considered your project for both a feasibility grant and a development grant and judged that it was too advanced for either scheme. I do not consider that further consideration of this issue will change the outcome.

Point 20: That DTI are not following guidelines to help SMEs research and development of technologically innovative products.

I have seen no evidence that the DTI did not follow the correct guidelines. I acknowledge that you consider the merits of your project were such that funding should have been provided. Neither DTI nor their two external advisers shared that view. Whilst I appreciate that the outcome of your grant application was very disappointing for you and your company, I do not consider that there is any evidence of maladministration in the way the decision was reached which would require the Ombudsman to intervene.

You also raised an issue as to the Patent Office's characterisation (point 17), but stated you were unsure whether this was maladministrative. It is for the complainant to provide evidence of maladministration to the Ombudsman. If you do not have such evidence, then the Ombudsman is not able to consider a complaint. Therefore I have not addressed any Patent Office issues during this review.

I hope that the further explanations provided have clarified the position. I appreciate that these events must have been very distressing for you and your company and I hope you have found the additional consideration of your case helpful.

Julia Whysall
Associate Investigator

In confidence

Mr Stephen Williams
Advance Software Limited
14-18 Heddon Street
London
W1B 4DA

2 October 2006

Your complaint against the Department of Trade and Industry

You will I think be aware that, under our internal complaints procedure, it falls to me to consider the further points you have made in response to the original investigation of your complaint by Karen Quayle and the subsequent review by Julia Whysall. I have now had the opportunity to consider the full set of papers that we hold on your complaint including your recent e-mails and can let you have my reply.

I should say that, where a decision by this Office has already been reviewed on one occasion, it is not my practice to reopen the investigation unless I have reason to think that the original investigation was flawed or that the conclusion reached was wrong. I do not see that this is the case here.

I see that the limits of my remit in regard to discretionary decisions have been explained to you and I am sorry that you have difficulty in accepting this. I have no power to substitute my judgment for that of the Department of Trade and Industry (DTI) in assessing your proposal. It is not for me to make a separate assessment of its technical merits or to take issue with the design of the Smart scheme itself. I understand that you feel strongly on both points, but my only legitimate concern is with the question of whether there was maladministration in DTI's decision on the basis of the guidelines laid down for the operation of the scheme.

The arguments you have raised were addressed in detail in the context of the original investigation and in the subsequent review of the decision on your complaint. Having

considered the papers very carefully, I am content that the conclusions reached are correct within the limits of my jurisdiction as explained to you.

I appreciate that my decision will be unwelcome to you and I am sorry that I cannot assist you further. You have made your views clear by e-mail and over the telephone on a number of occasions and I now consider this correspondence closed. The volume of your written communication, including e-mails sent to other organisations copied to my Office, has been high. I am sure that you will appreciate that the resources of my Office are limited. Therefore, in fairness to other complainants whose cases have yet to be considered, I have decided that if you send us further communication, we will read what you send. However, we will not acknowledge or respond to communication from you unless we see compelling reasons for doing so. I am also aware that some of your recent e-mails sent to other organisations, but copied to my Office, have contained offensive language. If you do communicate with my Office again I ask that you refrain from using such language.

Ann Abraham
Parliamentary and Health Service Ombudsman

Subject: RE: European Commission Competition DG : Case
CP282/2006]

Date: Fri, 29 May 2009 17:33:51 +0100

From: <Paul.ballinger@cabinet-office.x.gsi.gov.uk>

To: <steve.williams@advance-software.com>

Dear Mr Williams

Thank you for your e-mail.

There is no legal or comprehensive definition on what is meant by maladministration. However, it generally means where departments have provided a poor service or have acted inappropriately, ie, where there has been bias, neglect, inattention, delay, incompetence, ineptitude, perversity, turpitude, arbitrariness and so on. Examples of maladministration can include:

- rudeness (though that is a matter of degree);
- unwillingness to treat the complainant as a person with rights;
- refusal to answer reasonable questions;
- neglecting to inform a complainant on request of his or her rights or entitlements;
- knowingly giving advice which is misleading or inadequate;
- ignoring valid advice or overruling considerations which would produce an uncomfortable result for the overruler;
- offering no redress or manifestly disproportionate redress;
- showing bias, whether because of colour, sex, or any other grounds;
- omission to notify those who thereby lose a right of appeal;
- refusal to inform adequately of the right to appeal;
- faulty procedures;
- failure by management to monitor compliance with adequate procedures;
- cavalier disregard of guidance which is intended to be followed in the interest of equitable treatment of those who use a service;
- partiality; and
- failure to mitigate the effects of rigid adherence to the letter of the law where that produces manifestly inequitable treatment.

I hope this helps.

Paul Ballinger
Propriety and Ethics Team
Cabinet Office
Rm 118
70 Whitehall
London SW1A 2AS

email: paul.ballinger@cabinet-office.x.gsi.gov.uk

Making the Civil Service Work Better

Subject: RE: Request for clarity on the legal definition of "maladministration"

Date: Mon, 23 Mar 2009 12:32:29 -0000

From: Public Admin Committee <PUBADMINCOM@parliament.uk>

To: <steve@advance-software.com>

CC: Public Admin Committee <PUBADMINCOM@parliament.uk>, HCInfo
<HCINFO@parliament.uk>

Dear Stephen,

Section 5 of the Parliamentary Commissioner Act 1967 describes those areas which can and cannot be investigated by the Ombudsman. It is online here:

http://www.opsi.gov.uk/RevisedStatutes/Acts/ukpga/1967/cukpga_19670013_en_1#pb1-11g1

No specific definition of maladministration is provided in the Act. "In determining whether to initiate, continue or discontinue an investigation under this Act, the Commissioner shall, subject to the foregoing provisions of this section, act in accordance with his own discretion; and any question whether a complaint is duly made under this Act shall be determined by the Commissioner." [The Commissioner is the Ombudsman.]

To the best of my knowledge, no court has ever been asked to define maladministration under the Act. Iain Ogilvie, who headed up the Ombudsman's investigation into Equitable Life, has commented online on two previous attempts to define maladministration, neither of which has legal force, but which might be considered by a court if such a definition were sought: <http://boards.fool.co.uk/Message.asp?mid=8999268>

I believe you have also expressed an interest in the circumstances under which an Ombudsman could be removed from office. This is covered under section 1 of the 1967 Act: A person appointed to be the Commissioner may be relieved of office by Her Majesty at his own request, or may be removed from office by Her Majesty in consequence of Addresses from both Houses of Parliament, and shall in any case vacate office on completing the year of service in which he attains the age of sixty-five years. Her Majesty may declare the office of Commissioner to have been vacated if satisfied that the person appointed to be the Commissioner is incapable for medical reasons- (a) of performing the duties of his office; and (b) of requesting to be relieved of it.

I hope this is helpful.

Yours sincerely,

Steven Mark

Maladministration Definition - Parliamentary and Health Service Ombudsman

There have been many attempts to 'define' maladministration, perhaps the most famous two being, first, what is known as the 'Crossman catalogue' - so named because it was the list of traits that maladministration might have, that was given by the then Minister responsible for piloting the Bill to establish the Parliamentary Ombudsman through the Commons in 1966.

In the second reading debate on the Parliamentary Commissioner Bill, on 18 October 1966, when asked to define maladministration Richard Crossman said 'we might have made an attempt... to define, by catalogue, all of the qualities which make up maladministration... It would be a wonderful exercise - bias, neglect, inattention, delay, incompetence, inaptitude, perversity, turpitude, arbitrariness and so on.' He also said that maladministration 'does not extend to policy, which remains a matter for Parliament. Nor do we include under maladministration... discretionary decisions, [which if] properly exercised... [are] excluded'.

Secondly, Sir William Reid, a former Parliamentary Ombudsman, in his 1993 Annual Report to Parliament, under the heading 'What is maladministration?', wrote 'To define maladministration is to limit it. Such a limitation could work to the disadvantage of individual complainants with justified grievances which did not fit within a given definition. However I suggest an expanded list of examples going beyond those recounted in what has become known as the Crossman catalogue... In the language of the 1990s I would add rudeness (though that is a matter of degree); unwillingness to treat the complainant as a person with rights; refusal to answer reasonable questions; neglecting to inform a complainant on request of his or her rights or entitlement; knowingly giving advice which is misleading or inadequate; ignoring valid advice or overruling considerations which would produce an uncomfortable result for the overruler; offering no redress or manifestly disproportionate redress; showing bias whether because of colour, sex, or any other grounds; omission to notify those who thereby lose a right of appeal; refusal to inform adequately of the right of appeal; faulty procedures; failure by management to monitor compliance with adequate procedures; cavalier disregard of guidance which is intended to be followed in the interest of equitable treatment of those who use a service; partiality; and failure to mitigate the effects of rigid adherence to the letter of the law where that produces manifestly inequitable treatment.'

Readers of this very long post (for which apologies) should note that both attempts to 'define' maladministration effectively said that 'this is what an attempt to define maladministration might look like, but to define it rigidly would be inappropriate, which is why we haven't done so'.

With that health warning in mind, I think in terms of this investigation, we might say that the regulators would have been maladministrative:

1. had they failed to do something that they were required to do or had they done something that they should not have done; and/or
2. where discretion was given to them, had they acted unreasonably given the information available to them at the time.

The first is an absolute test - did the regulators break the regulatory rules contained in statute law, secondary legislation, professional guidance and any other sources of the regulatory regime ?

The second is effectively a reasonableness test, which will require the Ombudsman to look at each discretionary decision or action on its own merits and to assess it against what, in her view, is reasonable. It is here that the issue of hindsight is most relevant.

The part of the investigation in which we are working to set out the powers, duties and responsibilities of the regulators over the whole period is thus a critical process in determining whether maladministration occurred.

Author : Iain Ogilvie (Investigation Manager at the Parliamentary & Health Service Ombudsman)

Internet Reference : <http://boards.fool.co.uk/Message.asp?mid=8999268>

Extract - Parliamentary Commissioner Act 1967

5 Matters subject to investigation

(1) Subject to the provisions of this section, the Commissioner may investigate any action taken by or on behalf of a government department or other authority to which this Act applies, being action taken in the exercise of administrative functions of that department or authority, in any case where—

(a) a written complaint is duly made to a member of the House of Commons by a member of the public who claims to have sustained injustice in consequence of maladministration in connection with the action so taken; and

(b) the complaint is referred to the Commissioner, with the consent of the person who made it, by a member of that House with a request to conduct an investigation thereon.

(2) Except as hereinafter provided, the Commissioner shall not conduct an investigation under this Act in respect of any of the following matters, that is to say—

(a) any action in respect of which the person aggrieved has or had a right of appeal, reference or review to or before a tribunal constituted by or under any enactment or by virtue of Her Majesty's prerogative;

(b) any action in respect of which the person aggrieved has or had a remedy by way of proceedings in any court of law:

Provided that the Commissioner may conduct an investigation notwithstanding that the person aggrieved has or had such a right or remedy if satisfied that in the particular circumstances it is not reasonable to expect him to resort or have resorted to it.

(2A) Subsection (2)(a) of this section shall have effect in relation to the right of a person to make a complaint of unlawful discrimination under the Fair Employment and Treatment (Northern Ireland) Order 1998 as if it were such a right of appeal, reference or review as is mentioned in that subsection.]

(3) Without prejudice to subsection (2) of this section, the Commissioner shall not conduct an investigation under this Act in respect of any such action or matter as is described in Schedule 3 to this Act.

(4) Her Majesty may by Order in Council amend the said Schedule 3 so as to exclude from the provisions of that Schedule such actions or matters as may be described in the Order; and any statutory instrument made by virtue of this subsection shall be subject to annulment in pursuance of a resolution of either House of Parliament.

(5) In determining whether to initiate, continue or discontinue an investigation under this Act, the Commissioner shall, subject to the foregoing provisions of this section, act in accordance with his own discretion; and any question whether a complaint is duly made under this Act shall be determined by the Commissioner.

Subject: Pre-Action Protocol : Judicial Review of Parliamentary Ombudsman decision PA 6994 (continued 2)

Date: Mon, 21 Sep 2009 12:40:01 +0100

From: Steve Williams <steve.williams@advance-software.com>

Reply-To: steve.williams@advance-software.com

Organisation: Advance Software

ann.abraham@ombudsman.org.uk, O'Connell Annette

To: <Annette.O'Connell@ombudsman.org.uk>, Complaintsphso

<Complaintsphso@ombudsman.org.uk>, Quayle Karen

<Karen.Quayle@ombudsman.org.uk>, aaprivateoffice@ombudsman.org.uk

CC: gummerj@parliament.uk

European Commission DG Competition reference CP282/2006.

Dear all,

Parliamentary Ombudsman PA-6994 Report (May 2006)Â Annex / 6

Extract :

" The guidance called "Review and Complaints Procedures" said that decisions were open to review, but that the "onus was on the applicant to challenge the specific reason for non-selection". Under the procedure, where an applicant was challenging the decision not to award a grant, the Project Officer (i.e. the official who had made the original decision) would reconsider the project in the light of the applicant's representations. If the Project Officer's decision was to still to refuse a grant, the decision had to be confirmed by the Authorising Officer. "

The applicant has challenged the specific reason for non-selection over and over and over again without acknowledgement of validity of the argument from the UK Parliamentary Ombudsman.

The reason for non selection by the DTI was that we already had (in their view) a "fairly advanced" prototype.

As I have explained time and again, this is ambiguous uninformed nonsense. It was an assumption reached following a brief demonstration designed to impress (to gain confidence). There was no independent confirmation that the software was indeed "fairly advanced". It was (in software terms) early alpha. At the beginning. It was the output of our concept study, that appeared to us to have merit, and was worthy of further study - initially to determine whether the technical objectives required to create a commercial quality product could be reached. This next phase is called a "feasibility study". We applied for funding to assist with this study. Our application was appropriate and correctly submitted.

That the DTI thought the project "too advanced" for support - that there was no significant research and development to be done to create a 3D web browsing product suitable for use by the public is the uninformed naive view of lay persons who have no understanding of the complexities of the development of computer software.

The sum total of the "reconsideration" of our application which took place can be seen below. No further action was taken.

Is this "Correct review and complaints procedure" ?

Were the technical **advisers** ever contacted for **advice**Â **following**Â Mr Carr's viewing of our early "fairly advanced" prototype ?

During Stephen Kennett's "reconsideration" ?

During Roy Evans "reconsideration" ?

No, they were not. How would these improperly qualified civil servants know what they had seen ?
Are they computer software experts ?

Does the Parliamentary Ombudsman understand what the term "informed decision" means ?

The DTI arrogantly rejected the technical advice they had received because it didn't fit with their naive assumptions and refused to properly reconsider our application, contrary to the approved scheme requirements.

They held an overly simplistic view that any computer software that might be demonstrated to them was a product and was "already done". If only it was that simple.

Software engineering is very difficult and prototyping is a long and complex process. Most products with any significant level of functionality take many man years to develop.

I put it to the Court that no competent reconsideration to place, no further contact was made with the technical advisers and that the DTI complaints procedure was virtually non-existent.

I ask the Court to consider whether this failure to complete a competent reconsideration fits within the Court's understanding of the term "maladministration".

Please see below.

Yours Sincerely,

Stephen J.H. Williams

[Please see email on page 34 of this Judicial Review bundle]

Subject: Pre-Action Protocol : Judicial Review of Parliamentary Ombudsman decision PA 6994 (continued 3)
Date: Mon, 21 Sep 2009 15:45:25 +0100
From: Steve Williams <steve.williams@advance-software.com>
Organisation: Advance Software
ann.abraham@ombudsman.org.uk, aaprivateoffice@ombudsman.org.uk, Quayle Karen
To: <Karen.Quayle@ombudsman.org.uk>, O'Connell Annette
<Annette.O'Connell@ombudsman.org.uk>, Complaintsphso
<Complaintsphso@ombudsman.org.uk>
CC: Stateaidgreffe@ec.europa.eu

European Commission DG Competition reference CP282/2006.

Dear all,

Stephen Kennett did consider our appeal a little further - please see below. His email of 6th August 2004, referenced in Roy Evans letter 13th January 2005 is below.

As already discussed, his rejection was based on the misunderstanding that having a prototype means feasibility is proven, which is not correct.

You only know if any given prototype proves feasibility (and to what degree) if you test it.

For further details of the prototyping process, please see documentation I have already provided.

This is as far as the reconsideration went before the appeal was passed to Roy Evans, who declined our application.

Acknowledging and correcting this mistake is very important to prevent good projects from being damaged by this kind of destructive behaviour.

Access to public commercial R&D funding is a hazardous minefield which has caused me and my company (and probably a lot of others) severe damage.

Here is a mine (lack of understanding of the complexities of the prototyping process). It should not be here. Please help me remove it.

Yours Sincerely,

Stephen J.H. Williams.

----- Original Message -----

Subject: RE: URGENT: SMART/R&D Grant (SEC/1171304)
Date: Tue, 10 Aug 2004 13:36:10 +0100
From: Kennett Steve (Dr SR) <Dr.Steve.Kennett@sbs.gsi.gov.uk>
To: 'Stephen Williams' <steve@advance-software.co.uk>

Dear Mr Williams,

Steve Kennett is now out of the office on Annual Leave until 1 September. I will ensure this email is brought to his attention upon his return.

Kind regards,

Rebecca Hinson
PA to Steve Kennett

-----Original Message-----

From: Stephen Williams [<mailto:steve@advance-software.co.uk>]

Sent: 09 August 2004 12:10

To: Kennett Steve (Dr SR)

Cc: Griffiths MPST; Webster Ian (Mr IC); Evans Roy (Mr RW); 'Margaret.Aitchison@dti.gsi.gov.uk'; 'jquirk@dda.gov.uk'; Timms MPST; Carter-Gray Ann (Mrs A); malic Irene (SBS East); 'aayobiojo@bl4london.com'; ministers@hm-treasury.gsi.gov.uk; Helen Williams; Stephen.Booth@dti.gsi.gov.uk; mpst.hewitt@dti.gov.uk; Vinod Bhandari; peter.button@bls.org.uk; robert.fiske@bls.org.uk; ghellen.gol@go-regions.gsi.gov.uk; Michael.Duggan@dti.gsi.gov.uk; Darren.Holness@dti.gsi.gov.uk; Ian.Webster@dti.gsi.gov.uk

Subject: URGENT: SMART/R&D Grant (SEC/1171304)

Your reference: SEC/1171304

Dear Dr. Kennett,

Thank you for your email correspondence of last Friday. Your apology over the delay in responding is acknowledged and accepted. Mick Carr did write to me after our meeting, though I do not have a record of that letter to comment on as I set fire to it in disgust a couple of weeks ago. I once again bring to your attention that no agreement was reached. Ian Webster advises me that the DTI are not allowed to withdraw applications without the consent of the applicant. We give, nor have we ever given any such consent. We waited over a year to move matters forwards for several reasons. Firstly, we had no idea what had just happened - this was our first ever engagement with BusinessLink and the DTI and it took a long time to analyze and form a strategy for moving matters forwards. Secondly, over this period, we had a death in the family - my grandmother - who died of a burst appendix in an NHS hospital. This was an incredibly painful and traumatic experience for the whole family and lead to business matters falling from the top of the agenda for some time. Next, after the apparent rejection of our application, my mother and I had a blazing row and she resigned as financial director of the company. My activities continued primarily as managing/technical director, developing our product, as detailed in our business plan and SMART application. It is only recently that I have taken on the role of financial director in order to ensure the company has sufficient resources to bring our product to market and generate a sustainable business. I hope that you will accept my apologies for delay on our part that was unavoidable for the reasons stated above and the excessive workload that I have personally undertaken as I take our company through a severe funding gap, due in part to the lack of support we have received from your department. It is true that when Mr. Carr visited we had an early stage prototype that I demonstrated running *only* on the Win2K/XP platform. Were we not to have taken our product to an early stage of proof of concept prior to contacting the DTI, the project would not have been sufficiently well defined to make an application. *Your* (DTI) appointed representatives and advisers, BusinessLink (Suffolk) were aware of the stage at which our business was at the time of our application and we followed their advice as to how to apply for the grant scheme that you are responsible for. You (DTI) are responsible for ensuring that your appointed representatives give correct advice, which it appears, in this case, if your assessment is correct, they failed to do. EVEN IF they failed to advise us as to which category of the SMART/R&D scheme that we should have applied under, it is surely your (DTI) responsibility to ensure the application is dealt with appropriately. It seems reasonable that if the project was deemed to be a development award candidate, submitted in error following BusinessLink advice as a Feasibility candidate, that you should assess the project as such. It is not my job as the managing director of a busy company to have to read between the lines of a vague and poorly thought out scheme in order to play silly games with your department in order to gain access to public funding which we believe that we are entitled to. Plain and simple, the grant is now called "The grant for research and development". I do not believe that a reasonable person could argue against the fact that a product of the calibre of our exceptional 3D web browser project is the result of a long and continuing commercial research and development process. All we ask for is a modest amount of public funding that we believe that we are entitled to, equivalent in magnitude to that awarded to other organizations involved in similar activities. Thank you in advance for reconsidering our application.

Best Regards,

Stephen J.H. Williams
Managing Director
Advance Software Limited.

Some comments from From Mr IC Webster, DTI. They are copied out of larger emails, available on request.

1. We established that your business is now based in London and I suggested you might want to consider making a further application for support, through the R&D Grant product but to the SBS London team. You confirmed that you were considering this option but that the timetable for the new round of applications in London was too far in the future (October).

2. Its the SBS regional team, based at EEDA and not the Regional Development Agency which is currently responsible for appraisal of Smart/R&D Grant applications in the East of England. Responsibility for administering the R&D Grant will transfer to the RDAs in April 2005, confirmed by the Chancellor in yesterday's Spending Review announcement.

3. When we spoke you told me that the SBS team had informed you that they had withdrawn your application without, I think you said, your agreement. I did say at the time that I was a bit confused by that wording because its not really in the gift of an appraisal team to decide to withdraw an application without the agreement of an applicant (it is after all your application). In the absence of such an agreement I would normally expect an SBS team to proceed to take a view on whether to support or not support an application (i.e. approve or reject the application).

Kennett Steve (Dr SR) wrote: [Date : 6 / 8 / 2004]

Our reference: SEC/1171304

Dear Stephen,

Thank you for your emails most recently of earlier today (6 August) but also of 13 July where you appealed against the decision to withdraw your SMART grant application of 22 December 2002.

I regret the delay in responding to you, but I wanted to discuss the case personally with the officers involved.

As you know, Mick Carr wrote to you on 30 January 2003 following your meeting with him earlier on the same day. He recorded what was, in his view, the outcome of that meeting that you had agreed that the case should be withdrawn. I accept that there may have been some misunderstanding on my case officer's part about your agreement to withdraw your application but I still find it difficult to understand why you opted to wait over a year before you challenged Mick Carr's conclusion as conveyed in his letter.

Either way, the discussion had focused on the issue of the prototype. As you know, **Mr Carr had concluded that because the project had already reached the stage of having a prototype** - and the purpose of a feasibility award is to assist companies in proving their concept prior to development stage - the application did not meet all the criteria for assistance. In addition, in looking into the case in more detail, advice sought from our technical experts within the Department did not support the funding of this project. I therefore conclude that the decision made by SBS not to go forward to support the case under the SMART feasibility award was correct.

This is most certainly not to say that your idea is not a good one. Indeed I am glad that you have followed up Nigel Griffiths' suggestions to seek advice from Business Link for London and I was pleased to note the response from Max Broadhurst to the effect that your project may be eligible for support.

I know this conclusion will be a disappointment to you, but trust that you will accept that we are only able to support applications that fully meet the rigorous criteria of our schemes. Other bodies however do have other schemes with different criteria and I wish you well, in working with Business Link for London to secure the finance you require.

Stephen Kennett

From: Stephen Williams [<mailto:steve@advance-software.co.uk>]
Sent: 05 August 2004 13:48
To: Dr.Steve.Kennett@sbs.gsi.gov.uk
Cc: Vinod Bhandari; I D Lawson; MPST.Griffiths@dti.gsi.gov.uk;
Ian.Webster@dti.gsi.gov.uk; Roy.Evans@sbs.gsi.gov.uk; Margaret.Aitchison@dti.gsi.gov.uk;
jquirk@dda.gov.uk; Mpst.Timms@dti.gsi.gov.uk; Ann.Carter-Gray@sbs.gsi.gov.uk;
irenemalic.sbs@eeda.org.uk; aayobiojo@bl4london.com
Subject: RE: SMART/R&D Grant appeal status ...

Dear Dr Kennett,

As advised by Dr Vinod Bhandari of BusinessLink/London appointed by Ms Judith Rutherford, Chief Executive of BusinessLink/London following a request from Nigel Griffiths MP (letter attached) that BusinessLink assist us with identifying available DTI funding options, I would like to request the current status of our SMART/R&D grant appeal. Please note that our business is currently on operational hold due to current lack of funds and we are currently actively seeking unrelated contract programming work to get us through a funding gap. I would like to take this opportunity to make you aware of a recent project undertaken by another organisation that was part funded by a DTI grant in a related area. Paper attached.

Best Regards,

Stephen J.H. Williams

Managing Director
Advance Software Limited

[Stephen](#)

As discussed at our meeting, I believe it is appropriate that you get in touch with the person who received your request for the appeal. Need less to say that they will request any further information if it is warranted. Mr Bob Wright is currently out of the country and I am sure will set up another appointment. Please remind me as to when were you going to meet up with Phillip Maud of Angle Technology.
Regards
vinod

-----Original Message-----

From: Stephen Williams [<mailto:steve@advance-software.co.uk>]
Sent: 03 August 2004 10:26
To: Vinod Bhandari
Cc: Griffiths MPST; I D Lawson
Subject: SMART/R&D Grant appeal status ...

Hi Vinod,

As we discussed at our recent meeting, we have yet to hear from the Department of Trade and Industry as to whether a decision has been made with regards to our SMART grant appeal. Please could you advise as to how we might determine whether a decision has yet been reached, and if not, when it would be. Please also advise if you believe that the DTI requires any additional information or documentation prior to reaching a decision on this matter.

As we discussed, we have not yet begun the study of whether it is feasible to port our technology to Linux or MacOS X (as described in the SMART application) as we do not have sufficient funds to do so. Further, we have not patented any of our technology as we do not have sufficient funds to do so. Some remaining technical issues remain with regards to "2D webpage operability and full integration solutions" which I will endeavour to address if I can find the time. I am very busy trying to raise finance at the moment. Advance Software Limited seeks to raise £50-100K, ideally via debt finance under the SFLGS to be repaid over 5 years, with a 6-12 month capital repayment holiday to bring our product to market. Our existing bankers (HSBC) are currently unwilling to lend beyond our existing £15K overdraft. We believe that the software that we have developed is worth far in excess of the sum that we wish to borrow, and should be sufficient security for a loan of this magnitude.

YOUR REF: PA-6994

LETTER BEFORE CLAIM : 3

PRE-ACTION PROTOCOL START DATE : 9/9/2009 (TIME: 14:25)

PRE-ACTION PROTOCOL END DATE : 23/9/2009 (TIME: 14:25)

TODAY'S DATE : 22/9/09

DAYS REMAINING IN PRE-ACTION PROTOCOL PERIOD : 1

SENDER: STEPHEN JOHN HENRY WILLIAMS

GROUNDS : http://advance-software.com/gov/uk/doc/jr_parliamentary_ombudsman.doc

Dear Parliamentary Ombudsman,

Thank you for your email of 21/9/2009. I am pleased that your response is clear and unambiguous. This document attempts to address outstanding issues in this dispute.

1. Timing

1.1. I note with disappointment that you continue to refer to the timing of this application. If something is worth considering, it is worth considering when circumstances permit.

1.2 Advance Software continues to experience severe operational difficulties as a result of lack of finance, so I must prioritise and de-risk as best I can.

1.3 There have been a number of matters that I have had to address ahead of completing this judicial review application.

1.4 I could not proceed with this legal challenge until I was satisfied that we have completed our technical feasibility study beyond reasonable doubt. If I had proceeded any earlier, you could have continued to argue (as Julia Whysall stated) that it would not matter whether or not the DTI had correctly processed our application because I could have been shown to lack the competence to deliver on the project objectives.

2. Expert Advice

2.1 I note with disappointment that you still refuse to accept expert advice, either from me or from third parties. Pre-action protocol 3.2 suggests :

“Early neutral evaluation by an independent third party (for example, a lawyer experienced in the field of administrative law or **an individual experienced in the subject matter of the claim**).”

Reference : http://www.justice.gov.uk/civil/procrules_fin/contents/protocols/prot_jrv.htm

3. Lack of Informed Decision

Your refusal to accept input from properly qualified experts indicates you do not yet comprehend the term "informed decision". It means trusting input from experts in areas where you are not sufficiently experienced to make an accurate assessment. In this case, relevant experts includes State Aid experts (the European Commission Competition DG) and technical experts.

4. Eligibility For Commercial Research And Development State Aid under the "SMART" scheme

4.1 State Aid can only be awarded subject to Commission approval, by compliance with approved scheme criteria. The easiest way of determining whether our project fits within the scope of this approved scheme is to ask the Competition DG at the Commission. They have been following this dispute for some time and so may be able to advise you.

4.2. As far as I can determine, State Aid legislation does not prohibit the undertaking of a concept study prior to making a State Aid application. If anything, some prior commitment should be a requirement to demonstrate competence. The first item on the marking frame indicates that this is a positive characteristic of an application, not a reason for exclusion.

5. Project Status

5.1 I wish our software was as advanced as you seem to think it is. The current status, in my opinion is that the concept is sound and technical feasibility is arguably just about proven in all areas of key risk. This is a complex project and so not all components are developed to the same level of maturity. Our software still lacks some required functionality, it contains at least one serious technical flaw ("bug") and it is aesthetically challenged because all the artwork is prototype quality. It must therefore have been at a much earlier stage in the "software lifecycle" (you can google this term) when the DTI evaluated our application.

5.2. Significant additional development is required to transform our current prototype through into a production quality product that will be suitable for use by the general public. The phase we are moving into is called a "development project" in "SMART" terminology. Web browsers are deceptively complex technology. There is an awful lot going on 'under the hood' that laypersons take for granted. Computers are only easy to use because of the considerable amount of work that has gone into developing the operating system and desktop applications that most take for granted. Creating these products is far from trivial. Please show a little respect towards those who build products that improve your standard of living and provide the tools you require to efficiently carry out your duties. Without the work of those of us in the Information and Communications Technology sector, you would all still be using typewriters & tippex and would have to spend countless hours in the library.

6. Independent Technical Assessment ("Beta Testing")

An approximate understanding of the status of our current prototype can be reached by reading the following thread.

Warning - this is an informal public discussion and as such, it contains informal language.

<http://maxforums.org/thread.aspx?tid=584721>

As you will see, if you read and comprehend the feedback, our current prototype is still some way from commercial quality.

It is probably "early to mid beta" if that means anything to you. If not I can try to explain further, or you can ask an independent software engineer or computing academic to explain.

7. Independent Technical Advice

The computer science department of a leading London university has been considering our work for some time and they are also aware of this dispute. They may be able to provide you with some independent guidance and advice if you would like their assistance. I do not know if there would be a charge for such advice.

8. Legal Characterisation Of The DTI's Error

8.1 The DTI made an error by characterising our project as outside the scope of a commercial research and development grant programme. All Advance Software does is commercial research and development. Day in, day out, since the company was formed in 2000. If we cannot access commercial research and development funding, something very serious is going wrong.

8.2 Quite how you characterise this error in legal terminology is something I must leave to others who are properly qualified in this field of study.

8.3 I'm an engineer - I speak in plain terms, not legalese. Perhaps you are right, perhaps acknowledgement of this error does not fit within the scope of your remit. However, my simple brain sees a form that should have been completed to score our project. It was not completed.

8.4 Initially, Mr Carr may have made a genuine mistake and I have no problem with this. On appeal, there should have been further discussion with the technical advisers and the project should most certainly have been scored. The failure to do so shows no competent reconsideration took place. Completing forms is an administrative task. Not completing the form is an administrative error (+ considerably worse - legal advice has indicated that it may also be negligence or perhaps misfeasance in public office on the part of the former DTI.).

8.5. Your analysis to date seems to focus on the letter of the grant programme guidelines – trying to bend wording and descriptions to fit outside of the scope of “SMART”, probably because you have little empathy for my work and because you do not appreciate my challenge. I'm sorry you are annoyed. I'm not very happy either.

8.6. In addition to the letter of the law, the Court will also consider the intent of the legislation – what was the purpose of the “SMART” grant programme. Are those goals furthered or hindered by not supporting this project ?

8.7. I was misled and incorrectly advised by the DTI assessor, perhaps because of a genuine mistake, perhaps because of a misguided attempt to chase meaningless statistics (attempts to avoid fail statistics ?). Whatever the reason for the error, it should have been corrected on appeal, not ignored.

8.8 Whether the above fits within the scope of the undefined "m" word, I have no way of knowing because the term is undefined.

8.9 As the legal characterisation of the failure is unclear, the only way I can see of clarifying the situation and making progress towards a remedy is to ask the Court to consider.

8.10 I will therefore complete and file my Judicial Review case bundle and then deliver a copy (stamped by the Court) to your office. I would appreciate a receipt when the file is delivered.

8.11 I am satisfied that I have complied with pre-action protocol for this application unless you have anything further to add or have any further questions.

9. Application Status.

I will update the hyperlinked summary grounds document later today. You will see the document has a version number on the first page. The update will address the points you have raised.

I have added Karen Quayle's report to the case bundle, with the amended feedback (last page).

I intend to proceed with this claim if we are unable to resolve this dispute between ourselves. In the interests of a rapid exchange of information, please continue to communicate electronically, via email

9 Urgency.

This matter is urgent and has been for a very long time. The reason for this urgency is the extremely difficult financial circumstances both myself and the Company are currently experiencing. I have a number of defaulted debts that could land me in bankruptcy court at any time. The Company has a defaulted debt of £17,030 to HSBC that could lead to legal action against my mother who has guaranteed this loan.

10. Pre-action protocol 14 states that you may request a reasonable extension to the pre-action protocol period. If you need such an extension, please let me know how long you need and for what purpose. I extend this offer for the second time.

11. Grounds For Judicial Review Of Failure To Acknowledge "Maladministration"

There is no way that not completing an evaluation form for an R&D grant application for a project that clearly fits within the bounds of the grant program (eligible R&D) is correct administrative procedure. Refusal to acknowledge this error may be a breach of Community Law.

Yours Sincerely,

Stephen J.H. Williams

Subject: Re: EH - CP282/2006 - State aid to small and medium-sized enterprises

Date: Tue, 22 Sep 2009 13:54:06 +0100

From: Steve Williams <steve.williams@advance-software.com>

Reply-To: steve.williams@advance-software.com

Organisation: Advance Software

Stateaidgreffe@ec.europa.eu, ann.abraham@ombudsman.org.uk,
aaprivateoffice@ombudsman.org.uk, christine.corrigan@ombudsman.org.uk,

To: Iain.Ogilvie@ombudsman.org.uk, Complaintsphso
<Complaintsphso@ombudsman.org.uk>, Quayle Karen
<Karen.Quayle@ombudsman.org.uk>

Dear Sirs,

Thank you for your acknowledgement and for your continued interest in this case.

Another document was sent earlier today which should further clarify the situation.

Apologies for the quantity of correspondence.

I hereby give the European Commission and the UK Parliamentary Ombudsman authorisation (should it be required) to discuss any aspect concerning our grant application and the matters I have brought before you, should the parties wish to communicate on this subject.

Yours faithfully,

Stephen J.H. Williams
Director
Advance Software Limited

Subject: EH - CP282/2006 - State aid to small and medium-sized enterprises

Date: Tue, 22 Sep 2009 14:09:12 +0200

From: <Stateaidgreffe@ec.europa.eu>

To: <steve.williams@advance-software.com>

Dear Sir,

The Directorate-General for Competition has received your email dated 21/09/2009 concerning the subject referred to above.

Yours faithfully,

Martine Ben Kaida
State Aid Registry

COMP/ A/20281

Subject: Re: EH - CP282/2006 - State aid to small and medium-sized enterprises

Date: Tue, 22 Sep 2009 16:15:07 +0100

From: Steve Williams <steve.williams@advance-software.com>

Reply-To: steve.williams@advance-software.com

Organisation: Advance Software

Stateaidgreffe@ec.europa.eu, ann.abraham@ombudsman.org.uk,

To: aaprivateoffice@ombudsman.org.uk, Iain.Ogilvie@ombudsman.org.uk,

Complaintsphso <Complaintsphso@ombudsman.org.uk>, Quayle Karen

<Karen.Quayle@ombudsman.org.uk>, gummerj@parliament.uk

CC: Carter, Chris <chris.carter@hmcourts-service.x.gsi.gov.uk>, ivor.jacobs@hmcourts-service.x.gsi.gov.uk

Dear Sirs,

Thank you for your acknowledgement and for your continued interest in this case.

As it looks likely that I will be submitting a Judicial Review application of the UK Parliamentary Ombudsman's decision tomorrow, I hereby give the European Commission and the UK Administrative Court authorisation (should it be required) to discuss any aspect concerning our grant application and the matters I have brought before you, should the parties wish to communicate on this subject.

This permission (which may or may not be required) is also extended to the UK Business, Innovation And Skills Department who are an interested party to this dispute.

Yours faithfully,

Stephen J.H. Williams

Director

Advance Software Limited

Subject: EH - CP282/2006 - State aid to small and medium-sized enterprises

Date: Tue, 22 Sep 2009 17:03:26 +0200

From: <Stateaidgreffe@ec.europa.eu>

To: <steve.williams@advance-software.com>

Dear Sir,

The Directorate-General for Competition has received your email dated 22/09/2009 concerning the subject referred to above.

Yours faithfully,

Martine Ben Kaida
State Aid Registry

COMP/ A/20298

Confidential
Mr Stephen J H Williams
C/o Marigold Cottage
Blythburgh Road
Westleton
Suffolk
IP17 3AS



16 September 2009

By email to steve.williams@advance-software.com and by post

Dear Mr Williams

Response to e-mailed Letter before Claim

I write to acknowledge receipt of your email timed at 14:25 on 9 September 2009, which you asked to be treated as a pre-action protocol letter for judicial review of the Ombudsman's decision, and your email timed at 10.44 on 10 September 2009. Those two e-mails included hyperlinks to drafts of your grounds for judicial review.

The pre-action protocol process normally requires the proposed applicant to allow the proposed respondent 14 days to respond to your pre-action protocol letter, unless the matter is urgent (see paragraphs 5.2 & 5.3 below). You have today indicated by email that you intend to issue judicial review proceedings tomorrow, which has given us considerably less than 14 days to respond. This matter is hardly urgent as three years have already passed since the decision you are attempting to challenge. Your failure to allow the required 14 days is unreasonable and indicates that you are in fact unwilling to allow us a proper opportunity to respond, or indeed to properly consider any response we make. This will be brought to the attention of the court, should you decide to issue proceedings tomorrow, and may lead to you being penalised in costs.

In addition, I note that in today's e-mail you provided a link to yet another version of your summary grounds; please note that we have addressed your case as set out in the grounds in the link from your 10 September 2009 e-mail and do not here address any further changes you have chosen to make in the past week.



Millbank Tower
Millbank
London SW1P 4QP

Enquiries: 0345 015 4033
Fax: 0300 061 4000
Email: phso.enquiries@ombudsman.org.uk
www.ombudsman.org.uk

This Freedom Of Information request has now been processed.

Please see renewal application documents which includes a copy of the
SMART Review & Complaints Procedure Guidance Note.

“The British spirit of enterprise made us one of the most inventive and creative nations in the world . . . for far too long, in too many areas, enterprise [and inventiveness] has been seen as something for someone else, a small elite. I want to create a Britain of ambition . . . where talent is set free . . . and opportunities are opened up for all”.

Gordon Brown, Chancellor of the Exchequer

Government fails to prevent R&D slide

Gabriel Rozenberg
Economics Reporter

The Government has failed to stem a long-term decline in the proportion of cash that companies plough into research and development, despite public subsidies worth £1.8 billion since 2000, government figures show.

In the past decade, R&D spending, seen as a key building block of long-term economic growth, fell steadily back against its official target.

Detailed figures published today also indicate that R&D spending by Britain's biggest companies as a proportion of their sales has remained

static over the past year, even as the amounts spent on R&D rose by a nominal 9 per cent.

The share of GDP spent by the private sector on R&D, the Government's target measure, fell from 1.3 per cent in 1995 to 1.2 per cent in 1997 and was only 1.1 per cent by 2005, according to the response to a parliamentary question by David Willetts, the Shadow Secretary of State for Innovation, Universities and Skills.

A report published today by the Department for Innovation, Universities and Skills (DIUS) suggests that R&D investment has shown little improvement over the past year. The

Research levels

Growth as % of sales, 2005-06

| | |
|------------------------------------|--------|
| Aerospace & defence | -5.7% |
| Automobiles and parts | -12.2% |
| Banks | +25% |
| Chemicals | +0% |
| Electronics | +10 % |
| Fixed-line telecoms | +50% |
| Leisure goods | -11.8% |
| Pharmaceuticals and biotech | +2% |
| Software and computing | -11% |
| Technology hardware | -3.4% |

Source: R&D Scoreboard, 2007

R&D Scoreboard, which analyses the accounts of the 850 companies that invest the most in R&D, found that those companies increased their R&D spend by 9 per cent to £20.9 billion in 2006. That compared with a global average of 10 per cent, the report said.

PricewaterhouseCoopers, which compiled the report for DIUS, conceded that those figures did not account for inflation, the growth of the economy or for changes in overall activity by Britain's companies. Stripping out those effects, total research and development as a proportion of sales was 1.8 per cent in 2006, unchanged from the previous year.

The report draws into question both the effectiveness and the merits of the Government's R&D strategy, on which £600 million has been spent in the past year alone. PricewaterhouseCoopers was unable to prove that there was any link between spending on R&D and business performance, in terms of sales growth, profitability or share price.

David Willetts, said: "Evidence I have had from ministers shows private sector R&D steadily declining for nearly a decade. It would be marvellous if this trend had been reversed but these figures with their narrow base are not sufficient to show that."