Hearing
on patentability of computer implemented inventions
(COM(2002) 92)
Presentation by Dominic Sweetman, director of an SME

My experience

25 years in computing industry, all in UK SMEs (until July 2002, when we sold out to a middle-sized US corporation).

Over the last ten years Algorithmics Ltd made about EUR0.5M annually by integrating, packaging and supporting open source software.

My statement is structured using the questions suggested by your invitation.

1. *Is there any real benefit to be derived from the proposed directive?*

   Clarification and harmonisation are worthwhile objectives, though I fear they will not be realised by the text in front of us.

   What added value would patent protection afford over and above copyright protection to (a) industry in general and (b) SMEs in particular?

   (a) patent protection enables a much stronger monopoly than copyright, with the potential to generate much larger amounts of money.

   (b) Individuals and SMEs armed only with copyright have been able to make significant income (related to their size), because there is considerable value in "what works right now" - time-to-market. A few unusual exceptions exist, but it seems unlikely that patents will strengthen the position of most SMEs.

2. *Is there any merit in following in the footsteps of the USA (patentability of business methods) or should patentability of business methods be clearly and specifically precluded?*

   No merit.

   Business methods should be clearly excluded, and I believe the UK government agrees with me (a rare occurrence, and to be celebrated).

   I believe that the directive text is intended to achieve this, but is is coded (I recognise the difficulty of evolving wording which can achieve consensus).

3. *Will the directive achieve its ends, in particular without unwanted side effects?*

   The Directive's stated objective is to set out the status quo, but with more clarity and harmony. I think the current draft doesn't do that.

   It would probably provide the EPO and national courts with reasons to accept rather more applications for software patents than they do at present. But I think it will cause confusion.

   In the last few years the EPO has accepted a large number of software patents, despite working from the 1973 treaty which explicitly ruled them out. It seems sensible to assume that the EPO and national courts will interpret any directive generously towards patent applicants.

   I suggest that members of the committee should try to understand the directive by asking: under what circumstances does the Directive propose that a patent application for a (novel, inventive) computer program be rejected?

   Articles 2-4 of the current (Feb02) draft come very close to saying that any software which passes the tests of novelty and (non-obvious) "inventive step" may be patented, provided you've got a "technical contribution".

   In normal usage computers are "technical". But recital (13) gives some guidance:

   " ... an algorithm which is defined without reference to a physical environment is inherently non-technical and cannot therefore constitute a patentable invention. "

   Programs written in a high-level language for a PC (or mainframe) generally make no reference to a physical environment. Does that mean such programs can't be "technical" and still won't be patentable†?

† A committee of patent experts has been examining the draft directive and will propose some changes, but the drafts I've had sight of retain this distinction.

Well, no. I've talked with patent professionals, and they don't follow this line. In practice, only a limited class of old-fashioned text-based business applications (and perhaps some pure mathematical ones) are held to be non-technical. Despite many hours of reading patent cases and much patient advice from patent professionals, I still can't see the sense in this distinction. As someone closely involved in computer software for 25 years, the distinction seems to me contrived and artificial: it will create a great deal of expensive argument, but not much clarity.

So I believe the directive fails to provide *any* clear criteria which would lead to the refusal of a patent to any (novel, inventive) program.

Now, some people undoubtedly believe that it would be a good thing if software could be freely patented; others, that it would be a good thing if no software could be patented.

But it surely isn't a good thing to let a confusing directive make the policy decision by accident.

4. *Should the system of (compulsory) licences be reviewed to prevent abuse of the patent system?*

   In software and technology (1) it's unlikely that a compulsory license case will be resolved soon enough to help, and (2) the damage caused by refusal-to-license may well be suffered mainly by third parties unable to access their data - compulsory licensing is only useful to a commercial competitor.

5. *Is the issue of trivial patents a problem? If so, how should it be addressed?*

   SMEs are particularly vulnerable to vexatious patent litigation.

   Tougher examination by patent offices should help: but, for example, prior art searches on software are surely impossible in a world where so much open source software is published.

6. *What risk, if any, is posed to open-source software? If so, how is it that open-source and proprietary software seems to co-exist at present?*

   To answer the second question first: open-source software has not - until the very recent past - offered a target worth pursuing for gain.

   There have been damaging incidents where 'standard' data formats have been the subject of actual or threatened patent enforcement after a great deal of data has been committed to them: GIF, JPEG and MP3 have all suffered. Such a litigant does not seek damages or fees from open source practitioners, but rather seeks to clear the field of competition prior to requiring licenses from medium- to large-size enterprises.

   There haven't been major disasters yet: but it's too early to draw much comfort from that.

7. *Is it possible to argue that patents may stifle innovation, if so how?*

   Patents stifle *competition*, which we surely all believe is an important spur for innovation.

   Two examples? (1) patents make it more difficult for companies to enter a new market, reducing competition. (2) incumbent patent-holders cross-license; if you like competition, you *really* don't want the four or five biggest players in a market making cosy deals with each other.

   Less numerous but most troublesome are patent holders who do no development, and seek fees from patents they've acquired from failed or sunset companies. Their targets will consider paying them something even for quite weak patents, because it's cheaper and less damaging than a protracted dispute.

8. *Is it possible to quantify in economic terms/employment the benefits/disbenefits of software patentability?*

   No, I don't think so. This has to be a political judgement.

9. *What impact, if any, will action in this area, one way or another, have on SMEs?*

   SMEs (rightly) fear other people's patents - there really are too many of them for small companies to track.

   As I pointed out above, innovative SMEs have been obtaining returns on their clever software without patents.

   Most SMEs polled by the UK patent office seemed negative to indifferent about patents. Your rapporteur seemed to think that SMEs needed education about patents: I believe s/he should have considered the possibility that their reluctance was rational!

   SMEs also fear that if software patents are more widely available they will be compelled to build a patent

portfolio for cross-licensing. That's extra cost and overhead with no expectation of gain‡.

10. *Do recital 18 and Article 6 of the proposal for a directive need to be reworded in order to allow decompilation of programs for the purposes of interoperability as is permitted under Directive 91/250?*

    This is an important issue, but one which seems to be being well-defended by many other people and where the directive seems to have got it right.

‡ If this kind of increased patent activity at SMEs is picked up by the officials monitoring the Directive, I suppose they'll see it as evidence that the Directive succeeded!