

Anticipated acquisition by Biolin Scientific AB of Farfield Group Limited

ME/4451/10

The OFT's decision on reference under section 33(1) given on 24 March 2010. Full text of decision published 31 March 2010.

Please note that the square brackets indicate figures or text which have been deleted or replaced in ranges at the request of the parties or third parties for reasons of commercial confidentiality.

PARTIES

1. **Biolin Scientific AB (publ)** (Biolin) is a Swedish company listed on the Stockholm Stock Exchange. Biolin manufactures and supplies scientific instruments designed for measuring molecular interactions on surfaces. In the UK these instruments are principally based on QCM (quartz crystal microbalance) technology. It also supplies maintenance services for its instruments.
2. **Farfield Group Limited** (Farfield) is a UK company which also manufactures and supplies scientific instruments designed for measuring molecular interactions on surfaces. However, Farfield has proprietary rights for DPI (dual polarisation interferometry) technology and therefore is the only supplier of DPI instruments (the only instruments that it does supply). It also supplies maintenance services for its instruments.

TRANSACTION

3. On 1 March 2010 Biolin issued a press statement saying that it intends to acquire all outstanding shares in Farfield. Biolin will acquire approximately 60 per cent of the voting rights attached to Farfield's shares in the first instance and intends to acquire the remaining shares and voting rights in

due course. The acquisition of the initial shareholding and voting rights of around 60 per cent (giving Biolin full control of Farfield) is due to be completed on 1 April 2010.

JURISDICTION

4. As a result of this transaction the enterprises Biolin and Farfield will cease to be distinct. The parties overlap in the supply of scientific instruments for the measurement of interactions on surfaces for characterising the adsorption and desorption processes of soft material in liquids at the molecular scale and in real time. The parties estimate that together they supply more than 25 per cent of such instruments in the UK. The share of supply test in section 23 of the Enterprise Act 2002 (the Act) is therefore met.
5. The OFT therefore believes that it is or may be the case that arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation.
6. The parties submitted a Merger Notice on 24 February and the OFT's statutory 20-day deadline by which to announce a decision is 24 March.

MARKET DEFINITION

Product scope

7. The parties overlap in the supply of scientific instruments used to obtain measures of various structural changes on surfaces at the molecular level. The instruments are mainly used by the scientific research community.
8. In Biolin / Nima (a case which focused on Langmuir Blodgett instruments) the OFT concluded that each product constituted its own product market since each of the instruments is designed for a specific application and therefore there is little demand-side substitution between them.¹

¹ Anticipated acquisition by Biolin AB of Nima Technology Limited, Case ME/3172/07, OFT decision of 29 August 2007.

9. In this case the parties submitted that there are a range of products which offer different approaches to measuring surface tensions at the molecular level. These are:
- SPR (surface plasmon resonance) instruments which measure mass changes on functionalised solid surfaces under influence of liquid or gas flow
 - QCM instruments which measure mass and elasticity changes on functionalised solid surfaces under influence of liquid or gas flow
 - PMI (polarisation modulated infrared reflection absorption interferometer) instruments which measure molecular reactions and orientation changes in the surface of liquids or solids
 - ISR (interfacial shear Rheometer) instruments which measure viscosity of monomolecular organic layers on the surface of liquids
 - DPI instruments which measure changes in the mass and size of molecules and molecule orientation/conformation on functionalised solid surfaces under the influence of liquid flow
 - BAM (Brewster angle microscopy) visualising instruments which allow real time observations of structural changes of monomolecular organic layers on surfaces of liquids.
10. The parties submitted that end users choose their instruments according to their field of study. So, for example, someone wishing to study mass only would choose a different instrument than someone wishing to study mass and viscosity. In this way each type of instrument has its own set of functions which are different from other instruments (although there may be some partial overlap in the functionality between some instruments). This supports the product market definition used in Biolin/Nima.
11. Customers agreed that each type of instrument is differentiated from another by application. One customer told the OFT that DPI instruments (which are supplied by Farfield) are very different from those supplied by Biolin (and therefore are not substitutable on the demand-side).

12. Internal documents from Farfield supported this assertion. One document discussed how DPI technology measures conformational changes as well as size and mass measures whereas SPR instruments can only measure mass related factors. The document estimated that around half of DPI users are also SPR instrument users, arguing that these technologies are complementary rather than substitutable since each offers the scientific researcher a different insight to the surface being studied.
13. However, the parties did tell the OFT that for some applications at least, DPI instruments might be substitutable for QCM instruments or SPR instruments. Indeed, an internal document of Biolin said that the 'application scope for DPI is very similar to that of QCM-D² and application examples also has a lot in common'. Further, the document argued that DPI provides the same information as QCM-D but in a different way.
14. Further, some Farfield marketing literature does draw attention to SPR and QCM technologies by way of comparison with DPI. For example, one application study published on Farfield's website says '... DPI systems offer next-generation technology, providing valuable insights into the relationship between structure and function during protein-protein interactions. 'Biosensor' techniques such as SPR and QCM cannot reveal this level of quantitative structural information'.
15. The OFT has focused on the competitive constraints imparted on the parties' supply offering within the UK. To a certain extent third party comment in this case indicates that each category of instrument constitutes its own product market (which is consistent with Biolin/Nima). However, information from the parties, especially internal documents, reveal that the parties compare and contrast their own product offering with different categories of instruments. This suggests that there is at least some constraint imposed on the parties' offerings by different technologies (although the OFT recognises that the internal documents and marketing literature do conclude that instruments in different categories do have at least some different functions). The OFT has not found it necessary to conclude on the exact product market in this case. Instead the OFT has cautiously examined the case on the basis of DPI and QCM instruments together as well as DPI and SPR instruments together.

² A type of QCM instrument.

16. The parties also overlap in the provision on maintenance services. However, information submitted by the parties indicates that they only service and maintain instruments that they supply and therefore do not compete for maintenance work (or with any third party). Therefore, any competitive interaction takes place at the stage of the customer considering which instrument to buy and maintenance services are not considered any further in this decision.

Geographic scope

17. The parties submit that the geographic scope is worldwide.
18. Some customers told the OFT that they sourced their instruments from within the UK while another told the OFT that it sourced its instrument from outside the UK.
19. The OFT has not found it necessary to conclude on the geographic scope of the market in this case and, on a cautious basis, has examined the case on the basis of the UK.³

HORIZONTAL ISSUES

Market shares

20. The parties submitted that they together account for around one to five per cent of the supply of scientific instruments for the measurement of molecular interactions on surfaces. On a narrower basis, the supply in the UK of scientific instruments for measuring interactions on surfaces for characterising adsorption and desorption processes of soft material, in liquids, at the molecular scale in real time, the parties estimated that they account for around 15 per cent each. In absolute terms Farfield sold [] instruments in the UK in 2009 and [] in 2008. Biolin sold [] instruments in 2009 and [] in 2008.
21. Biolin's main offering in the UK is QCM-D instruments while Farfield supplies only DPI instruments. Since DPI is proprietary to Farfield it is currently the only supplier offering DPI instruments. The OFT's

³ This is the same approach as was undertaken in Biolin/Nima.

investigation has found that QCM and SPR instruments are the closest categories of instruments, by functionality, to Farfield's DPI instruments.

22. The parties submitted that these two categories of instrumentation are similar to the extent that they both measure mass change on the surface due to molecular interactions. However, the range of measurements that the instruments produce does differ. Biolin's QCM-D instruments measure the viscoelastic properties of the surface which Farfield's instruments do not measure. Further, the QCM-D instrument can measure up to four different interactions simultaneously which Farfield's instrument cannot do (it can measure only one interaction at a time). Conversely, Farfield's DPI instruments measure conformity changes on the surface which QCM-D does not measure.
23. Customers corroborated the parties' information in that they do not consider the parties' instruments as being close substitutes from the demand-side. One customer told the OFT that Biolin's instruments have no overlap with that of DPI which is very different.
24. Moreover, internal documents from Farfield which the parties supplied to the OFT does not identify Biolin as a key competitor to Farfield. The document describes Biacore as the market leader (its instruments are based on SPR technology). It also names as competitors Fortebio, ICx and Biorad among others. In addition, the parties submitted other SPR competitors as Genoptics, Reichert, Ibis and SensiQ. Although Biolin does supply SPR instruments in other parts of the world it has not done so in the UK.
25. For QCM instruments, Farfield's internal document references Farfield against Q-Sense although it notes that Farfield has never competed directly against Q-Sense and their products are complementary (based on their ability to measure different aspects of surface changes). The parties informed the OFT that other QCM suppliers are Seiko Instruments, Initium, QCM Research and Masscal Scientific Instruments.

THIRD PARTY VIEWS

26. No third party raised competition concerns with the OFT.

ASSESSMENT

27. The parties overlap in the supply of scientific instruments for measuring molecular interactions on surfaces. The OFT has not found it necessary to conclude on either the product or geographic scopes in this case. It has cautiously examined the case on the bases of DPI and SPR instruments together and DPI and QCM instruments together, both within the UK.
28. For the supply of scientific instruments for the measurement of molecular interactions on surfaces the parties together account for only one to five per cent in the UK. On a narrower basis, the supply in the UK of scientific instruments for measuring interactions on surfaces for characterising adsorption and desorption processes of soft material, in liquids, at the molecular scale in real time, the parties estimated that they account for around 15 per cent each.
29. Based on the parties' internal documents and third party comment, the OFT's investigation has found that the merger parties have not been close competitors to each other. The products that they supply are similar in some respects but differ enough by functionality for customers not to consider switching between them during their purchasing decision making process. Further, the OFT has identified a number of competitors in the supply of both SPR and QCM instruments to sufficiently constrain Biolin in the UK after the merger. To date Biolin has not supplied any SPR instruments in the UK.
30. Consequently, the OFT does not believe that it is or may be the case that the merger may be expected to result in a substantial lessening of competition within a market or markets in the United Kingdom.

DECISION

31. This merger will therefore **not be referred** to the Competition Commission under section 33(1) of the Act.