The Potential Impact of the Essential Facilities Doctrine on the Biotechnology Industry

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Summary

This thesis deals with the application of the so-called Essential Facilities Doctrine in Community law against the background of the special characteristics and needs of the biotechnology industry.

The Essential Facilities Doctrine obliges under competition law the dominant owner of an essential facility to grant access to third parties on non-discriminatory terms. When obliged to grant access the dominant undertaking has in turn to be given adequate compensation. The Doctrine is applicable to both private and state-owned companies. It can be applied in any industry, but has typically been applied when the essential facilities result from a (previous) legal monopoly or geographical particularities in the individual case.

The precise substance of the Doctrine varies from jurisdiction to jurisdiction and from one commentator to another. In EC law the Doctrine is a sub-category to the principle obliging dominant undertakings to supply, a principle emanating from Article 82 of the EC Treaty. According to the Doctrine a refusal to grant access to an essential facility constitutes an abuse of dominant position provided that the refusal would have a serious effect on Community competition. The major difference between the more general duty to supply and the Doctrine is that the first mentioned applies only to existing customers.

A legal doctrine mandating access to private property is very controversial from both a legal and an economic point of view. Its application can therefore be justified only in very special circumstances. The facility, which can be an infrastructure, a raw material, a product, a service, an intellectual property right, etc., needs to be "essential". That is there has to be an insuperable barrier to enter a market, which is usually situated downstream from the market where the facility exists. Without the facility the third party must not be able to compete in the concerned market. The definition of the “relevant market” will influence the assessment of whether a particular facility is “essential”. The narrower the market the more likely is the facility to be declared essential.

The rationale of the Doctrine is the belief that access will result in increased or developed competition, which will benefit consumers in term of more price worthy and qualitative products/services but also in term of entirely new products/services.

The Doctrine has been criticized for not taken into consideration the long-term effects of its application. The effects are said to be disincentives to invest and innovate. Such effects would have a particular harmful impact on the high technology industries. These industries are characterized by heavy investments in research and development and short product cycles resulting in first mover advantages. Intellectual property protection is in these industries crucial to protect the firms’ investments and preserve their incentives to innovate.

In the biotechnology industry the phase of research and development of products is particularly long. Furthermore the outcome of the ventures is often uncertain due to the high failure rate and the need of regulatory approval. The process of putting products on the market is therefore extremely expensive. The attraction of risk capital is thus vital to the survival of the industry. Unfortunately investors’ approach to the industry has traditionally been hesitant. The application
of the Doctrine to products/services provided by the biotechnology industry might further strengthen investors’ disapproving investment policy. Potential useful products/services would never reach the market and the victim would not only be the industry itself but also, and more importantly, the individual consumer.

The ECJ has applied the Doctrine to essential facilities enjoying intellectual property protection. The circumstances were however extraordinary; the intellectual property right prevented the emergence of a new product for which there was potential consumer demand and thus conferred on the dominant undertaking a monopoly over a secondary related market. The Doctrine does not generally apply to intellectual property rights.

To conclude, in theory nothing prevents the Doctrine from being applied to products in the biotechnology industry. The potential harmful effect of its application on the industry could be reduced through the introduction of more predictable criteria, which at least would prevent companies from cutting back on research and development expenses out of fear from a possible application in the future. It is vital that when assessing the impact on competition of a refusal to grant access the long-term effects are taken into consideration.
List of Abbreviations

Biotech Biotechnology
Co Company
CEO Chief Executive Officer
CFI Court of First Instance
CMLR Common Market Law Report
(EC) Commission European Commission
EC European Communities
ECJ Court of Justice of the European Community
ECLR European Competition Law Review
ECR European Court Report
ed Edition
EEA European Economic Area
EF Essential Facility (-ies)
EFD Essential Facilities Doctrine
e.g. exempli gratia (lat) = for example
etc et caetera (lat)= and so on
FTC Federal Trade Commission
High tech High technology
MMC Monopolies and Mergers Commission
MS Member States of the European Union
i.e. id est (lat) = that is
Inc Incorporated
IP Intellectual Property
IPO Initial Public Offering
IPR Intellectual Property Right(s)
IT Information technology
JO Journal Officiel de la Communauté Européenne
JV Joint Venture
Ltd Limited
NIR Nordiskt Immateriellt Rättsskydd
No Number
OECD Organisation for Economic Co-operation and Development
OJ Official Journal of the European Community
OPEC Organization of the Petroleum Exporting Countries
p(p) page(s)
para(s) paragraph(s)
Reg Regulation
SME Small and Medium sized Enterprises
St Saint
US United States of America
v versus
Vol Volume
1. Introduction

"There is no necessary connection between great science and great business opportunities; the great theory of relativity has yet to be turned into a money-spinner"

Economist, Feb 25, 1995

1.1 Background

The history of biotechnology is rather short, about 25 years old. It has been shaped by a series of outstanding scientific breakthroughs but also by the individuals who realized how to capitalize on them. Twenty-five years ago almost nobody had heard about an academic scientist in the biological sciences who decided to join a company. Chemists might do it, but not the geneticists, the bacteriologists or the molecular biologists. Still about that time the just mentioned scientists started to join industrial outfits. The shift was due to a growing interest and belief in a new technology, the genetic engineering. Today nobody questions the importance of the biotechnology industry. It is widely recognized to be a high tech industry forming part of the so-called "new economy".

The most important feature of high tech industries is the speed of technological change resulting in short product cycles and first mover advantages. The companies depend on an incessant flow of new innovations and they are consequently forced to invest heavily in research and development (R&D). Protection of intellectual properties, i.e. patents, know-how and trade secrets, is crucial to the companies’ survival in particular where the market itself is emerging and entire new products are coming into existence. The situation raises many regulatory issues not the least in competition law.

Competition law is designed to promote investments and business. It does in principle not encourage companies to collaborate with one another; rather on the contrary many jurisdictions prohibit collusion between companies. Yet according to the so-called Essential Facilities Doctrine (EFD) a dominant undertaking may under certain circumstances be obliged to collaborate with third parties by granting them access to a certain facility owned by the dominant undertaking.

In a market economy it is pro-competitive to allow companies to retain for their own use assets, which they have legitimately acquired or constructed. Therefore this property right should only be interfered with for strong public interest purposes. In view of this the application of the EFD is considered very controversial in particular as regards access to facilities resulting from heavy investments and major risk-taking.

1.2 Purpose

Why a thesis about the potential impact of the EFD on the biotech industry? The EFD is as already mentioned, in itself controversial and much concern has been expressed about its potential reach. Furthermore it appears to be rather blurry. The EFD has never been applied to any biotech facilities and one might ask oneself whether it is at all relevant to the biotech industry? If the answer is yes, to what kind of biotech applications can it be applied? Can an essential facility consist in a genetic testing service, a genebank, an
enzyme, an antibody, bio-informatics, etc? May the EFD be applied to products/services, which are enjoying intellectual property protection? What are the consequences of a potential application of the Doctrine for the biotech industry?

The questions are many and the purpose of this thesis is to try and answer at least some of these by examining the EFD from primarily a competition law perspective against the background of the particular needs and characteristics of the biotech industry. The aim is thus not to present the Doctrine in all its breadth but rather to analyze the legislation, case law, etc., which are appropriate in order to understand the potential impact of the Doctrine on the biotech industry. The focus will be on EC law. Foreign legislation and case law will only be dealt with to the extent that it adds to the analysis of the legal situation in the Community.

When trying to define essential facilities the issue of what kind of material one can claim possession over, is sure to arise. It can be noted that genomics companies produce and file patent applications for biological substances from cloned genes and biological materials that at one point belonged to a particular individual. Their conduct has given away to an intense debate about property rights. Regardless of the limits of future patents the biotech companies’ race to the national patent offices are proof of the crucial importance of intellectual property assets in the biotech industry. Even though the issue is of great interest and needs to be solved in the near future, the question of what kind of material is eligible to intellectual property protection is beyond the scope of this thesis. The relation between intellectual property rights (IPR) and competition law will however be discussed in order to illustrate the potential scope of the EFD.

Issues dealing with access to private property do inevitably include questions of economics. Some attention will be drawn to these questions in order to provide an understanding of the rationale of the EFD and of the consequences of its application. The economic aspects will however by no means be exhaustively scrutinized.

1.3 Method

The method used to procure all the material necessary to put together this paper has been the traditional legal one. Through consultation of the law, of its underlying sources, of the case law, etc., the relevant material has been identified and analyzed. The method used to arrive at the conclusions has been primarily deductive and analytical.

1.4 Material

The material used consists primarily in Community legislation, case law and articles in European legal journals. A substantial share of the material has been taken from the Internet. This material deals primarily with the innovations in and economic analysis of the biotech industry.

1.5 Outline

The second chapter provides an introduction to the biotechnology industry. The purpose of this chapter is two-fold: On one hand it seeks to provide some examples of biotech applications in order to illustrate circumstances where the EFD might potentially come into play. On the other hand it aims at describing the special features of the industry and why these make it particularly vulnerable to an application of the EFD.
The third chapter is devoted to the origin, general definition and rationale of the EFD. The purpose is not to describe the Doctrine in all its breadth but rather to present the common denominator of the different versions of the Doctrine. Furthermore some criticism of the EFD is presented.
The subsequent chapter elaborates on the legal ground of the application of the EFD in Community law.
The fifth chapter describes the substance of the EFD as applied in Community law.
The sixth chapter presents case law and scholars’ comments, which in the author’s opinion are relevant in order to assess the potential application of the EFD to biotech products/services.
The subsequent chapter deals with the rationale of intellectual property rights as well as their relation to competition law and the EFD.
The eighth chapter focuses on the Community approach to high tech industries like the biotech one. Since the EFD has not yet been applied in the biotech industry it is relevant to try to understand the potential approach of the EC authorities in a situation where a dominant undertaking in this industry is accused of abusing its position due to an alleged EF. Does the Commission take any special facts into consideration with regard to the special characteristics of high tech industries, etc.?
In the last chapter the author presents some general and personal thoughts about the application of the EFD and its potential impact on the biotech industry.
2. The Biotechnology Industry

2.1 The essence of biotechnology- a few examples

Biotechnology is often defined as a series of techniques based in life sciences. The different techniques compromise e.g. therapeutics, diagnostics, novel feed, plants, enzymes and xenotransplantation. In the following a few biotech applications will be described.

2.1.1 Genebanks

There exist a number of international and national research institutes that have created gene banks holding important genetic material. An interesting phenomenon on the international arena is the Consultative Group on International Agricultural Research (CGIAR), established in 1971. CGIAR is an informal association of 57 public and private sector-members that supports a network of 16 international agricultural research centers.

The mission of CGIAR is to contribute through its research to promoting sustainable agriculture for food security in the developing countries. Contribution to the preservation of bio-diversity by establishing an ex situ collection of plant genetic resources is one of CGIAR’s principal research objectives. Today, this collection compromises over 600,000 accessions of more than 3,000 crop, forage and pasture species. The gene bank thus contains huge amount of valuable information, which might be very valuable to third parties. Researchers not belonging to the network of CIGAR might demand access to e.g. germplasm in order to develop registerable plant varieties.1

2.1.2 Bioinformatics

*Exelixis Pharmaceutical Incorporated* is a biotech company using model systems to identify and validate high-quality screening targets for the pharmaceutical and pest-control industries. Having identified remarkable genetic similarities that exist across a broad range of species such as the common fruitfly, the nematode worm, mice and zebrafish, different model systems have been built up. The all-important cross talk among these systems is supported by bioinformatics and computational biology. The chief scientific officer of *Exelixis* describes the system as a bioinformatic “Rosetta stone” linking sequence information for various model organisms, to find its close relative in vertebrate genomes. The information one can extract from it is extraordinarily interesting for both the pharmaceutical and the pest-control industries.2

2.1.3 Enzymes

The enzyme market is relatively young and still in the process of evolution. *Prodigene*, an American biotech company in the business of developing industrial and pharmaceutical proteins from plants has produced the industrial enzyme laccase in plants. Laccase is a naturally occurring enzyme, which is traditionally isolated from fungi. Still today most laccase is produced through a fermentation process.

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1 http://www.murdoch.edu/au/elaw/issues/v5n3/blakeney53nf.html, p2 2-3
2 http://www.signalsmag.com/signalsmag.nsf/0/620FE29C9E5931418825678A000AA315, pp 4-6
Prodigene having rights to more than 70 patents received in April this year a European patent for a particular laccase production. Its production system is able to grow the enzyme in maize. This has several advantages. It is less expensive and very easy to produce and store. Laccase is one of the first non-food consumer products that can be produced in genetically enhanced plants. It is a key enzyme with application inter alia in the textile, pulp and paper and adhesives industries.

2.1.4 Diagnostics

For a long time diseases were diagnosed through guessing. Even at present times many chronic diseases having different etiologies are put together because of similar symptoms. Thanks to the advancement of genomics, immunology and molecular biology, such diseases can be reclassified based on their pathways. E.g. arthritis will soon be differentiated into several diseases and what today is identified as multi sclerosis might in the future be diagnosed as five different diseases. The newly gained knowledge will of course result in more specific and effective treatments.

Myriad Genetics is a company, which already from its start saw an opportunity in diagnostics. At the time a basic shift from reactionary to preventative approach was occurring in the practice of medicine. When the approach turned proactive there emerged a need to be able to identify the subset of population that was at risk. Accordingly Myriad started to develop its diagnostics strategy. Its efforts has resulted in two commercial products; BRACAnalysis, a genetic testing services for assessing the risk of breast and ovarian cancer and CardiaRISKAGT used to evaluate genetic predisposition to cardiovascular disease.

2.1.5 Therapeutics

The number of targets identified for treatment has multiplied several-fold over the last couple of years. The main beneficiaries of these targets are monoclonal antibody developers. The advantage of developing therapeutic monoclonal antibodies is that it can be done in only six months compared to at least a year for synthetic chemical products. Sadly enough virtually every major therapeutic product emerging from the biotech field has been to subject to intense and bitter patent litigation.

ImClone Systems Incorporated headquartered in New-York, is a bio-pharmaceutical company focused on oncology care through the development of a portfolio of targeted biologic treatments addressing the needs of patients with a variety of cancers. The company has three different programs including growth factor blockers, cancer vaccines and anti-angiogenesis therapeutics. The company is currently evaluating the therapeutic potential of its lead anti-angiogenic cancer therapy which is a chimeric antibody targeting the human Vascular Endothelial Growth Factor.

3 http://www.individual.com/Story.p0405122.900
4 http://www.prohostonline.com/_disc4/0000000e.htm, p 3
5 http:// recap.com/signalsma…/94C74A8925E448578825682B0070EE82
6 http://www.prohostonline.com/_disc4/0000000e.htm, p 2
7 http://www.prohostonline.com/_disc6/0000004c.htm, p 4
8 The effect of anti-angiogenesis therapeutics is that the cancer may be deprived of its blood supply.
9 That is an antibody containing genetically different tissues formed by grafting or mutation
receptor. Previous pre-clinical studies have shown that this receptor plays an important role in angiogenesis. The company has filed an Investigational New Drug application. 10

2.2 Special features and investors’ attitude

As implied in the previous section biotechnology is of a very diverse nature. There is however a common denominator for the different techniques: the process in bringing any new product to the market is protracted and extremely resource demanding. Through heavy investments in R&D the biotech companies aim at achieving a high pace in the development of products and production processes but the venture is risky. E.g. when validating genes as potential targets for drug intervention by far the biggest problem is the high failure rate during the overall process. The failure often becomes evident late in clinical development 11

Evidently in the biotech industry the initial fixed costs of production, including R&D, are far greater than the marginal cost of additional units of production. Due to the extremely expensive phase of development venture capital companies provide a critical link in the financing of the biotech companies. The investors are not unaware of the obstacles. In a recent American Industry Report related to the biotech industry a variety of risk factors to which investors are exposed were presented. Several of the factors were said to be unique to the biotech sector. The factors included:
- Assessment of relative merits and development status of competitive products.
- The timing of marketing approval and relevance of clinical trials
- The likelihood of patent disputes and potential outcomes.
- Cost /benefit analyses of product usage (also called pharmacoconomics)
- Market potential and penetration

Taking these risk factors into account the need to ensure incentives for investments becomes crucial to the survival of the industry. An encouraging element is the fact that some commentators consider the biotechnology industry to be “the most lucrative island of opportunity”. According to them the biotechnology has reached a stage where any further step forward will bring cures and develop libraries of molecules that can be transformed into therapeutics. In other words many biotech disciplines are now in “the zone of pre-perfection” within their particular domain. Many of the companies have as many as five or six fully developed products waiting for market authorization. Whole structures seem to be put in place, paving the way to the development of a multitude of valuable products. The firms appear to know how to spend their money in order to attain their goals. They know exactly what to buy, whom to hire, whom to ally with and also why. Furthermore the biotech companies demonstrate a more and more realistic approach towards problems, solutions and time frames for accomplishments. From this perspective the industry has indeed matured and become less speculative. Numerous insufficiently financed, science-driven companies appear to have turned into expanding, productive and profitable drug companies. 13

As to the investors attitude certain commentators argue that biotech companies’ values to an increasing extent are based on revenues and promises regarding far-reaching valuable products. If

10 http://www.imclone.com
11 http://www.signalsmag.com/signalsmag.nsf/0/620FE29C9E5931418825678A000AA315
12 http://www.sciweb.com/features/hq.cfm, p 2
13 http://www.prohostonline.com/_disc4/0000000e.htm, p 1-6
it is true it might depend on the quantities of data available about the existing and missing links in
the respective biotech field. Accordingly it would have become much easier for professionals to
make realistic predictions about the outcomes of technologies and products. The evaluation of
companies’ future growth would thus to a larger extent be based on concrete facts instead of mere
speculation.\textsuperscript{14}

Noteworthy is that the biotech companies likely to success are the technology leaders in emerging
fields and those that have \textbf{strong proprietary positions}. I.e. it is essential both to the companies
themselves and to the investors that patents and or other IPR protect their technology expertise.
Existing profitable companies and those emerging are generally sharing very similar business
models. These models are dependent on the companies to own a surfeit of technology, allowing
the companies to sell and trade technology or products to achieve financial security with minimal
dilution.

To sum up, regardless of whether the industry has indeed matured or not the biotech companies
need financing in order to realize their objectives. The financing environment of the biotech
industry seems to change from one extreme to another as investors fall in and out of love with
biotech stock. As with any other publicly traded group, it is impossible to prevent the biotech one
from experiencing cycles of ups and down. Only a year ago van Brunt the editor of the Signals
Magazine\textsuperscript{15} wrote that the biotech industry was in the midst of one of its worst financing crises in
its history. Investors just did not seem interested in most biotech stocks. This year started with
an amazing run-up in the stocks. Apparently investors are now hoping to profit from new
technology that is going to change the practice of medicine.

\textsuperscript{14} http://www.prohostonline.com/_disc4/0000000e.htm, p 3
\textsuperscript{15} Signals Magazine is an on-line magazine analyzing the Biotechnology Industry
\textsuperscript{16} http://recap.com/signalsma…/31F7C75CF259CF78825683200762433
3. Introduction to the Essential Facilities Doctrine

3.1 The origin of the Doctrine

The EFD has traditionally been said to originate in a US Supreme Court decision from 1912. The case, *US v St Louis Terminal Railroad Association* involved a multi-firm conspiracy, which violated section 1 of the Sherman Act.

The *Terminal Railroad Association* had been created expressly to buy up the properties of independent St Louis terminal companies in order to combine them into a single system. Initially the Association bought up several companies, including the only existing railroad-bridge from St Louis to East St Louis and every terminal company connected to it on either side. Shortly after this purchase another bridge, the Merchants’ Bridge, was completed and could operate in competition with the Association. In the years to come also this second bridge were to be acquired by the Association, as was the sole other terminal system crossing the river and serving St Louis. Because of the hills surrounding the city it would have been economically unfeasible to build any other bridges across the river. The Association thus obtained control of every terminal facility serving St Louis railroad traffic.

An important aspect of the case was that while the members of the Association had full and free access to the relevant facilities, other companies could only be admitted after a unanimous vote of the members and after having paid a considerable fee. The Court was concerned by the effective veto that each member company had and by the fact that the geography of the St Louis area prevented the feasibility of the creation of new terminal facilities. The Court considered the creation of another bridge to be “impractical and “prohibitively expensive” due to the topography of the area. It even said that it would be “impossible” to enter St Louis without using the Association’s facilities. Accordingly access to the Association’s terminal facilities was deemed “indispensably necessary” for competition in the St Louis area railroad traffic. Consequently the court fashioned a remedy stating that the Association would not be illegal if it acted as the impartial agent of every line compelled to use its facilities. The Association was hence ordered to admit any company that sought entrance to it and to provide for use of the facilities by any company, which chose not to join the Association, and to eliminate any restrictions between companies on the use of the Association’s facilities.

Although the court never used the word ”essential ” in the case it did use the word ”facilities” ubiquitously. The term ”essential facilities” seems to be an appropriate characterization of the property owned by the Association.

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17 US case *United States v Terminal Railroad Association*, 224 US 383 (1912), USSCR 56 L Ed 810
18 Subsequent US case law has showed that the EFD under US law is on of three exceptions to the basic rule that in in the absence of any purpose of creating or maintaining a monopoly, even a monopolist is free to exercise his discretion as to the parties with whom he will deal. The intent test and the monopoly leveraging test are the two other tools used to establish this exception.
3.2 The definition of the Doctrine

The EFD has today multiple meanings and its precise definition varies from jurisdiction to jurisdiction, from commentator to commentator but also from case to case depending on issues such as the type of “facility”, ownership over the facility and the structure of the concerned market. There is however always a common denominator: the wish to mandate access to something by someone who otherwise would not get access. The EFD thus sets out the criteria for when a dominant undertaking will be required to provide access to a particular facility.

The EFD can be applied in any industry. Traditionally it has come into play after an industry is being deregulated. It is generally used in single firm conduct cases involving alleged abuse of dominant positions. In most cases the dominance will be largely due to owning or controlling the essential facility.

As to the market situation underlying the EFD it requires two related markets or activities, often expressed as an upstream and a downstream market, thus a vertical relationship. Both markets/activities are components of the product bought by the end consumer. The EF problem can arise in either market as depicted below in the Figure. In the typical case one firm is active in both markets and other firms are active or wish to become active in the downstream market.

![Figure: The Essential Facilities Problem](https://example.com/figure)

In the scenario of the upstream facility, Firm A supplies the end consumers with a product that is a combination of the upstream and downstream activities. The question arise, should Firm X having a capability to perform the downstream activity only, in order to be able to supply consumers as well as Firm A, be granted access to the upstream activity of firm A?

In the case of the downstream facility conceptually analogous considerations apply.

Most products purchased by consumers are involved in a number of separate processing stages. Consequently almost any product market appears in principle to be able to become subject to an

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20 The Figure is taken from Ridyard’s article, “Essential Facilities and the Obligation to Supply under UK and EC Competition Law”, ECLR [1996] issue 8, p 439
EF dispute. The sorts of facilities that have been highlighted in European cases involving EF or similar issues, include e.g. harbor facilities, television program listings, bank check clearing facilities, computer reservation systems, airports, telecommunications networks, electricity transmission grids, natural gas pipelines and performing rights societies. Other potential EF are interface information, IPR that span an entire market, a raw material, a service or access to a physical thing or place.

The Figure can apply in the following cases:

<table>
<thead>
<tr>
<th>&quot;Upstream&quot;</th>
<th>&quot;Downstream&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport infrastructure ⇒ Transport operator</td>
<td></td>
</tr>
<tr>
<td>(E.g. port, rail, airport) (E.g. ferry, airline, train)</td>
<td></td>
</tr>
<tr>
<td>Pipeline/Wire ⇒ Supply of gas, electricity, water, telephone, etc</td>
<td></td>
</tr>
<tr>
<td>Manufacture ⇒ Distribution/retail</td>
<td></td>
</tr>
<tr>
<td>Raw material ⇒ Processing</td>
<td></td>
</tr>
<tr>
<td>Manufacture ⇒ Branding/marketing</td>
<td></td>
</tr>
<tr>
<td>Spare parts ⇒ Maintenance service</td>
<td></td>
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</table>

The defendant’s and the plaintiff’s basic arguments are similar regardless of the precise context of the individual case.

The complainant firm argues that the dominant firm’s refusal to grant access prevents the plaintiff from entering the market; a fact resulting in reduced consumer choice and unnecessarily high prices due to the lack of competition. Furthermore it argues that the costs for establishing its own facility would be prohibitive, eliminating the potential advantages.

The dominant firm will in turn argue that there are efficiency advantages in keeping the upstream and downstream activity in-house and that the resulting benefits belong to itself as a reward for having built up the facility in the first place. Both firms’ arguments seem reasonable.

What is then the rationale of the EFD?

### 3.3 The rationale of the Doctrine

Why should a company, which has the vision to see the importance of one particular asset, and acquires that asset, have to share it with other companies that lacked that foresight?

The requirement to give access to a private asset to a third party is very controversial from both a legal and an economic point of view. The freedom of contract implying that you never have to enter a contractual agreement unless you want to is a fundamental legal principle. Similarly, respect for property rights is essential in a functioning market economy. Consequently a legal doctrine mandating access to private assets can only be justified in exceptional circumstances.

If a company’s dominant position is not due to a natural monopoly but to large returns to scale, it may be impossible for another company to enter the market if it only has the resources for a small-scale entry. In other words it might be very hard for smaller companies to compete effectively on these kinds of markets because of their cost handicap. Alternatively, small

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23 Ridyard, op cit, p 439
24 Ibid, p 440
companies may be incapable of competing in industries characterized by large network effect because of the consumers’ attitude. That is consumers are in some situations not willing to pay for products unless most other consumers have purchased or are willing to purchase identical or compatible products.

A market, which is generally lacking competition, will often have repercussions on the consumers’ welfare. E.g. where the owner of an essential facility is competing in the upstream or downstream market, he has incentives to refuse access or restrict it by charging monopoly prices. Denying access to the complainant will stifle a potential short-term gain to consumers in terms of price, quality and choice. Accordingly access will in some situations enhance consumer welfare. The doctrine therefore seems justified from a consumer perspective. Benefits to consumers but also potential positive effects on the integration of the Common Market and protection of SME have been pointed out as possible justifications of an application of the EFD in Community law. In US the emphasis appear to be more on the efficiency enhancing effect than on the consumer welfare that may result from it.

3.4 The pitfall of the Doctrine- the harbor example

When formulating an efficiency enhancing EFD it is essential to take into account the effect of mandating access on dynamic efficiency. In the following an example illustrating this issue will be presented. The example is taken from the Background Note to the OECD Competition Policy Roundtables concerning the essential facilities concept in 1996.

Picture a private, unregulated, non-aided firm contemplating an investment, such as a harbor. Assume that the future demand for that port is unknown until after it is built. The firm may then face three possible results: a negative return on investment in the harbor in any case (low demand), a negative return if access is ordered but positive if it can exclude competitors (medium demand), and a positive return even if access is mandated (high demand).

It may be the case that if the firm expects access to be ordered, then it would not build the harbor, while if it expects access not to be ordered it would build the harbor. Accordingly a duty to provide access can deter initial investment in such a facility. On the next page this argument is explained in greater detail.

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Dynamic effects of mandating access

Assume that the harbor cost 7 currency to build and that the decision to build must be taken before the quantity of demand is known. Assume that the demand can be high, medium or low, that the corresponding revenues are as shown, and that the probability of each of these outcomes is 33%.

E.g. assume that if the demand is "high" then the harbor would have revenues of 8 if access were mandated and of 10 if it were not. In the situation depicted here, the harbor would be built if demand were known in advance to be "high" whether or not access is ordered. The harbor would not be built if demand were known in advance to be "low".

If the demand is medium the expected profits from building the harbor if access is mandated is \(-1\) (0.33x1-0.33x1-0.33x3) and expected profits if access is not mandated is +1. Consequently, assuming risk neutrality, the firm will build the harbor if it expects not to be obliged to provide access but will not build the harbor if it expects access to be ordered.

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The impact of the application of the EFD on companies’ investment strategies is of course in reality somewhat more complex than implied by the example above. Nevertheless there exists indeed an inherent conflict between static and dynamic incentives for competition. Invariably a denial of access will stifle a potential short-term gain to consumers in price, quality and/or choice of terms. Likewise however, an obligation on the dominant firm to share its EF will invariably affect the incentives and rewards in the market. The company owning the facility will view the obligation as a robbery of its expected returns from investments made. Even the motivation for others to undertake similar investments in the future will to some extent be dulled.  

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4. The Legal Ground of the EFD in Community Law

In Community law the EFD is not an independent doctrine or an exception to normal rules, but a specialized example of the Community competition rules about handicaps and discrimination created by dominant undertakings. In this context Article 82 (former Article 86) of the EC Treaty constitutes the key. Thus in the Commission decision in Sea Containers one can read the following. "The owner of an essential facility which uses its power in one market in order to protect or strengthen its position in another related market (...) imposing a competitive disadvantage on its competitor, infringes Article 86".30

Article 82 reads as follows:

"Any abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it shall be prohibited as incompatible with the common market in so far as it may affect trade between Member States. Such abuse may, in particular, consist in:

(a) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions;
(b) limiting production, markets or technical development to the prejudice of consumers;
(c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;
(d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

According to Article 82 abuse within the common market or a significant part by an undertaking of a dominant position is prohibited if it may affect trade between MS. In other words the mere fact that an undertaking enjoys a dominant position is not enough for Article 82 to apply. The dominant position has to be abused in a way, which affects intra-community trade. There exists a reciprocal relationship between the concept of "abuse" and that of "dominant position". A given practice such as a refusal to sell, which is permitted without an agreement so to act for one or more firms having no dominant position may be abusive when carried out by a firm in a dominant position.

Even if Article 82 generally provides the legal ground in EF cases Articles 8131 and 8632 may serve the same purpose. The main objective of these three Articles is the same; to ensure that competition in the Common Market is not distorted, an objective stemming from Article 3 (g) of the EC Treaty. Noteworthy is also that many of the criteria are defined in more or less the same way. The articles have to be applied in accordance with the principles of proportionality, of

29 Under the Treaty of Amsterdam many provisions have been renumbered. Article 85 is now 81 and Article 86 has become Article 82, etc.
equality and of non-discrimination; all fundamental legal principles of the Community.33

However since Article 82 is the article generally relied on it is the one henceforth focused on.

4.1 The "relevant market"

When determining whether Article 82 is applicable the first step is to define the "relevant market". This concept has in turn to be divided into two sub-sections, the product market and the geographic market.

From the case United Brands Company v EC Commission34 it follows that the product market is dependent on substitutability of products from the consumers'/buyers’ perspective owing to the products’ characteristics, their prices and intended use. In the "Tetra Pak II" case35 the Court pointed out relevant criteria for determining whether certain products are substitutable, e.g. the competitive conditions and the structure of supply and demand in the market. In the same case it was furthermore clarified that if there is potential substitution it must be an immediate possibility.

The 1997 Commission Notice on the definition of relevant market36 demonstrates that the assessment of the relevant market gradually has become more sophisticated, more influenced by economics. A battery of economic tests has emerged, e.g. shock-test, quantitative and cross-elasticity test, causality tests and price-similarity tests.37

Once the relevant product market has been identified it has to be related to a defined geographic market. According to Article 82 the undertaking has to enjoy a dominant position in "the common market or a substantial part of it." In other words a dominant position can be hold either in the entire Community or in a limited area of it. The relevant geographic area is the area where the undertakings concerned are involved in supply and demand of products/services and in which the conditions of competition are homogenous. The conditions of competition serve as a tool to distinguish the relevant area from the neighboring one.38 The policy of what is required for an area to be considered "a substantial part" has changed over the years, from two Member States, to one Member State, to a major port.39 Hence when determining whether a specific territory is large enough to constitute a substantial part of the common market one must consider the pattern and volume of production, the consumption of the relevant product as well as the habits and economic opportunities of vendors and purchasers.40

37 Lidgard, "Competition Classics", Master of European Affairs, Faculty of Law, Lund University, 1999, p 336
38 Lidgard, op cit, p 341
4.2 The concept of "dominant position"

Once the relevant market has been defined it must be determined whether the undertaking accused of abuse, enjoys a dominant position. In the opinion of ECJ a dominant undertaking, regardless of the reasons for which it is dominant, has a special responsibility not to impair undistorted competition on the common market. The competition rules do not aim at discriminating against larger or more influential companies as such, but rather to uphold a competitive environment. 41

An important factor when establishing a potential dominant position is the share of the relevant market held by the undertaking. Market shares of 60% and more are clear proof of dominance, while shares of 25% and less is proof of the opposite. The Court has in its case law pronounced a presumption of dominance when the share is over 50%. Still the notion of "dominant position" is not defined by fixed parameters, but by a combination of several factors. In the intermediate market share ranges of 20-60%, the importance of other factors will increase. The assessment has then to be done on a case-by-case basis. In these situations the market share is a helpful tool but is by no means determinative. Instead the total economic context that the undertaking is exposed to has to be evaluated. 42 The factors that will influence the final determination might include:

- The structure of the undertaking (e.g. is the company vertically integrated)
- Technical knowledge compromised by the undertaking
- The market share of the competitors
- Intellectual property protection enjoyed by the dominant undertaking
- Customer dependence
- Availability of raw materials and supplies, etc.

The fundamental test will be whether the undertaking can act independently of its competitors and customers. In the "Hoffman-La Roche" 44 case the ECJ defined a dominant position as follows:

"a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of the consumers"

When assessing the dominant position one generally turns to the relevant market, as already explained the market where the products are substitutable. Neighboring markets then remain unaffected by the assessment. In some situations a strong position in one market can however affect the behavior of the dominant undertaking in another associated market. According to the Court’s reasoning in "Tetra Pak II", a strong but not dominant position in one market and a leading position in another distinct, but closely associated, market may lead to the conclusion that the undertaking holds a dominant position on the markets in question as a whole. Tetra Pak was

41 Lidgard, op cit, p 330
42 Ibid, p 341-348
44 Case 85/76 Hoffman-La Roche & Co AG v EC Commission, 13 February 1979, ECR 1979 461, [1979] 3 CMLR 211
considered to enjoy a greater freedom of conduct compared to the other operators on the concerned markets.45

4.3 The concept of “abuse”

A dominant undertaking will as already mentioned only be judged to violate Article 82 if it has abused its dominant position; dominance per se is never an offence. If a dominant company abuses its position by either reducing residual competition or preventing the development of new competition, no form of exemption is available.

In order to constitute an abuse it is not required that the dominant undertaking has an intention to prejudice other parties.

Article 82 contains a non-exhaustive list of abuses. The enumerated abusive conducts are sometimes divided into two categories. The first category of abuses may directly prejudice against consumers while the second one consists in abuses, which indirectly prejudice them by harming the effective competitive structure of the market. The Article is nevertheless not only intended to protect the consumers but the competitive structure itself as well. In some circumstances these two interests clash. This fact along with the difficulties in measuring abusive conduct sometimes makes the application of Article 82 very controversial.46

4.4 The ”effect on trade” criterion

Having identified the existence of a dominant position on a relevant market, it must be established that the alleged abuse is capable of having an effect on intra-community trade. The purpose of this trade criterion is to establish the boundaries between Community law and national law.

In the ”Michelin” case ECJ declared that when a dominant company obstructs access to the market by competitors it does not matter that such conduct is confined to one Member State as long as it is capable of affecting patterns of trade and competition on the common market.47 In “Continental Can”48 the Court declared that a conduct resulting in a substantial reduction of competition might infringe Article 82. In a subsequent case, “Hoffman-La Roche”49 the degree of foreclosure of the market was small, less than 2%. The Court nevertheless stated that:

“since the course of conduct under consideration is that of an undertaking occupying a dominant position on a market where for this reason the structure of competition has already weakened, within the field of application of Article 86 any further weakening of the structure of competition may constitute an abuse of a dominant position. Thus even a very small reduction of competition may be enough to fulfill the “effect on trade” criterion of Article 82.”50

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49 Case 85/76 Hoffman-La Roche & Co AG v EC Commission, 13 February 1979, ECR 1979 461, [1979] 3 CMLR 211

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4.5 Relevant case law

Refusal to supply and similarly a withdrawal of supply from downstream competitors are practices, which on many occasions have been considered as abusive. More precisely a refusal/withdrawal to supply will in some circumstances limit production, markets and technical development to the prejudice of consumers, the criteria of Article 82 (b). Community case law demonstrates in fact that there is a broad duty to supply for undertakings in dominant positions. Through the application of a narrow market definition to a particular undertaking- by defining the market in terms of the undertaking’s own products- the Commission has on several occasions imposed an obligation to supply on the dominant undertaking. Indeed, the Commission has stated that, as "a general principle, an objectively unjustifiable refusal to supply by an undertaking holding a dominant position on a market constitutes an infringement of Article 86".52

It is from this principle that the more precise legal ground of the EFD in Community law emanates. Related to a mere refusal to supply is a supply on dissimilar conditions despite equivalent transactions, a conduct that is abusive according to Article 82 (c). The “refusal to supply” principle is exemplified and limited in the two ensuing cases.

4.5.1 The Commercial Solvents Case

The American Company Commercial Solvents Corporation (CSC) enjoyed a dominant position on the world market of production and sale of products based on the raw materials nitropropane and aminobutanol. CSC held 51% of the voting stock in an Italian company (hereinafter called “Istituto”) which acted as a reseller of the nitropropane and aminobutanol produced by CSC. Istituto was the only supplier of the relevant raw material within the Community. One of Istituto’s customers was the Italian company Zoja, which used the raw material to manufacture ethambutol-based products. Istituto tried to acquire Zoja but failed. Istituto then increased its price to Zoja who in turn traded with an alternative source of supply, which eventually dried up. At the same time CSC changed its sale strategy and started to supply Istituto exclusively with dextro-aminobutanol for processing into bulk ethambutol. Istituto then developed its own specialties based on ethambutol. By this time Zoja turned to Istituto hoping to be supplied with aminobutanol but Istituto. Zoja then notified the Commission. CSC argued that it was entitled to refuse to supply since its intention was to integrate vertically down-market, i.e. use the raw material for its own production of the finished product. The Commission found that CSC and Istituto had infringed Article 82 by stopping supplies of aminobutanol.53 The matter was appealed.

4.5.1.1 The market to be considered

In the opinion of the CSC and the Istituto the relevant market could not be that of ethambutol since ethambutol only forms part of the larger market in anti-tuberculosis drugs. According to the

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51 Cowen, op cit, p 535
52 Commission Notice, Polaroid v SSI Europe, EC Commission Thirteenth Report on Competition Policy, § 157
Court it is however possible to distinguish the market for manufacture of a product from the market on which the product is sold:

"An abuse of a dominant position on the market in raw materials may thus have effects restricting competition in the market on which the derivatives of the raw material are sold and these effects must be taken into account in considering the effects of an infringement, even if the market for the derivative does not constitute a self-contained market."

4.5.1.2 Abuse of the dominant position

The applicants considered that they could not be held responsible for stopping supplies to Zoja since the stop was due to a legitimate change of policy by CSC. The policy was inspired by a legitimate consideration of the advantage that would result from expanding its production to include the manufacture of finished products and not limiting itself to manufacture of raw material or intermediate products. CSC thus decided to limit/cease, the supply of nitropropane and aminobutanol to certain parties in order to facilitate its own access to the market for the derivatives.

According to ECJ an undertaking, which is dominant due to the production of a particular raw material, will be able to control the supply to manufacturers of derivatives. Consequently he cannot even when starting to manufacture these derivatives himself, act in such a way as to eliminate the competition, which in the case in question, would amount to eliminating one of the principal manufacturers of ethambutol in the common market.

Noteworthy is that the Advocate General suggests that a dominant company may have an obligation to meet the requirements of the market. The refusal to supply Zoja was thus considered to be an abuse of dominant position.

4.5.1.3 The effect on trade

Since Zoja sold 90 % of its production outside the common market, the appellants argued that it was principally the world market and not the common market that was the affected by the refusal to supply. According to the Court the prohibition contained in Article 82 cannot be limited to "industrial and commercial activities supplying the Member States". The Article covers abuse, which may directly as well as indirectly prejudice the consumers. In the latter case the abuse prejudices them by impairing the effective competitive structure of the common market. Accordingly all consequences of the alleged abusive conduct on the competitive structure of the common market -without distinguishing between production intended for sale within the market and that intended for export- must be considered. When the abusive conduct of a dominant company is likely to eliminate a competitor there will be consequences for the competitive structure within the common market. In these situations it does not matter whether the abusive conduct relates to the competitor’s exports or its trade within the common market.

4.5.2 The ABG case

The ABG case arose as a result of the shortages of oil during the crisis that started in November 1973 when OPEC first raised prices and boycotted the Netherlands. During the crises Benzine en

55 Ibid, para 25
56 Lidgard, op cit, p 361
57 Case 6-7/73, Istituto Chemioterapico Italiano & Commercial Solvents Corporation v Commission, para 32-33
Petroleum Handelsmaatschappij (BP) substantially reduced its supply of petroleum to a Dutch independent central buying organization, ABG. BP’s reduction to ABG was 73% while the average reduction to its customers was about 12.7%.

According to the Commission the action put ABG at a competitive disadvantage without any objective justification. In its opinion BP should have supplied all its former customers with the same proportion of the amounts it had supplied in an earlier period. The Commission after having considered the extent, regularity and continuity of the commercial relationship between the parties ruled BP’s conduct as abusive.

On appeal the Advocate General stated: “In my opinion such a rule, which manifestly is not expressed in article 86, could be held to be implicit in the terms of that article only if it were equitable, practical and generally accepted. It appears to be that it would be none of these things”.

ECJ’s approach towards the commercial relationship between ABG and BP was indeed radically different from the one taken by the Commission. The Court considered ABG to be far from a regular customer either in view of long-term contractual or by reason of regular spot purchases. ABG was merely an occasional customer. Moreover BP showed that due to a reduction in its own crude oil supplies, it had reduced its contractual commitment to ABG 12 months before the oil crises occurred. BP had even requested that ABG in the future should obtain most of its crude oil from other sources, while offering to refine this crude oil. BP had earlier in 1973 “lent” ABG some crude oil to be repaid at a later date. According to the Court it was justifiable to remove these figures from the total sale of oil to ABG. The percentage reduction in the supplies to ABG then appeared to be too small to constitute an abuse of dominant position. Thus ABG did not infringe Article 82.

4.6 Lesson to be learned

There exists a broad duty to supply/deal for dominant undertakings in Community law. It is important to note that the obligation applies not only in relation to competitors but also in relation to parties with whom the dominant company is not competing, i.e. mere customers. This obligation is based on Article 82 (b) which focuses on the impact of conduct on customers regardless on whether the dominant company is vertically integrated or not. The Commercial Solvents case opened up for a very broad application of the duty to supply principle and is still considered controversial. Istituto was according to many commentators merely punishing a disloyal former customer, a behavior, which is acceptable in the harsh business world as long as it is proportionate. Such argumentation does however not consider the special responsibility conferred on dominant undertakings in Community law. Furthermore the duty to supply was limited in the subsequent ABG case. The duty to supply equitably is there limited to regular customers.

It can be added that in most "refusal to deal" cases it is perhaps not the product itself which is at stake, but rather a secondary market.

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59 Ibid, at ECR 1539
60 Goyder, "EC Competition Law", 2nd ed, 1993, p 355
61 The obligation seems to have no parallel in US antitrust law. Kallaugher, op cit, p 326
5. The definition of the EFD in Community law

As mentioned in the previous chapter, the duty to provide access to essential facilities can be deduced from the Community case law principle that there is a broad duty for dominant undertakings to supply/deal. This principle has made it unnecessary to elaborate a particular category for essential facilities cases.

In a situation where a party seeks access to a facility without which he cannot operate on the market, a refusal to grant access will in some circumstances limit the development of new competing products or even the emergence of entire new markets contrary to Article 82 (b). Although there are many cases concerning third party access that may be susceptible to an essential facility analysis, there are very few explicit references to the EFD in the Community case law. The first published Commission Decision to use the term ”essential facility” is the “Sea Containers” case, where the Commission stated:

”a dominant undertaking which both owns or controls and itself uses an essential facility, i.e. a facility or infrastructure without access to which competitors cannot provide services to their customers, and which refuses its competitors access to that facility or grants access to competitors only on terms less favorable than those which it gives its own services, thereby placing them at a competitive disadvantage, infringes Article 86, if the other conditions of that Article are met. A company in a dominant position may not discriminate in favor of its own activities in the related market...without objective justification.” Specifically where...the competitor is already subject to a certain level of disruption from the dominant undertaking’s activities, there is a duty on the dominant undertaking not to take any action which will result in further disruption. That is so even if the latter’s action make, or are primarily intended to make, its operations more efficient.”

The “Sea Containers” case involved access to port facilities at Holyhead in Wales, which were used for ferry services to Ireland. The plaintiff, Sea Containers that had no track record of operating from Holyhead port, wanted to start up a new high-speed service. The case was resolved on the Commission’s insistence that Stena Sealink, the owner of the facilities should provide access to the port facilities on non-discriminatory terms. The Decision suggests that Article 82 imposes special procedural obligations on the owner of the facility. Sealink’s failure to negotiate and consult with its customers created a presumption for abuse of dominant position. If not the EFD but merely the less sophisticated duty to supply principle had been applied it seems very unlikely that Sea Containers would have been granted access to the port facilities since it had not been using them before, i.e. Sea Containers was not an existing regular user.

As to the question of dominance in Community law the owner of the EF does not have to be dominant on both the market where the facility exists and another related one where it can be used in order for the Doctrine to apply. However if he is dominant on both markets the arguments for a duty to grant access are very much stronger. This policy differs from the US one where the

62 Notice on the Application of the Competition Rules to Access Agreements in the Telecommunications Sector, p 20
64 Kallaugher, op cit, p 331
EFD comes into play only where a refusal to grant access will have effect on a market where the owner of the facility has market power.66

5.1 What makes a facility “essential”?

Deciding what are essential facilities is a question of estimating the extent of the competitors’ handicap, and whether it would be permanent or just temporary. The starting point is to define the relevant market for which access to the facility is essential. As already mentioned the identification of the relevant market depends primarily on the existence of substitutes. Case law has shown that the geographic market definition plays a vital role in identifying substitutes. In e.g. UK case law the issue of access to ports has arisen in different EF cases. In one there was found to be three corridors and three markets for crossing the Irish Sea, in another there was found to be one corridor and one market for the crossing between Britain and continental Europe. Yet another example is the Channel Tunnel providing different extremes of possible market definitions. A market of “transport services between Britain and the Continent” could be divided into freight trains, business travelers and leisure travelers. Business travelers might consider airlines to be viable alternative whereas leisure travelers may view the ferries as substitutes67.

Once the relevant market has been defined the next step will be to decide whether the facility is duplicable. Both the cost and time necessary to duplicate the facility will then have to be evaluated. The company seeking access has to be prepared to put in an effort comparable to that of the dominant company and still not be able to create the facility.68 The reasons why the facility cannot be duplicated can be physical, political or economic. In practice without access there has to be an insuperable barrier to entry the market for the competitors of the dominant company. Hence without access all or most competitors would be excluded from the market. The plaintiff does not have to prove that a so-called natural monopoly is involved.69 In the UK “Mid-Kent buses” case70 land use planning constraints and the availability of land made impractical the duplication of a bus station at the suitable location. The MMC, applying the same principles as those of the EFD but using another language, found that access to the Pentagon Bus Station was not essential but merely desirable. In the recent Bronner case the ECJ elaborated on the criterion of essentialness.

5.1.1 The Bronner case

In the so-called Bronner case71 in Austrian court referred to the ECJ for a preliminary ruling in a case concerning the Austrian newspaper market. The publisher of the daily newspaper Der Standard, O. Bronner sought an order requiring Mediaprint to distribute Der Standard under a provision of the Austrian competition law. Der Standard had a market share of around 4 % while Mediaprint published newspapers with a combined market share of around 45 %. Mediaprint that had established a nation-wide home-delivery system gave a third publisher the right to distribute its newspaper through Mediaprint’s

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66 Kallaugher, op cit, p 319
68 Ridyard, op cit, p 448
70 The UK Mid and West Kent bus services case, MMC Report, August 1993
distribution system while refusing the same right to Der Standard. O. Bronner then argued that the home-delivery scheme constituted an essential facility and thus that Mediaprint’s refusal to distribute Der Standard amounted to an abuse of dominant position.

The ECJ did not penetrate the issue of market definition but assumed that the related market was the newspaper market. In order to establish that the scheme was an essential facility the Court stated that it had to be demonstrated that access to the home-delivery scheme was necessary in order to compete in the related market. Hence, the question of substitutability between the different services had to be examined. The ECJ did not go into the question itself but advised the national court to establish whether there was a separate market for home delivery of newspapers, or whether other means of distributing newspapers were sufficiently substitutable.72

The Court further stated that in addition to being indispensable for a competitor in the newspaper market, the distribution system had also to be impossible to duplicate. The requirement of ”impossible” was said to mean that not only had it to be impossible for O. Bronner to set up a competing home-delivery scheme. In addition it must not be economically viable for a firm that having a circulation comparable to that of Mediaprint to set up a competing scheme.73 The case that O. Bronner due to its weak circulation did not consider it economically viable to set up a competing home-delivery distribution was thus not enough to render Mediaprint ‘s refusal abusive.74 The distribution system could thus not be considered to be an essential facility.

5.1.2 Consequences of the Bronner case

Since in principle almost all facilities can be duplicated in a physical sense it is in the end economic considerations that will determine whether a facility is duplicable or not, i.e. whether it is “essential”. The criterion that a facility has to be “essential” was before the “Bronner” case considered to be fulfilled if the claimant lacked ”the ability” to duplicate the facility, indeed a very unclear requirement. In the “Bronner” case the Court gave a somewhat more refined definition of ”impossible”. Hence it has to be impossible for an undertaking of the same size as the owner of the EF to duplicate the facility.

According to Bergman, chief economist at the Swedish Anti-trust Authority, there are at least two possible ways to interpret this new criterion:

1. The market entrant has to be unable to establish a competing facility even if it were to capture half of the market. In other words, at the current size of the market, a duopoly is not economically viable.

2. If the incumbent were a monopolist, the requirement would be that a duopoly is not economically viable even if the market were to increase twofold. Thus an even stricter requirement.75

Regardless of the just interpretation of the criterion introduced by the Court, it is clear that with the Bronner case the position of an incumbent of an EF has been strengthened. Genuine essential facilities will without any doubt be found more seldom in the future.76

72 Ibid, para 34
73 Ibid, para 46
74 Ibid, para 47
75 Bergman, ”The Bronner Case- A Turning Point for the Essential Facilities Doctrine”, ECLR, [2000] issue 2, pp 60-61
76 http://www.bakernet.com/Publications/Documents/848_tx.htm, p 10
5.2 "Control" over a facility?

A basic criterion of the EFD is that someone is "controlling" an essential facility. Is "control" limited to ownership or might "control" be exercised through an exclusive contract with the owner of the facility? If the latter, then which party is liable? If a company rents an essential facility with exclusive rights on commercial conditions it is generally not allowed to granting third parties permission to the facility. On the other hand the actual owner cannot on contractual grounds allow competing companies to share the facility without breaking the contract with the original renter. It may be difficult to determine who really controls the facility and to find the possible links between the owner and the renter of the facility. This important issue has not yet been dealt with by the Community authorities and will probably have to be solved on a case-by-case basis.  

5.3 The need for an effect on competition

The test determining whether there is a duty to provide access is an objective one. A particular competitor cannot plead that it is especially vulnerable. There exist no specific legal rules to resolve these cases. Instead it rather requires application of basic antitrust economics. A duty to provide access exists where a refusal objectively seen would have a serious enough effect on competition. Assessing the effect on competition requires a factual analysis of the individual case. If one more competitor will not add significantly to competition the dominant company is not obliged to grant access. In single firm cases where the downstream market is competitive there is only a duty to grant access- even if there is spare capacity- if the plaintiff can show that:
A, it will provide a significantly different product/service not provided by existing competitors, or
B, it is being discriminated against to discourage it from competing vigorously.

When a refusal would result in that one of very few competitors would be forced out of the market and there is spare capacity, there is a duty to provide access. Only very strong business reasons can then justify a refusal.

5.4 Legitimate reasons to refuse access?

Once a facility has been found to be essential the next question will be; what sort of refusal of access is anti-competitive? Case law has so far done little to illuminate the circumstances in which discrimination or a refusal to grant access can be justified. As a starting point it is however useful to distinguish between situations in which
1, access to the facility can be given to an unlimited number of persons (e.g. patent licenses and access to information)
and
2, physical or other constraints result in that only a limited number of companies can use the facility.

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78 http://www.hyperlaw.com/lang.htm, p 14
In the second situation the facility may or may not be fully used. The Community law *principle of proportionality* and basic economics require a distinction to be made between EF cases where there is spare capacity and EF cases where there is none.

If the owner claims that the facility is fully used it must be assessed whether it is not just being inefficiently used, etc. If there truly is no or insufficient spare capacity, the legal position of the plaintiff will depend on among other things existing contractual commitments. If the contracts are of reasonable duration the new entrant must be given an opportunity to compete with other users or potential users for access at the expiration of the contracts. The question then arises whether the available places should be auctioned or reallocated. If the existing access agreements are of very long term the purpose of this has to be assessed. If it is primarily to make the facility unavailable to new entrants the contract risks to be declared void in accordance with Article 81 EC Treaty.81

The owner of the facility should not be required to reorganize or scale down its existing activities unless an identifiable increase in competition is expected as a result. In principle the owner of the essential facility cannot be obliged to invest in new capacity to provide access for more competitors unless he is compensated for both additional investment and the main investment in the facility.82

If the EF to its nature is unlimited or is not being fully used a refusal to grant access will be hard to justify, in particular where the owner of the EF enjoys a dominant position in the downstream market. Refusal to grant access due to business reasons is only allowed when access endangers the dominant company’s economic stability and equilibrium. The fact that there is no unmet demand for additional services/products or that access would limit increased use of the facility by incumbent operators are not a legitimate reason to refuse access.

A legitimate reason to deny access would be that the applicant does not satisfy certain personal requirements such as being in good standing, creditworthy and financially independent. The applicant must also have the professional and technical skills and capacity required for the operation and security of the business.83

### 5.5 New kinds of services and products

In some situations refusal to grant access will be considered to be an abuse even if there is effective competition in the downstream market or if there is no spare capacity. The reason for this is that the refusal would hinder the growth of competition in the market.84 This might be the case if an existing competitor or a new entrant can’t introduce a *new substantially altered product* without access. The introduction of a new product will influence the right to access in situations where: 85

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82 http://www.oecd.org//daf/clp/Roundtables/ess08.htm, p 7
84 Cowen, op cit, p 539
a, the entrant - if he can not launch its new product (or service)- will never catch up on his competitors. Interim measures such as interlocutory injunctions may then be necessary to make sure that the final decision of the Commission is effective, 86

b, the new entrant will provide goods or services significantly different from and more competitive than those provided by the incumbents,

c, the new entrant plans to provide obviously useful goods or services which do not yet exist at all. 87

5.6 Terms for the access agreement

The difference between EF cases and cases like “Commercial Solvents” seems e.g. to be that where a company owns an EF it is under a stricter duty not to discriminate: a duty that goes beyond the prohibition of discrimination in respect of equivalent transactions covered by Article 82 (c). 88 The latter does not apply regardless of the effect on competition. 89 This very strict obligation imposed on the owner of an EF might stem from the undertaking’s dual role as both an administrator of the facility and an operator on a market dependent on that facility. E.g. in the “Sea Containers” case, Sealink’s rejection of proposals made by the plaintiff and its failure to make any counteroffers or engage in negotiations was according to the commission “not consistent with the obligations of an undertaking, which enjoys a dominant position in relation to an essential facility. Neither was it the conduct which would have been expected from an independent port authority.” The standard of conduct to be applied to the incumbent is consequently that of an independent operator using the product or facility in question.

The owner of the EF is entitled to “reasonable” compensation; indeed not a workable principle for how the pricing is supposed to function. Some guidance can be deduced from the “Volvo v Veng” case where the Court held that the holder of intellectual property rights is entitled to recover not only production costs but also a reasonable profit margin and costs for R & D. 90 What person/authority should then determine the reasonable profit, etc.? Some commentators argue that the appropriate competition authority should decide this while others consider it to be a question for the parties to agree upon. 91 In the opinion of the Swedish Competition Authority the parties and not the Authority should in principle establish the terms of access. The reason for this would be to avoid the parties from turning to the Authority to resolve disputes that really should be settled in court or by arbitrator. 92

Another aspect of the terms of the access agreement is the owner’s right to impose certain rules/duties on the applicant. These can include maintenance duties, presence or performing obligations. Failure in satisfying these duties may result in access withdrawal or other sanctions.

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86 See e.g. Commission Notice, IGR Stereo Television, EC Commission Eleventh Competition Policy Report, p 63
88 See e.g. Commission Decision 94/19/EC. Sea Containers v Stena Sealink, 21 December 1993, OJ 1994 L 15/8
89 Lang, Defining Legitimate Competition: Companies Duties to Supply Competitors and Access to Essential Facilities”, chap 12, p 247
91 E.g. Ridyard argues that it is for the Authority to regulate the terms on which access is granted, See Ridyard; op cit, p 448
93 Glasl, op cit, p 314
The obligations placed on a company that is dominant in the upstream market and active in the downstream may be no greater than those thrust upon a company that is active only in the upstream market.94

It might be added that access might in certain cases be time-limited95

5.7 Access for how many and who?

It follows from section 5.6 that a dominant undertaking having a duty to grant access to its facility has to objectively decide the optimal or maximum number of users that can satisfactorily use the facility. It then has to allocate access in a non-discriminatory way without giving preference to its own operations.

The duty to provide access does not only apply to existing competitors/customers but also to new entrants in the market. This is the big difference between general “refusal to deal” cases and EF cases. In the “Aer Lingus” case96 the established operator Aer Lingus had to enter into an interlining agreement on the London-Dublin route with the new entrant British Midland. The Commission recognized explicitly that its intervention amounted to a form of artificial assistance to the new entrant.

Moreover new entrants in new markets have to be granted access or be supplied on the ground of the “development” of competition97. A new entrant who is a dealer or a middleman is entitled to access to the facility only if there are other companies similarly placed to whom the dominant company sells. The reason for this is that a dealer is not fulfilling the same function as a buyer who buys essential raw materials or components for its own use. Furthermore a dealer is generally a less important competitive force than a producer is.98

A principle limiting the duty to provide access to firms already in the market would unjustifiably create a privileged category of competitors without any legal or economic rationale, depriving consumers whatever new entrants had to offer. A distinction between an existing competitor increasing its capacity and a new entrant would therefore not make any sense. Nor would it make any sense to grant access to entrants into new markets, but not to new entrants into existing markets.99 It has been argued that the Commission takes on a more interventionist friendly approach when it has to do with existing competitors seeking access. Its possibility to do so emanates from its discretion to define narrow product/service markets in which dominant companies are found.100

An issue that remains to be resolved is whether a vertically integrated firm could be obliged to sell its intermediate product to a downstream competitor, even though it has never before sold the intermediate product.101

96 Ibid
98 http://www.hyperlaw.com/lang.htm, p 8
5.8 Lesson to be learned

Considering the Community rule on the obligation to supply/deal one might ask oneself whether there is a need for this doctrine in Community law? There are indeed some cases that are not about the duty to supply but about sharing genuine facilities, e.g. port-facilities. In such cases where it is rather a question of access to/use of a facility and not the supply of a tangible or intangible good, the EFD proves useful. Furthermore the duty imposed on the owner of an EF to serve third parties, as would an independent operator, introduces a new criterion compared to the general duty to supply. Still it must be said that the EFD is more a label than an analytical tool. It has not much independent, substantive content.

The EFD is still in the process of development in the Community. A lot of questions regarding its application remain to be solved. For the time being it is however clear that when determining whether a dominant company must grant access to its facility to third parties account will be taken to the following elements taken cumulatively:

1. access to the facility is essential in order for companies to compete on a related market;
2. there is sufficient capacity available to provide access;
3. the facility owner fails to satisfy demand on an existing product/service market, blocks the emergence of a potential new product/service, or impedes competition on an existing market;
4. the company seeking access is prepared to pay reasonable and non-discriminatory price and will otherwise in all respects accept non-discriminatory access terms and conditions;
5. there is no objective justification for refusing access.

The European cases raising issues on the EF theme can be divided in the following categories:

- Utility regulation. See e.g. the UK case of “British Gas”
- Cases involving existing competitors. See e.g. the “Sealink” case
- Cases involving new or potential competitors. See e.g. the cases of “Sea Containers” “Aer Lingus” and “Schöller Lebensmittel”.
- Cases involving IPR. See e.g. the “Magill” case discussed in the ensuing chapter and in chapter 7.3.1.

102 Notice on the Application of the Competition Rules to Access Agreements in the Telecommunications Sector, p 21
103 UK case British Gas, MMC’s 1993 Gas Reports (access to a natural monopoly network, BG’s pipes) quoted in Ridyard’s article, op cit, pp 440-442
104 See Commission Decision B & I Line v Sealink Harbours and Stena Sealink, IV.34.174
106 Commission Decision 92/213/ EEC, British Midland v Aer Lingus
6. EFD Policy Relevant to the Biotech Industry

6.1 Case law

6.1.1 The Magill case

The background of the “Magill” case was as follows. Most households in Ireland and 30-40% of households in Northern Ireland could receive television programs broadcast by among others Radio Telefís Eireann (“RTE”) and British Broadcasting Corporation (“BBC”). Each television station published a television guide covering exclusively its own programs and claimed copyright protection under Irish and UK legislation. Their policy was to grant daily newspapers the right to publish program listings a day in advance as well as “highlights” of the week. No comprehensive weekly television guide existed. Magill TV Guide (“Magill”) attempted to publish one but was prevented by a Court order. On complaint from Magill the Commission then decided that the television stations were abusing their dominant position. RTE and Independent Television Publications Ltd (“ITP”), a publishing company created expressly by a third broadcasting company to publish its television guide, appealed the decision.

The CFI, relying on the “Volvo v Veng” case in principle agreed with the Commission and stated that by reserving the exclusive right to publish their weekly television program listings, the appellants were preventing the emergence of a new product- a general television magazine- on the market. This new product was likely to compete with the broadcasting companies’ own magazines. In other words the appellants were using their copyright in order to secure a monopoly in the derivative market of weekly television guides in Ireland and Northern Ireland. It was considered noteworthy that the appellants permitted the publication of daily listings and highlights of their weekly programs in the press free of charge. By preventing the emergence of a new product for which there was potential consumer demand, on the ancillary market of weekly television guides and thereby excluding all competition from that market, the appellants secured their respective monopolies and thus abused their dominant positions. The matter was appealed to the ECJ.

Concerning the existence of an abuse of a dominant position the ECJ held that it was necessary to interpret Article 82 in the light of copyright in program listings. In the absence of harmonization of national rules or Community standardization, it is for the national legislation to determine the conditions and procedures under which copyright is protected. Referring to the “Volvo v Veng” case ECJ then stated that since the exclusive right of reproduction forms part of the author’s rights, a refusal to grant a license cannot in itself constitute abuse of dominant position even if it

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is the act of a dominant undertaking. The exercise of an exclusive right by the proprietor may however in exceptional circumstances involve abusive conduct.\textsuperscript{112}

In the “Magill” case it was furthermore clarified that the remedy of compulsory licensing may be imposed if necessary but only in accordance with the principle of proportionality. In other words the burdens imposed on the undertaking in order to bring an infringement of competition law to an end must not exceed what is appropriate and necessary to attain the objective sought, that is re-establishment of compliance with the rules infringed.\textsuperscript{113} In “Magill” the only way to bring the infringement to an end was to require the broadcasting companies to provide the relevant information. The Commission was thus entitled to impose compulsory licenses in order to ensure that its decision was effective. The legal ground for this is Article 3 of Regulation 17 implementing Articles 81 and 82. The Regulation “is to be applied according to the nature of the infringement found and may include an order to do certain acts or things which, unlawfully, have not been done as well as an order to bring an end to certain acts, practices or situations which are contrary to the Treaty”.\textsuperscript{114}

6.1.2 The Bronner case

In the “Bronner” case previously discussed in chapter 5.1, the Advocate General Jacobs gives evidence of a clearly skeptical approach towards the application of the essential facilities doctrine in EC competition law. Nevertheless he accepts that competition law may in certain circumstances intervene to restrain the conduct of a dominant supplier or even an IPR owner. Still he emphasizes that “intervention of this kind, whether understood as an application of the essential facilities doctrine or, more traditionally, as a response to a refusal to supply goods or services, can be justified in terms of competition policy only in cases in which the dominant undertaking has a genuine stranglehold on the related market (...) It is not sufficient that the undertaking’s control over the facility should give it a competitive advantage.”\textsuperscript{115}

In particular he advocates the need to be cautious when applying the essential facilities doctrine to facilities created by the dominant company after heavy investments, particularly in relation to intellectual property rights. Quoting the Advocate General: ”Where such exclusive rights are granted for a limited period, that in itself involves a balancing of the interest of free competition with that of providing an incentive for research and development and for creativity. It is therefore with good reason that the Court has held that the refusal to license does not of itself, in the absence of other factors, constitute an abuse.”\textsuperscript{116}

\textsuperscript{115} Opinion of May 28, 1998 Case C-7/97 Oscar Bronner GmbH & Co KG v. Media Print Zeitungs und Zeitschriftenverlag GmbH & Co KG, para 65
\textsuperscript{116} Ibid, para 62
6.1.3 The Pasteur Mérieux- Merck case

The “Pasteur Mérieux- Merck” case concerned a notification by Merck & Co. Inc. (“Merck”) and Pasteur Mérieux Sérum et Vaccins (“PMsv”) pursuant to Article 4 of Council Regulation No 4064/89. The two companies wished to coordinate their existing activities in the human vaccines and some related business through the establishment of a JV. The main objective of the JV was to create and develop new multivalent vaccines. The Commission at first had doubts as to the compatibility of the JV with the competition rules. Furthermore Lederle-Praxis Biologicals (“LPB”), a subsidiary of the US pharmaceutical company American Cyanamid Company, which was active in Europe with one vaccine since 1991, had lodged a complaint against Institut Mérieux, the parent company of PMsv, Merck and Smith Kline and Beecham (“SKB”).

LPB objected to an exemption of the JV since considering the oligopolistic nature of the European vaccine market, the JV would immediately have an overall market share of close to 70% in the Community. According to LPB the combination of the resources of the parties would severely hinder the ability of third parties to enter the market for in particular new pediatric multivalent products. To be more precise the development by the parties of a pediatric hexavalent containing DTP, HIB, Hepatitis B and polio vaccines would have a serious effect on sales of the monovalents included with the result that undertakings not having access to Hepatitis B, due to the, in LPB’s opinion, exceptionally broad patents would face severe difficulties to remain on the vaccine market. Moreover LPB suggested that the three companies were abusing their dominant positions in various MS by not supplying the Hepatitis B vaccine to LPB. LPB wanted to buy the vaccines on reasonable commercial terms and conditions but also to get access to registration documents, which it needed for inclusion in multivalents vaccines to be developed by it. LPB therefore suggested that if the JV was to be exempted the Commission in order to maintain effective competition, should require the JV to supply Hepatitis B to LPB as one of only two global vaccines manufacturers in addition to the JV.

Hepatitis B was at the time no longer produced on plasma basis but by way of genetic engineering. There was however considerable uncertainty as to the legal validity and precise scope of different patent claims for the new Hepatitis B vaccine technology. For this reason SKB the other global vaccines producer, which was not a party to the JV, had prior to the court proceedings entered into cross-licensing agreements with Merck. Other producers that would like access to the patent rights involved, in order to avoid uncertainty and costs of litigation, consequently needed at least a sub-licence of both Merck and SKB of their respective rights. The cross-licence did nevertheless only allow the parties to sub-license their respective rights to affiliates such as the JV.

Apart from Merck and SKB, the companies Medeva and Berna were also offering the Hepatitis B vaccines. SKB observed to the Commission that the competitiveness of Community vaccine producers was dependent upon innovation and access to new technologies and vaccine components. Furthermore it stated that the wide scope of the JV was such that the normal competitive processes in the European vaccines market, which ensured access to technology, were likely to be restricted. In response to this observation the parties amended their exclusive

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119 Ibid, paras 1-5
120 Ibid, para 45-48
121 Ibid, para 23
As regards the effects of the JV on third parties the Commission stated that the JV would limit other producers’ possibilities to collaborate with the JV and/or with the parent companies in view of getting access to their “missing” antigens or vaccine technologies. Given the position of the parties on the relevant markets the JV was therefore capable of as regards existing and imminent vaccine technology, an appreciable restriction of competition towards third parties. Concerning the impact on future vaccines and vaccine technology the Commission argued that not only the limited number of vaccine producers with a European presence were able to engage in such research. There were many other companies that had recognized the importance of the costlier, more recent DNA-related research for the development of new vaccines. Given the existence of numerous such specialized companies, scientific institutes or universities engaged in basic biotechnology research, there were hence many undertakings that could be considered as potential competitors for future vaccine markets. Thus in the Commission’s opinion there were no indication of that the JV would restrict competition to an appreciable degree by reducing the out-sourcing possibilities of third producers for future vaccines and vaccine technology. The JV was eventually after lengthy negotiations declared to benefit from an exemption pursuant to Article 85(3), now Article 81(3) until 31 December 2006.

With regard to the second part of the LPB’s complaint urging the Commission to compel the parties to supply and license the Hepatitis B vaccine and its registration documents to LPB, the Commission closed the file after having sent a formal letter pursuant to Article 6 of Regulation No 99/63/EEC. The Commission concluded the following: “at the current stage of EC competition law, it is highly doubtful whether one could impose an obligation upon a dominant firm (in an eventual EC bulk intermediate Hep B market), as a remedy to ensure the maintenance of effective competition in the national Hep B markets, to share its intellectual property rights with third parties to allow them to develop, produce and market the same products (i.e. multivalents containing the Hep B antigen) which the alleged dominant firm was also seeking to develop, produce and market. This was judged to be all the more precarious in sectors such as the vaccine sector where R&D require high investment. Even a ”simple” refusal to supply could not be considered an abuse as Lederle was not an existing customer that had found itself in a situation of factual dependence for the supply of Hep B. The companies did not break off an ongoing relationship with Lederle.

Why did the Commission choose not to apply the compulsory licensing principle established in the Magill case? The author of this paper can think of several explanations. First of all LPB was seeking to develop, produce and market the same products as the parties. This was not the case in Magill where Magill was the first undertaking to have shown an interest in publishing a weekly comprehensive TV guide. Secondly the special features of the pharmaceutical markets seems to have constituted additional reasons not to apply the principle. Thirdly the parties were not the

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122 Ibid, paras 50-51
123 Ibid, paras 70-71
124 Ibid, Articles 1-4
126 Ibid
only one to offer Hepatitis B. LPB might have had success in obtaining it from Berna or Medeva. If the EFD wasn’t applicable, then why did the Commission not compel the parties to supply on ground of the broad duty to supply as established in the Commercial Solvents case? The reason for this is simple. Lederle was as mentioned above not an existing customer in a situation of factual dependence. As explained in chapter 4.5.2 the duty to supply is not applicable in such circumstances.

6.1.4 The FT Profile case

The British “FT Profile” case deals with access to an on-line database service owned by Financial Times (FT), and operated by FT Profile, which was obtaining licensed material from other newspapers. FT Profile refused to license its competitors with news stories and data collected by FT for the joint exploitation in the FT newspaper and via FT Profile’s on-line database.

Were FT’s data collection and editorial services an EF? In the opinion of MMC it was not since other information and news stories were available from the competitive market in such services. The imposition of a compulsory licensing regime would have deprived FT its right to enjoy the benefits associated with its investments in creating a distinctive media product.

The MMC could only have considered the data collection and editorial to be EF if FT had enjoyed ”such a position of pre-eminence as to make it virtually immune from competition from other financial media”.

6.1.5 The Philips Electronics case

In the UK “Philip Electronics” case concerning an action for patent infringement, the defendant pleaded that the plaintiff that owned patents in the field of compact disk technology had abused its dominant position by refusing to license those patents to them on fair and reasonable terms. The judge reviewed the EC case law on EF and went out of his way to deal with Magill:

”First, the ECJ pointed out that the case was exceptional…If a party is to rely on Magill to resist the enforcement of an intellectual property right, it is incumbent on him to plead explicitly what are the exceptional features which take the case outside Volvo v. Veng. Mere assertion will not do.(…) It seems to me to be strongly arguable that not all intellectual property rights are equal. Some are more equal than others…In Magill what was being considered was the rights in a sub-species of copyright. It does not follow inevitably that Magill can be applied by analogy to a patent case.”

6.1.6 The Sign v Stet-Sip case

In the Italian Sign v Stet-Sip” case two state-owned companies shared exclusive rights over the production and distribution of telephone subscribers’ lists. The companies enjoyed a dominant position in the downstream market where the lists were used to sell services to consumers and businesses. Both companies repeatedly refused either to sell lists in a CD-ROM format or to provide access to their on-line database to prospective new entrants in the market for on-line and

127 Ridyard, op cit, p 447
128 UK Cases CH 1997 P No.4100 and CH 1997 P No 4101 Philips Electronics NV v Ingman Limited; Philip Electronics NV v The Video Duplicating Company Limited; judgment of Laddie J. May 13, 1998
129 Ibid, paras 63-66
off-line information about telephone users. Given the exclusive rights in the provision of subscribers’ lists, no company could duplicate the database and sell the information on the market. The Antitrust Authority defined the lists as an essential resource for downstream activities and made explicit references to previous EF cases, e.g. “Magill”. The companies were found guilty of abuse of dominant position despite the defendants’ objections as to the need to preserve the value of investment, the purported copyright in the database and the alleged possibility of its duplication.\footnote*{130}

6.1.7 The Service Trends case

In the US case Service Trends ("ST") v Siemens Medical Systems ("SMS") \footnote*{131} SMS was selling the Lithostar lithotripter in the US and also providing sales, service and maintenance contracts after installation. The plaintiff ST was a provider of maintenance services for lithotripters. Lithotripter is a facility disclosing kidney stones non-invasively by projecting high-energy shock waves into the human body. Lithostar comprised a patented shocktube, spark gap and shock wave generator, which were all modular replacements parts. SMS was servicing Lithostars by replacing the modules but did not sell or service their sub-components. The company was employing a refund policy that essentially required the return of used shocktubes for replacement or repair. The plaintiff was thus precluded from repairing shocktubes. ST wanted access to the individual components of the shocktube in order to be able to assemble the shocktube and also to install it into the Lithostar. The district court declared that "no court has ever held the antitrust laws require a patent holder to forfeit the exclusionary power inherent in his patent the instant this patent monopoly affords him monopoly power over a relevant product market" \footnote*{132} Hence the district court did not find any evidence that SMS was over-reading its patent rights. It might however have been an abuse if the company had attempted to extend the intellectual property exclusion into complementary markets.\footnote*{133}

6.2 Scholars’ comments

In the previous section of this chapter different cases, which somehow shares common features with biotech applications, e.g. IP protection, have been described. However direct references to the EFD in relation to the biotech industry have been found neither in case law nor in legal articles, etc. The next logical step therefore seems to be to consider whether legal scholars have made any other comments that might shed some light upon a potential application of the EFD in the biotech industry.

Lang has raised the important question when if ever it is justified to regard scientific knowledge as an EF.\footnote*{134} Unfortunately he does not elaborate on the question. In the context of the EFD in relation to IPR he has however stated his opinion. Accordingly he considers it possible to apply the EFD in some situations where competitors have set up a pool of patents. A duty to grant

\footnote*{130} http://www.oecd.org//daf/clp/Roundtables/ess05.htm, p 4
\footnote*{131} US Case, Service Trends Inc v Siemens Medical Systems, Inc, 870 F. Supp. 1042 (ND Ga 1994)
\footnote*{132} Ibid, at 1056
\footnote*{133} Kim, "High Technology Antitrust: commentary on recent cases", International Antitrust Law and Policy, 1996, p 632
\footnote*{134} Lang describes scientific knowledge as knowledge "which is not patentable and which is more basic than anything normally described as know-how", "European Community Antitrust Law- Innovation Markets and High Technology Industries", p 4
access through licensing may thus exist when the patents are complementary and if the combination cannot be duplicated or invented around. In his argument he relies on the IGR Stereo Television case, discussed below in section 7.2.2. In Lang’s opinion IGR and its members would not have been permitted under Article 81 to exploit the German market while shutting Salora out of it. If IGR had not agreed to license out the relevant patents, the Commission would have ordered compulsory licensing. Since IGR and its members could well have been in a joint dominant position, the practical result would have been the same if Article 82 had been applied.

Kallaugher and Venit have made an interesting remark in the context of the balancing of competing interests, i.e. reward of the competitor for its legitimate creative efforts and the preservation of competition. In their opinion the balance may tilt against the imposition of a duty to grant access where the EF has resulted from efforts, which are either encouraged by statutes, as in the case of patents, or are regarded as socially beneficial as in the case of R &D.

In respect of the general application of the EFD, Overd and Bishop have argued that the EFD ought not to be applied to new assets where these have been developed in a risky commercial environment. According to them a requirement that access should be granted immediately would severely reduce the normal incentives for a firm to innovate, the incentive being the temporary “monopoly” profits enjoyed while competitors catch up and seek to eliminate the first mover advantage. An application of the EFD to new assets therefore risks to result in that innovation (a) will not occur at all, (b) will be delayed, or c) will occur on a lesser scale than otherwise. These are all costs to the consumer and need to be balanced against the benefits of allowing equal competitive opportunity to firms that wait for others to innovate.

Kon and Scaeffer are on the same track as Overd and Bishop when they conclude from the Lederle-Praxis Biologicals complaint that the special features of the pharmaceutical market may be reason enough to limit the compulsory licensing principle established in the Magill case. They are then alluding to the major investments and risks involved in that market.

To sum up the EFD policy and scholars’ opinions the following can be stated. The EFD appears in Community law in exceptional circumstances to be applicable to products being protected by copyright or patents. The Judge’s, in the UK “Philip Electronics” case, emphasis that the subject matter in the “Magill” case was rights in sub-species of copyright, is clearly noteworthy in relation to the potential limits of a future EFD application to IP products. The scholars’ advice not to apply the EFD to products developed in risky commercial environments or that result from R&D efforts is a desirable approach in view of the risks inherent in all application of the EFD, i.e. reduced incentives to innovate. As of yet there is however no evidence that the authorities will take such aspects into consideration in EF cases. The Commission’s attitude in the Lederle Praxis-Biologicals complaint is encouraging but no evidence of a particular concern since Lederle wanted to produce the same product as the parties and there were other undertakings offering the relevant vaccine.

136 Ibid, p 16
137 Kallaugher, op cit, footnote 17
7. IPR and Competition Law

As shown in the so-called “Magill” case in the previous chapter the EFD can be applied to facilities enjoying IP protection. This is controversial for several reasons. For starters within the Community, in the absence of harmonization of national rules or Community standardization, determination of the conditions and procedures under which IPR are protected, is a matter for national rules. Article 30 of the EEC Treaty expressly governs the relationship between national IPR and the general rules of the Community. Thus the Article provides for a possibility of derogating from the rules relating to the free movement of goods on the grounds of protection of national industrial property. The member states consequently regard any Community interference in this area with much suspicion. When dealing with questions on the limits of Community jurisdiction in this area it is however important to remember that the concerned derogation provided for in Article 30 is subject to the conditions set out in the second sentence of that same article, i.e. the derogation must not constitute a means of arbitrary discrimination or a disguised restriction of trade. Hence the Article emphasizes that the reconciliation between the Principle of free movement and the necessary respect of IPR has to be reached in a way protecting the legitimate exercise of such rights. In other words it is implied that limitations of IPR may in some circumstances be justified. What is then the relationship between Article 30 conferring much discretion to the MS as concerns IP law and the Community competition rules?

In order to understand this it appears appropriate to clarify the rationale and objective of IP law.

7.1 The rationale of intellectual property law

The term “intellectual property” is generally used to refer to patents, copyrights, trademarks and trade secrets. The intellectual property regime aims at establishing a balance between the owner’s right to prevent third parties from making money on the IP products and the public’s interest in attaining access to these same products.

The policy dictating the resolution of the incentive/access trade-off in intellectual property law differs significantly from the policy underlying competition law. The justification of IPR may be found in the utilitarian theory. The utilitarian argument being that people, in the absence of intellectual property protection, would have less incentive to invest in the creation and distribution of inventions and works of authorship. The reasoning appears reasonable since copiers then could free ride on the creator’s investment, thereby competing against him at a lower cost. The conferral on the creator of the right to exclude others from reproducing his work is thus an instrument to correct for the market’s probable failure to produce the socially optimal number of creative works. Briefly, the utilitarian perspective considers intellectual property protection as stimulating behavior that in an unregulated market would be produced at a sub-optimal level. At the same time the utilitarian perspective cautions against a too ”strong” protection in the sense of being unlimited in duration or too broad in scope. Assuming that the return on productive activity is subject to the law of diminishing marginal returns, further protection may at some point be unnecessary to incite the creation of more intellectual products. Furthermore, to the extent that every new invention or work of authorship builds upon the knowledge embodied in certain past inventions and works of authorship, the creators of today are obliged to compensate those whose ideas have contributed. This imposes transactions and other costs that at the margin may detain some innovation from taking place. From a utilitarian point of view the primary task of
intellectual property law is thus to achieve the proper balance between the incentives needed to
stimulate productive activity, and the access to existing works upon which the activity is built.
Intellectual property law qualifies consistently with the utilitarian theory the right-holder’s
exclusive rights with a number of limitations construed to insure that others have sufficient access
to inventions, works of authorship, etc. One of these limitations and access-insuring practices is
that of compulsory licensing.  

7.2 Comparing intellectual property law to competition law

Competition law is often considered to be an instrument for promoting resource allocation
efficiency or in other words wealth maximization. Seen from a utilitarian perspective, intellectual
property law can be considered as a method for attaining this goal as well. The ways in which
competition law and intellectual property seek to reach this goal are however different in two
important respects.

Competition law aims at economic efficiency by promoting competition over monopoly, while
intellectual property seek to achieve this same goal by somewhat stifling competition. However it
would be wrong to say that intellectual property rights create monopolies in the true sense of the
word. For most patented inventions, copyrighted works and trademarked articles, a variety of
substitutes exist. Relatively few intellectual products confer a monopolizing power over a given
market. Still, most commercially successful intellectual property rights appear to confer some
supra-competitive profit. Some may even result in monopoly power. Monopoly power due to
IPR seems to be the price to pay for encouraging socially beneficial activity. This consequence
runs counter to the competition law objective of encouraging competition.

Furthermore the main focus of competition law is not really for any particular result to be
achieved but to ensure that the market operates freely, i.e. the objective is the attainment of
competitive market conditions and not a particular outcome. Intellectual property law on the other
hand aim at provoking a specific response from the market, that is the “provision of the socially
optimal amount of innovation” or more precisely the proper mix of incentive and access in order
to attain the optimal level of investments in ideas.

As to the relation between IP law and competition law within the Community the following can
be stated. The fact that an IPR is exclusive and distinctive does not automatically mean that the
right-holder holds a dominant position for the purposes of competition law analysis. If IPR were
to be recognized as no more than property rights this might help to provide a more economically
rational approach to the application of competition law to IPR. Furthermore the Community
competition law cannot affect the existence of an IPR even in cases where an IPR does confer
monopoly power and results in a dominant position being thrust upon its owner. This is true for
two reasons. Firstly an IPR is a national right which existence is only conditional upon national
rules. Secondly Article 82 is as already explained, not dealing with dominant positions as such
but with the abuse of dominant position. However the exercise of an IPR might be dealt with
under both Article 81 and 82 when it can be considered abusive. The Community competition
rules are thus capable of overriding national IP law in some circumstances. The legal situation
will be illustrated in the two ensuing cases.

140 Cotter, "Intellectual property and the essential facilities doctrine", pp 2-4, Antitrust Bulletin, 1999, issue 1
141 Cotter, op cit, pp 6-7, 11
7.2.1 The *Volvo v Veng* case

In the “*Volvo v Veng*” case\(^{142}\), *Volvo* sued *Veng* for breach of its registered designs covering front wing panel for a particular *Volvo* car model. *Volvo* had previously refused *Veng* a licence to design rights of such panels. Was *Volvo*’s refusal an abuse of its undoubted dominant position with regard to such panels? The Court stated that even if a company enjoys a dominant position within the meaning of Article 82, the holder of design rights does not have to grant a licence to third parties in return for a reasonable royalty. The right to sue for infringement “constitutes the very subject matter of its exclusive right”. Thus the exclusive right to a product resulting in even a 100% dominant position can never in itself constitute an abuse. The reason for this is as mentioned earlier that it is not the monopoly or quasi-monopoly that can be challenged under Article 82, but its abuse\(^{143}\). Nevertheless the Court stated that it might amount to an abuse of dominant position *neither* to give independent repairers a licence, *nor* to sell them the product on reasonable terms\(^{144}\).

7.2.2 The *IGR Stereo Television* case

In general there is no duty to supply under Article 81. However as the “*IGR Stereo Television*” case\(^{145}\) from 1981 demonstrates, a duty might indeed exist when a discriminatory refusal has sufficiently serious anti-competitive effects. In this case *IGR*, a joint venture which all the companies manufacturing color TV in Germany owned, hold the patents necessary for making television sets equipped for stereo reception of German TV. Only these sets were compatible with German TV transmission. *IGR* granted the relevant patents to all the above manufacturers. Non-members were only granted licences after a certain date and for a limited number of sets. *IGR* accordingly used its patent rights to prevent *Salora*, a Finnish company, from supplying stereo TV sets to two large mail order firms in Germany. *Salora* was thus being prevented from supplying the sets at a time when these sets were being launched on the German market. When *Salora* asked the Commission for interim measures, *IGR* agreed to immediately grant licences, which were free of restrictions as to quantity. The case can be understood as follows. The nature of the relationship to be set up between the creators of their JV inter se and with the JV itself (potentially including *patent and know-how licenses* with extensive reciprocal clauses) suggested that the resulting barriers to entry that market to third parties would themselves justify that the agreement came within the prohibition of Article 81(1).\(^{146}\) In other words the existence of the rights in patents and know-how was not questioned whereas the exercise of the IPR through the JV and the reciprocal licensing agreements was assessed to violate the Community competition law. To be more precise only the undertakings with right to exploit the patents and know-how were capable of producing TV sets compatible with German TV transmission and since non-members of the JV had very limited such rights the arrangement between the German manufacturers excluded effective competition on the German market.

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\(^{143}\) Goyder, op cit, p 342-343  
\(^{146}\) Goyder, op cit, p 199
7.3 IPR and the EFD

Nowhere is the misuse of EF arguments greater than where IPR are concerned. The misuse stems from the tendency to allege that IPR are essential facilities *per se*, in the sense that they cannot be duplicated. In order for a facility to fulfill the essentialness criterion an undertaking has however as explained in chapter 5.1, be prepared to put in as much time and money as its owner has done when developing it and still not be able to get access to the market. Consequently in a situation where the right-holder’s IP product is one of many rival widget-making technologies he should be free to maximize the exploitation of that technology just as the owner of one of many widget-making factories would be. On the other hand if there is some impediment to competition between alternative widget-making technologies, the right-holder must expect to have its rights reduced by competition law intervention but so would the widget manufacturer that had bought up all physical property rights to rival widget-making factories. The just mentioned impediment could consist in a company having bought up a cluster of IPR that somehow definitely blocks the ability of new rivals to develop alternatives. Thus an IP product/service can never bear the blanket definition ”EF” but that it may constitute an EF where there is some serious impediment to the way competition works in the relevant market. Most commonly countries and industries are concerned about the disincentive effect of treating IPR as an essential facility. It has even been argued that a general policy requiring compulsory licensing might dilute all IP and thereby hurt an entire industry, not only the company owning the EF. In the “Magill” case as explained below this effect was however not relevant due to the special characteristics of the IP product.

7.3.1 The Magill case- an IPR perspective

In the “Magill” case the broadcasting companies were considered to have gone beyond what was necessary to ensure the protection of the actual substance of the copyright. The refusal to license *Magill* was therefore arbitrary and not justified. There existed an abuse of dominant position. Might the compulsory licensing have a disincentive effect on the broadcasting companies’ investment strategies? In the case the copyright in the TV-listings did not require much creativity or investments on behalf of the broadcasters but were rather a by-product of the main activity, i.e. TV broadcasting which also enjoyed IP protection. In such a situation the compulsory licensing does nothing to upset dynamic incentives since the investments and labor required to e.g. broadcast TV, i.e. the main activity will be the same irrespective of whether the broadcasters are protected from competition in the TV guides market. Since the costs for producing the TV-listings in this context evidently must be marginal the compulsory licensing will presumably not affect the incentives to produce and publish the TV- listings either. The same is not true for any genuinely economically useful form of IPR, i.e. a work for which incentives and rewards to the inventor affect the likely level of creativity.

The *Magill* case has been very criticized and even said to be a “freak” dependent on its facts, and not demonstrating approval of the EFD in EC law in general or to IPR in particular. Trojan horse or not the position is still clear. An abuse of dominant position may consist in mere refusal to license where it prevents a new product for which there is potential consumer demand, from

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147 Ridyard, op cit, p 445
148 http://www.w.oecd.org//daf/clp/Roundtables/ess09.htm, p 3
149 Lidgard, op cit, p 393-394
150 Ridyard, op cit, p 446
coming on a neighboring market in competition with the dominant undertaking’s own product on that market. In other words IPR cannot in all cases be used as a defense against alleged abuse of dominant position. The key question in situations where no other abusive conduct are involved, is whether the plaintiff’s products/service is in a second distinct market from the market in which the IPR primarily operates. It remains to be seen whether the EFD will also be applied in situations where the IPR are the result of skill and labor and not merely a by-product of another main activity.
8. The Community Approach towards High Tech Industries

8.1 General approach

Within the Community the intellectual development of competition law is to a great extent in the hands of the antitrust authorities, which are generally understaffed and overworked. It is therefore generally cases and not studies or formal discussion of antitrust economics that shape the intellectual development. This is of course not an ideal situation. Having said this the European authorities nevertheless seem very well aware of the fact that the high tech industries not only give raise to specific legal issues but also may merit particular concern.

The Commission has explicitly stated that one of its priority tasks is to encourage innovation and the dissemination of new technologies in the European industry. In the development of technological innovation technology transfer holds a key role. The Regulation on the Block Exemption of categories of Technology Transfer Agreements accordingly provides the parties with greater contractual freedom. The relaxation of the rules is however accompanied by a warning to firms with strong market positions: the benefit of the block exemption can be withdrawn if firms use their exclusive licences to monopolize the market for a product and prevent third parties from gaining access to new technologies.

What in the US are called innovation markets have been considered several times, in particular in pharmaceutical merger cases. In US an “innovation market” has been defined as the R & D directed to particular new or improved goods or processes, and the close substitutes for that particular R & D. The European Commission has not defined an “innovation market” but has arrived at the same result as the US authorities by using the more traditional concept of competition by two firms in R & D directed towards the same goal. Unfortunately the market definition used in EC competition law is not well suited to assessing innovational competition. The existing definition leads to artificially narrow markets and focuses on existing products and current prices. The very essence of innovational competition is however the emphasis on products not yet on the market, or new processes that will allow existing products to be sold at lower prices. By definition R& D programs are very uncertain ventures that may or may not succeed or indeed may succeed in ways quite different from the original expectations. Thus not only the dominance but also the market definition itself may be affected. In respect of merger and similar cases dealing with undertakings involved in heavy investments in R & D, the Commission has thus a hard time considering the potential effect on competition. A large or successful R & D program may be evidence of a current dominance but does not generally say anything about the future. Especially in the biotech industry one can never be certain that a particular line of research will produce the desired results. The Commission therefore seems cautious and reluctant to try and look too far in the future.

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151 Lang, "European Community Antitrust Law- Innovation Markets and High Technology Industries", p 7
152 Commission Regulation 240/96/EC of 31 January 1996, on the application of Article 85(3) to certain categories of technology transfer agreements, OJ 1996 L 31/2, [1996] 4 CMLR 404
154 Ibid, footnote 66
155 Ibid, pp 43-45
In merger cases where there is specific evidence about competing lines of R & D the practice of the Commission is to consider whether the merger is likely to restrict the competition in R & D. This was done e.g. in the Upjohn -Pharmacia, Glaxo-Wellcome, Crown Cork and Ciba Geigy-Sandoz cases. The reason for the particular considerations is the belief that next generation products might not reach consumers as quickly or with the same quality or diversity if there is no competition in R & D, i.e. consumers may be deprived of likely potential price and quality improvements.

The case law of the Commission consolidates its positive attitude towards dissemination of new technologies to the benefit of consumers. Many Decisions show that the Commission in practice is favorable towards joint ventures, etc., even those restricting competition if there are indications that these will bring a new technology quickly on to the market or will establish a counterweight to an existing dominant undertaking. The approach appears to stem from a pragmatic preference for immediate short-term result rather than less certain, long-term advantages that might follow from competition in the long run. A partial explanation to this attitude has been suggested to be the desire for Europe to catch up with the introduction of new technologies.156

In Lang’s opinion the Commission is likely to consider competition in R & D to be important only where:

a, the competition between the firms in question is the leading research in the field,

b, the competition is directed specifically towards producing or improving the same product or process,

c, it is associated with specialized R & D programs of those firms.157

To somewhat sum up the situation it can be stated that in cases involving high tech industries the Commission appears to aim beyond static analysis. Its case-by-case analysis of concerned undertakings’ present and future R & D generally demonstrates a very constructive analysis.158

It is furthermore an encouraging fact that competitors and others with interest opposed to those of the parties in an individual case more and more are allowed to comment before the actual Commission Decision is given. Moreover even though the Commission is lacking the optimal tools needed to assess the R&D dimension of innovational competition,159 it is nevertheless encouraging that the Commission has recognized the importance of competition in R& D. The insight hopefully renders the Commission less likely to consider products/ services consisting in know-how or other IPR to be essential facilities. Logically from the Commission’s perspective it would seem more desirable to force applicants seeking access to an alleged EF, e.g. consisting in a patent, to try and invent around the facility and thus forcing alternative R&D programs to come into existence. Considering the high failure rate in the biotech industry such an approach would probably increase the total number of successful ventures to the benefit of consumers. As to the attitude of ECJ according to Lang the case law of the Court give proof of a “careful and balanced consideration of fundamental issues”, brushing away the Commission’s arguments when necessary.160

156 Lang, “European Community Antitrust Law- Innovation Markets and High Technology Industries, p 35
157 Ibid, p 37-38
159 Clapes, op cit, pp 603-604
160 Lang, “European Community Antitrust Law- Innovation Markets and High Technology industries”, pp 11-15
8.2 The pharmaceutical and the biotechnology industries— a comparison

The pharmaceutical industry has many features in common with the biotech industry. They are both research-based and dependent on sufficient profitability in order to cover the investment required to guarantee their capacity for innovation. Innovation is vital for the companies to ensure their competitiveness on the market. Both industries rely to a large extent on patents and other IPR to obtain necessary returns on their investments. Biotech as well as pharmaceutical products are relatively easy and cheap to copy. In the absence of effective IP protection the price would consequently be forced down to the marginal cost of production. The investment incurred would then not be recovered. In this situation the companies would choose not to undertake the investment in the first place. This would be a market failure; potential consumer surplus would be lost. Accordingly both industries seek to recover their costs through reliance on the temporary exclusivity emanating from IPR, primarily patents.

In neither industry does their exist a substitute for innovation, even after the initial identification of a compound and its patenting. Only a very small number of products that begin the medical trials pass the approval process successfully. The attrition rate between compounds screened in pre-clinical testing and those that reach the stage of human testing is very great. Out of a total of approximately 10,000 substances synthesized by a research laboratory, patent filing will be filed for only a few selected hundred. Out of these only one or two will actually be placed on the market. As a result the overall costs of R&D, of complying with all necessary regulatory provisions, and of launching a new product on the market are extremely high. The long-term capacity of such companies thus depends primarily on their ability to conduct R&D resulting in improved and new products.161

As concerns the pharmaceutical industry the Commission has acknowledged a need to “encourage the future development of the innovatory pharmaceutical industry”.162 Furthermore the Commission has stated that the “pharmaceutical market is not a normal market” and that “The huge risks [in pharmaceutical research] make individual companies very vulnerable”.163

In Council Resolution 96/C136/04, the need of sufficient profitability of the industry was recognized.164 The form an investment point of view, reassuring approach was affirmed in the Lederle-Praxis Biologicals complaint, discussed above in chapter 6.1.3.

Considering the biotech industry the recent Directive on the Legal Protection of Biotechnological Inventions165 gives evidence of a liberal and positive attitude towards biotech inventions.166 The importance of creating incentives for investments in the biotech industry is being acknowledged and emphasized in the recitals, in particular recitals 1-11, of the Directive. Such incentives can only be ensured through strong IP protection of the biotech inventions. The recitals are best understood against the background of the ever-harshening international competitive climate.167

161 Kon, op cit, p 124
166 Engfeldt, "Transgena organismers patenterbarhet med avseende på växtsorts- och djurras undantaget”, 1999, p 45
167 Koktvedgaard, "Genteknik og patentret i nordisk og europæisk perspektiv”, NIR [1989], issue 4, p 509
9. Conclusion

Do there then exist any essential facilities in the biotech industry? The answer is certainly yes. It is however very hard to visualize precise circumstances where the EFD might be applied. An assessment of whether a particular biotech application is an “essential facility” would require much factual information about the market position of the dominant company, the structure of the market, viable substitutes, etc, and is beyond the scope of this thesis, which deals primarily with legal aspects of the Doctrine.

Still it seems to be in place to make a few comments about the biotech applications presented in chapter two. These applications are all the result of years of research and heavy investments and are thus in general not easily substituted. Furthermore if access to them were granted they might very well give rise to new end products/services. Access to the applications therefore appears to be of great interest not only to the company who have developed them and to the competitors of the company and to producers in related markets, but also and more importantly to the consumers. It is probable that access to the applications would enhance the technical development and consumer welfare, at least in the short run. All of these criteria have to be fulfilled in order to define a product/service as an essential facility. It must nevertheless be emphasized that genuine essential facilities are rare. In order for a genebank, bio-informatics, a genetic testing service, an enzyme or an antibody to be judged as essential facilities it must be “impossible” to duplicate/substitute the product/service for an undertaking of the same size as the owner of the EF. This approach was affirmed in the recent “Bronner” case. There are probably very few biotech applications that could not if the will is really present be duplicated or invented around. In this context it is noteworthy that the current debate on the EFD does not always focus on genuine EF cases. This is due to the fact that plaintiffs refer to it as a short-cut method for proving seeming abuses of monopoly power. Would-be competitors not having the skill to succeed on their own, sometimes try to use the doctrine in order to appropriate the capital investment and business efforts of their successful predecessors in the relevant market. Competition law is however not intended to serve the purposes of jealous competitors but rather to enhance economic efficiency through protection of the competitive process itself. Competition law aims at protecting competition not individual competitors. In many cases involving alleged EF the well-established case law on the duty to deal may fully serve its purposes.

Having said this, competitors will however without a doubt continue to lodge complaints and request access to alleged EF, presumably consisting in IP products. From the “Magill” case it follows that the EFD may in exceptional circumstances be applied to facilities enjoying IPR, e.g. when they prevent the emergence of a new product for which there is potential consumer demand on a related market. It is however important to remember that the copyright protected product in “Magill” had not required much investment but was rather a by-product of another, main activity. This is a criterion, which ideally would have to be applied in future application of the EFD to IP products. The exception could be cases where an undertaking has set up a pool of patents which are complementary and which combination can not be duplicated or invented around. In relation to the feared negative consequences of a compulsory licensing regime in EF cases another interesting and surprising remark can be made. An economist who has researched the economic consequences of compulsory licensing regimes for the past forty years has reported on

a large variety of empirical studies that consistently have shown that the compulsory licensing of patents pursuant to antitrust decrees has not resulted in reduced innovation efforts. Furthermore such licensing has - with a few exceptions- failed to result in any significant impact on the market structure of the affected industries. Considering the purpose of this thesis it has nevertheless to be mentioned that compulsory licensing traditionally come into play in cases of “non-use” which will probably not be the situation in future alleged EF cases involving biotech applications enjoying IP protection.

The feared negative consequence, i.e. the risk that firms’ incentives to invest will be jeopardized cannot be emphasized enough. The feared consequence is apparent in all high tech industries, which are characterized by the speed of technological change and the resultant reliance on R&D and first mover advantages. The application of the EFD might however have a particular serious impact on the biotech industry given the unusually risky commercial environment it exists in. The biotech industry is indeed especially vulnerable due to the long and uncertain phase of development rendering the process of putting new products on the market extremely expensive. The attraction of risk capital is therefore crucial to the survival of the industry. Investors have however traditionally proved ambivalent in relation to the biotech industry, comparing investments in the biotech companies to buying tickets at a lottery. The difficulties in raising capital to biotech are often blamed on instant Internet gratification. Quoting Bruce Goldman;

“Why wait out some shaky little one-drug biotech outfit’s high-risk, 10 year product cycle, with a development cost approaching half a billion dollars, when you can punch up a dot-com IPO with a price-to- earnings ratio of infinity and a doubling time of, oh, about ten minutes?”

Considering the investors’ already hesitant approach towards the industry, it is understandable that the potential reach of the EFD is bound to make biotech companies and investors nervous. There is a substantial risk that there will be little investments to the detriment of efficiency and the economy as a whole if a firm can not exclusively benefit from its own assets. To gain a proper perspective in respect of the EFD, it is therefore crucial to assess whether the owner of the alleged EF is subject to effective economic pressure. The pressure can be due to either existing competing products/services, or to potential products/services that other companies might create. Thus existing R&D programs may be proof of future, if not present competition. Only if access will significantly enhance competition in the long run should the EFD be applied. Another issue is the question of dominance. In the biotech industry unquestionable current dominance may disappear over night if an R&D venture fails or if competitors achieve a technical breakthrough. This makes the evaluation of long-term consequences especially complex. The Commission has in its case law recognized this particular R&D dimension of innovational competition. When faced with alleged EF in the biotech industry it will therefore reasonably seldom judge the alleged EF as essential in view of the competitors’ possibilities to come up with alternatives in the future if they are prepared to put in an amount of capital and labor comparable to that invested of the owner of the alleged EF. However in cases where an undertaking enjoys a genuine stranglehold on a particular market through e.g. a cluster of patent rights it may be appropriate to apply the EFD even to biotech applications since the competition may otherwise be seriously impeded and the consumers might be deprived of useful products/services. Likewise the EFD could potentially be applied in cases where the facility is

170 http://www.signalsmag.com/signalsmag.nsf/0/620FE29C9E5931418825678A000AA315 , p 1
more the random result of another activity and not the fruit of major investments in time and money. In such a case the determent of investments will not be as serious if access is granted.

It is an encouraging fact that in practice the Commission and the ECJ have been cautious and pragmatic in its application of the EFD to begin with. Typically it has been applied when the control of the EF originates in a (previous) legal monopoly, geographical particularities or other circumstances, which cannot be considered as any merit of the company itself. Moreover the fact that the Commission has recognized the innovational dimension of the high tech industries and for the purpose of this thesis, in particular the biotech industry, appears reassuring.

As regards the scope of the EFD, an important issue, which needs further clarification, is when an owner of an EF that has never been in the business of providing that facility may have a duty to grant access. It would be interesting to know whether such a distinction could be influenced by the fact that the EF is an IP product and/or the result of the owner’s efforts and skills in contrast to geographical particularities, etc. If the EFD were to be applied also in cases where the owner of the EF had never before provided that facility the harmful impact of the Doctrine would of course risk to be even bigger.

There exists indeed a need to adopt a clearer analytical framework when assessing alleged EF cases. It would increase the predictability of the Doctrine and benefit the industry by saving litigation costs and reassuring investors. Well-defined criteria would on one hand improve the predictability of the law and stimulate strong companies to taking risks and making investments, but might on the other hand reduce the Authorities’ discretion to balance short-term and long-term considerations against each other in cases with special circumstances. Ideally a criterion should be added to the EFD, which distinguishes between situations where investments might be hampered by its application, situations where no significant such risk occur and situations where its application potentially can result in substantial efficiency gains. Such a criterion would however realistically be hard to apply with enough predictability and the predictability of the law is vital in a community claiming to be governed by law.

It can’t be emphasized enough that a rational competition law policy must recognize that some competitive activity will be highly rewarded and thus that certain products/services created through the competitive process will be highly sought after by others. Only where competition has seriously broken down or cannot be expected to operate, the rationale of the EFD will work as intended. Such an approach would in the vast majority of cases limit the existence of EF to natural monopoly activities. To conclude, it appears to be in order to issuing a warning for over-zealous application of the EFD. Companies must be ensured that they will not be deprived of the legitimate use of their competitive advantages. An over-liberal application of the EFD will not benefit the consumers in the long-term and the welfare of the consumers is what competition law is all about in the end.

"The successful competitor, having been urged to compete, must not be turned upon when he wins."  

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171 Bergman, op cit, p 63  
172 Bergman, op cit, p 63  
173 Ridyard, op cit, p 448  
174 US Case, United States v Aluminium Co of America, 148 F.2d. 416, at 433 (2 cir. 1945)
**Bibliography**

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<tr>
<th>Author(s)</th>
<th>Title</th>
<th>Publication Details</th>
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<tbody>
<tr>
<td>Bergman</td>
<td>&quot;The Bronner Case-A Turning Point for the Essential Facilities Doctrine?&quot;</td>
<td>ECLR [2000] issue 2, Sweet &amp; Maxwell Limited</td>
</tr>
<tr>
<td>Glynn, Oglialoro</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bright, Guttuso,</td>
<td>&quot;Licensing Block Exemptions and Essential Facilities&quot;</td>
<td>International Antitrust Law and Policy, 1994, Fordham Corporate Law Institute, Sweet &amp; Maxwell Limited</td>
</tr>
<tr>
<td>Lang, Rosen, Venit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cowen</td>
<td>&quot;The essential facilities doctrine in EC competition law: Towards a matrix infrastructure&quot;</td>
<td>International Antitrust Law and Policy, 1995, Corporate Law Institute, Sweet &amp; Maxwell Limited</td>
</tr>
<tr>
<td>Furse</td>
<td>&quot;The ‘Essential Facilities’ Doctrine in Community Law”</td>
<td>ECLR [1995], issue 8, Sweet &amp; Maxwell Limited</td>
</tr>
</tbody>
</table>
Kim, Rapp  “High Technology Antitrust: commentary on recent cases”, International Antitrust Law and Policy, 1996, Fordham Corporate Law Institute, Sweet & Maxwell Limited

Koktvedgaard  “Genteknik og patentret i nordisk og europæisk perspektiv”, NIR [1989] issue 4, ISSN 0027-6723,


Lang  ”European Community Antitrust Law-Innovation markets and High Technology Industries”, International Antitrust Law and Policy, 1996, Fordham Corporate Law Institute, Sweet & Maxwell Limited


Lidgard  “Competition Classics”, Master of European Affairs, 1999, Faculty of Law, Lund University, Sweden

Ridyard  ”Essential Facilities and the Obligation to Supply Competitors under UK and EC Competition Law”, ECLR [1996], issue 8, Sweet & Maxwell Limited

Treacy  ”Essential Facilities- Is the Tide Turning?”, ECLR [1998] issue 9, Sweet & Maxwell Limited

Websites


http://recap.com/signalsma…/31F7C75CF259C9F78825683200762433 (Signals Magazine, Online Magazine of Biotechnology Industry Analysis, ”Biotech Raise $2.4 Billion in Equity Financings”), 07-04-2000


http://www.hyperlaw.com/lang.htm ("Defining Legitimate Competition: companies duties to supply competitors, and access to essential facilities” by Lang), 23-03-2000

http://www.imclone.com, 06-04-2000


http://www.prodigene.com, 06-04-2000


European Community Case Law

ECJ cases


CFI cases


Commission Decisions


Commission Notice, *Polaroid v SSI Europe*, EC Commission Thirteenth Report on Competition Policy, p 95


Advocate Generals’ opinions

Opinion of May 28, 1998 Case C-7/97 *Oscar Bronner GmbH & Co KG v Media Print Zeitungs- und Zeitschriftenverlag GmbH & Co KG*

Legislative Enactments

European Union

Consolidated Version of the Treaty establishing the European Community as amended by the Treaty of Amsterdam


Commission Regulation 240/96/EC of 31 January 1996, on the application of Article 85(3) to certain categories of technology transfer agreements, OJ 1996 L 31/2, [1996] 4 CMLR 404


US
Sherman Act, 15 USCA of 1890

Official documents of the European Community


Communication from the Commission to the Council and the European Parliament outlining an industrial policy for the pharmaceutical sector in the European Community, COM [93] 718


Council Resolution 96/C136/04 of April 23 designed to implement the outlines of an industrial policy in the pharmaceutical sector in the European Union, OJ 1996 C136/4


National and Foreign Case Law

Italy
Sign vs Stet-Sip quoted at http://www.oecd.org//daf/clp/Roundtables/ess05.htm, p 4
(no first hand reference has been found)

UK
The Mid and West Kent bus services case, MMC Report, August 1993 (Cm 2309)
British Gas case, MMC’s 1993 Gas Report (quoted in Ridyard’s article, pp 240-242)
Cases CH 1997 P No.4100 and CH 1997 P No 4101 Philips Electronics NV v Ingman Limited; Philip Electronics NV v The Video Duplicating Company Limited; judgment of Laddie J. May 13, 1998

US
United States v Terminal Railroad Association of St Louis, 224 US 383 (1912)
United States v Aluminium Co of America, 148 F.2d 416, 2d Circuit 1945
Service Trends, Inc v Siemens Medical Systems, Inc, 870 F. Supp. 1042 (ND G a 1994