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The Year 2005 at DG Competition: The Trend towards a More Effects-Based Approach†

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Abstract. This first review of the European Commission's Directorate General for Competition (DG COMP) gives an overview on DG COMP's mandate and the main developments of 2005. The discussion includes institutional and policy developments, as well as the main competition policy decisions and Court judgments in the merger, antitrust, and state aid areas. It is argued that the trend towards a more effects-based analysis in EU competition policy had an impact on the assessment of competition cases, as well as on the development of soft law. For example, the effects-based approach was put high on the agenda with the publication of the Article 82 discussion paper. Similarly, the publication of the State Aids Action Plan (SAAP) launched a "more economic approach" in European state aid assessment. In line with its objective to focus resources on key sectors, two major inquiries were launched in the energy and financial sectors.

Key words: Competition policy, effects-based approach, antitrust, state aids, mergers.

I. Introduction

This is the first review of the European Commission's Directorate General for Competition (DG COMP) in the "Antitrust and Regulatory Update". Since the institutional and legal setting of COMP is different from the US antitrust agencies, we not only summarize the main developments of 2005, but also provide a general overview of DG COMP's mandate.

DG COMP is in a unique position within the European Community, because it has direct enforcement powers and does not depend on national governments. The European Treaty defines competition as a principal goal, and the general rules governing antitrust and state aid control are included

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in the Treaty, while merger control rules are in a Council regulation. An important issue is jurisdiction, where Community competition law is applicable only if there is sufficient Community-wide impact.

Originally, one of the main goals of European competition policy was the promotion of market integration – i.e., the removal of obstacles to cross-border trade – which also linked the Commission with the European Court of Justice. The emphasis on market integration is one of the determinants for a policy that is more based on legal form, rather than on economic content. With progress made toward realisation of the internal market, the relative importance of the market integration goal has declined. As a result, policy statements today stress efficiency, consumer welfare, and competitiveness.

In 2005, substantial progress was made towards a more effects-based analysis in competition policy across all of the main areas of activity. An effects-based approach requires a careful examination of how competition works in each particular market. By focusing on the effects of company actions rather than on the form that these actions may take, an effects-based approach makes the circumvention of competition policy constraints more difficult for companies. At the same time, this approach provides a more consistent treatment of practices. It takes into account that many business practices may have different effects in different circumstances, distorting competition in some cases and promoting efficiencies and innovation in others. As the assessment is not based on the form of a particular practice but on the anticompetitive effect, the competition authority needs to identify a theory of harm and assess the extent to which such a negative effect on consumers is potentially outweighed by efficiency gains.[1] As discussed in more detail below, such an effects-based analysis has been embraced not only in antitrust (including mergers), but also most recently in state-aid analysis.

In 2005, in antitrust enforcement, the highest priority was given to detecting and dismantling cartels. The Commission's leniency programme led to an increasing number of cartel investigations. In 2005, the Commission adopted five decisions against cartels with total fines of EUR 683.029 million.

In the area of merger control, a total of 313 notified cases were assessed. In line with the aim to move towards a more effects-based analysis, investigations tended to rely increasingly on a thorough fact finding. In 2005, no prohibition decision was taken, while in three cases the notification was withdrawn in the second phase. 291 cases led to a clearance decision following an initial investigation ("phase I"), of which 15 were conditional. Five decisions were taken only after an in-depth investigation ("phase II"). Some key decisions, as well as court judgments, are summarised below.

[1] See Gual et al. (2006).

The State Aid Action Plan (SAAP), a far-reaching reform package for EU state aid control, was launched in 2005. It aims to promote better-targeted aid, for example, to promote innovation, risk capital, and research and development. The ultimate goal is to offer better predictability of state aid, better economic results, and better governance. There has been a significant increase in case-handling activities, with 676 new state aid cases registered in 2005.

In what follows, we first give an overview of recent institutional and policy developments. Thereafter, the main decisions and court judgments in the antitrust, merger, and state aid areas are summarised. In 2005, the broadband sector was investigated under different instruments of EU competition policy (antitrust, regulation, and state aid). As this raised some interesting issues, our overview focuses on the case work in this sector.

II. Institutional developments

With the reform of antitrust procedures under Regulation (EC) No 1/2003, enforcement against horizontal cartels has become a key priority. This increased focus on the fight against cartels led in 2005 to the creation of a dedicated Cartels Directorate in DG COMP. With a staff of some 60 employees, the Directorate handles the majority of cartel cases. Its main task is to streamline and accelerate the handling of investigations so that they can be completed within a reasonable time-frame. It also takes a leading role in developing policy in the area of cartel detection and prosecution.

1. EUROPEAN COMPETITION NETWORK (ECN)

Over recent years, Community competition law has undergone a profound transition to a mature, comprehensive enforcement structure. The substantive principles have now become a common legal framework shared with the national laws of the Member States. With the adoption of Regulation 1/2003, DG COMP and the national competition authorities of the Member States have been closely linked in a European Competition Network (ECN). In the future, the law will evolve within the network of national and Community agencies that share responsibility for applying it. Within the ECN, agencies have to ensure a coherent application of the EU's competition rules. National authorities and DG COMP meet in so called "plenary meetings" and working groups. The latter address, for instance, issues like discrepancies between leniency programmes, heterogeneity of procedures and sanctions, and abuse of dominance. There are 13 sectoral sub-groups dedicated to particular sectors.

Cooperation between ECN members in individual cases is organised around two principal obligations: Under Regulation 1/2003, national authorities are obliged to inform the Commission at the outset of proceedings and before the final decision. The first obligation facilitates the swift re-allocation of cases when necessary; the second is important to ensure consistent application of EU law. In 2005, the first full year of implementation of the ECN, the Commission was informed about some 180 new case investigations launched by national authorities and almost 80 cases where a national authority envisaged adopting an anti-trust decision.

There also exists a working group of chief competition economists. The primary purpose of the working group is to share technical expertise and to improve the understanding of complicated quantitative analysis tools. This includes, for instance, discussing case-related applications of econometric or simulation modelling. A closer contact between economists of EU competition authorities should help develop a coherent approach in the application of such modelling tools to competition policy.

2. BILATERAL CO-OPERATION

DG COMP has dedicated cooperation agreements in competition matters with the US, Canada, and Japan. The principal elements are mutual information on, and coordination of, enforcement activities and the exchange of non-confidential information. Under the agreements one party may request the other to take enforcement action (positive comity), and one party may take into account the important interests of the other party in the course of its enforcement activities.

With the US there also exists bilateral cooperation in particular sectors. In the field of air transport, on 18 November 2005 the Commission finalised the draft text of a new agreement with the US, replacing existing bilateral agreements concluded by Member States. The agreed institutional cooperation framework includes notification of relevant cases, exchange of information on general and case-related issues, and regular meetings to discuss market developments. During 2005, close cooperation with the Antitrust Division of the US DoJ and the FTC continued. There were frequent and intense contacts between these agencies, ranging from cooperation in individual cases to cooperation in relation to more general competition policy-related matters.

Over the year, a number of merger cases required substantial cooperation. These included *Johnson&Johnson/Guidant*, where the cooperation with the FTC focused on the patent dimension in the US market and led to aligned investigations. In *Procter&Gamble/Gillette* there was close cooperation with the FTC as regards product market, assessment of possible anticompetitive effects, and remedies. In both of these cases the competition issues differed between the US and the EU. *J&J/Guidant* was cleared by the EU subject to remedies in endovascular stents and coronary steerable guidewires, whereas in the US no issue arose in these markets.

In *P&G/Gillette* the Commission only identified horizontal competition concerns in battery toothbrushes, whereas in the US there were broader concerns. A common merger remedy was found in the *Reuters/Telerate* case, which the Commission investigated together with the DoJ.

3. CHIEF ECONOMIST OFFICE

In 2003, the Commission created the office of a Chief Competition Economist (CCE), which consists of 10 specialized economists who are usually described as the Chief Economist Team (CET).[2] The CET has two functions. First, the CET gets involved in selected cases and guidelines and provides support to case teams (the "support function"). In this way the CET is closely involved with the day-to-day work of case teams, giving economic guidance and methodological assistance. Second, the CCE provides the Commissioner and the Director-General with an independent opinion on all cases and guidelines that the CET has been involved in (the "checks-and-balances function").

The CCE is also responsible to help capacity building in economic expertise. An "Economic Advisory Group on Competition Policy" (EAGCP) was created in 2004, which consists of 20 leading academic economists in the area of industrial organisation. The EAGCP writes independent "opinions" and advises DG COMP and the Commissioner on selected policy issues. There is also an Annual Forum, which is an internal one-day event, where DG COMP discusses economic analysis of past cases and current policy issues with the EAGCP. Another element of capacity building is the Economic Seminar series on Competition Policy, a monthly public seminar, where external academic speakers present their latest work in the field of competition policy.

III. Policy developments: A more effects-based approach and pro-active enforcement activities

The recent trend in DG COMP towards an effects-based approach, as described above, is not so much about more economics or less economics, but rather about what kind and how economic analysis is used to arrive at better decisions. In fact, antitrust and merger analysis has been based on economics for a long time. The increased need to justify the benefits of competition policy, advances in economic thinking (industrial organisation), and the scrutiny by the courts has triggered a debate about how economic analysis should be used in the context of guidelines or cases. In

[2] For more detail, see Roeller (2005).

particular in *Airtours*[3] and *Tetra Laval/Sidal*[4] the Court considered that the Commission had not adequately looked at the (economic) evidence.

As a result, there has been a change as regards the way in which economic principles and economic evidence are used in the context of competition policy decision making. An assessment in the light of modern economic principles that are robust and empirically tested, as well as the reliance on a number of empirical methodologies that help identify a theory of harm, is at the core of this trend.[5] In 2005, this has been visible in a number of merger and antitrust cases, where arguments based on economic theory played an important role in establishing a particular theory of harm. In state-aid control, a paradigm shift took place with the move towards a "more economic approach" in the state-aid action plan. Economics is increasingly used to develop a more explicit analysis of the distortions of competition as well as the use of the concept of market failures. Some concepts have already been introduced into the new Research and Development and Innovation (R&D&I) Guidelines.

1. ARTICLE 82 GUIDANCE PAPER

On 19 December 2005, the Commission published a discussion paper on the application of the EC Treaty competition rules on the abuse of a dominant position (Article 82).[6]

Article 82 of the EC Treaty prohibits the abuse of a dominant position. Abuses are divided into exclusionary abuses and exploitative abuses, where the dominant firm exploits its market power by (for example) charging excessive prices. The current application of Article 82 has been criticised for being fragmented and for focusing too much on a form-based approach that too easily assumes the existence of effects. It thereby would lead to Type I errors – a conviction in cases in which no restrictive effect arises on the market – and to Type II errors – false acquittals in cases where an effect truly occurs. A pure form-based approach is often considered to provide certainty and timely enforcement – but at too high a cost of false positives and false negatives.

The Guidance paper, which later may lead to Guidelines, addresses issues of exclusionary conduct: conduct that limits the remaining competitive constraints on the dominant company. The central concern is foreclosure, whether upstream or downstream. The paper proposes to move

[3] Case T-342/99, *Airtours plc v. Commission*, [2002], ECR II-2585.

[4] Judgments of the Court of Justice in cases C-12/03 P and C-13/03 P, *Commission of the European Communities v. Tetra Laval BV*, 15 February 2005.

[5] See Roeller (2005).

[6] http://euopa.eu.int/comm/competition/antitrust/others/article_82 _review.html

toward an effects-based analysis and sets out a methodology for the assessment of some of the most common abusive practices, such as predatory pricing, single branding, tying, and refusal to supply.[7] For price-based conduct, such as rebates, the paper considers whether only conduct that would exclude equally efficient competitors should be considered as abusive. It also proposes that efficiencies should be taken into account.

After having discussed the paper with the Member States, the Commission published the paper and started a wide consultation. Following this consultation process, in the second half of 2006 DG COMP will decide whether to propose draft guidelines.

In July 2005 the antitrust sub-group of the EAGCP submitted its "opinion" on *"an economic approach to Article 82"*.[8] The report supports an effects-based rather than a form-based approach to competition policy. Such an approach would focus on the presence of anticompetitive effects that harm consumers, and is based on the examination of each specific case, based on sound economics and grounded on facts. After highlighting an economic approach to different types of competitive harm, the report discusses how such an approach could be put to work in Article 82 cases. As several alternative practices – e.g., refusal to deal, exclusive dealing, prohibitively high access prices for downstream rivals – can often serve the same anticompetitive purpose, an approach should be developed that is consistent across these different practices. Rather than focusing on an individual practice, a competition authority's investigation should be led by the question about the nature of the competitive harm. The report finally analyses individual issues, such as price discrimination, rebates, tying and bundling, refusal to deal, exclusive dealing, and predation.

2. NEW MERGER TEST

In 2004, the revision of the Merger Regulation adapted the original legal standard for merger control. One interpretation of the old merger test was that dominance is necessary and sufficient to prohibit a merger. If so, merger control would focus on the impact on market structure, not on competitive effects. It would be economically flawed, as it would not allow efficiencies to be taken into account, such as marginal cost reductions that give an incentive to lower prices. It was argued that the old test would lead to under-enforcement as some mergers may have serious anti-competitive effects even in the absence of dominance. If the merging parties sell

[7] Peeperkorn (2006).

[8] The report has been produced independently from DG COMP's internal review process, and it does not present DG COMP's position. http://ec.europa.eu/comm/dgs/competition/eagcp.htm

close substitutes, they impose on each other a significant competitive constraint. Post-merger, customers do not have other close substitutes to turn to, and the merged entity could raise prices significantly, irrespective of whether it becomes the market leader. These are the so-called "gap" cases. In some other cases, due to its ambiguity, the old test instead created the risk of over-enforcement.[9] For instance, a merger involving a small firm with another firm that is close to being dominant could have only a negligible impact on competitive performance, but it would still be caught by a test that focuses on dominance.

Under the new test, the Commission may prevent or correct a merger that would "*significantly impede effective competition [...] in particular as a result of the creation or strengthening of a dominant position.*" The principal issue motivating the change was non-coordinated effects in oligopoly markets, where the merged firm might have market power without necessarily having an appreciably larger market share than the next competitor. It is argued that the new test could increase the accuracy and effectiveness of merger control by closing the gap in enforcement and by adding clarity. It focuses more on the principal economic question raised by a merger: whether competition is likely to be reduced. Such an effects-based approach should reduce false positives: the prohibition of pro-competitive mergers.

In a first review of the new test, it was found that during the period 1 May 2004 until 12 October 2005, in some cases the new test had an impact.[10] In 3 merger cases – *J&J/Guidant*,[11] *Siemens/VA Tech*,[12] and *Lufthansa/Swiss*,[13] the dominance criterion was less important while the analysis focused on equilibrium effects. In *Total/Gaz de France*[14] the concern has been with impeding access to an essential facility. It is possibly the first case where dominance was not mentioned at all. The first "gap" case arose in vertical mergers, where the Commission became less reluctant to assess equilibrium effects. In *E.ON/Mol*,[15] to be discussed in more detail below, the Commission considered that the merger would likely significantly impede effective competition even though there was no evidence that E.ON would acquire a dominant position downstream.

On 1 May 2004, the Commission also adopted horizontal merger guidelines that led to a strong harmonisation in approach across the Atlantic. The guidelines' structural safe-harbours and presumptions are based on market shares and HHI. They discuss in detail the theories of non-coordinated

[9] Roeller and Mano (2006).
[10] Roeller and de la Mano (2006).
[11] M. 3687.
[12] M. 3653.
[13] M. 3770
[14] M. 3410.
[15] M. 3696.

and coordinated anticompetitive effects. A market share over 50% and a significant market share advantage over any rival may be a strong indication that the merger would create or strengthen a dominant position. Countervailing factors include buyer power and entry. Entry must not only be likely but also sufficient and timely. Efficiencies can be a mitigating factor, if they are merger-specific, timely, verifiable, and benefit consumers. The guidelines disavow an efficiency "offense", i.e. an increase in productive efficiency as a result of the merger would be a reason to reject the merger.

3. NON-HORIZONTAL MERGER GUIDELINES

Following the horizontal merger guidelines, in 2005 DG COMP started working also on non-horizontal merger guidelines. Non-horizontal mergers are generally less likely to create competition concerns than horizontal ones since there is no loss of direct competition between the merging parties and due to the scope for efficiency gains. The latter arise in particular due to possible complementarities of the merging parties and due to the elimination of double mark-ups. However, there are also circumstances in which non-horizontal mergers may significantly impede effective competition.

A non-horizontal merger may change the ability and incentive to compete on the part of the merging companies and their competitors in ways that cause harm to consumers. *Non-coordinated effects* may arise from a merger if the vertically integrated firm, as a result of the merger, has an incentive to deny access to supplies or markets to its competitors (input foreclosure). As a result of such foreclosure, the merging companies may be able to increase the price charged to consumers. There may also be cases of customer foreclosure when a supplier integrates with an important customer in the downstream market. Foreclosing access to a sufficient customer base to its rivals in the upstream market may reduce their ability to compete. In return, this may then also affect the downstream rivals' ability to compete and allow the merged entity profitably to reduce the overall output on the downstream market.

Coordinated effects arise if the merger changes the nature of competition in such a way that firms that previously did not coordinate their behaviour are now significantly more likely to coordinate and raise prices or otherwise harm competition. A merger may also make coordination easier, more stable, or more effective for firms that were coordinating prior to the merger.[16]

In 2006, the EAGCP will provide an opinion to DG COMP on non-horizontal mergers. It is expected that DG COMP will start a consultation on draft non-horizontal merger Guidelines in the second half of 2006.

[16] See Case No. COMP/M.3101 – Accor/Hilton/Six Continents, par. 23-28; case COMP/M.3333-Sony/BMG, par. 177-180.

4. A "MORE ECONOMIC APPROACH" IN STATE AID

In 2005, the Commission launched the "State Aid Action Plan" (SAAP),[17] a far-reaching reform package that is designed to deliver more focused state aid rules to promote better-targeted aid. It outlines principles for a comprehensive reform of state aid rules over the next five years. The Commission intends to use state aid rules to encourage Member States to contribute to the Lisbon Strategy: to focus state aid on improving the competitiveness of EU industry and creating sustainable jobs. State aid should focus more on R&D, innovation, and risk capital for small firms, on social and regional cohesion, and on improving public services. The SAAP also requests a more refined economics-based analysis.

In principle, economic analysis is introduced in state aid control both with regard to the definition of state aid under Article 87 (1) of the Treaty and under the assessment of state aid carried out in Article 87(3). At this stage, by developing a balancing test that is based on economic criteria, a major change has been introduced as regards the in-depth assessment under Article 87 (3). This balancing test is a new element in state aid investigation and implies a significant policy shift away from a form-based analysis toward an economic assessment.[18] It requires that the state aid must be justified by a well-defined market failure or equity objective. The former can include the existence of important externalities, public good aspects, imperfect and asymmetric information, or coordination and network failures. The Member State would furthermore have to show that the aid has an incentive effect – that the aid leads to a change of behaviour of the company that would allow it to address the market failure. This requires a counterfactual analysis and ex post monitoring for large firms.

A first step towards a more refined economic approach was taken with the new Framework for state aid for Research and Development and Innovation. While the existing Framework was prolonged until 31 December 2006, in 2005 the Commission consulted Member States on measures to improve state aid for innovation.[19] The Commission recognises that state aid policy can be used to support innovation by tackling market failures. However, it also points out that only effective competition in the market creates the incentives for companies to develop new ideas and products.

[17] 107 final, 7.6.2005. http://europa.eu.int/comm/competition/state_aid/others/action_plan

[18] See Friederiszick et al. (2006).

[19] The proposals for innovation aid cover innovative start-ups, risk capital, the integration of innovation into the existing rules on state aid for R&D, innovation intermediaries, training and mobility, and poles of excellence for projects of common European interest.

The new Framework for R&D&I sets out a "balancing test" to investigate whether a state aid can be authorised. According to the new test, the aid must (i) target a well-defined market failure, (ii) be the appropriate instrument to address the market failure, (iii) has an incentive effect on innovation, (iv) is proportionate to the defined objective, and (v) creates only limited distortions of competition. The purpose is to achieve a better targeting of overall state aid and to prevent an increase in R&D spending that leads to a decline in the overall productivity of such spending. While there exist good reasons that market failure may lead to insufficient R&D, not all R&D is beneficial from the point of view of society. Some of it involves needless duplication or may even be motivated by an intent to exclude rivals from a market. A recent opinion of an EAGCP sub-group sets out the conditions for R&D to result in productive and socially useful innovation. This includes, for instance, that complementary factors of production are present, that public support is made available in particular to new entrants, and that Member States are willing to halt support for failing projects, etc.[20]

One of the first initiatives taken in the context of the SAAP was the launch of a legislative package[21] regarding the financing of public services. It provides greater legal certainty in the financing of services of general economic interest. It ensures that companies can receive public support to cover all costs incurred, including a reasonable profit, when carrying out public service tasks. However, it prevents over-compensation or the use of public funds for the cross-subsidisation of activities in adjacent markets. Also for Services of General Economic Interest,[22] the state-aid sub-group of the EAGCP has recently presented an "opinion" to DG COMP.[23]

5. SECTOR INQUIRIES

A milestone in the implementation of Regulation (EC) No 1/2003 was the launch of the first two sector inquiries in 2005, one in the financial sector and one in the energy sector (gas and electricity). This new regulation gives the Commission special powers to carry out extensive market investigations. Launching such inquiries follows from the Commission's aim for a

[20] http://ec.europa.eu/comm/dgs/competition/eagcp.htm.

[21] Commission Decision, OJ L 312, 29.11.2005, p.67; Community Framework OJ. C 297, 29.11.2005, p. 4., and an amendment to the Commission Directive on financial transparency: Commission Decision 2005/81/EC of 28.11.2005.

[22] Services of General Economic Interest are defined in EU competition law as economic activities that public authorities identify as being of particular importance to citizens and that would not be supplied (or would be supplied under different conditions) if there were no public intervention.

[23] http://ec.europa.eu/comm/dgs/competition/eagcp.htm

clearer priority in the setting of its enforcement policy and the application of a more pro-active and economic approach. On the basis of the results of these inquiries, the Commission will determine the necessary enforcement and regulatory actions.

The first results of the energy sector inquiry were presented in February 2006.[24] In the past, in most Member States the energy sector was under close state control, which led to the creation of (state) monopolies along national borders. In recent years the European Union has liberalised energy markets. All gas and electricity end-user markets should be open for competition by 2007. Directives lay down a number of conditions for competition to evolve, such as non-discriminatory access to transport and storage infrastructure.[25] The key preliminary findings demonstrate that throughout the Member States at the wholesale level *natural gas* markets generally maintain the high level of concentration of the pre-liberalisation period. Incumbents remain dominant in their traditional markets by largely controlling up-stream gas imports (production). Lack of liquidity and limited access to infrastructure lead to market foreclosure. A network of long-term supply contracts between gas producers and incumbent importers makes it difficult for new entrants to access gas in upstream markets.

In *electricity*, generators have the ability to raise prices by withdrawing capacity. Vertical integration of generation, supply, and network activities create the risk that markets are foreclosed for new entrants. Finally, in both gas and electricity markets there exists a low level of cross-border trade, and cross-border sales therefore do not exert any significant competitive pressure. The preliminary findings suggest that only structural change would be an ultimately effective remedy. This would imply structural unbundling: effective separation of the supply and retail business from monopoly infrastructures. Regulatory changes would be required to address the existing disincentive for incumbents to invest into cross-border inter-connection. Such inter-connection would dilute the incumbents' pricing power in their respective home markets.

6. REMEDIES STUDY

In 2005, a major ex-post evaluation exercise was carried out reviewing the design and implementation of merger commitments over the period 1996-2000. The Study analysed 40 Commission decisions, which included

[24] DG COMP had sent out over 3000 questionnaires and met with several dozen market participants. A preliminary report can by found at: http://europa.eu.int/comm/competition/antitrust/others/sector_inquiries/energy.

[25] Directives 2003/54/EC of 26.June 2003 and 2003/55/EC of 26. June 2003.

96 different remedies. The vast majority of these remedies consisted of divestiture commitments. For 85 remedies an overall effectiveness evaluation was possible. 57% were fully effective, while 24% were considered only partially effective; 7% of the remedies had clearly failed to achieve the intended objective.

Where the Study identified flaws in the design and implementation, the failure adequately to define the scope of the divested business was the most frequent problem, followed by unsuitable purchasers, the incorrect carve-out of assets, and the incomplete transfer of the divested business. Stand-alone commitments to prevent foreclosure to critical infrastructure, technology, or intellectual property rights raised a number of serious issues. The primary causes for the failure of access commitments were found in the difficulties in initially setting the terms for effective access and in monitoring them.

7. EX OFFICIO CARTEL INVESTIGATIONS

As another step toward a more effects-based approach, DG COMP set up a working group developing a methodology to determine areas for independently initiated cartel investigations. Successful investigations can reinforce the success of the existing leniency programme. In the absence of such investigations, potential applicants for leniency will adjust to the perceived low probability of detection. In addition, there appear to be industries that are "immune" to the leniency programme. Thereby absent from the possibility of independent detection, some sectors of the economy may remain cartelized. An objective methodology could produce evidence that meets the standard necessary to obtain the authorisation to start investigations, and it would also provide a solid justification if, in spite of a complaint, it is decided not to start an investigation.

The use of economic evidence in cartel investigations is receiving increased attention. On the academic side, several economists have surveyed or tested methods to deploy economic analysis for cartel detection. While acknowledging the limits of any economic methodology aimed at identifying collusion, there is a higher willingness to deploy economic tools to provide guidance to competition authorities in cartel cases. A recent OECD roundtable conference found that the use of economic evidence in cartel cases is becoming increasingly important since it is getting more difficult to find direct evidence, so that circumstantial evidence is needed.[26] The working group will present its results in the second half of 2006.

[26] OECD roundtable on "*prosecuting cartels without direct evidence of agreement*", 8-9th February 2006, Paris.

IV. Antitrust

1. CARTELS

The level of enforcement against horizontal cartels has sharply increased since 2001. The Commission has issued an average of about eight decisions per year, compared to fewer than two per year over the previous decades. The Commission's notice about setting fines treats hard-core cartels as "very serious infringements", for which the fine, determined by gravity, would normally be at least EUR 20 million. In 2005, the leniency programme continued to give rise to a steady stream of cases being reported to the Commission. The Commission received 17 applications for immunity and 11 applications for a reduction of fines. The Commission, within the framework of the ECN, focused on violations that have an impact in at least several Member States. The Commission issued five final decisions in which it fined 37 undertakings a total of EUR 683 million.

2. BROADBAND CASES

Television channels are delivered primarily through three platforms: terrestrial, cable, and satellite. More recently, television can also be received via the Internet. The use of different transmission platforms varies considerably across countries. There are two modes of transmission: the traditional analogue mode, and the more recent digital mode. Digital transmission allows better for picture and sound quality and better use of the frequency spectrum. However, it obliges broadcasters and network operators to update their transmission equipment, and viewers must use set-top boxes. Several Member States are currently introducing digital television transmission, since analogue terrestrial TV broadcasts use scarce frequencies that could have better alternative uses. This process of "digital switchover" raises a number of interesting competition issues. The termination of analogue terrestrial transmission has a public interest aspect that is not present for the switch-off of cable or satellite analogue transmission.

In the antitrust area, in 2004 the Commission had accepted commitments by Deutsche Telekom (DT) to terminate an abusive behaviour in the form of a "margin squeeze" as regards shared access to the local loop (line sharing) in Germany. The resulting settlement was based on the margin squeeze methodology as established in a previous *Deutsche Telekom* decision.[27] After consulting the German national regulatory authority, the settlement was accepted by the Commission and led to a substantial decrease in line-sharing fees. Subsequently, several companies started to roll out networks in order to provide broadband services on the basis of line sharing.

[27] Joined cases COMP/37.578 and 37.579 *Deutsche Telekom*, OJ L 263, 14.10.2003.

In combination with the EU competition rules, infringement proceedings under Article 226 EC Treaty are used by the Commission to ensure that Member States transpose EC directives correctly into national law. It is the responsibility of DG COMP to monitor Member States' compliance with one of the directives in the EU regulatory framework for electronic communications, the so-called Competition Directive. After it learned that regulations remained in Sweden that oblige television broadcasters to acquire terrestrial broadcasting and transmission services exclusively from the state-owned company Teracom AB, the Commission opened infringement proceedings against Sweden. Further investigations in 2005 showed that the Swedish regulation of digital broadcasting services had similar effects.

3. COCA COLA

On 22 June 2005, the Commission adopted a commitment decision based on Article 82 EC addressed to the Coca-Cola Company. In a preliminary assessment, the Commission expressed concerns that Coca-Cola had abused its dominant position in the national markets of carbonated soft drinks in the EU. The Commission investigated practices of exclusivity requirements, growth and target rebates, and tying arrangements in the take-home distribution channel and the on-premises distribution channel. In response to the preliminary assessment, Coca-Cola submitted commitments that, following a market test, were accepted by the Commission. In particular, Coca-Cola will refrain from concluding exclusivity agreements except in specific circumstances and from granting growth and target rebates. The decision concluded that there were no longer grounds for action by the Commission, without reaching a finding as to whether or not there was or had been an infringement.

4. ASTRA ZENICA

On 15 June 2005, a decision was adopted fining Astra Zeneca (AZ) EUR 60 million for having infringed Article 82 EC by misusing public procedures and regulations in a number of European Economic Area (EEA: the EU Member States, plus Iceland, Liechtenstein, and Norway) States with a view to excluding generic firms and parallel traders from competing against AZ's anti-ulcer product Losec. AZ misused a Council regulation[28] creating a supplementary protection certificate (SPC) under which the basic patent protection for pharmaceutical products can be extended. The abuse consisted of a pattern of misleading representations made by AZ before

[28] Council Regulation (EEC) No 1768/92 of 18 June 1992, OJ L 182, 2.7.1992, p. 1.

patent offices in a number of EEA countries in connection with its SPC applications. It thereby obtained extra protection in several countries. The Commission considered that the existence of remedies under other legal provisions cannot by itself exclude the application of Article 82 EC, even if the remedies cover aspects of the exclusionary conduct. A second abuse took place due to the misuse of drug authorisation procedures whereby AZ succeeded in extending the protection provided for in the applicable rules.

V. Mergers

1. ENERGY CASES: ENI/GDP/EDP AND E.ON / MOL

As the preliminary results of the energy sector inquiry have shown, market concentration due to the strength of historic monopolies is a fundamental problem in European energy markets. The lack of cross-border gas pipelines and electricity inter-connectors further prevent competition between incumbents or national incumbents. Gas and electricity companies within the same Member States are therefore often considered to be each other's most obvious (potential) competitors. The Commission has taken a critical view regarding mergers between national energy incumbents and prohibited the ENI/GdP/EdP merger in Portugal on 9 December 2004. In its judgment of 21 September 2005, the Court of First Instance confirmed the Commission's decision.[29]

By way of contrast, cross-border mergers have also been considered more positively, as they could foster market integration and more cross-border competition in the EU. On 21 December 2005, the Commission approved, subject to conditions and obligations, the acquisition of the incumbent oil and gas company in Hungary MOL by E.ON Ruhrgas. The latter is a large integrated German energy operator active in gas and electricity production and supply. MOL is active in gas production, transmission, storage, and wholesale and trading operations. Through the transaction, E.ON acquired MOL's wholesale and trading business and storage, as well as MOL's long-term gas supply contracts, notably with Gazprom. It thereby was in the position to control all of Hungary's gas resources, both imported and domestic.

Given that E.ON was already active in gas and electricity retail in Hungary, the Commission initially found that the operation would have anti-competitive effects due to the vertical integration of the dominant position in gas wholesale and storage with E.ON's downstream activities. Applying the new merger test, the Commission concluded that the transaction would significantly impede effective competition on these markets. E.ON would be

[29] Case T-87/05 EDP –Energias de Portugal SA.

in a position to use its control over gas resources in Hungary to increase its market power on the downstream markets for retail supply of gas and electricity and for generation/wholesale distribution of electricity.

To address these concerns, E.ON offered a far-reaching package of remedies, which will lead to full ownership unbundling of gas production and transmission activities from gas wholesale and storage activities. E.ON also undertook to release significant volumes of gas into the market at competitive conditions. E.ON committed to implement an eight-year gas release programme and divest half of its 10-year gas supply contract with MOL. These two measures would release an equivalent of 14% of Hungarian gas consumption. This is the most significant gas "release" ever implemented in Europe. The Commission considered that the remedies are sufficient to remove the competitive concerns stemming from the transaction.

2. SIEMENS/VA TECH

This case concerns the proposed takeover of the Austrian company VA Tech by the German firm Siemens. The assessment involved both classical horizontal issues in a number of markets as well as vertical issues, notably in rail markets (i.e., production of regional trains, trams, and metros). The Commission cleared this transaction following the submission of remedies to alleviate serious competition concern in two areas: hydro power and metallurgical plant building.[30]

With respect to the hydro market, the analysis found a likely significant unilateral effect from the merger. The proposed remedy, however, removed the overlap and thereby the competition concerns. Siemens committed to divest VA Tech's hydro power business, thereby entirely removing the competitive overlap between VATech and the Voith Siemens joint venture in the market for hydro power generation equipment.

As regards the metallurgical plant building, the assessment of potential unilateral effects took into account that Siemens has a minority shareholding in SMS. Though the horizontal guidelines do not specifically mention the effect of minority shareholdings in competitors on the analysis of unilateral effects, it would be wrong to ignore them. They can indeed lead to less intensive competition and be harmful to customers. Again, the potential harm to competition from this minority shareholding was removed with a remedy.

The analysis of the market for power transmission and distribution led to a finding of no impediment to effective competition. This market raised the interesting question as to what extent information about a possible

[30] The term refers to activities related to the (mostly turnkey) planning and building of industrial plants producing and processing metals.

historic attempt to cartelize this industry should be taken into account in the assessment of future risks of coordinated effects. This is an issue that DG COMP may further explore in a working group.

Finally, vertical issues arose in the rail markets. While many integrated suppliers produce both traction (i.e., electrical motors) and the rail rolling stock, some firms only produce one of the two. In particular, the VA Tech subsidiary ETR only produces traction. The planned takeover by Siemens of ETR would thus lead to a reduction in the number of independent suppliers of traction. In some markets this would be a reduction from two to one (inter alia for trams and underground trains) and in one market possibly even from one to zero: They would abandon the market (regional trains). The Commission applied an effects-based analysis and found that even if independent suppliers of rail rolling stock would encounter difficulties in finding independent suppliers of traction, there would still be sufficient competition in the market due to the competition between fully integrated suppliers.

3. BLACKSTONE/ACETEX

On 20 January 2005, the Commission received a notification for the proposed acquisition of Acetex, an active producer in the acetyls and plastic business, by Blackstone, a U.S. private merchant-banking company.[31] After an in-depth investigation, eventually the merger was cleared. The investigation became an interesting example for the role of quantitative analysis to delineate antitrust markets.[32] While the definition of product markets did not pose any challenge, one of the key issues was the delineation of the relevant geographic market for each product affected by the transaction. The transaction had an impact on four product markets: acetic acid, an intermediate chemical product used in the production of various other chemicals; VAM, a commodity chemical derived from acetic acid; acetic anhydride, a basic chemical used primarily for the production of cellulose acetate flake; and PVOH, a water-soluble synthetic polymer.

For acetic acid, VAM, and acetic anhydride the parties claimed that the markets for the affected products were worldwide.[33] But because the presence of substantial transportation and storage costs as well as duties could inhibit trade flows, it was not clear whether imports could flow easily into

[31] Blackstone is mainly active in financial advisory services, private equity investment and property investment. One of the companies controlled by Blackstone, Celanese, is active on the same product markets as Acetex.

[32] See in detail Durand and Rabassa (2005).

[33] The same applies as regards PVOH, where the parties claim was in line with previous case law (*Solvay/BASF*), and furthermore broadly confirmed by the Commission's market investigation in this case.

the EEA as a result of a domestic price increase. During the proceedings the parties submitted numerous econometric studies supporting the existence of a worldwide market. However, the empirical studies submitted did not directly provide evidence that the producers in different regions belong to the same antitrust market.

The parties carried out a "shock" analysis to VAM to determine the relevant geographic market. No such analysis could be carried out for the other three chemicals as they could not identify a sufficient number of shocks. The following discussion therefore only refers to the market of VAM. The parties' analysis consisted of determining whether unexpected supply shocks in one particular region had any impact in other regions of the world. Because negative supply shocks lead to a restriction in output, they can provide useful information about the strength of the competitive reactions of producers located in other regions of the world. Such natural experiments can be a suitable empirical methodology to shed light on the source of existing competitive constraints that are likely to impede the exercise of market power.[34]

Unlike the parties, DG COMP maintained that the relevant experiment was first to focus on the impact of unexpected outages that have occurred in Western Europe. The Commission's primary concern is to determine whether the merger would lead to a significant price increase in the EEA. Therefore the starting point of the exercise is to determine if the EEA constitutes a geographic market that can be successfully monopolized. Unexpected outages, though short-lived, may provide some indication about the source of the competitive constraint faced by producers located in the EEA. That is, if unexpected output restriction causes both a surge in imports into the EEA and prices in other regions to rise, this would be an indication that a hypothetical monopolist controlling all production facilities in Europe would be unlikely to impose a successful small but non-transitory price increase. As a result, the antitrust market would likely be broader than the EEA.

The results suggest that an unexpected output reduction in Europe has led to an increase of imports from North America. The diversion by producers in North America of part of their production to Western Europe also led to a supply shortage and a price increase in North America. However, there was no evidence that producers located in Asia exerted directly a competitive constraint on producers located in Western Europe. The price effect in Asia was relatively small in magnitude, and the estimate of that effect was so imprecise that the coefficient is not statistically significant.

[34] For the purpose of their study the parties identified plant outages that had occurred in various regions of the world and that were cited in the trade press. The study focused on three main regions: North America, Western Europe (a proxy for the EEA), and Asia.

Although it was found that the suggested increase in imports from the US could not satisfy completely the excess demand resulting from the outages, it was concluded that the EEA cannot be considered a separate antitrust market for VAM. The econometric evidence suggests that producers located in North America would exert a competitive constraint that could defeat an attempt to raise prices in Western Europe. There was also an investigation of whether unexpected plant outages that had occurred in the EEA had any impact on trade flows. By and large exports from North America (mostly from the US) to Western Europe represented and still represent the vast majority of VAM imports into the EEA. Although monthly observations show that US exports have fluctuated over time, US exports would appear to have increased throughout the period. Asian exports to Western Europe, on the other hand, are much smaller and tend to be very lumpy.

These various empirical analyses have enabled the Commission to determine that the EEA did not constitute a distinct geographic market. The relevant geographic market had to include at least North America as well. However, the lack of historical data did not permit an extension of the analysis beyond this conclusion. In light of the new and planned capacity expansion in Asia, the Commission considered that the market has become or was on the verge of becoming global.

4. GE/HONEYWELL COURT CASE

On 14 December 2005, the Court of First Instance upheld the Commission's decision to prohibit the merger between General Electric (GE) and Honeywell.[35] In 2001, the Commission had prohibited this merger considering that it would impede effective competition in the markets for aerospace products and industrial systems.[36] The Court found errors in the Commission's assessment of the conglomerate and vertical effects of the merger, but it considered that the horizontal effects of the merger alone were sufficient to justify the prohibition.

As regards the vertical effects, the Commission established that GE would have the capability and incentive to foreclose its rival engine makers from Honeywell's starters. The Court, however, considered that the Commission had failed to take into account the potential deterrent effect of Article 82 on such conduct. As regards conglomerate effects, the judgment acknowledges that mergers can be anticompetitive. However, the Commission would have to prove this with convincing evidence. This was

[35] Case T-209/01 Honeywell v Commission and Case T-210/01 General Electric v. Commission.

[36] An assessment of the case can be found, for example, in Nalebuff (2003).

not the case with regard to the transfer of GE Capital's financial strength to Honeywell's avionics and non-avionics markets. Though the Court considered the internal documents of GE's financial vertical integration conclusive for proving the reinforcement of GE's pre-merger dominance in jet engines, it concluded that the decision did not provide sufficient evidence that the new entity would actually use the financial leverage to obtain a selection of Honeywell products. It also observed that the Commission had not produced an economic study proving that the short-term commercial sacrifices that GE would have to make to convince its customers to select Honeywell products would be below additional future revenues.

As regards conglomerate effects based on various bundling practices, the Court required the Commission to prove both ability and interest of the merged entity to engage in mixed bundling. By applying the standard of review for conglomerate mergers that it had set in the Tetra Laval case, the Court concluded that the Commission had not established that the merged entity would have bundled sales of GE's engines with Honeywell's avionics and non-avionics products. Also in this case, the Commission had failed to take account of the deterrent effect of Article 82 on practices as pure bundling and mixed bundling.

The Court's findings give useful guidance for the drafting of non-horizontal merger guidelines, as mentioned above.

VI. State Aid

The EC Treaty imposes a negative presumption on all forms of state aid, declaring those measures incompatible with the common market. The Commission may grant an exemption, however, and declare state aid "compatible" under Article 87(2) or Article 87(3) EC. Measures falling under Article 87(2) are compatible as such. Measures falling under Article 87(3), which are in practice more important, can be declared compatible at the discretion of the Commission. In order to enable the Commission to exercise its control, all measures covered by EU jurisdiction have to be notified to the Commission *ex ante*, and then approved by the Commission before they are implemented.

The EC Treaty specifies a two stage approach. First, with a view to establishing *jurisdiction*, it is assessed whether a specific state measure constitutes "state aid" within the meaning of Article 87(1). Only state measures that constitute "state aid" within the meaning of Article 87(1) are subject to EU state aid control. Second, there is the assessment of *compatibility*, to assess whether the aid measure can be allowed under the provisions of the EC Treaty.

The way in which the Commission exercises its discretionary powers is outlined in a number of Regulations and in so-called *soft law* provisions, such as Guidelines and Communications. Specific categories of training aid, employment aid, and aid to small- and medium-size enterprises are exempted by the so-called block exemption regulations. These measures have to be notified only *ex post*, and notification requirements are reduced. In addition, specific soft law provisions exist providing criteria to assess compatibility for aid measures of a horizontal (i.e., non-sectoral) nature, for certain sectoral measures, for measures in relation to public enterprises, and with respect to specific types of state aid (state aid "instruments"), such as state guarantees. Smaller amounts of aid are considered to fall outside EU jurisdiction and, hence, do not have to be notified (*de minimis* approach). Measures that do not fulfil the criteria outlined in the soft law provisions or Regulations can, in exceptional circumstances, be approved by direct application of Article 87(3).[37]

After an extensive consultation process to review the Guidelines on national regional aid, revised Guidelines for the period 2007-2013 were adopted on 21 December 2005. Under the new Guidelines, regional aid is re-focused on the least developed regions of the EU 25. Clearly differentiated aid intensity ceilings aim to prevent possible spill-overs to non-assisted areas. As has been discussed above, in 2005 a new Framework for R&D&I was adopted which incorporates criteria for an economic compatibility assessment (the balancing test). With regard to case law, as an illustration the following section describes DG COMP's activity in one particular sector.

1. STATE AID IN THE BROADBAND SECTOR

Public authorities use various means to facilitate and encourage the digital switchover in television broadcasting and reception, including regulatory means, financial support, and information campaigns. The Commission recognises that the digital switch-over may be delayed if the process is left entirely to market forces. The 2003 Switchover Communication mentions market failure as a possible justification for public intervention.[38] Such market failure may arise from coordination problems because broadcasters need to agree on common dates for switching off analogue transmission and for switching on digital transmission to overcome the lack of frequency spectrum. It may arise from positive externalities due to the better use of the frequency spectrum. In that case the social benefit of more channels and services may exceed the private benefit of the incumbent broadcasters. Market power may prevent the market from securing the full benefits of competition between operators. Incumbent broadcasters may have an

[37] See Friederiszick et al. (2006).
[38] COM (2003) 541 final.

interest in delaying the launch of digital transmission, given that new operators may enter the market. Finally, sometimes uncertainty may prevent innovation and the development of new services.

Apart from market failure issues, the digital switchover process also raises aspects of social cohesion. Since the digital switchover entails costs for consumers for the purchase of decoders, Member States may want to assist disadvantaged groups of society and to ensure that all geographic areas continue to have appropriate TV coverage.

In line with the state-aid action plan, Member States must demonstrate that state aid is the appropriate instrument to address the issue, that it is limited to the minimum necessary and that it does not unduly distort competition. The appropriateness of granting state aid, for instance, raises issues such as the economic value of the digital licenses, the technical costs of digital transmission, and the investments needed for digitisation. In order to determine the size of the aid, one would have to take into account that operators of digital terrestrial TV may also offer new interactive services and exploit different business models, such as pay-per-view.[39] As a result, the need for economic incentives in connection with the digital switchover may be lower.

On 9 November 2005, the Commission took a decision regarding subsidies for the introduction of digital terrestrial television (DVB-T) in the German Laender of Berlin and Brandenburg. It decided that a subsidy of some EUR 4 million granted to commercial broadcasters for the use of the DVB-T network violated European state aid rules. In its compatibility assessment, the Commission recognised that there exist market failures in terms of a coordination problem and due to positive externalities. This, however, did not justify the state aid as the authorities could have resolved the coordination problem by setting a common expiry date for all analogue licences. Moreover, it was not clear that the subsidy was necessary since the commercial broadcasters had committed to the digital switchover before it was clear that they would receive subsidies. The subsidy was not the appropriate instrument since regulatory intervention in respect to the transmission licences would have been a less distortive means. Finally, the Commission found that the scheme would lead to a distortion of competition, as the measure was selective, since it only benefited broadcasters who used the DVB-T platform.[40]

[39] See Schoser and Santamato (2006a).
[40] In more detail: Christof Schoser (2006b).

VII. Conclusion

In 2005, the trend towards a more effects-based analysis in EU competition policy has been strengthened. This applies both to the assessment of competition cases, where more emphasis is put on the analysis of facts, as well as to the development of soft law. While for mergers this process started already with the adoption of the horizontal merger guidelines in 2004, in antitrust the effects-based approach was put high on the agenda with the publication of the Article 82 discussion paper. Similarly, the publication of the State Aids Action Plan (SAAP) launched a "more economic approach" in European state aid assessment. In line with its objective to focus resources on key sectors, two major inquiries were launched in the energy and financial sectors. The policy priority of cartel prosecution led to the creation of a new cartels directorate. As in previous years, also in 2005 DG COMP had a heavy case load and adopted a number of important decisions, as discussed above.

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