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ENVIRONMENTAL POLICY

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EUROPEAN AID CONTROL AND ENVIRONMENTAL PROTECTION

-EVALUATION OF THE NEW COMMUNITY GUIDELINES ON STATE AID-

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PART I:
STATE AID AND AID CONTROL AS RESEARCH OBJECTS

1 Introductory Remarks

For many years, the European Commission's control policy towards state aid has developed into a grave restriction for national structural policies. The control of state aid especially has become a major obstacle to not only effective national – but also Community-wide – environmental policy. A prominent example of this is the attempt to declare environmentally beneficial and technically viable elements of ecotaxes incompatible with the common market, or to authorise them for only a limited time. The new Community guidelines on state aid for environmental protection[1], adopted by the Commission after several revisions of the first draft guidelines, were put to force in early 2001. While they are a significant improvement on the 1994 guidelines and the first draft, they cannot serve as a sustainable, ecologically and economically consistent basis for the Community's aid control policy.

Nobody would question the Commission's general responsibility to curtail artificial distortions of competition and "arms races" in subsidies between Member States. However, in the field of environmental protection, the aid control approach worked out by the Commission and frequently promoted by the European Court of Justice has become counterproductive and disregards elementary notions of environmental economics. Moreover, the lack of clear criteria to demarcate aid and competition policy from environmental policy establishes an opportunity for the Commission to interfere in policies of the Member States where it has no factual authority.

Past criticism did not have any significant influence on the Commission's aid control practice. Rather, the first draft of the new Community guidelines on state aid for environmental protection of 27 January 2000 upheld the old systematic deficiencies, and continued to subordinate environmental protection to a biased and narrowly defined "neutrality" of allocation and competition. Furthermore, the Commission made an effort to extend the aid control regime to measures and instruments of international climate protection even before these had been fully worked out. Though the subsequent discussion-process with the Member States eventually led to significant en detail-improvements on both the old guidelines and the first draft for the new, the crucial shortcomings of aid control in the field of environmental protection still weigh heavily on the final guidelines of 3 February 2001.

Nonetheless, these already "traditional" conceptual shortcomings of aid control are now made worse, as substantial changes in principles governing the Community's policies have not been taken into account: the relative importance of environmental protection in the Community's overall policy objectives has increased considerably with the Single European Act. This fact reflects in

[1] OJ C 71, 3.2.2001, p. 3 [URL: http://europa.eu.int/comm/competition/state_aid/legislation/].

numerous *other* activities of the European Union, e.g. EIA-Directive. Yet, the new guidelines on state aid for environmental protection do not meet the requirements of this framework. On the one hand, the criteria of aid control do not comply with the obligation to balance environmental protection and protection of fair competition as required by Article 6 of the EC Treaty. On the other hand, these findings apply on formal grounds also to the guidelines as a whole: With Declaration 12 of the Amsterdam-conference, the European Commission agreed to prepare environmental impact assessment studies when making proposals which may have significant environmental implications. That guidelines on state aid for environmental protection will have significant environmental implications is out of the question. Therefore, the Commission's failure to conduct an environmental impact assessment for the draft guidelines must be perceived as a severe shortcoming.

Essentially, the new guidelines on state aid for environmental protection display three harmful tendencies:

- they hamper progressive and innovative environmental policy that improves on "least common denominator"-Community standards, thereby hindering further progress in environmental protection of common European interest;
- they do not respect the limits of the Commission's authority, interfere with the Member States' exclusive authority to decide on strategies and instruments of their respective environmental policies, and especially affect a Member State's choice between different energy sources and the general structure of its energy supply;
- finally, they do not better the standards of protection of fair competition on the common market.

Therefore, the Community guidelines on state aid for environmental protection, and the corresponding concepts of aid control policy need to be revised in crucial aspects. The control of environmental aid requires a fundamental change of perspective (and instruments) in order to establish a new balance between environmental protection and protection of fair competition.

2 The Role of State Aid and Subsidies in Environmental Policy

2.1 Environmental Protection and Competition – Harmony or Conflict?

Efforts to reach an ecologically sustainable development suffer profoundly from distorted price structures. The decisive question is not whether this is the consequence of market failure or policy failure; basically, it is both: the market mechanism alone cannot determine the "right" prices for the largely public good 'environmental protection' or for ecologically sustainable levels of utilization and consumption of natural goods respectively. So far, policy makers have failed to correct the prices for market goods so that they adequately reflect environmental objectives . On the contrary, numerous political activities – among these, state aid – and negligence in other fields change relative

prices in the opposite direction, thereby distorting the principal incentive-system to the disadvantage of ecologically beneficial processes and goods.

According to the neoclassical paradigm these shortfalls should be cured by internalising all external effects and further social costs of economic activities associated with the environment on the basis of the 'polluter pays' principle. Moreover, internalisation must also extend to positive externalities. To avoid insufficient supply of this form of environmental public goods, those who generate positive externalities must be compensated for the associated "production"-costs or for the utility-equivalents to the public.

This optimal internalisation approach would promote both environmental protection and protection of fair competition. Everyone would bear the ecological costs of his actions, and there would be no environment-related distortions of production. At the same time, relative prices would reflect ecological objectives according to their scarcity; thus, environmental protection would be optimised. This is the only situation that can be called 'fair and undistorted competition.' Yet, the optimal approach of complete internalisation cannot be implemented in reality, as every standard textbook of environmental economics confirms.[2] Consequently, the decisive questions arise again: which environmental policy is compatible with fair competition? What are and wherein lie the distortions of competition *before* and *after* the use of environmental policy instruments?

First, we keep in mind: without environmental regulations – be it standards, norms, ecotaxes or other instruments – that make the polluter "pay" for the ecological costs he induces, the inter-firm competition for scarce factors is biased, and thereby the whole market outcome is distorted. Roughly speaking, any environmental instrument employed reduces this distortion. However, as internalisation cannot serve as a criterion to assess the "correct," fine-tuned application in practice the respective degree of distortion before and after the use of environmental policy instruments can hardly be established.

What options are at hand when looking for a reasonably safe and adequate principle with which to balance environmental and competition-effects? The most popular conclusion drawn from the practical unfeasibility of proper internalisation is to expect the *same efforts* in environmental protection from all firms. Environmental economics' alternative to this is to impose on all firms the *same costs* per pollution unit, for instance, by use of taxes and levies. The scientific disciplines concerned – law and economics – have always valued the respective pros and cons of these two alternatives quite differently. These discrepancies need not be discussed en detail here, as both approaches have one, for our purposes crucial, aspect in common: they focus on the final, i.e. target, state of environmental protection. They both ignore the specific problems of transition from the actual state of environmental protection and competition to the target state, i.e. they ignore the implementation of actual environmental policy and its effects.

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[2] See for instance: Baumol / Oates (1988); Weimann (1995); Endres (2000); Cansier (1996).

Typically, new environmental initiatives and instruments meet real conditions of competition that are a result of 'historical' developments. In this situation, many firms have competitive advantages *because* they could use the production-factor 'environment' for free or for relatively low prices. These firms are de facto *treated preferentially* by slow, weak, or even virtually non-existent environmental policy and the subsequent, 'artificially' low factor-prices which no longer reflect the scarcity of environmental goods. The active use of environmental policy-instruments reduces the preferential treatment and ensuing distortion of competition. Nevertheless, those subject to these instruments usually argue that dynamic environmental policy *distorts* competition. This is correct only in one respect: their competitive stance has worsened because their former preferential treatment has been put to an end. Or, as they did not have to bear the costs of a public good, they lost subsidies. Yet, this claim can be politically decisive as far as it implicates potential losses of jobs and a slowdown of economic growth. As a result, the adoption of new environmental measures can easily be frustrated as a whole if these measures do not come with the announcement of reductions or exemptions for those firms or sectors affected most, i.e. with the announcement of new subsidies. The political dimension is obvious: national environmental measures which correct the formerly distorted competition between more and less environmentally intensive production on the national level can, at the same time, cause competitive disadvantages for resident firms on the international level.

This leads to a crucial question: how should environmental policy improvements that are politically viable only *with* reductions or exemptions be judged from the conceptual perspective of environmental protection and protection of fair competition? In other words: can preferential treatment for particular firms or sectors be justified if it is the precondition for the adoption of an environmental instrument which, on the whole, reduces the misallocation of environmental goods and improves net environmental quality? Ultimately, the European Commission, too, must answer this question when putting the guidelines on state aid for environmental protection into practice.

This task is profoundly complicated by the existence of locally, regionally and nationally differentiated environmental states and preferences, as well as by different spatial ranges of environmental goods. Against this background, it becomes virtually impossible to identify and devise an environmental policy that is absolutely neutral in terms of competition. Community-wide environmental standards or harmonised environmental taxes, for instance, may have adverse effects on competition, insofar as they do not reflect different regional or national preferences and assimilation capacities.[3] Thus, the question as to which state of competition should be protected and which environmental intervention distorts this state cannot be answered on the instrumental level or with regard to equal or varied intensities of environmental intervention.

[3] See Sprenger et al. (1995), pp. 148; Zimmermann (1994), pp. 211.

2.2 State Aid and Subsidies – Blessing or Curse for Environmental Policy?

Since the greater part of costs associated with the industrial use of environmental goods is still not borne by the polluters, and since therefore important production factors can be used for free, competition on goods- and factor-markets is distorted *in general*. Additionally, those who generate positive environmental effects usually do not receive equivalent compensation. Hence, our general hypothesis is that the distorted competition on goods- and factor-markets is supplemented by an insufficient supply of the public good 'environment'.

The current environmental regimes display preferential treatments as well as discrimination of various character caused by government intervention default. Four different prototypes can be identified under the topic 'subsidies and environmental policy':

- *Implicit,*[4] *ecologically harmful subsidies*. Where environmental goods can be used free of cost, environmentally intensive products are treated preferentially and their producers have a competitive advantage over producers which damage the environment to a lesser extent. From the perspective of environmental economics this form of preferential treatment must be classified as subsidisation or state aid because the government fails to implement the 'polluter pays' principle and thereby renounces potential revenue from this. Additionally, these subsidies are inconsistent with the environmental protection and protection of fair competition; their gradual removal via internalisation of external costs serves both objectives.
- *Explicit, ecologically harmful subsidies*. Firms and sectors that produce in an ecologically harmful or environmentally intensive manner are openly subsidized with public money – either through direct expenditures or renunciation of tax revenues. Comparable preferential treatment can be achieved with exemption from environmental standards, irregular long periods to adapt to environmental standards, reductions of or exemptions from ecological taxes and levies, which in an isolated perspective slow down environmental improvements. These types of preferential treatment are inconsistent with the objectives of environmental policy and competition policy.
- *Environmental subsidies in the case of positive externalities (compensations).* Occasionally, firms receive payments because they generate positive externalities for the environment. In general, payments of this type do not bring about preferential treatment. Whether they should be counted as 'state aid' remains to be seen. Regardless, these compensations serve to improve the environment, and they are consistent with fair competition.[5] Consequently, the non-adoption of this kind of compensatory system must be viewed as a violation of environmental and competition objectives.

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[4] For the distinction between implicit and explicit ecologically harmful subsidies see for instance: Tonman (1996), p. 46; OECD (1998), p. 8.

[5] Of course, this applies only to "true" compensatory payments, which do not cause an over-compensation of the costs associated with the generation of positive externalities.

- *Environmental subsidies in the case of negative externalities*. Finally, there are subsidies in favour of 'classic' environmental measures. They serve as incentives for intensified environmental protection by firms. The use of the 'public pays' principle instead of the 'polluter pays' principle (the principle of choice in cases of negative externalities) must be criticised from both the perspectives of environmental protection and protection of fair competition.[6]

Apart from the third, all above types are associated with a state of competition that is distorted in comparison to a system in which all externalities are fully internalised. In addition, the first two types of subsidies bring about lower levels of environmental quality in comparison to a situation with no subsidisation at all. This result gives rise to demands for:

- support for or compensation of the generation of positive environmental externalities in order to raise the thus far insufficient supply of public environmental goods;
- further implementation of the 'polluter pays' principle, where negative externalities prevail, above all via taxes and levies, in order to reduce preferential treatment caused by low or non-existent prices for environmental goods;
- removal or modification of transfers and subsidies that lower prices and costs in favour of ecologically harmful production; and
- extension of support programmes for additional environmental protection *as long as* (a) negative externalities cannot completely be internalised according to the 'polluter pays' principle and (b) ecologically harmful subsidies cannot be completely abolished.

Environmental policy must have an interest in pursuing all of these objectives, though they are not of the same value. The reduction of explicit, ecologically harmful subsidies certainly plays an important role in a comprehensive ecological reform of a country's fiscal system. Yet, the removal of direct expenditure or tax reductions of this kind cannot replace additional instruments for the internalisation of external effects, i.e. for the establishment of environmentally "correct" relative prices. Moreover, the removal of ecologically harmful subsidies is by no means the easier way to the same end:

- At best, it establishes an one-dimensional 'neutrality' with no *extra* incentives for ecologically harmful activities. But the indispensable discrimination of these activities according to their negative externalities, and thereby 'true' neutrality of allocation, cannot be attained.
- It is a limited instrument of environmental protection because the removal can obviously cover only those subsidies granted at the present time that do not necessarily comprise all pressing environmental problems.

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[6] Theoretically, an internalisation of negative externalities with Pigouvian 'bounties' could heal the adverse effects on competition. Yet, this would come at an environmentally (and fiscally) heavy price, the complete abandonment of the 'polluter pays' principle. Polluters would be paid by the society / the state for refraining from their harmful activities.

- Past experience with reduction programmes has shown that subsidies are usually the manifestation of specific political objectives that collide with the objectives of environmental policy. As these other objectives may still be high on the political agenda, and as specific groups benefit from these grants, plans to remove ecologically harmful subsidies may easily meet political resistance that is as strong as the opposition against the introduction of new environmental instruments (eco-taxes etc.).

Experience with the political 'evergreen' removal of subsidies supports the concluding low expectations placed on reduction-initiatives. Moreover, the cutback of explicit, ecologically harmful subsidies could produce an effect only in the long-term. The notion of subsidies as simple 'presents' that can be taken away easily and without consequences is wrong. As steering- or redistribution-instruments, they serve to meet political objectives. It is a plain fact that these political objectives sometimes contradict the aims of environmental policy. Therefore, environmental policy must also accept subsidies *in favour of* environmental protection as a legitimate instrument. That is the case where subsidies are superior to other instruments with respect to the improvement of incentive-structures and the political ease of their introduction, and where they are compatible with the aid regime of the European Treaty.

Yet, a form of competition that is truly worth protecting can only be reached when additional instruments for further internalisation of external effects are put into practice. This internalisation-policy has to cover negative externalities, e.g. by means of levies or tradable permits, as well as positive externalities (by means of compensations).

In this context, one type of subsidy is particularly delicate for environmental policy: the preferential treatment granted via the exemption from an instrument that, in general, works for the further internalisation of environmental costs. These exemptions are often seen as 'environmental subsidies'.[7] In an isolated view, however, they act *against* environmental protection. They are simple, 'classical' subsidies of industrial policy, neither helping environmental protection nor befitting the objectives of fair competition.

Yet, this unambiguously negative view should only be upheld as long as this kind of subsidy is granted unconditionally, *and* as far as environmental policy can truly implement alternative instruments without concessions. The first circumstance can be avoided by use of 'quid pro quo' concepts: the preferential treatment is only granted if the recipient firm commits itself to an eco- or energy-audit, or if it participates in an agreement with the Member State that obliges the firms concerned to achieve specific environmental protection objectives.[8] The second circumstance can hardly be avoided: No matter which instrument is to be employed, be it a tax, tradable permits or

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[7] For instance, the volume of German environmental subsidies reported in state aid surveys increased because of the exemptions from the ecological tax reform. See: Federal Ministry of Finance (2001): Achtzehnter Subventionsbericht der Bundesregierung, p. 25, pp. 91; and European Commission (2001): Ninth Survey on State Aid in the European Union, COM(2001) 403 - 18.07.2001, pp. 40.

[8] For an assessment of this kind of agreements see: Ewringmann/Linscheidt (2001).

any other instrument, firms which produce environmentally intensively and are subject to fierce international competition are affected the most. Since these firms usually have a rather strong lobby, the actual choice for national environmental policy often is not between new instruments *with* or *without* concessions that reduce compliance costs to an 'acceptable' level. The choice is between new instruments with concessions and no new instruments at all. As a consequence, the decisive question becomes: do the Member States have to refrain from intensified environmental protection because all politically viable strategies can collide with the simple – not the allocative – neutrality of competition on the common market?

2.3 The Notion of Subsidies

Economics defines subsidies as direct or indirect payments or other privileges granted by a government or one of its agents to private firms without a market-like quid pro quo. Instead, the firms concerned are expected to display a certain change of behaviour (or a continuity of behaviour otherwise not planned) which assists in the accomplishment of political objectives.[9] Therefore, subsides are basically not 'presents' to firms – though they degenerate into that direct form from time to time. Typically, a subsidy is the 'price' paid for the assistance in the making of a good that cannot be purchased on the market, but which is in the interest of the public or is a public good.

If the subsidised activities of the firm concerned are entirely in the interest of the public, and not at all in the own interest of the firm, the government grant becomes a compensation that can be calculated on the basis of cost equivalence or benefit equivalence, respectively. If the subsidised activities are, on the contrary, entirely in the firm's own interest, the subsidy becomes a 'present'. Thus, the economic problem of subsidies lies in *binding the public transfer to the public interest.* Subsidies distort competition only when private interest is financed or promoted with public money.

To discriminate between private and public interest is consequently the crucial task of rational transfer and aid policy. The fact that this task is all but possible for *merit goods* need not be discussed here, because environmental goods are typically *public goods* which would not be supplied without state intervention. To generate or secure their supply is solely in the interest of the public. However, there are different ways to reach this goal. The government can undertake to 'produce' environmental protection on its own, or it can formulate 'rules of conduct' for the private participation in the generation of environmental services. More and more, the latter is associated with the 'polluter pays' principle as the most favourable financing rule for environmental protection.

In the Pigouvian world, the boundaries of private and public interest could be drawn clearly: in addition to all private costs of production, firms would have to bear all social costs of their activities. Equivalently, all social benefits generated by private activities and not reimbursed over the market-

[9] For the definition of 'subsidies' and the concluding problems see e.g. Hansmeyer (1977), pp. 960.

mechanism would be paid by the public. "Taxes and bounties"[10] would establish the 'true' pricing of externalities.

Yet, the Pigouvian world is a theoretical one. In the real world, these boundaries are less clear. Certainly, there is no doubt *that* originators of negative externalities should bear the associated social costs and *that* originators of positive externalities should be compensated for the social benefits of their activities. However, the *correct quantities* of these payments and compensations cannot be deducted from allocation theory. Instead, environmental policy must determine the distribution of environmental costs and burdens between firms and the public. It thereby also determines the relation of public to private interest and the concluding distortions of competition. With this decision, environmental policy defines the point at which public payments (or renunciation of potential revenue) for private activities in environmental protection are solely in the interest of the public, and therefore no longer entail a preferential treatment which is inconsistent with the protection of fair competition.[11]

Counter to the general disapproval of subsidies among economists,[12] who look at subsidies from the perspective of political and institutional economics: subsidies per se are neither good or bad, neither necessary in general, nor indispensable on the whole.[13] Like any other policy instrument, they must be judged on their merits: Can they be implemented successfully (perhaps contrary to other instruments)? Do they enhance the incentive-structures? Do they thereby reach the important 'players' or their addressees, respectively, thus promising to accomplish their politically defined task? Finally – taking transactions costs into account – are subsidies cost-efficient instruments?

2.4 The Notion of State Aid

In the legal and the political sphere, the notion of subsidies has by and large been pushed into the background by the concept of *state aid,* because the main discussions focus on European law. Member States' transfer policy must adjust itself to the framework of the Treaty and the aid control carried out by the European Commission.

From the economic point of view, state aid is – particularly in its effects – equivalent to subsidies. Yet the Treaty appreciates state aid under just *one* functional aspect: identification and elimination of potential distortions of competition on the common market generated by Member States. Already the EEC-Treaty set one of its highest priorities in the promotion of economic efficiency and growth by removing obstacles to free competition.

Yet, a claim to restrain or at least control every single type of Member States' interventions which potentially treat individual competitors preferentially could only be met by a correspondingly broad

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[10] Pigou (1928), p. 119.

[11] See Thöne (2000), pp. 259.

[12] Andel, (1977), p. 491, gives an overview.

[13] See for instance Ewringmann/Hansmeyer (1975); Truger (1999).

control-competence for the Commission. For example, the Commission would have to be granted the authority to monitor all differences in the legal requirements for firms operating on the common market, as well as all differences in the application of. law. The variety of factors which – in this sense – treats firms preferentially and distorts competition is almost boundless. An equivalently broad control-competence for the Commission would cut deeply into the Member States' exclusive jurisdiction. The commission would enact a "control of the entire administration of national law".[14]

The Commission's actual authority to control for distortions of competition is much more limited. It is confined to the use of financial State resources according to Article 87 I of the Treaty. Whether a public grant counts as state aid is not decided according to its motives or objectives but to its *effects*. A grant is regarded as state aid incompatible with the common market if it distorts or threatens to distort competition and if this affects trade between Member States. State aid is assumed if a firm is given relief of costs it normally would have to bear, and if this relief improves its competitive stance relative to that of other firms.

However, in regard to state aid for environmental protection, one could doubt the distortion of competition where no Community environmental regime exists, i.e. where firms in the different Member States operate under the different requirements of national environmental law. If these requirements differ in such a manner that firms in one Member State have to bear obligations and costs that firms in other Member States do not bear, the distortion of competition does not occur only when firms are relieved from environmental obligations and costs. From this point of view, competition is already distorted *because of* the differences in national environmental regimes. This observation, of course, does not only apply to environmental law, but to many systemic differences under which firms operate on the common market, e.g. social security systems. Thus, the "undistorted competition" relevant for aid control comprises very different starting points and operative frameworks for the competitors on the common market.

Consequently, the Commission and the Court of Justice assume state aid according to Art. 87 I whenever a public grant is likely to level these kinds of differences in the conditions under which firms operate. It has already been mentioned that this perspective is economically rather problematic and can be counterproductive for environmental policy. At the same time, it is – at least in the short run – very improbable that this concept of state aid of might be changed substantially.

Therefore, the further analysis does not concentrate mainly on the *concept of state aid,* but on the *authorisation* according to Art. 87 III, and thereby on the potential scope for state aid for environmental protection within the guidelines. The integration of environmental protection is mandatory for Community policies and activities according to Article 6 of the Treaty. The following discussion will focus primarily on how this integration requirement can be translated into criteria for the authorisation of environmental aid.

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[14] Sprenger (1995), p. 35 (translated from the German original).

PART B:
AN EVALUTION OF THE NEW COMMUNITY GUIDELINES ON STATE AID FOR ENVIRONMENTAL PROTECTION

3 Preliminary Note

Under certain conditions, subsidies are efficient and legitimate policy instruments. Like any instrument of public policy, they must be carefully designed to meet their prime objectives. Furthermore, they must be thoroughly scrutinized in respect to their compatibility with other policy objectives, their acceptance, the political effort of their introduction, and their practical feasibility. If a specific subsidy stands all these tests as well as or better than alternative instruments, it should be considered as a legitimate tool of public policy.

This perspective has won an additional dimension with the aid control according to Art. 87 of the EC-Treaty. Subsidies which withstand all above-mentioned national tests must also submit to the control of the European Commission. The Commission uses own, i.e. other criteria in its inspection. Thus, we have two different levels of aid inspection with two different sets of criteria, which in turn can be deducted from the political objectives of the respective level.

A Member State may, for instance, decide to reach its environmental objectives by strictly applying the 'polluter pays' principle and trying to make economic agents bear the full external costs of their activities. A national strategy like this would reduce or even remove the distortions of market allocation (see 2.1). If this strategy were implemented Europe-wide, the conflict between protection of fair competition and environmental protection would disappear – at least at first glance.

A closer look, however, unveils the problems of this statement: The 'quality' and quantity of external costs can vary significantly among different Member States and regions. The same environmental effects can have very different relevance in different regions not in the least because the ecological burdens accumulated in the past are different or are *perceived* differently. As long as environmental effects are limited to particular spatial units, differences between the regional preferences for environmental goods make a good case for decentralised environmental jurisdictions. In these cases, the central European competition authority must not have any objections when environmental requirements in some Member States are substantially less strict than in other Member States.

On the other hand, competition policy must be very alert, if differences between Member States' environmental requirements are not based on preferences, but are, for instance, the consequence of deliberate environmental 'dumping'. In practice, though, a central competition authority can hardly discriminate between these two cases. To make things even more complicated: what is the adequate position of the European aid control authority if firms in one Member State bear higher environmental costs than firms in others States in *absolute* terms, while the *degree* of internalisa-

tion is lower than in other States, and if, at the same time, the first Member State treats particular groups of polluters less strictly than other polluter-groups?

Another kind of problem arises if an environmental good affects European or even global welfare (such as climate protection). In this case, all Member States are affected by the corresponding external effects, but they still may display different preferences for climate protection in their respective national climate policies. It is almost impossible to tell which different intensities of national environmental policies conform with the notion of fair competition, and where "distortions" start to occur.

These difficulties are a major cause for the ambivalent appraisal of state aid for environmental protection. As it is hard to tell whether or not international differences in environmental requirements are based upon analogous differences in the preferences , the call for strict application of the 'polluter pays' principle can easily lead to a call for harmonisation of environmental requirements. However, in this context, harmonisation can just as well trigger worse distortions of allocation and, thus, competition. This fundamental problem is omnipresent in the Member States' aid policy and the Commission's aid control policy. It is also the cause for a large part of the conflicts that arose between Member States and the Commission because of the new Community guidelines on state aid for environmental protection. Other conflicts come from the inadequate und inconsistent handling of the fundamental problems in the guidelines.

4 Origins of the Shortcomings of the New Community Guidelines

The new Community guidelines on state aid for environmental protection of 3 February 2001[15] display – like their predecessor – numerous shortcomings and inconsistencies. The basic problems already surfaced in the first guidelines in 1974.[16] They have different origins:

From the economic perspective, many problems come from the deficient attempt to use the same criteria of control in functioning markets as well as in markets already fundamentally distorted because of external effects. Thus, aid control uses the *wrong reference-system*. In addition, state aid for the intentional promotion of environmental protection (e.g. investment aid for the application of new technologies that facilitate improvement on mandatory environmental standards) is treated in the same way as only so-called 'environmental aid', i.e. subsidies that reduce the financial burden of environmental instruments for certain firms (e.g. reductions of ecotaxes and environmental levies). Thereby the guidelines take no account of one crucial discrepancy: usually state interventions – i.e., state *activities* – cause distortions of competition. Yet in the field of environmental protection, the opposite is the case: State *inactivity* causes distortions of competition, as the government avoids internalisation of external effects by means of appropriate interventions.

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15 OJ C 71, 3.2.2001, p. 3 [URL: http://europa.eu.int/comm/competition/state_aid/legislation/].

16 See Part II of the "long version" of this study (UBA-Texte 01/02, Berlin 2002; only in German).

The second cause of problems with the guidelines lies in the rather vague notion of the interactions between state interventions and competition, and of the functions of interventions – including state aid – and their potential consistency with the market system displayed in European competition law. This leads to uncertainty concerning the *range of the concept of state aid*, and consequently concerning the effectiveness of aid control.

The third cause of problems lies in the structure and *distribution of authority* between the Regions, the Member States and the Community, and the special role of the Commission herein. This involves the multidimensional weighing of eventually conflicting political objectives that are a part of multi-level decisions. Originally, aid control was institutionalised to accomplish one dominating task: to establish a common market as efficient as possible by protecting it from distortions caused by State interference, and from "arms races" in subsidies. The Community has become more and more active in fields other than competition policy; at the same time, the Member States hold the major part of the authority for structural and departmental policies. Thus, the decision-structures and weighing-problems have acquired a considerable complexity. Until now, aid control as it is practised by the Commission does not reflect this requirement sufficiently. Among others, the Commission's control for compatibility of Member States' and Community activities with the concept of undistorted competition must be supplemented with environmental impact assessments of these activities.

In the following section, the problems of the new Community guidelines stemming from these three causes will be discussed in depth. We will use prominent examples to illustrate where these problems can frustrate the systematic progress of environmental policy in the Community, and which alternatives are at hand to reconcile protection of fair competition and environmental protection.

5 The Problems of the New Community Guidelines

5.1 Tension between the Aid Control-Authority and National Environmental Policy

The actual range of the European Commission's aid and competition policy reaches a lot further than its jurisdiction over economic and competition policy suggests. This structural problem affects various fields of policy. A current example of this is health policy. Referring to its authority to regulate competition on the common market, the Community tried to impose a wide-ranging prohibition on the advertising of tobacco products. This directive was annulled by the European Court of Justice because it effectively was a regulation in the field of health protection, i.e. in the exclusive jurisdiction of the Member States, and would have restricted competition on the common market.[17] The conflict between aid control policy and environmental policy is comparable to this health policy

[17] Case C-376/98 of 5 October 2000. Germany v European Parliament and Council of the European Union. European Court reports 2000 Page I-2247.

case: the central European aid control cuts deeply into the scope of national environmental policies.

Jurisdiction over environmental policy is concurrent: the principal authority lies with the Member States, the Community's authority is supplementary. Within the common European framework, the Member States decide on their own which concepts and measures they implement to make allowances for special national, regional, or local characteristics, or to improve upon the mandatory minimum levels of environmental protection in the Community. From the economist's point of view, Community competition objectives and rules cannot be opposed to national additional measures as long as these do not change the allocation of environmental costs resulting from the mandatory Community levels of environmental protection. In other words, firms must not be given relief of costs which would result from their compliance with Community standards applicable, or which are imposed upon them by a Community environmental levy.

This principle is not reflected in the aid control policy and the Community guidelines on environmental state aid. Commission and Court of Justice traditionally base their decisions on the principle that every Member State establishes the legal and administrative environment in which its firms operate, and that – if this includes requirements *stricter* than in other member States – all firms should be treated alike, i.e. all should meet equally strict requirements. Yet, if the requirements are lowered for certain sectors or firms, or if – in the absence of stricter national standards – the State stimulates additional measures of environmental protection that improve on Community standards by means of subsidies, the Commission and the Court of Justice usually regard this as state aid "which distorts or threatens to distort competition by *favouring* certain undertakings or the production of certain goods."

In doing so, the Commission effectively curtails the Member States' authority to devise and adopt the instruments of (additional) environmental policy. As a result, the national incentives for voluntary environmental protection beyond Community minimum levels decrease considerably. In Germany, the intrusion into national authority and its consequences became very clear in the disputes about the introduction, notification and re-notification of the ecological tax reform, the "Stromeinspeisungsgesetz" (Electricity Feed Act), and the "Erneuerbare-Energien-Gesetz" (Renewable Energy Act).

This meddling with the Member States' jurisdiction over environmental instruments clearly contradicts the principle of subsidiarity; it affects the general relationship between Community and Member States. It becomes even more problematic with the fact that the *Commission* interferes with Member States' jurisdiction, and not the Council, i.e. the one actually empowered to do so.

The new Community guidelines on environmental aid comprise a good example for the problem: he Commission tries to subject the promotion of renewable energies to very specific rules and maximum rates of authorised aid. Yet, according to Article 175 of the Treaty only the Council may – *unanimously* – adopt Community "measures significantly affecting a Member State's choice be-

tween different energy sources and the general structure of its energy supply". Without doubt, the guidelines' provisions for state aid for renewable energy sources qualify as measures significantly affecting the choice between different energy sources.

These considerations apply not only to energy policy, but also to environmental policy as a whole. The principle of subsidiarity commands that Member States are free to devise and adopt environmental programmes and instruments which improve on the measures adopted by the Community. The Member States set their own priorities, decide on the differentiation of the instrument use, and may also take diverse regional or local starting points into account. All political fields and questions for which no harmonisation-consensus can be established within the Community are the domain for Member States' individual policies. Certainly, it never was the assignment of the aid control regime – especially not the Commission's assignment – to cut back these domains. But that is exactly what aid control has developed into.

Closely related to the Commission's power to submit national environmental instruments to the competition-regime is the question of which criteria are to be employed if state aid that is deemed as distorting competition may still be authorised with respect to the equal-ranking aim of environmental protection.

When the EC originally was founded one single aim prevailed: to build an economic community be means a common market with equal 'rules of the game' for all goods and factors in order to stimulate growth and prosperity. The concept of the economic community called for market competition, which in principle should be free of state intervention. Thus, the protection of competition and the aid control regime are core pieces of the Treaty. Yet, with the Single European Act, and the Treaties of Maastricht and Amsterdam, the assignments of the Community changed and have been enlarged significantly. Among these fundamental changes is the new role of environmental protection: According to Article 6 of the Treaty, it now is an equal-ranking aim which must be weighed against the aim to protect fair competition.

By now, the Treaty encompasses a wide range of Community and Member States' activities with the aim of reaching a high level of environmental protection and quality. These policies shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source, and that the polluter should pay (Art. 174). Protection of fair competition and environmental protection coincide when prices reflect environmental costs, i.e. when full "internalisation of costs" is implemented. With full internalisation, competition is also fair in respect to environmental matters. Thus, in theory, protection of fair competition and of the environment can be brought into line quite easily. State interventions simply must follow the logic of full cost accountability which is the fundamental principle governing the market. The concluding neutrality of allocation and competition leads to optimal economic prosperity and environmental quality (see part 2.1).

Consequently, non-neutral state interventions which treat some activities or firms preferentially to the disadvantage of others should, in general, come to an end. Hence, subsidies can be criticised from both the perspectives of environmental protection (based on the 'polluter pays' principle) and protection of fair competition. In this view, aid control's key role in the Treaty is justified without a doubt.

Yet, problems arise when internalisation of costs can be put into operation only partly or not at all. This is the usual case because information on the proper 'internalisation-contribution' for every single polluter is not obtainable. Furthermore, jurisdiction over environmental policies and practical measures is divided between the Community, the member States, and the Regions. As a result, environmental protection and protection of fair competition are not optimised automatically and simultaneously as economic theory suggests. Instead, they are subject to the setting of (rival) priorities like most other fields of public policy.

And, according to the Treaty, economic and competition aspects are by no means 'automatically' the highest priority. "Environmental protection requirements must be integrated into the definition and implementation of the Community policies and activities (…), in particular with a view to promoting sustainable development" (Art. 6). In essence, this requirement is not new. But it has been specified by the Amsterdam Treaty, and it now ranks higher numbering among the 'Principles' of the Treaty.

This does not mean that environmental protection now has 'automatic' priority over other Community objectives. But environmental matters must be taken into account concurrently, and Community activities must not have significant negative impacts on the environment. This, of course, applies to aid control policy, too. However, the Commission did not pay much attention to the principle of integration in the formulation of the new guidelines on state aid for environmental protection. Firstly, this becomes obvious in the special rules for the practise of aid control and authorisation. Secondly, this applies to the guidelines as a whole, as their environmental impacts have not been analysed in advance.

In the words of the Commission, the guidelines determine "whether, and under what conditions, State aid may be regarded as necessary to ensure environmental protection and sustainable development without having disproportionate effects on competition and economic growth" (pt. 5, GEP-01 final). The guidelines supply the conceptual basis for the control of Member States' aid measures in environmental protection, and for the 'appropriate measures' the Commission proposes acting under Article 88(1) of the Treaty. As the rules for aid control and restriction interfere with the choice and design of environmental instruments employed by the Member States, the guidelines can have significant influence on environmental protection in the Community. Given that the guidelines are a "proposal" potentially bearing significant consequences for environmental policy within the Community and for the environment itself, the Commission was obliged to prepare an environmental impact assessment study for the guidelines in advance. With Declaration 12 of the

Amsterdam-conference, the Commission agreed to this procedure. Still, an EIA-study was not conducted.

5.2 State Aid – Preferential Treatment – Distortion of Competition: the Doubtful Coherence of the Concept

The EC-Treaty does not supply a legal definition for State aid. Yet, the aim to prevent any aid which distorts competition by favouring certain undertakings, as far as it affects trade between Member States, calls for a very broad concept. Consequently, the Court of Justice regards not only public grants to firms as state aid, but also any measures that reduce legal requirements for specific firms or sectors. From this point of view, the ban on state aid extends to "any public intervention in the normal trade conditions in the Member States".[18] The Commission's concept of state aid is a little less broad because it must be quantifiable.[19] It bases on direct or indirect grants without market-like quid pro quos from the receiving firms. Among these are: direct payments, tax credits, exemptions, deferrals, preferential rates; capital cost subsidies such as preferential loans, favourable interest rates, credit guarantees, debt forgiveness; public provision of goods and services below cost; and other measures with equivalent effects. Actually, the Commission's concept of state aid covers all financial measures that can directly affect costs and/or profits of a firm.

Beyond these indisputable types of state aid the Commission has also tried to count for example exemptions from environmental regulation as state aid. Undoubtedly, this is reasonable if *all* measures that may distort competition are to be banned. Yet in the EC-Treaty, the concept of state aid covers only a part of the eventually distorting state interventions.[20] The concept of state aid covers all kinds of *financial* payments of the State to firms and the reduction of or exemption from payments of the firms to the state. Therefore, according to prevalent legal opinion, exemptions from environmental regulation do not count as state aid (as far as the Commission is concerned).

Viewed from the perspective of concurrent jurisdictions, no other solution is viable: "Assume any exemption from legal requirements constitutes illegal state aid. Then state aid must also be assumed if the State – willingly or unwillingly – totally or partly refrains from enforcing specific legal requirements for a certain firm (or industry, or region) that otherwise would have been faced with financial costs when complying with the respective requirement. If this was (…) state aid, the jurisdiction of the Commission and the European Court of Justice over competition matters would include the control of the enforcement of the entirety of national law. Yet, such a broad interpretation of Community law contradicts the principles of the EC-Treaty, i.e. the limitation to the powers explicitly adjudicated by the Treaty (Prinzip der Einzelermächtigung)."[21]

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[18] Sprenger et al. (1995), p. 37 (translated from the German original).

[19] See again Sprenger et al. (1995).

[20] Bleckmann (1989), p. 271.

[21] Sprenger et al. (1995), p. 53 (translated from the German original).

Summing up the argument thus far: European competition law aims to protect market competition and trade between Member States from distortions. For this purpose, the Commission is entitled to conduct a control of state aid. Yet, the aid control regime covers only a part of the state interventions that may affect competition. It does not cover differentiations in national environmental regulation and differences in the enforcement of national law. Thus, the Member States can resort to these methods of favourable treatment as a substitute for the controlled types of state aid. As a result, the aid control regime can provide only an imperfect protection of fair competition.

However, for environmental protection in the Community, another shortcoming is even more important. The Commission's aid control disregards the favourable treatment that results from the non-internalisation of environmental costs.[22] Thus, the *central* source of distortions in the allocation of environmental goods, and consequently in the general allocation of goods and factors, is not subject to aid control. The Member States can easily subsidise national firms by closing the eyes to environmental needs, and they can be sure that the aid control regime will not intervene. But in the other hand, national measures that improve on the Community minimum levels of environmental protection and thus reduce the distortions of allocation are subject to aid control, if the respective Member States decide to burden firms in highly competitive sectors with lower additional requirements than others. This establishes an explicit incentive for Member States *not* to introduce own environmental measures that go further than the Community environmental policy. The control of this type of 'state aid' has no influence whatsoever on the fundamental distortions of allocation and competition, and, worse, it can also hinder interventions that reduce the distortions.

Summing up further, we note that aid control does not police those distortions of competition that are fundamental for environmental goods, the distortions stemming from non-internalisation of external costs. Instead, aid control in the environmental field covers only more or less arbitrary symptoms of preferential treatment and distortion.

Furthermore, the concept of state aid and the aid control regime tend to inspect policy measures that neither treat anyone favourably, nor distort competition, nor affect trade between Member States. These activities play a major role in environmental protection: for example, a Member State decides to support the voluntary change from fossil fuels to renewable energy sources. The State is not obliged to take these measures by Community decisions, yet the resulting reductions of CO_2-emissions are in the interest of the Community. If under these circumstances the costs of energy production and use for the firms in the respective Member State increase, a public reimbursement of the additional costs does not constitute state aid. It is a compensation for the generation of positive externalities. It is analogous to a market exchange based on the equivalence principle. The market itself cannot generate this good because further reduction of emissions constitutes a public good. But as long as the compensations follow the principle of cost equivalence the market analogy holds, and market competition is not affected. A firm that contributes to an environmental good with

[22] See above, part 2.1.

an activity not affecting its own profit interest does not gain a competitive advantage from a cost equivalent compensation because it is not treated preferentially. Compensations for positive external effects from the voluntary generation of environmental goods, or compensations for voluntary environmental protection respectively have nothing in common with payments or state interventions that are usually counted as state aid. Nevertheless, these compensations are subject to aid control.

In contrast to the extensive interpretation of the state aid, the Commission is rather unenthusiastic when it comes to applying the same criteria to Community aid. If the sole aim was to ban all aid that might have adverse effects in competition, the Commission should not worry about who carries out the interventions in question. From this perspective, it goes without saying that Community interventions should also comply with the Commission's aid control criteria and the guidelines on state aid for environmental protection.

Yet, the Commission has – so far – successfully warded off the equal treatment of own aid and Member State aid, thus maintaining more flexibility for Community aid measures. The LIFE-Program, for example, reflects this observation. Here, the *total* costs of an investment serve as eligible costs of a Community aid measure, whereas Member States may grant aid only on the basis of the *extra* investment costs necessary to meet the environmental objectives. Typically, LIFE-Environment is concerned with demonstration projects with the goal of developing innovative, integrated techniques and processes, as well as advancing Community environmental policy. For such demonstration projects, it can often be the case that these extra investment costs are indeed the total costs of the investment. Consequently, a coherent system of competition-control would apply the same authorisation criteria to national and Community demonstration projects.

There is, however, no corresponding regulation for national demonstration projects in the realm of state aid. Additionally, the maximum rate of authorised aid for national projects is lower than the maximum rate for LIFE-projects. To address this, the Community guidelines establish an extra ruling: according to No. 73, higher rates of state aid may be granted "to promote the execution of important projects of common European interest." Because there are no unified, concrete criteria for this, it is up to the Commission itself to define the common interest and launch its own projects with conditions more attractive than national projects. Thus, the Commission has ensured favourable treatment for its own aid measures and, at the same time, legitimised itself to distort competition to a greater degree than the national governments.

To sum up the argument: the concepts upon which the Commission organizes the protection of competition from environmental policy interventions are insufficient and contradictory. Aid control is confined to a fraction of the processes relevant to competition, and here, the Commission tries to implement perfectionistic control procedures while preserving favourable treatment for its own aid measures. Meanwhile, the basic distortions on the markets remain unchanged. This is an inefficient answer to a typical second-best-problem. The systematic balancing of competition, preferential treatment, and matters of state aid is, at least in view of environmental protection, thus far not ac-

complished. Not only do the state aid regulations offer an insufficient protection of competition; they are counterproductive with respect to an effective and efficient environmental protection. The reason for this is the wrong reference system.

5.3 The Wrong Reference-System, or: Which Competition should be protected?

The objective of aid control is to protect competition on the common market and to frustrate distortions arising from state interventions. For this task, it must first be clarified as to which state of competition is to be protected and which distortions must be hindered or immediately disposed of. An applicable reference system must be established. These questions are of unique relevance for the environmental sector. Here, the only state of competition worth protecting is one in which prices already reflect the usage, and, accordingly, damage, of environmental resources on the basis of cost-equivalence, and in which positive contributions to environmental goods are equivalently recompensed. An initial situation highly distorted because of regionally differentiated free access to scarce environmental resources, and because of uncompensated positive externalities does not justify protection, but rather, a far-reaching reform.[23]

Against this background, the general concept of state aid is not offhandedly transferable to environmental state aid. This may be demonstrated by the following example: a firm in economic difficulties that receives state aid which effectively delays its market exit is, without doubt, favoured over domestic and foreign competitors. These competitors are in need of protection.

Suppose, on the other hand, a firm – assume for simplicity, in a field unregulated by environmental law – receives state aid that helps the firm to restrain pollutants through an end-of-pipe facility: in that case, competition is not necessarily *additionally* influenced at all. Even if the total additional costs for the filter aggregate are covered by state aid, the market position of the respective firm will, ceteris paribus, not change in relation to that of its competitors. Competition is already distorted before the granting of state aid, since all firms are not required to bear the environmental costs of their activities, and enjoy individually different benefits from the free use of environmental resources. In the initial situation, the general public bears the environmental costs; the public also finances state aid for investments toward environmental protection.[24] Only one change occurs: the public no longer finances costs of damages, but rather, avoidance costs. This brings about environmental improvement without impairing competition (unfortunately, also without improving the competition structure). The initial state of competition requires no special protection. On the contrary, it requires thorough correction because it displays a maximum of distortion among firms producing at different levels of environmental intensity, and the common market can unfold its efficiency potential only with environmental policy intervention.

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[23] See Part 2.1.

[24] We assume for simplicity that the aid measure is financed through a relatively neutral tax, or through the removal of other subsidies.

How do the Community guidelines deal with such a case of environmental aid? It would be subsumed under No. 37 (8): since mandatory environmental standards – as presumed here – do not exist, "eligible costs consist of the investment costs necessary to achieve a higher level of environmental protection than that which the firm or firms in question would achieve in the absence of any environmental aid." According to point 29, the maximum rate of authorised aid would be 30 % gross of the eligible investment costs.

This means that the Commission would

- see no reason to take action against the existing distortions of competition in case of a renunciation of the end-of-pipe facility (and the corresponding state aid),
- deem the state of competition without any measures of environmental protection worth protecting,
- consider the state financing of the end-of-pipe facility as aid that is, in principle, incompatible with the common market, and
- make allowances for environmental objectives by – nevertheless – authorising the aid measure as long as the additional investment costs are covered by the Member State to a maximum of no more than 30%.[25]

Here, the guidelines do not at all reflect upon the question of whether competition is affected, nor do they adequately take environmental matters into account. Where no mandatory standards exist, the implementation of an environmental protection measure is absolutely voluntary for a firm. It would have to bear at least 70% of the costs of implementation, thus diminishing its competitiveness. A further distortion is added to the existing ones: it is not apparent as to why competition in the aforementioned case should be better protected if the state aid is limited to 30%, instead, for example, to 80% or even to 100%.

The well-established, conventional concept of competition and aid control cannot be easily transferred to the field of environmental policy. In most other fields, state interventions potentially distort market conditions and must consequently be prevented or least reduced to a tolerable level. In the environmental sector, market conditions are distorted *without* guiding frameworks established on the Community- and the Member State-level. Here, policy intervention is the precondition for an efficient competition that is worth protecting.

This fundamental problem can only be tackled through a basic transformation of the current control strategy for environmental state aid. Briefly back to the essential problem: behind the basic notion of Article 87 of the Treaty – that state aids are generally incompatible with the common market – lies the image of a free market exchange of private goods: all costs and benefits are reflected in the market prices. Undistorted markets assure efficient allocation and, therefore, deserve protection.

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[25] The further requirements and qualifications made by the guidelines are not relevant to the argument here.

If, in this context, state aid is perceived as preferential treatment, then a ban on state aid makes sense, indeed, but only if it relates to state measures

- that corrupt a previously undistorted market competition where all participants bear the full costs of their activities and can appropriate of all benefits of their activities, and
- that further corrupt an already distorted competition.

In both cases, a ban on state aid would serve the goal of allocation efficiency. In other words: the market condition existing without state aid is worthy of protection, at least with respect to *one* important, major Community goal.

The EU state aid policy's underlying image of a market where everything is already ordered to be the best and where a complete framework guarantees fair competition is false with respect to environmentally relevant measures. For that reason, it cannot offer a criterion of whether or not an intervention or, accordingly, a state aid measure, is unacceptable.

In a market free of state interventions, environmental costs remain, for the most part, external. Under aspects of efficiency, a situation worthy of protection does not exist here. On the contrary, not accounting for environmental costs distorts the competition, leading to preferential treatment of those who use or damage the environment relatively intensively. This condition can only be remedied by interventions of environmental policy. Environmental regulations that reduce the free-of-cost usage of the environment, and/or account for the costs of this usage, contribute to the improvement of market competition and the conditions for corporate decision-making. They reduce the inefficiencies and distortions that exist through state non-regulation of the market and in the competitive positions of the individual market players.

In theory, the ideal conception of environmental state intervention would lead to the already addressed individual internalisation of all social costs relating to the environment. Recalling the idea of the Pigouvian tax, it becomes clear that the market *prior* to interventions by environmental policy is in a "condition of chronic aid": if the "polluter pays" principle and full internalisation represent basic principles governing public policy, every firm must pay for its specific uses of the environment (Pigouvian tax). Then, at the same time, a state that refrains from collecting this tax grants "classical" state aid within the aid concept of the Commission and the European Court of Justice. This perspective has merely fallen into oblivion because environmental policy is typically identified with, and executed by means of, regulations and standards. For that reason, the major part of state aid in the environmental field goes unnoticed, and it – erroneously – becomes a matter of concern at first, when a Member State accompanies environmental standards with the granting of financial support, or when environmental levies or taxes are raised, while, along with that, differentiated burden-profiles are used. From an allocation perspective of competition, false conclusions and prescriptions result out of this overly narrow perception of state aid.

Whether distortions still existing after an intervention of environmental policy are worse or not as bad as in the initial situation, cannot be determined in the basis of universally valid criteria. Insofar, the Commission cannot determine whether instruments (e.g., the German ecotax) that are implemented with elements of "state aid" within the meaning of the guidelines should be appraised more negatively according to their effects on competition, than a total renunciation of instrument implementation. The Commission can just as little validly judge whether a tax with exceptions conforms more or less to competition than a uniform, standards-based regulation that could possibly be executed in different ways.

Once again: the only state of competition worth protecting is one where all market players are made to bear the full environmental costs of their activities via policy intervention. The Community guidelines on state aid for environmental protection repeatedly refer to this ideal with the key phrase, "internalisation of costs", or "prices to reflect costs" as a long-term objective and reference case. However, the Commission has not taken the associated consequences into account. Ultimately, it would have to classify any Member State's refusal of full internalisation as state aid which might or might not be authorised.

Of course, this does not happen, for the Commission's jurisdiction does not go that far. Moreover, such an approach could not be made executable. Full internalisation of environmental costs cannot be realised by public policy: complete internalisation in accordance with the Pigou concept can not serve as a reference system in practice, because the reference situation of full internalisation is unknown, and costs remaining external cannot be quantified (see part 2.3). Which environmental costs the polluter should or should not bear, and where, for that reason, the "correct" bearing is changed or altered through state aid, can only be determined within the scope of a pragmatic solution.

As long as it is within the jurisdiction of the Member States to voluntarily pursue environmental policies stricter than mandatory Community standards, they necessarily also have the power to decide on the contributions to further avoidance and associated costs on an individual, differentiated basis. A criterion that enables a uniform application of the "polluter pays" principle under this condition does not exist.

Furthermore, applying the guidelines on state aid to measures undertaken voluntarily by the Member States handicaps Community progress towards environmental protection. A Member State that refrains from improving on Community minimum standards can happily do so. Yet, a Member State that does improve on minimum standards must face Community restrictions in the cost allocation of these voluntary advancements. This intensifies the "first mover disadvantage", and gives an incentive for immobility in national environmental policy.

The Community's ambition to reduce the distortions arising from the 'non-internalisation' of environmental costs and to minimize any new distortions that may occur in this process should, of course, be honoured. The first aspect can be accomplished only through the further development

of Community-wide environmental norms and/or through the introduction of uniform, monetary economic instruments (for example, ecotaxes and –levies). As far as this cannot be achieved through Council decisions, the competition instrument of state aid control is only capable of pursuing the second aspect to a very limited extent: aid control can logically only aim at hindering national measures that grant firms favourable treatment in the form of *additional* relief of costs *already existing* in the status quo ante. If, on the other hand, national measures lead to *new* costs, the state aid control is reduced to questions of whether these individual costs can be pitted against real, individual advantages for which the firm should also bear equivalent costs at any rate.

The result reads as follows: since the complete implementation of the "polluter pays" principle and the full internalisation of external costs delivers no workable reference-system for the identification and quantification of preferential treatment, aid control policy must use another method to determine the existence and size of environmental state aid within the meaning of the Treaty. For this purpose, only mandatory Community standards and goals binding all Member States come into consideration. Where Community standards exist, the costs associated with the compliance to these standards must be borne by the respective polluters. Then, aid relevant for the Commission occurs only when a state measure leads to a partial or total relief of costs that firms have to expend on compliance with mandatory Community standards.

Any supplementary measure that leads to individual costs higher than the compliance costs of Community standards is a national contribution to the improvement of environmental quality in the Community, and to the reduction of existing distortions of competition caused by a lack of internalisation. In this realm, firm-specific, sectorally- or regionally-differentiated Member State initiatives cannot work against the objectives the common market; nor are they the sensible object of Community aid regulations. Aid control gets involved only when the additional costs firms have to bear come along with real, individual advantages that must be taken into account. Then, state aid incompatible with the common market can be stated if the cost allocation for additional national measures leads to relief from costs that have to be borne for the compliance to mandatory Community standards, or if the national measures generate specific increases of firms' revenues that are not coupled with specific costs.

5.4 Environmental Aid: Alleviation of Compliance or Incentive?

In the Community guidelines on state aid for environmental protection, the Commission proclaims that environmental protection and protection of fair competition can be brought into harmony through the neoclassical full internalisation of environmental costs, and thus by means of the "full application of the 'polluter pays' principle"[26]. From this it follows: "In general, the 'polluter pays' principle and the need for firms to internalise the costs associated with protecting the environment

[26] See GEP-01 final, pt. 20, pt. 4.

would appear to militate against the granting of State aid."[27] The Commission thus dismisses state aid from the perspectives of both competition- and environmental-policy. Indeed, it names two justifications for state aid:

- "in certain specific circumstances in which it is not yet possible for all costs to be internalised by firms and the aid can therefore represent a *temporary second-best solution* by encouraging firms to adapt to standards" (pt. 18a);
- "aid may also act as an *incentive* to firms to improve on standards or to undertake further investment designed to reduce pollution from their plants" (pt. 18b)

The programmatic focal point lies upon the incentive function. This becomes particularly evident with state aid to facilitate the compliance with Community standards. According to the previous, 1994 guidelines, state aid for this purpose – though labelled as a "second-best solution"[28] – could be authorised. Now, it will not be authorised anymore: "aid is not justified in the case of investments designed merely to bring companies into line with new or existing Community technical standards."[29] Only SMEs may receive state aid for adapting to new Community standards for a period of three years from the adoption of such standards, and with a relatively low maximum rate of 15% of the eligible costs.

Community standards (or, accordingly, the lack thereof) are, simultaneously, the key criterion for the understanding of the „incentive effect" in the Community guidelines. Namely, it would be misleading to follow the usual economic understanding of the concept, and to only see room for an incentive function where firms are not subject to legally binding regulations. The concept of incentives in subsidy theory always includes the potential recipient's option *not* to follow the stimulus. In this sense, incentives could only be set for voluntary improvements on the environmental standards applicable.

The concept of incentives in the guidelines on environmental state aid reaches further; next to state aid for voluntary environmental protection, it also encompasses state aid for the *adaptation* to national standards, as long as these exceed the mandatory Community levels: "Aid may though be useful where it serves as an incentive to achieve levels of protection which are higher than those required by Community standards. This is the case when a Member State decides to adopt standards which are more stringent than the Community standards (…) It will also apply when a firm invests in environmental protection over and above the strictest existing Community standards or where no Community standards exist.." (pt. 20) "However, it has not been shown that aid has an incentive effect of this kind where it is designed merely to help firms to comply with existing or new Community technical standards." (pt. 21.)

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[27] See GEP-01 final, pt. 17

[28] Community guidelines on state aid for environmental protection, OJ C 72, 10.3.1994, p. 3, pt. 1.4.

[29] GEP-01 final, pt. 20.

For all three cases entitled to authorisation according to point 20, the same maximum rate of 30% of the eligible investment costs applies.[30] A differentiation results from the respective definitions of eligible costs in point 37. Yet, these definitions display systematic deficiencies, and they are not very precise, either.

- Where environmental standards exist at neither the national nor the Community level, "eligible costs consist of the investment costs necessary to achieve a higher level of environmental protection than that which the firm or firms in question would achieve in the absence of any environmental aid" (pt. 38, para. 8). What applies as "higher", and how the reference case is chosen, remains in obscurity. The ambiguity is worsened by "significant" differences in the translation of this term in the Official Journal.[31]
- Where national standards, rather than Community standards, exist, "the eligible costs consist of the additional investment costs necessary to achieve the level of environmental protection required by the national standards" (pt. 38, para. 6). In this case, aid for the adaptation to mandatory standards can be authorised. The definition of the eligible costs is rather generous; they comprise the total costs for the environmental protection installation.
- "Where the firm is adapting to national standards which are more stringent than the Community standards or undertakes a voluntary improvement on Community standards, the eligible costs consist of the additional investment costs necessary to achieve a level of environmental protection higher than the level required by the Community standards. The cost of investments needed to reach the level of protection required by the Community standards is not eligible" (pt. 38, para. 7).

Again, all these cases designate state aid as "incentive" in the dubbing of the guidelines, even though some cases of adaptation to mandatory standards are included. This taxonomy results from the attempt to make the definition of incentives workable not through differentiated maximum rates of authorised aid, but exclusively through the classification of eligible costs. Simplified, the „incentive logic" consists of ranking the implemented facilities according their environmental effectiveness, in comparison to facilities that are able to just fulfil the Community standards. Technical and cost-comparisons must drawn between "standard-fulfilling" facilities and the installed, "better" facilities, i.e. the costs of the second must be subtracted from the costs of the first. We will discuss later that this poses major practical problems;[32] here, we are interested in the incentive effects of this arrangement.

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30 However, according to other criteria, bonuses may be granted for SMEs, for certain investments in the energy sector, and for firms located in assisted regions.

31 While the English version speaks of "a higher level of environmental protection" (and the French and most other versions say the same), the German version calls for the "Erreichung eines wesentlich höheren Umweltschutzgrades", i.e., for a *significantly* higher level of environmental protection. Consequently, any Member State applying for the authorisation of an aid measure on these grounds would be well advised *not* to refer to the German version.

32 See part 5.5.

With setting a uniform maximum aid rate of 30% for all cases classified as incentive aid, the guidelines effectively give an inadequate equal treatment to matters economically and politically different. This poses an obstacle for "real" incentive policies of the Member States, and retards possible improvements in environmental protection in the Community – improvements that could be implemented without affecting competition; the difference between the aforementioned "real" incentive aid in the economic sense and state aid for compliance with national standards is highly relevant.

De facto, the latter set no incentives *for companies,* because they must comply with the national standards anyway. The fact that state aid for this purpose can be authorised is, nevertheless, welcome for another reason: it sets a sort of incentive *for the Member States*.

When companies face no Community standards that force them to implement ambitious environmental measures, it will be politically difficult for individual Member States to establish such measures through legal coercion alone. The national firms and their lobbies will – correctly – point out that their respective European competitors are subject to requirements less stringent. Under these circumstances, the chances for the implementation of ambitious national environmental standards are much higher, if the Member States can alleviate the compliance through the granting of state aid, that is, if they can use both – the stick *and* the carrot.

The limitation of the maximum state aid to only a portion of the emerging additional costs at the same time guarantees that the "polluter pays" principle is implemented to a higher degree than in the reference situation, in which a demanding standard could not have been implemented. Whether the limitation to 30% of the eligible costs is optimal, remains to be seen.

The obstacle to „real" incentive policy arising from the Community guidelines lies in another field, namely, in state aid for voluntary environmental protection. Here, the Member States face a completely different situation: either they could not enforce standards exceeding the Community minimum level in the face of national opposition or, if they actually have been able to implement more ambitious standards, the question is how to deal with those measures still exceeding these national standards. (This second case finds no mention in the Community guidelines – a loophole, whose consequences will be addressed later.) One way or another, we are talking about measures that raise the level of environmental protection in the Community, and that the pertaining firms undertake entirely voluntarily.

In general, aid for voluntary environmental measures can be authorised up to 30% of the additional investment costs. Thus, an ordinary, closely calculating company faces the decision to either install a facility that complies with the applicable standards, or to install a significantly more effective and correspondingly more expensive environmental protection facility. In the second case, the company must take own interest in better environmental protection, and it must calculate this interest to be worth at least 70% of the additional investment costs.

Regarding end-of-pipe installations, that may perhaps be the case if the new installation would be very long-lived, and if, at the same time, the company expects the applicable standards to be raised in the near future.[33] For "clean techniques", savings on energy and raw materials can accompany the "better" process-integrated facilities. This form of own interest is, however, excluded through the guidelines' method to calculate eligible costs: Not only are the investment costs for a reference facility that complies with the mandatory Community standards to be subtracted from the total investment costs; all other economic benefits attainable through the new facility must also be subtracted. Those are "benefits accruing from any increase in capacity, cost savings engendered during the first five years of the life of the investment and additional ancillary production during that five-year period" (pt. 37).

In short: anything that might embody an additional economic incentive is excluded. It is not obvious from where, then, a „70%" interest could be stirred, which induces a company to voluntarily execute a measure with a significant burden of cost, and which is demanded by neither itself nor its competitors.[34] Under these conditions, it does not actually make sense to talk of *incentives* – at least, not of *effective incentives*. Voluntary environmental protection is public-private-partnership in environmental policy 'par excellence'. For this reason, effective incentives can be established with no less than with the rule of thumb of fair burden sharing, that is, with "fifty-fifty".[35]

How little, effectively, the guidelines for investment aid have been influenced by the economic conception of incentives becomes apparent in a revealing omission. As already mentioned, the improvement on national standards – be it in the absence of Community standards, or be it with less stringent Community standards – finds absolutely no mention in the guidelines. This omission leads to a "remarkable" calculation of the eligible costs. Let us take the most desirable case as an example: a Community standard is outdone by a more stringent national standard. The investment to be assisted shall make it possible to realise a degree of environmental protection that voluntarily improves even on this stricter national standard. Here, according to point 37, the eligible costs consist solely of the additional investments costs necessary to come into line with the national standard. But the extra costs necessary to improve on this standard are *not eligible at all*. Of course, this paradoxical consequence is undesirable in the context of Community state aid policy and guidelines on state aid for environmental protection. It is, without doubt, an unintentional omission. But

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[33] Another sort of "own interest" could arise from emission levies that can be substantially reduced with the help very effective end-of-pipe installation. Yet, it is not clear whether point 37 must be applied to such a case, or not. It says that "In all cases, eligible costs must be calculated net of the benefits accruing from any (…) cost savings engendered during the first five years of the life of the investment (…)." Footnote 33 to pt. 37 states: "If the investments are concerned solely with environmental protection without any other economic benefits, no additional reduction will be applied in determining the eligible costs." Typically, EoP-installations are indeed concerned solely with environmental protection. But it is not apparent, whether reductions of environmental levies count as *subsequent* benefits, or as *other* benefits. Yet, viewed in the broad context of the guidelines, we presume that savings of this kind would be deducted from eligible costs.

[34] Except for the case of far-reaching intrinsic motivation, which is very rare in competitive markets.

[35] A little reminder: as shown in part 5.3, in the field voluntary environmental protection even an aid rate of 100% would not be at odds with protection of fair competition on the common market.

since this loophole would probably be closed with the notorious 30% maximum aid rate, not a whole lot would really be won from the incentive point of view.

What has been said about investment aid for voluntary environmental protection in the case of negative externalities can analogously be applied to compensations in the case of positive externalities. Provided that positive externalities could be realised through corporate investment measures, state compensation payments for such environmental measures exclusively in the public (or possibly even Community) interest would be treated according to the same, above mentioned regulations of the guidelines. That payments accruing only to 30% of the costs of investments that are 100% in the interest of the public have nothing to do with incentives, the 'polluter pays' principle, or internalisation, need not be further elaborated.[36]

As a matter of fact, the Commission has recognised this for the Community programs for quite a while. As already mentioned, within these programs, the maximum aid rates can be higher. This fact could also be interpreted as the Commission's intention to give a higher priority to its own programs than to those of the Member States; in any case, there is need for clarification.

With *operating aid*, it is also evident that while the Commission writes about incentive effects in general, it does not translate these ideas into technically viable rules in the guidelines. In general, the Commission argues against operating aid, analogous to earlier Community guidelines. Here, the main attention is directed exemptions and reductions from taxes that are levied for reasons of environmental protection (GEP-01, pts. 47-53). Without going into details, the basic concept shall be briefly recapitulated here:

The Commission differentiates between taxes that are liable to a regulation at the Community level and taxes that are exclusively regulated within national jurisdiction. If taxes with a harmonised minimum tax rate are additionally raised for reasons of environmental protection by a Member State, reductions of exemptions for certain firms must not result in tax rates that are lower than the minimum rate laid down in the respective Community directive.

For taxes that are not subject to harmonisation, and that are introduced by a Member State exclusively within its autonomous jurisdiction, this minimum rate concept must fail. The Member States are free to introduce such taxes, or to refrain from doing so. Theoretically, the "zero tax rate" is the reference system. In comparison to their competitors, the companies in a Member State that intro-

[36] Interestingly, the old 1994-guidelines on state aid for environmental protection display, in some special cases, more awareness for the interdependencies of public interest and the incentive function of state aid, i.e., in the cases of aid for information activities, training and advisory services, and aid for the purchase of environmentally friendly products (GEP-94, OJ C 72, 10.3.1994, p. 3, pts. 3.3, 3.5). For example, measures to encourage final consumers to purchase environmentally friendly products did not fall within the (then) Article 92(1) because they do not confer a tangible financial benefit on particular firms. But even where such measures were, in principal, incompatible with the common market, they could be authorised, provided they did, among others, "not exceed 100% of the extra environmental costs." A similar regulation applied to aid for investment to make polluted industrial sites again fit for use (GEP-94, pt. 3.2.2). Where an environmental measure serves no private interest, and where no benefits to firms arise, the total extra environmental costs may be granted without affecting competition on the common market.

duces no autonomous environmental tax do not count as being treated preferentially. Competition is – at least according to the guidelines' logic – not distorted, and trade is unaffected. However, in case a Member State does introduce a tax of this kind, the guidelines nevertheless command a minimum tax level and make other unsystematic demands.

Tax rate differentiations in favour of certain companies subject to intensive international competition, for example, may only be granted if these companies commit themselves to other environmental protection measures in agreements with the Member State, or if they at least "pay a significant proportion of the national tax" (pt. 51 b para. 3). In order to fulfil the European commitments in regards to the Kyoto Protocol, the single Member States have shouldered very dissimilar reduction obligations. Insofar, they must also be granted flexibility in the practical implementation of environmental instruments that help them meet their individual commitments. It is obvious that restrictions such as these tax rate regulations can substantially weaken the incentives for an ambitious and innovative environmental policy in these countries.

The Community guidelines do not reflect these incentive aspects, they treat operating aid in the form of tax reductions predominantly under aspects of adaptation. In Point 448, the Commission writes: "the firms affected may have some difficulty in adapting rapidly to the new tax burden. In such circumstances there may be justification for a temporary exemption enabling certain firms to adapt to the new situation." From this perspective, also the other preconditions for authorisation ensue: the state aid must be strictly limited in time, and also, if necessary, degressive. This does not even agree with the concept of adjustment, let alone with an incentive policy.

Nationally introduced, non-harmonised environmental taxes are voluntary measures that improve on the level of environmental protection in the Community that employ the 'polluter pays' principle more stringently, and that internalise external costs to a greater extent than in other Member States. For that reason, they are in the interests of the European Union's environmental policy. However, implementing them autonomously can yield disadvantages for companies that compete internationally with companies that work under conditions of less internalisation. Consequently, special provisions for certain firms competing internationally are legitimate, and this not only transitorily, but as long as the internalisation in the individual Member States and in relation to relevant third countries is not shaped according to the same criteria; that is, as long as the internationally varying application of the 'polluter pays' principle persists as a competition distortion. It is wrong to assume that companies would go back to the former level of cost after adapting to new or higher taxes or environmental levies. They will try to minimise the costs from avoidance and remaining tax, but even after adaptation, the burden will be typically at a higher level than at the onset.

In another context, however, the Commission has acknowledged this problem. In its communication to the Council of 14 October 1991, with which it recommended a Community wide energy/CO_2 tax, it wrote the following on the protection of European firms from competitive disadvantages: „Since such a tax is likely first applied in the Community only, marked economic costs must be

avoided for industries that work with energy-intensive production processes and that have a large share of international commerce. (...) As long as the most important competitors of the Community employ no similar measures, an exception must be considered."[37] At that time, the Commission recommended the introduction of a "zero tax rate" as a superior form of preferential treatment. The duration of such a regulation was tied to the "catching up" of the non-EU countries. Indeed, an absolute limitation in time would have been improper. It is also improper within the new Community guidelines that concern an identical regulation – only in the relationship among different Member States. It would also remove the incentive for the Member States to introduce additional environmental measures, if they were compelled to buy the benefit of the European environment through competitive disadvantages at the national level.

5.5 Shortcomings in the practical application of aid control

Aside from the principle problems discussed, the guidelines on environmental state aid display, in some sections, serious weaknesses in their fundamental task for the execution of state aid: to reliably and consistently communicate to the Member States which criteria the Commission intends to use in controlling state aid for environmental protection.

The requirements for investment aid seem to be quite straightforward, at first glance. Leaving aside the question of what is counted among the investments concerned (pt. 36), the discussion of technical aspects boils down to the definition of eligible costs, and to the application of maximum aid rates.

As already mentioned, the costs eligible for state aid are measured according to an 'extra investment costs' principle: eligible costs "must be confined strictly to the extra investment costs necessary to meet the environmental objectives" (pt. 37). These are to be calculated along with the difference between the degree of environmental protection of the new facility and the mandatory Community degree of environmental protection. This principle no longer corresponds with the policy to support measures that merely bring companies into line with Community standards: to meet Community standards does not result in extra costs.[38]

Where such differences exist, supplementary or voluntary efforts of the companies can be stated. This can be the case where no Community environmental norms are in force. Here, the entire environmentally-relevant investment costs should be eligible for state aid. Yet, the guidelines subject the authorisation of state aid in this case to the condition that the eligible costs are "necessary to achieve a higher level of environmental protection than that which the firm or firms in question would achieve in the absence of any environmental aid" (pt. 37 para. 8). Actually, this *could* mean

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[37] Community Strategy to limit carbon dioxide emissions and improve energy efficiency (Communication from the Commission to the Council); Document SEC(91)1744 final, Brussels. (Translated from the German document).

[38] With the exception of SMEs, see part 5.4 above.

the same. But with the definition of the hypothetical reference case – "What might happen if we did not grant state aid for this specific environmental protection installation?" – the Commission retains a broad range of discretion. The concluding legal uncertainty for the Member States is deepened by the above-mentioned differences between the translations of the guidelines: The German version, e.g., demands a "*significantly* higher level of environmental protection".

Where a firm is adapting to national standards adopted in the absence of Community standards, "the eligible costs consist of the additional investment costs necessary to achieve the level of environmental protection required by the national standards". On the one hand, this regulation is interesting insofar as it sets a certain political incentive for Member States: the higher the autonomous standards are set, the larger the eligible costs become. On the other hand, the regulation lacks consistency with the regulation discussed above regarding the absence of any standards on Community and Member State level. There, the entirely voluntary environmental investments must reach – quoting the German version of the guidelines – a significantly higher level of environmental protection in comparison to the usual investments without environmental aid. This additional criterion is missing in the case of adjustment to national norms. As a consequence, the costs eligible for state aid can eventually be higher for an investment that fosters the adaptation to national standards than for an investment with the same environmental impact that is undertaken voluntarily. State aid for adjustment can be higher than incentive state aid.

The comparison logic of the 'extra investment costs' principle becomes most obvious where more stringent national standards improve on mandatory Community standards, thus leading to other investments in environmental protection techniques with higher costs. An installation capable of reaching the level of protection required by the Community standards must be compared to an installation capable of reaching the higher level of protection required by the national standards. The difference of investment costs between these alternatives defines the eligible costs. The same applies analogously, when a firm voluntarily improves on mandatory Community standards in the absence of stricter national standards. It has already been pointed out that it could come to – in a literal interpretation of point 37 – a defective, doubtless unwanted stipulation for those cases in which investments for environmental protection improve on existing Community standards as well as stricter national standards (see Section 5.4). Here the guidelines fail in their task of providing legal certainty for the Member States.

Leaving this ambiguity aside, the process of calculating eligible costs is plausible by all means, as long as it is used for traditional *end-of-pipe* installations. The 'extra investment costs' concept is tailor-made for this kind of environmental protection installation, which can be added to a plant without changing the core process of production or the production capacity. The environmental protection investments can (more or less) be easily isolated from "productive" investments. Here, also the cost comparison of several end-of-pipe installations with different degrees of environmental effectiveness should pose no major problems. For process-integrated environmental protec-

tion installations ("clean techniques"), on the contrary, a valid separation of the environmentally relevant investment costs and the "regular" investment costs is not feasible, or, at least, is associated with considerable effort, difficulties, and costs for the respective firm.

This is confirmed by the findings of a short, empirical study conducted by FiFo Köln (Cologne Center for Public Finance).[39] All firms interviewed had, in the past, invested in clean techniques, and had received state aid for this purpose. The study confirms that the overwhelming majority of these firms would not have been able to handle the 'extra investment costs' principle in practice. Investments in clean techniques are, in general, cases where "the cost of investment in environmental protection cannot be easily identified in the total cost" (pt. 37, para. 2). Here, the application of the 'extra investment costs' principle means that the following must be deducted from the total costs:

- "the cost of a technically comparable investment that does not though provide the same degree of environmental protection";
- "benefits accruing from any increase in capacity";
- "cost savings engendered during the first five years of the life of the investment",
- "additional ancillary production during that five-year period" (GEP-01 final, pt. 37).

In spite of their familiarity with state aid, almost none of the firms interviewed saw itself capable of implementing a reliable calculation of the additional costs according to the predetermined model.

Thus, in comparison to end-of-pipe facilities, integrated systems face a significant barrier to public support simply because, here, the method of calculating eligible costs can hardly be implemented. This contradicts the importance that the EU, in general, places on integrated environmental protection. Furthermore, these requirements ask too much especially from SMEs, thereby contradicting also the otherwise sympathetic policy towards this group. Finally, the regulation also affects the structures of state aid policy and state aid control: the complicated and complex process of cost comparison allows itself to be controlled individually, case by case; whether this is in the Commission's interest need not be discussed here. However, for the Member States, it is nearly impossible to form standardised aid programmes that can offer aid recipients the legal certainty that the payments received will not have to be repaid again because the Commission chooses different references cases, or acts unexpectedly within its broad range of discretion.

The Commission has taken note of these weak points and has opened up to other methods of determining eligible costs – though, without substantiating them. Now, the Member States may, at least, utilise alternative methods, if these are „objective and transparent" and are accepted by the Commission. Yet, as welcome as this increased flexibility is, it must remain unsatisfactory: it would have been the task of the Community guidelines to specify and elucidate the criteria and procedures according to which the Commission wants to control state aid. In clean techniques, it now

[39] See Annex A of the German long version of this study.

appears to be the contrary: If the Member States do not want their support measures to be controlled with unsuitable methods, they have no choice but to do the Commissions' s job.

With alternative methods, at least the relative disadvantages for process-integrated environmental protection could be removed. But even if this should succeed, the Community regulations in question are still far-removed from an incentive-oriented system. In order to set *effective* incentives, above all, the permitted maximum rate of state aid must conform to the basic principles of voluntary, innovative environmental protection, as described in part 5.4.

For the second category of state aid – *operating aid* – the Commission has chosen a policy that is not directly comparable to the one outlined before, but that just as well leads to inconsistencies. As already mentioned, the Commission generally regards operating aid even more sceptically than investment aid. From the purely technical perspective, this is barely justified, since both forms of state aid can be made to result in the same effect of preferential treatment (either via recurrent payments, or via capitalised, one-time payments).

This scepticism already becomes obvious in the case differentiation. A general regulation for operating aid practically does not exist. Rather, there are special regulations for operating aid for waste management and energy saving, aid in the form of tax reductions or exemptions, operating aid for renewable energy sources, and operating aid for the combined production of electric power and heat.

These groups of operating aid and their subdivisions differ considerably among one another with respect to their methods of implementation, the maximum aid intensities, and their time limits. Aid to promote waste management and energy saving must be limited to a maximum of five years, for example, and it must be wound down over this time, i.e., it must be 'degressive'. Under the prerequisite that the supported firms either "pay a significant proportion of the national tax", or that they participate in an agreement with 'their' Member State that obliges them to undertake environmental protection measures, tax reductions or exemptions may be authorised for a 10-year period with no degressivity. For measures in favour of renewable energy sources, a wide variety of options is provided, which also can be used for certain measures of combined production of electric power and heat. Here, the Commission has conceded considerable scopes of choice for the Member States. They can, for example, compensate the difference between the costs of energy production from renewable energy sources and the attainable market price for the respective energy, in order to ensure the payback of the required facilities. Or, by means of green certificates or tenders, the profitability of the facilities can be guaranteed. Solutions this type can be authorised of for ten years. Furthermore, operating aid may be granted, that is, be calculated on the basis of the external costs avoided.

Abstracting from the fact that the Commission obviously wanted or had to satisfy different national preferences with the individual options and that the variety of regulations follows, for that reason, no recognizable, systematic criteria, the most interesting aspect of this variety is the very fact that the Commission authorises in the area of the "unloved" operating aid significantly higher aid intensities than in the realm of investment aid: in some cases, additional costs can be reimbursed up to 100%. This must be backed by the hypothesis that, in these cases of energy measures, there is no private 'own interest' in the promoted measures – an assumption that should, in general, either apply to no case of environmental state aid, or that should apply to investment aid as well. In view of the approved, far-reaching opportunities to give support to renewable energy, it is surprising, on the other hand, that the Commission (in another context) has reservations about exempting electricity from renewable energy sources from environmentally motivated energy taxes, even though such exemptions are unobjectionable from the perspectives of systematic tax policy and rational environmental policy, as well.

Thus, in the technical definitions of state aid, and in its practical application, the Community guidelines on state aid for environmental protection feature numerous inconsistencies. Many of the associated fundamental problems have been, so far, masked by relatively liberal regulations for energy aid. Environmental protection measures not directly affected by energy matters are handled inadequately and unsystematically, however. With respect to their incentive functions, integrated environmental protection and the use of economical market instruments receive no adequate treatment. The management of aid programmes is considerably complicated, and especially burdens small and mid-sized enterprises.

6 Evaluation of the Community Guidelines in Summary

The evaluation of the new Community guidelines on state aid for environmental protection must, for the time being, limit itself to the analysis of the textual representation, without being able to take into account their (future) practical handling by the Commission. However, since the guidelines are meant to offer the Member States orientation and certainty on how to devise aid policies and individual aid measures that are environmentally sensible and, at the same time, compatible with the common market, such an evaluation of the text alone appears adequate to the guidelines' objective.

Under *legal aspects*, above all, the question is whether the new Community guidelines correspond to Article 6 of the EC-Treaty, i.e. whether environmental protection requirements have been integrated into the definition and implementation of the Community aid control policy in a manner that reflects the intentions of the Treaty.

The authoritative, legal provisions result from the EC-treaty in the version of the *Amsterdam* Treaty. The Community guidelines on environmental state aid give the Fifth Environmental Action Pro-

gramme as their legal reference point, as far as environmental policy is concerned.[40] This programme, however, was formulated on the basis of the *Maastricht* Treaty – that is – before Amsterdam. Accordingly, the new and more central role given to environmental protection by the Amsterdam Treaty has not been taken into account. Correctly, the guidelines should have been founded on a new environmental action program that is obtained on the basis of the version of the EC-Treaty now in force. This is especially relevant because the guidelines will be applicable until 31 December 2007 – a fairly long period of time. Since the Sixth Environmental Action Programme was not yet in force when the new Community guidelines were finally passed, a shorter period of applicability of the guidelines should have been provided for. Aside from that, the Commission could, of course, have allowed for the changes brought by the Amsterdam Treaty, even without a new environmental action program in force.

The consequences of not revising the guidelines in light of the Amsterdam Treaty become obvious, when one compares the Community guidelines of 1994 with the current ones. Differences exist chiefly in specific provisos, but not in the principles. In general, the Commission still considers the strict application of the 'polluter pays' principle and the associated principle of internalisation as the right approach to bring the requisites of a functioning common market in line with those of environmental protection. Also, correspondence can be stated with regard to the types of state aid and methods of support eligible for authorisation (investment aid: maximum percentages of additional investment costs; degressivity for operating aid). Essentially, what is new is only the wide variety of options for support to energy measures, and that aid for investments designed only to bring companies into line with Community standards will not be authorized any longer. As a result, the new guidelines are mainly a perpetuation of their predecessor.

This perpetuation results in a biased focus on only the 'polluter pays' principle as the guiding principle of environmental policy. The other, equally important principles of environmental policy in the Treaty (see Article 174. para. 2) have not sufficiently been taken into account, namely: the *principle of a high level of protection* in conjunction with the *principle of regional diversity*, the *precautionary principle* and the *principle that preventive action should be taken*, and – to a certain extent – the *principle that environmental damage should as a priority be rectified at source*. It is by all means conceivable that, with the help of state aid, incentives could be set to induce companies to an ecologically beneficial conduct within the meaning of these other principles. The Commission deems state aid legitimate where it may also act as an incentive. Yet, the incentive effect and the aforementioned principles are not brought into concordance with one another in the Community guidelines. Such an interconnection could, however, result in higher incentives than acknowledged in the guidelines – be it via further types of permitted state aid, or be it via higher maximum aid rates. Let us just give two examples of this:

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[40] See GEP-01 final, pts. 11, 19.

- In certain spatial areas with high pollution of the local environment, state aid could be a means to reduce this burden. Here, the criterion for the authorisation of special maximum aid rates would be neither the *economic situation* of this region (regions eligible for national regional aid according to GEP-01, pts. 33-4), nor *specific* environmental damages (rehabilitation of polluted industrial sites according to GEP-01, pt. 38), but rather, the overall degree of pollution. Such a measure would contribute to a high level of protection while taking into account the diversity of situations in the various regions of the Community, and correspond to the concept of responsible action on the decentralised level.
- According to the Community guidelines, state aid for investment, in "regular cases", can be granted up to a maximum of 30% of the eligible costs. This maximum rate also applies to completely voluntary measures in the absence of mandatory standards applicable. As already demonstrated, this maximum rate most probably cannot generate effective incentives for voluntary environmental protection. With reference to the principle of a high level of protection in conjunction the precautionary principle and the principle that preventive action should be taken, a more efficient incentive system could be established.

Without going into greater detail here, these examples already clearly show that the guidelines for environmental state aid do not sufficiently make allowances for the requirements of environmental protection within the meaning of Article 6 of the Treaty, since they firstly do not make full use of the concept of shared responsibility among the various actors, according the 5th Environmental Action Programme; and secondly, they do not apply the other basic principles of Community environmental policy alongside the 'polluter pays' principle.

From the *economic perspective*, the evaluation turns out to be rather negative, also: the problem of externalities is not adequately considered. As a result, the effects of differentiated instruments of environmental policy – state aid among them – on competition are seen from a misleading perspective. As a consequence, many policy measures that have nothing to do with preferential treatment and distortion of competition are subjected to state aid control. The Community guidelines constantly choose legal regulations – standards and norms – as a measure of reference, despite repeated, but regrettably theoretical, praise of economic market instruments. In many detail rules, the guidelines thus hinder an innovative and efficient environmental protection, which could be implemented with the assistance of more flexible and incentive-oriented economic instruments.

Indeed, the new Community guidelines, in contrast to the preceding guidelines of 1994, display a number of beneficial improvements – especially regarding the broad spectrum of renewable energies eligible for state aid, the consideration of combined heat and power, and the rules concerning rehabilitation of polluted industrial sites and relocation of firms. Yet, the breakthrough to a frame-

work for Member States' state aid policy that is both inventive-oriented and compatible with the common market, has not been achieved.

On the other hand, in should be positively noted that, in the feverish last drafting phase,[41] the Commission refrained from further, unsystematic adaptations by waiving previously planned detail regulations for the new instruments of climate protection. After all, when criticising the shortcomings of the new Community guidelines, it should not be ignored that the Commission, which had entered into an exchange of opinions with the Member States, ultimately had to work out the guidelines under strong pressure and incorporated amendments that display no systematic justification – neither within the concept of the Commission, nor according to any other methodical conception.

Many inconsistencies, however, must be attributed to the fact that the new Community guidelines – as their predecessors – rest upon fragile, insufficiently pondered fundamentals. In part, they result directly from the shortcomings of the state aid regulations in the EC-Treaty, in part, they are the outcome of an undifferentiated application of general aid control criteria to environmental protection, and, in doing so, they disregard the specific conditions for implementation in the field – above all – the problem of externalities. And not a small part of the guidelines' shortcomings can be attributed to the Commission's very "liberal" interpretation of the boundaries of its own jurisdiction.

Finally, the new Community guidelines lack *inner consistency*. Significant discrepancies must be stated between the Commission's general intentions in sections A through C and the concrete requisites for state aid in section E. This is especially true for the proclaimed incentive-perspective on state aid policy, and for declarations concerning innovative and integrated environmental protection on the one hand, and the concrete, individual regulations in this matter on the other hand. These discrepancies foremost hinder "voluntary" environmental protection, which is of great importance for the progress of environmental policy in the Community. Here, companies can explore their individual potentials to devise ecologically beneficial products and processes that improve on the – unavoidably – generalising and median-oriented environmental standards applicable. Not only do voluntary measures of this type raise the level of environmental protection in the respective Member State, they also boost environmental protection in the Community. Exploring individual potentials with respect to "more" environmental protection and the associated costs in many cases also means developing, testing, and implementing innovative process combinations – and thereby demonstrating what is possible beyond the standards. This could become a major driving force of the Sevilla-Process as regards technical progress in environmental protection. For that, however, an incentive system comprised chiefly of economic 'market instruments' must be created – a system in which state aid could also have its place in the voluntary sphere.

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[41] Within the year 2000 the European Commission made eight draft versions of the guidelines accessible to the Member States, five of these within the final three weeks between 1 and 19 December. The final version was adopted on 21 December 2000. See part II of the German long version of this study.

State aid for the adjustment to mandatory standards cannot be a part of such a system. The Commission has acknowledged and implemented this with respect to Community standards. State aid for adjustment mostly serves as indulgent treatment of non-competitive enterprises, and thus is at odds with the protection of fair competition. On the contrary, state aid for the initiation of voluntary measures calls for an aid control perspective different from this "usual" concept: incentive-oriented aid policy is a type of public-private-partnership in environmental protection, where the Member State and the companies in question agree upon additional efforts on a "peer to peer" level. Thus, far-reaching measures of this kind will only come about on a voluntary basis if they are regarded as fair and appropriate.

This fundamental distinction between the functions of state aid for environmental protection that are generally appreciated by the Commission is not sufficiently reflected in the technical section on state aid of the Community guidelines (section E). For the most part, the dissimilar instruments – state aid for adjustment and incentive state aid – are treated equally. Restrictive treatment of adjustment aid is adequate on account of the always latent danger of distortions of competition. However, the same treatment for state aid in cases of voluntary and cooperative environmental protection is wholly inadequate. It lacks the economic logic that firms should engage in such measures if they have to bear, in a normal situation, 70% of the additional costs arising for their voluntary contribution to Community environmental protection.

For the further development of environmental policy and for the promotion of innovations in process-integrated techniques, Member States must to be able to implement support measures that comprise a fair allocation of costs compatible with the economic concept of incentives. Also, there can be no objections from the side of competition protection: state aid that induces firms to bear additional costs in comparison to competitors solely complying with mandatory standards can, by definition, not lead to any form of favourable treatment, within the meaning of Article 87 of the Treaty.

The Community guidelines also discriminate against aid to clean techniques, as compared to conventional end-of-pipe-techniques. Contrary to these, process-integrated, 'clean techniques' not only shift harmful emissions into a filter medium, but prevent emissions at the onset. Therefore, wherever possible, end of pipe-installations should – within the meaning of the IPPC Directive – be replaced by ecologically superior, integrated installations. At least, both types of technique should be treated equally.

Without further qualifications, integrated installations do not allow for a separation of environmentally relevant cost components from total investment costs. For the calculation of the additional costs eligible for state aid, the Community guidelines provide a method that will encounter great difficulties in practice. This method demands calculations and projections of future developments that are nearly impossible to perform – unworkable especially for SMEs, but also for the Member State in question. To warrant the coherence of Community policy – particularly in view of the IPPC

directive – further improvements for clean techniques are necessary. At least the Commission is prepared to recognise other calculation methods developed by the Member States, provided those methods are objective and transparent. This chance must be utilised by the Member States.

The insufficient handling of the multi-dimensionality of the incentive problem and concluding potential conflicts of jurisdiction also becomes evident in the guidelines' rules for tax reductions and exemptions. In contrast to direct subsidies, elements of aid within environmental taxes usually lead to less environmental protection, since they reduce the incentives set by tax.

For this reason, it must be the concern of *national* environmental policy to limit incentive-weakening tax benefits to inevitable exceptions.[42] If an environmental tax is raised autonomously by a single Member State, exceptions can be legitimised to protect firms from imminent competitive disadvantages in face of foreign competitors upon whom few or no comparable burdens are imposed.[43] Often, such exemptions are necessary to ensure the national adoption or continued application of such taxes. However, general exceptions for *the* producing sector, for *the* industry, or for certain sectors should be avoided, since these impair the incentive effect of the tax too strongly. This is also the rationale of the German discussion that the allocation effects of the national ecotax are rather weak because of generous reductions, which, in turn, calls for the "reduction of reductions" and for the use of 'quid pro quo' concepts.[44]

To repeat, this is an adequate *national perspective*. However, the Commission pursues the same concept by tying the authorisation of tax reductions or exemptions to restrictive prerequisites in time limits, and by demanding 'quid pro quos'. This approach, though, does not suit the European control of state aid, and is also not in accordance with the Commission's jurisdiction in these matters: the Commission has no power whatsoever to command the implementation of an environmental tax in an individual Member State. Nor can the Commission demand stricter CO_2 reductions from an individual Member State by other means. From its jurisdiction over aid control, the Commission has no authority to intervene if an ecotax is *not* levied, because that is no violation of the competition rules. Why, then, should the Commission have the power to sanction, if an ecotax with special conditions in favour of certain companies is introduced, while, at the same time, it is ensured that no company is burdened less than it was before the introduction of the tax? In comparison to foreign companies, nobody is favoured, and trade is not affected. There is no competition problem that would allow the Commission to tie special requirements to a tax regulation of that kind. Those types of tax incentives for environmental protection are voluntary measures that lie solely within the jurisdiction of the Member States. Nationally, they may be discussed controversially; but still, the Commission has not right to interfere in these questions. Consequently, the crite-

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42 See: Ewringmann/Linscheidt (1999).

43 Here, not only the environmental tax in question, but the general structures of tax and environmental policies have to be taken into consideration.

44 E.g., the conclusion of agreements with the Member State whereby the firms undertake to achieve environmental protection objectives, or the adoption of environmental and energy audits.

ria of efficiency and incentive effectiveness of new, voluntary environmental taxes that should be applied at the national level may be transferred to the Community competition and aid control policy.

The Community guidelines continually fail to hold Member States' voluntary, incentive-oriented environmental initiatives for additional cost-internalisation systematically apart from the boundaries of aid control. The deficits in the definition of state aid, the unclear interdependencies of state aid, preferential treatment, and competition distortion, and the inadequate treatment of externalities all come together here. Hence, the new Community guidelines are already in need of reforms – not only in many details – but also in terms of their overall conception and basic structure.

PART C:
FUTURE PERSPECTIVES FOR COMMUNITY GUIDELINES ON ENVIRONMENTAL STATE AID

7 Strategic Reorientation

The flaws and problems discussed above demand far-reaching reforms of the state aid control system. Some of these issues expand beyond the area of environmental aid. They point at the general notions of state aid and competition, as well as the position of state aid control in the Treaty.

This is also a question of the European Commission attracting jurisdiction. State aid control sometimes appears to serves as a spearhead of European centralism. It disregards the fact that, within the competing jurisdictions-model, the actual basis for progress of common environmental policy and other areas of policy lies in the Member States and regions. It also does not adequately acknowledge that policy works less and less by using classic hierarchical and regulatory instruments. Instead, environmental policy has to increasingly use cooperative measures, "soft" tools (including, necessarily, differentiations), and incentive systems.

Increasing internationalisation and globalisation of economic processes that are often given as rationale for more centralised and harmonised policies constitute only one side of the relevant developments. On the other side are decentralisation tendencies that are becoming stronger despite, or rather, because of, globalisation. These boost, first of all, competition between regions. Regions may, as a consequence, strive to distinguish themselves from their "competitors" by using, among others, different strategies in the supply of public goods and financing of these. In harmony with the principle of subsidiarity, this development can lead to more orientation along regional preferences, the strengthening of regional identities, and to shaping the own environment using individual measures and instruments.

The state aid control system intensifies the harmonisation of interventions, and aims at creating and maintaining equal rules of competition on the common market. This is straightforward wherever the Member States agree to relinquish their independent jurisdiction for the sake of unified frameworks. In fact, however, they tend to utilise their individual competences for defining goals and use of instruments more strongly. In most policy fields they have – on the basis of Community-wide minimum standards – retained enough authority to do so. If the Member States or regions want to make use of individual instruments in order to fully exploit their specific potentials, they must not be obstructed by an undifferentiated competition control mechanism. Fair competition on the common market is a prominent objective of the Community. However, it is not automatically of highest priority; it must be weighed against other principal objectives. State aid control will have to make more allowances for this fact in the future.

For example, the state aid control system must submit to an assessment of its environmental impacts. The integration clause of Article 6 of the Treaty implies the establishment of a mechanism that supplements the control for competition effects with a control for environmental and sustainability effects. This needs a formal framework. The (overdue) environmental impacts assessment for the Community guidelines on state aid for environmental protection has to start soon so that not only the next guidelines benefit from its results, but also the application of the current one. The need for integration of environmental protection requirements into Community policies is not a vision for the future; it is a legal obligation today.

The concept of state aid, as applied in aid control, needs to be reformed. Without a clear definition in the Treaty, the concept of state aid is used as a vehicle for the constant expansion of the Commission's jurisdiction. At the moment, the Member States and the regions can engage in new environmental initiatives only under the eminent risk of Commission interference. The current state aid regime effectively and improperly impedes especially the differentiated application of flexible economic instruments essential for a precautionary and integrated environmental protection that improves on the Community minimum level.

In connection to environment and the underlying problem of externalities, the differentiation between state aid that gives favourable treatment and distorts competition on the one hand and equivalence-oriented compensation payments on the other hand especially needs to be clarified. The concept of state aid must reflect the separation of private and public interests more strongly. Where action is taken solely in the public interest, the concept of state aid cannot serve as a reference system, since these cases exclusively focus on voluntary contributions to environmental protection without changing the actual market position or potential profits of the addressees of public intervention.

If this transformation cannot be reached by fundamental changes of the state aid concept and the Community rules on competition, an exemption regulation for environmental aid must, at least as far as environmental policy is concerned, supplement the environmental aid guidelines. Such a regulation could declare certain interventions – those that are inappropriately considered to be state aid in the guidelines – to be generally compatible with the common market. This step would also create more legal certainty for enterprises and Member States.

8 Starting Points for Improved State Aid Control

Notwithstanding the long-term need for fundamental reforms, the rules for control of environmental aid can be improved within the current legal framework. To conform with the increased importance of environmental matters in European law and the ecological strategy of the Community, the state aid framework will have to reflect the following aspects more strongly:

- The Member States are the driving force for improvement and enforcement of environmental activities. They must retain the authority to freely choose instruments that go beyond the Community minimum standards, especially with a view of precautionary environmental protection.
- This is especially true when Member States implement special environmental instruments and regulations for certain regions or spatial areas, resulting in stricter requirements for certain enterprises.
- It is also crucial to make it easier for Member States to enforce additional environmental protection via market instruments. This includes introducing or increasing eco-taxes and environmental levies. In order to ensure public acceptance on the national level, Member States must retain the authority to lower the fiscal burden on firms in cases that would otherwise result in competitive disadvantages and dangers to employment.
- These kinds of exceptions are justified as long as the cause of competitive disadvantages – the varying implementation of the 'polluters pays' principle in different countries – has not been removed. These exceptions should be inspected on a regular basis but not be unconditionally limited in time from the start. It is not helpful for the further development of common competition and environmental policies to burden enterprises in those Member States that improve on Community levels on environmental protection with the resulting competitive disadvantages while, at the same time, allowing competitive advantages for firms in Member States that do not display any individual environmental efforts.
- State interventions for the environment must not be appraised solely on the basis of their effects on competition. Environmental concerns have to be weighted equally, following Article 6 of EGV.
- The valuable theoretical concept of bringing protection of the environment and of fair competition into unison through total internalisation of the external environmental costs cannot be implemented in the practice of state aid control. The pecuniary computation of externalities necessary for internalisation is not workable. The extent of competition distortions arising from state neglect of environmental policy and non-internalisation of environmental costs can be quantified just as little as the potential distortions of competition arising from Member States' instruments of environmental policy. Whether, for example, state aid designed to lower the additional costs that arise from the compliance to national standards improving on Community standards *increases* or *decreases* distortions of competition, cannot not be assessed with the help of this criterion.
- The prime criterion for state aid control can only lie in the costs incurred in the compliance to mandatory Community standards. Here, any state aid given to facilitate compliance clearly distorts competition on the common market. Any additional national objectives and measures are *voluntary*, exercised within the exclusive jurisdiction of the Member States and regions. Within

the meaning of the Treaty, they are to be appreciated unequivocally positively, if they improve environmental quality and, at the same time, the concerned firms gain no *additional* competitive advantage or disadvantage. If additional competition distortions should emerge, these are to be weighed against the attainable environmental improvements.

- For the realisation of ambitious national targets in environmental protection, state aid performs special functions. It serves either as a pure *incentive instrument* to prompt firms to voluntary environmental efforts beyond mandatory ones; or, it serves as a means to assure *public acceptance* for ambitious environmental measures, which are in the interest of the Member State and the Community as well, by preventing the most burdensome competitive disadvantages that would emerge for national firms without the accompanying aid measure.
- Wherever firms can implement process-integrated environmental protection techniques instead of additive, end-of-pipe techniques, they should have an incentive to choose the better, 'clean' alternatives that bring about real avoidance of pollution. For that reason, aid policy should account not only for the costs of environmental and energy-saving measures, but also for achieved, definitive environmental relief.

9 Recommendations for the Design of Aid Control

The perspective for a European state aid control outlined above can be pursued with the help of various modifications, and, accordingly, supplementations, to the Community guidelines that, at the same time, maintain the essential regulations for competition protection.

9.1 Support of Voluntary National and Regional Environmental Efforts

Taking the mandatory Community level of environmental intervention as the point of reference, innovative, precautionary and dynamic advancement of environmental protection can be achieved only through additional national activities. The Community must offer the Member States an incentive to proceed on this path; at least, it must not place any obstacles in the way for Member States to utilise their own authority to improve environmental protection. The Community must merely ascertain that European law will not be violated. With regard to the protection of fair competition on the common market, this is warranted as long as companies must bear the full costs that arise from the adaptation to mandatory Community standards in environmental protection. Where the consensus attainable in the Community does not yet carry so far, the Member States in their additional, voluntary environmental protection efforts must be free

- to implement instruments that avoid national disadvantages and conflicts, and, with that, secure the acceptance for the further development of environmental protection;

- to choose between the tightening of environmental regulations and the implementation of market instruments, or a combination of both, and with that,
- to decide on the burden sharing of additionally arising costs for enterprises.

In this sense, the new Community guidelines are consistent, where state aid for adaptation to Community standards will be not be authorised anymore. They are, however, not consistent in authorising the same maximum rate of aid (30% of eligible costs) for all additional national programmes meant to attain *different* levels of enhanced environmental protection.

With regard to incentive effects, the different cases should also be treated differently, i.e. with individual maximum rates of authorised aid. For example, the following distinction could be appropriate:

(1) State aid for environmental protection investments that improve on mandatory Community standards, but that do not yet correspond to the level of environmental protection possible with BAT ("best available techniques" in the meaning of the IPPC-directive), or the level of environmental protection that is mandatory in other Member States. Here, state aid could, for example, be authorised up to the designated maximum of 30% of eligible costs. The same maximum rate could apply, where firms undertake investments to reach the mentioned level in the absence of mandatory Community standards.

(2) Investments to comply with very ambitious national standards that are more stringent than the Community standards and that demand the use of BAT: aid to this kind of investment should be authorised up to a higher percentage of the eligible costs if prices of products that compete internationally with products produced under lower standards would otherwise have to be raised. Likewise, aid to investment should be authorised up to the same, higher percentage of the eligible costs in those cases where stricter environmental quality standards are adopted for certain regional or local areas, which leads to higher costs of environmental protection for the firms concerned.

(3) Investments that enable firms to improve on national standards more stringent than Community standards, and that improve on the level of environmental protection attainable by BAT: aid to this kind of investment in theory should be authorised up to 100% of the additional net cost of the measure; in any case, it should be authorised up to a maximum rate that clearly exceeds both of the aforementioned.

The same applies to aid prompting firms to invest in demonstration projects where innovative processes, process combinations or integrated technologies are applied for the first time on a large scale, i.e. technologies that are liable to substantially reduce ecologically harmful effects of plants or products, or liable to produce new, environmentally friendly products, or liable to use environmentally sound inputs. Demonstration projects of this kind lead to the advance-

ment of technical standards and best available techniques in the interest of the Sevilla Process and, accordingly, of the Community.

9.2 Equal Treatment for Clean Techniques

As discussed in Section 5.5, the use of the 'extra investment costs' principle in calculating the costs eligible for state aid will most likely discriminate against the promotion of process-integrated environmental protection in comparison to end-of-pipe techniques, if not render it impossible. This especially applies for SMEs. Thus, the feasibility of aid to clean techniques must be improved.

In view of their ecologically more beneficial effects, clean techniques should be favoured over end-of-pipe techniques. This could be accomplished with a system of aid control that also takes the levels of final environmental relief, an objective unattainable with traditional end-of-pipe techniques, into account. In any case, aid to clean techniques should not be treated worse, or be impeded implicitly.

In the technical execution of state aid control, there are different approaches to reach this aim:

By and large, aid control could serve this objective best by setting a limit of authorised aid per unit of avoided emissions. This concept could be employed both for end-of-pipe installations and process-integrated installations. Authorised aid would result directly from the level of improvement on mandatory standards. Yet, final environmental relief (clean techniques) and the shifting of environmental burdens from one medium to another (EoP) would be treated equally. From this perspective, a limit of authorised aid per unit of avoided "raw emissions"[45] would be a better alternative. Ecologically more beneficial clean techniques-installations would get the preferential treatment they deserve. But the attempt to put this second idea into practice would probably be confronted with severe problems.

If, for practical reasons, the limits of authorised aid are to be fixed with reference to investment costs for environmental protection – instead of direct reference to the environmental benefit – a concept must be chosen that provides for the equal treatment of 'clean' and end-of-pipe techniques. This could be done with a combination of extra investment cost-calculation and total investment cost-calculation, where the maximum rates and volumes of authorised aid would be determined with reference to payback periods. An aid control concept on the basis of payback periods would take into account that in many cases, 'clean' installations are profitable, but are nevertheless rarely adopted due to longer payback periods.

The regulation could read as follows:

[45] Emissions produced in a process *before* they are filtered by an end-of-pipe installation.

- *Maximum rate of authorised aid*: Investment aid may be authorised up to not more than *x*% gross of the eligible investment costs, but at most up to an amount that shortens the payback period of the investment to *y* years.
- *Eligible costs*: The eligible costs consist of the investment costs necessary to meet the environmental objectives.
  - Where the costs of the environmental investment component can easily be separated from the total investment costs, the eligible costs are confined strictly to the extra investment costs necessary to meet the environmental objectives.
  - Where the costs of the environmental investment component cannot easily be separated from the total costs, the eligible costs consist of the total investment costs, if
    - the investment serves the application of innovative and clean techniques and processes,
    - the investment meets the qualifications of Article 3 of the Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control.[46]

However, an approach based on payback-calculations would also require pragmatic cataloguing and simplification. Demanding an individual and differentiated payback calculation instead of the now required, complex comparison of investment costs according to the "pure" extra investment costs principle, would not be the suitable way to reduce the obstacles in the promotion of integrated environmental protection.

9.3 Systematic Treatment of Reductions and Exemptions from Environmental Taxes and Levies

Introducing (or increasing) taxes on use of the environment, energy, and other resources poses a chance to promote the transition to market instruments in environmental protection as favoured by the Commission and the Community. The Member States decide autonomously whether they adopt these instruments, or whether they avoid making voluntary contributions to further environmental protection. Since the Member States have the free choice between improving on Community levels of environmental protection and failing to do so, and since the insufficient internalisation of environmental costs is not subjected to any sanctions in the conduct of aid control, those Member States that decide to use additional market instruments must not be subjected to restrictions of this kind, either. Consequently, aid control should only determine whether the adoption of additional national instruments leads to situations in which the firms are relieved from costs that they would have to bear when only the Community standards were applied.

Yet, when adhering to the aid concept of the Commission and the European Court of Justice, the individual Member States must be granted greater flexibility to make allowances for divergent envi-

[46] OJ L 257, 10/10/1996, p. 0026 - 0040.

ronmental and tax policies in other Member States – flexibility especially in relation to tax reductions and exemptions.

(1) Certain tax differentiations should be excluded from the notion of state aid. Any action reaching beyond the compliance to the Community minimum, which leads to additional cost for the polluters, is a national contribution to the reduction of otherwise external environmental costs. It therefore basically contributes to the limitation of distortions of competition resulting from non-internalisation, and, at the same time, to the improvement of environmental quality. In this realm, firm-specific, sectorally- or regionally-differentiated Member State initiatives cannot work against the objectives the common market; nor are they the rational object of Community aid regulations. Aid control gets involved only when the additional costs firms have to bear come along with real, individual advantages that must be taken into account. State aid can then be stated incompatible with the common market if the cost allocation for additional national measures leads to relief from costs that have to be borne for compliance to mandatory Community standards, or if the national measures generate specific increases of firms' revenues that are not coupled with specific costs.

(2) If an economic perspective like this one should not be adopted, the tax scenarios referred to should, instead, be included in an exemption regulation for environmental aid, thus declaring them compatible with the common market in general. Since this does not seem very probable at the moment either, the following remarks are made under the assumption that the Commission assesses state aid of this kind on a case-by-case basis as compatible with the common market.

Since the EU cannot take action against Member States that refrain from the introduction or increase of energy and ecotaxes, the actual adoption of additional environmental taxes by another Member State cannot be considered as an act harmful for the common market, even if the individual extra tax burden is differentiated in a manner that is adequate to the subject. The following belong to adequate differentiations:

- Differentiations of tax rates according to the environmental effects of the energy sources used in the energy transformation. For example, within the framework of an ecologically motivated electricity tax that follows the 'polluter pays' principle, it is imperative to allow a tax exemption or reduction for regenerative energy. The special treatment of regenerative energy as part of such a tax is therefore not state aid. As a matter of fact, to refrain from such a differentiation would have to be interpreted as supporting fossil fuels and the electricity produced herewith.
- It is also essential for an environmental tax or levy to take into account the technological potentials for energy savings or substitution. Use of energy that cannot be avoided with current technology must not be "forbidden" by regulations or standards. Consequently, unavoidable energy-intensities must also not be submitted to "regular" environmental tax rates that are meant to set incentives for reduction and avoidance of energy use. Technologically unavoidable use of energy can be accounted for with differentiated deductions from the tax base. Such deductions can, therefore, not constitute state aid incompatible with the common market.

- Finally, it can also be adequate to differentiate environmental taxes that account for existing incentive programs – independent of the tax incentive – and resulting energy savings. Under certain circumstances, environmental agreements between the Member State and the tax payers concerned or energy audits can be employed as additional instruments and incentive systems. Companies participating in such systems should consequently not be subjected to the same tax burdens as their non-participating competitors.

In all these cases, differentiating regulations do not constitute state aid incompatible with the common market, but rather, they reflect the adequate integration of environmental subjects into the tax system.

The following aspects must also be considered:

(3) As regards tax exemptions and reductions, the general call for ex ante fixed limits in time and for degressivity does not conform to the motives of environmental aid mentioned above. If national measures demand additional environmental efforts going beyond the community level, the resulting disadvantages in competition will remain as long as the affected regulations differ on the Community and international level. It is wrong to assume that enterprises can return to their previous cost level after a short adjustment period by avoiding the actions that caused their extra environmental burden. In comparison to companies in countries with less stringent environmental laws, the cost level will usually remain higher, even after the adjustment process.

(4) Since the discussed taxes pursue an environmental cause, it can, at the most – and only if they in fact entail elements of state aid relevant to competition on the common market – be required that recipient companies also contribute to the ecological objective. This can be assumed if these enterprises, in return, deliver results such as emission-reducing and energy-saving actions, or if they participate in agreements obliging them to apply advanced technologies or additional environmental management systems.

(5) In particular, exceptions in the scope of taxes introduced or raised for environmental reasons should be authorised under the following requirements:

(5.1) The exceptions must be strictly limited to cases in which the regular tax burden would endanger the competitiveness of certain products of processes relative to products with little or no comparable burden. Such a danger can be assumed, if the production processes of the respective products are energy-intensive or intensive in relation to other environmentally-relevant matters subject to the tax, and if the affected products directly compete with products that face no or less comparable taxes, and if the application of the regular tax burden would raise production costs by a certain percentage.

(5.2) Additionally, operating aid may be granted in these cases, only if the companies are made subject to a lasting incentive to contribute to the environmental objectives pursued by the tax. This can be assumed

- if the concerned production processes already correspond to a modern degree of energy efficiency and emissions avoidance (on the basis of BAT), or if, in the scope of environmental agreements, measures for the attainment of this degree are arranged, while, upon application of the regular tax base, the actual tax rate does not fall below 90% of the regular tax rate;
- or if, while the regular tax rate is upheld as an incentive for further reductions of energy use and/or emissions, corrections to the tax base do not lead to an actual tax burden falling below 10% of the regular burden.
- Basic quantities of raw material- and energy inputs per product unit, as well as emissions per product unit that cannot be avoided even through the use of advanced processes (BAT) can be exempt from taxation, or, accordingly, deducted from the tax base.

Abbreviations

Art.	Article
BAT	Best Available Techniques
BMU	Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit [Federal Ministry for the Environment, Nature Conservation and Nuclear Safety]
CHP	Combined Heat and Power
CO_2	Carbon dioxide
COM	European Commission
EC	European Community (-ties)
EC-Treaty	Treaty establishing the European Community
EEC	European Economic Community
EEC-Treaty	Treaty establishing the European Economic Community
EIA	Environmental Impacts Assessment
EoP	end-of-pipe
EU	European Union
FiFo	Finanzwissenschaftliches Forschungsinstitut an der Universität zu Köln [Cologne Center for Public Finance]
GEP	Community Guidelines on State Aid for Environmental Protection
GEP-01 final	Community Guidelines on State Aid for Environmental Protection of 30.02.2001
IPPC	Integrated Pollution Prevention and Control
LIFE	Financial Instrument for the Environment
OECD	Organization for Economic Co-operation and Development
OJ	Official Journal of the European Community
para.	paragraph
pt.	point
SMEs	Small and Medium Enterprises
UBA	Umweltbundesamt [Federal Environmental Agency]

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