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CHAIRMAN'S BACKGROUND DOCUMENT 7

Subject: "Monitoring, reporting, verification and compliance"

7. Introduction: this Background Document should be read in conjunction with Background Document 6 entitled: "Elements to be made compatible for the linking of national schemes and the linking of national schemes with an EU scheme". All the elements treated below should be treated as those in respect of which a co-ordinated response is necessary to link trading schemes.

First, monitoring, reporting and verification are necessary for other instruments than emissions trading, most notably voluntary agreements. For the purpose of this paper, the focus is rather on the additional requirements that are needed for emissions trading to be effective as an instrument of environment policy.

Second, compliance is an element that is also not specific to emissions trading, but is applicable to many policies and measures, especially those that entail non-transferable permitting (e.g. IPPC Directive). However, without effective compliance, emissions trading will not work.

Third, distinction should be made between the monitoring, verification, reporting and compliance provisions that are necessary to make emissions trading among entities work, and those in respect of the obligations (both of the Member States and the Community) in the context of the Protocol as a whole. Most obviously, the guidelines for national inventories are not sufficient for the purposes of emissions trading between entities. Similarly, the compliance provisions of the Protocol will be applicable to Parties, not entities.

7.1 Monitoring standards: A tonne of CO2-equivalent should be measured to the same degree of accuracy within trading schemes that are linked (or, rather, have the same tolerances of inaccuracy). If this is not the case, then the environmental outcome of the two schemes combined may not fulfil the pre-set environmental outcome. Common monitoring standards are, in practice, a basic safeguard against cheating by participating entities. Acting in bad faith, a company might sell its allowances, and then try to understate it actual emissions. Alternatively, a company might try and understate its emissions, so as not to need to buy so many allowances on the market. Unless monitoring and verification is sufficiently robust, these understatements of actual emissions would go unnoticed.

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While no government concerned about environmental integrity wants to be cheated by its own entities, the incentives for Member States to ensure that their entities performed well will depend also on the degree of incentive coming from a "higher" level, whether that be the Community or the Protocol.

Common measurement standards are an essential element of maintaining the environmental credibility of an emissions trading regime, or a collection of linked regimes. Environmental monitoring standards would have to be agreed between the relevant jurisdictions. Environmental credibility rests on the standards of the weakest. In practice, governments will only link schemes if they trust one another's standards and the practical application of these standards. It is not enough for one government to certify a tonne: other governments must trust this standard if they care about environmental integrity.

Calculation probably offers the most feasible and accurate means of monitoring CO2 emissions for most sectors. This can be done on the basis of input and output data, using emissions factors for fuels. Such information may be commercially sensitive, which may raise problems with respect to the openness of access to such data. The controlling authority would have to be able to guarantee commercial secrecy where appropriate. It should also be feasible to use calculation as a basis for determining a given entity's base-period emissions, assuming that the necessary data is still available. This is important in so far as the wrong calculation of the base-period's emissions may have an on-going effect on the trading scheme (every year that an over-estimated base-period was used would entail the entity concerned having to buy fewer permits or reduce emissions less to achieve a fixed-rate reduction).

7.2 Reporting and verification: Entities involved in emissions trading schemes will have to report their actual emissions and their holdings of allowances or credits at regular intervals. Such allowances or credits that are used to cover the actual emissions would be retired and cancelled irrevocably. The standards of verification of these reports, like standards of monitoring and enforcement, should be comparable in the case of linked schemes. An important difference between monitoring and verification, however, is that monitoring can be carried out by trading entities themselves in accordance with agreed monitoring standards while verification is under the *responsibility* of the controlling authority. The latter may decide that verification can be carried out by private entities accredited in accordance with accreditation criteria requiring the necessary expertise for the verification of emissions. It is the vigour with which monitoring standards and verification requirements are applied in practice that determines the environmental integrity of a trading system. Rigorous reporting and monitoring standards are meaningless unless properly verified and enforced in practice.

7.3 Compliance framework: A common compliance framework is necessary – both in terms of severity of sanctions and the actual enforcement of sanctions. Simply put, the scheme that has the most severe compliance sanctions will be the most successful in obtaining its pre-determined environmental outcome because, in these "strict" jurisdictions, companies will make the greatest effort to comply. Conversely, the scheme with the weakest sanctions will be the least likely to perform adequately in environmental terms, in the case that non-compliance with emissions targets should arise at all.

A further consideration when discussing compliance is the importance of the need for speedy and automatic sanctions in the case of breaches in compliance – given the speed at which market mechanisms work.

The Danish scheme, for example, has a "safety-valve" provision of 40 DKK per tonne of CO2. This is *de facto* equivalent to a financial penalty per tonne emitted beyond the cap. If any scheme were linked to it, this scheme would also assume the consequences of that ceiling on the price of permits within the Danish market. If the price of permits in the joined schemes were to reach 41 DKK per tonne, then it must be assumed that Danish allowances will flow out of Denmark on a large scale. Such flows might take place between a multi-national's different business units in different Member States. These flows might be quite sudden, and would clearly endanger Denmark's fulfilment of its own obligations. Although, measures could be taken to counter such sudden flows, these would almost certainly require the setting up of market restrictions. Alternatively, linked schemes could merge their overall environmental outcomes so that flows of permits from one scheme to another would not matter if the result of the combined schemes were the only result that mattered. However, such merging may not be feasible under the international commitments that Governments have undertaken.

Compliance provisions should be co-ordinated, at least to the extent of setting a minimum penalty and ensuring that enforcement is roughly similar across linked schemes, to avoid "gaming" and sudden flows of permits from one scheme to another. Furthermore, it is of central importance for environmental integrity that financial penalties are substantially higher than the price of allowances. Otherwise, a company that emits more than its holding of allowances, and pays the penalty for any shortfall, may fare better than a compliant company that had reduced its emissions or bought allowances in the market.

However, the above analysis on compliance has assumed that the trading system is one based on allowance trading. For "baseline and credit" trading systems, the compliance provisions may not have to be so strong, given that the transfer of credits can only take place on an *ex post* basis to the extent that absolute reductions are actually achieved. Nevertheless, while a "baseline and credit" approach may not run the risk of "over-selling", the penalty rate must still be high enough to ensure that companies either take action to reduce their own emissions, or buy enough permits to cover their excess of emissions. Moreover, "baseline and credit" systems would require that the trading authorities in different jurisdictions trust each other's certification procedures. Finally, "baseline and credit" systems would also allow less liquidity and imply higher transaction costs on trading.

7.4 Conclusions: As the guarantors of environmental integrity and economic value of permits, monitoring, reporting, verification and compliance underpin emissions trading systems. Both governments and entities have an interest in these areas being co-ordinated in the case that emissions trading schemes are linked between different jurisdictions. Without certainty in terms of what is being exchanged, what obligations there are, and what sanctions will be imposed in the case of non-respect of these obligations, no emissions trading system – individual or collective – will work.