Bonn 2007: Russian Proposals, Policy CDM, and 'CER Put Options' (CERPOs)



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Executive Summary

During the recent meeting of the UN Framework Convention on Climate Change ('Convention') Subsidiary Bodies, a workshop was held in Bonn/Germany on a two-fold proposal by the Russian Federation on the issue of 'voluntary commitments'.

There was overwhelming support for the first ('Kyoto-track') proposal that the current conditions and procedures for acceding to Annex I of the Convention or to legally binding targets under Annex B of the Kyoto Protocol ('the Protocol') must be simplified, particularly with respect to the impossibly high three-quarters of Parties ratification hurdle.

The second ('Convention-track') proposal on 'voluntary commitments' for developing countries fared rather less well. All but one of the G77+China interventions rejected the proposal more or less forcefully, not least because it mentioned access to technology transfer and adaptation funding as possible incentive mechanisms to be used to motivate developing countries to adopt such 'voluntary commitments'. This was seen as indication that the scheme would sooner or later lead to developing countries being forced into adopting legally binding commitments, which was tantamount to a death sentence for the proposal in the eyes of most developing countries.

This paper argues that probably the only way of reprieving the Russian Convention-track proposal is by way of a generalised version of the Clean Development Mechanism (CDM), allowing for sectoral, programmatic, or generally policy-based emission reduction activities in developing countries ('policy CDM'). The CDM is broadly accepted, if not embraced, in developing countries and – unlike any new and untried proposal on how to reduce developing country emission – is thus not seen as a step on a slippery slope towards the developing country anathema of new legally binding

(mitigation) commitments. Indeed, policy CDM has been put forward by senior opinion formers from key developing countries as the way forward as regards the role of developing countries in the post 2012 mitigation regime.

Policy CDM, however, will inevitably be 'unilateral,' i.e. rely on domestic funding, as it is unrealistic to expect large-scale (sector-wide) government policies to be financed by bilateral ODA, let alone by private sector FDI. This however means that policy CDM carries a carbon investment risk, i.e. the risk that revenue from the sale of the CERs (Certified Emission Reductions) generated by the policy will not be able to cover the costs of the associated greenhouse gas reduction costs.

Given the inherent risk averseness of governments – with (very) limited budgets – and the genuinely voluntary nature of the CDM, there would have to be, it is argued, some form of carbon investment risk limitation for this sort of unilateral policy CDM to be genuinely attractive to developing country Parties. One way in which this could be achieved is if industrialised (Annex II) countries – say as part of their obligations under Article 4.1 of the Convention – were to underwrite Certified Emission Reduction Put Options (CERPOs) which would give developing countries willing to engage in such policy CDM activities the right to sell a number of the generated CERs at a certain price ('strike price').

This would have a number of significant advantages for both sides of the bargain. For one it would mean a reduced risk of additional (carbon) costs for developing countries which invest in such mitigation policies, while keeping open the possibility of net benefits through a sale of the generated CERs on the open market, if the spot price is higher than the agreed CERPO strike price: put options are a *right* to sell at the strike price, not an obligation to sell, i.e. the right need not be exercised).

Annex II Parties, in turn, would have a means of fulfilling (at least part of) their obligations under Article 4.1 of the Convention in a manner which rewards the success of developing country mitigation policies and thus create incentives for achieving such a success. CERPOs would give the right to sell (at the agreed price), but they can only be exercised if there is something to be sold, i.e. if the policies in question actually have managed to generate CERs. Moreover, as the CERPO right would only be exercised in a low-price environment (often a sign of insufficient environmental integrity), the CERPO scheme could also be used by Annex II Parties to improve the environmental integrity of the international mitigation regime simply by retiring the policy CERs under the scheme

There would be other advantages – such as much increased adaptation funding due to the adaptation fund levy on CDM activities – but the key message in this context has to be that the only way to rescue the Russian 'Convention-track' proposal and, more importantly, to address developing country emissions in a politically acceptable manner, is to turn to the Kyoto Protocol, and negotiate the necessary policy ('sectoral', 'programmatic') enhancement of the CDM, with a tool such as the CERPOs proposed here to limit the carbon investment risk of such 'unilateral' activities.

The SB24 Workshop on the 'Russian Proposal'

The Existing Legal Framework and the 'Kyoto-track' Proposal

The Outline of the Proposal on Voluntary Commitments (the 'Russian Proposal') – submitted by the Russian Federation prior to the in-session SB.24 Workshop on 11 May 2007 –began with an exposition of the 'Existing Legal Framework,' discussing at some length the cumbersome nature of the mechanism for countries to take on targets under Annex B of the Kyoto Protocol. And yet, the Russian Proposal did not really seem to be about taking on Annex B targets at all, as became clear from the stipulation that

"The main principle of voluntary commitments is no-regret emission reduction measures by countries. If a Party has not achieved its stated voluntary targets, it does not enter into a non-compliance regime and does not incur penalties. In the case of success, a Party gains various financial or technological benefits" [Russian Proposal:4]

'Voluntary commitments' – in the sense of the Russian Proposal – therefore seem to be 'non-binding targets' and, as such, categorically distinct from Annex B targets.²

The actual presentation delivered by Sergey Tulinov,³ during the Workshop did provide some clarification in this respect, as noted by the Workshop Chairman, former Convention Executive Secretary, Ambassador Michael Zammit Cutajar in his summing up of Mr Tulinov's delivery of the Russian proposal presentation:

"What I see as coming through from your proposal clearly is the idea that Parties should consider [simplifying] the procedures for joining Annex I and for taking on commitments under Annex B to the Protocol ... That is one idea you put on the table, calling it the 'Kyoto-track' ... Second is the proposal to explore further, in an appropriate place, the concept of 'voluntary commitments.' ... I believe the focus [of the proposal] is on action by non-Annex I developing country Parties under the Convention. 'Voluntary', I believe, comes through as what other people call 'no-lose'."⁴

The first intervention from the floor – by Saudi Arabia – rightly pointed out that the topic of 'voluntary commitments' is really nothing new; that it had been discussed in the runup to Kyoto under the heading of 'Item 10', and that it would have been impossible for developing countries to accept the Protocol text had it not been dropped.

According to an 'authorised' history of the Kyoto Protocol text⁵ "proposals on voluntary commitments for non-Annex I Parties"⁶ were indeed put forward by most of the major actors (AOSIS, EU, G77+China, Japan, USA) during the negotiations of the Kyoto Protocol, most of them "based on the principle that a Party not included in Annex I ... could declare to the Depositary that it wished to take on commitments under the protocol."⁷ While some of them were talking of commitments on policies and measures and others on QELROS,⁸ all of them interpreting 'voluntary' as pertaining to the transition from not having a commitment to adopting one 'voluntarily', as it were. In other words, all of them were concerned with what in the present context has been dubbed the 'Kyoto-track.' And the same was incidentally true for Chairman Estrada's text "setting out a detailed process through which non-Annex I Parties could take on commitments under the protocol."⁹

The key to why Item 10 was ultimately dropped at Kyoto was that "the issue of voluntary commitments for non-Annex I Parties became caught up in debates over proposals for lists of Parties that could include [non-Annex I] countries, and over so-called "evolution"¹⁰ – i.e. the question of launching negotiations on extending commitments beyond Annex I which was "thrown into focus following a US proposal … that Parties shall adopt, by [2005], binding provisions so that all Parties have quantitative greenhouse gas emissions obligations and so that there is a mechanism for automatic application of progressive greenhouse gas emissions obligations to Parties, based upon agreed criteria".¹¹

As it happens, the Saudi intervention did evoke the spectre of this sort of "evolution" in the closing remarks of his intervention:

Voluntary commitments will become, by and by, non-voluntary – in other words there are industrialized countries that will not fail to use any and all means to attract country after country towards these commitments. Consequently things may well begin as something deemed voluntary but eventually turn into something which is compulsory. ... This would move the burden and responsibilities for climate change, and put them on the shoulders of the developing countries which is something which we could not accept.¹²

And yet, things have moved on since these early days, at least in some respects. For one, there is a procedure for countries to adopt legally binding targets under the Kyoto Protocol, if they wish to do so (i.e. 'voluntarily'). The 'only' problem is that in requiring ratification by three-quarters of Parties, this procedure becomes "virtually impossible", as pointed out by Belarus, citing the example of their own amendment which after six months since its adoption in Nairobi has been ratified by exactly one country: Belarus. And most of the interventions during the Workshop, both from industrialized and developing countries – including China (see below) – were actually in favour of simplifying the procedure of acceding Annex B of the Kyoto Protocol – for example, as suggested by Belarus, by requiring only the ratification of the candidate country in question.

The 'Convention-track' Proposal

Where consensus did break down with a vengeance is on the 'Convention-track' interpretation of voluntary commitments. Almost all G77+China interventions – with the exception of South Africa – rejected the notion. China, for one, was particularly clear about this:

"We do not believe that the proposal by the Russian Delegation on voluntary commitments has any added value. We cannot go along with the continued discussion of this proposal, as the delegations of Saudi Arabia, UEA and India made clear in their statements. The workshop is a workshop. There should not be any follow-up procedures to the workshop."¹³

As acknowledged by the Workshop Chairman,¹⁴ there was no ambiguity in this. What may not be quite as clear is why there was such a vehement reaction to the Russian 'Convention-track' proposal, particularly given – as pointed out by the Chairman in his initial summing-up of the presentation – "the similarity of the concept, apart from the word 'commitment,' to the idea of 'voluntary action' … that is being explored through the Convention Dialogue."¹⁵ To gain some more insight into the motivation for the

rejection, it may be useful to look at some of the statements mentioned in the Chinese intervention.

Notwithstanding having been cited as rejecting the Russian proposal, India actually merely put forward a number of questions for clarification, among them one – echoing the Chairman's introductory comments – asking for a clarification with regard to the fact that, apart from 'voluntary commitments,' the Russian Proposal contains references to 'voluntary actions' (and, indeed to 'voluntary initiatives').

The Saudi position that introducing 'voluntary targets' would be the thin end of the wedge towards 'evolution' has already been quoted. It was amplified by the United Arab Emirates asserting that the proposal by the Russian Delegation "is a proposal aimed at a fundamental change in the terms and obligation of the Convention, by [re-] directing tech transfer and financial incentives to the countries which take on what are called 'voluntary commitments'. [T]his is a fundamental change to the commitments under the convention which [UAE] cannot support." Egypt echoed these sentiments and emphasised that tying technology transfer and adaptation funding to accepting 'voluntary commitments' would constitute "a grave shift from the commitments that have been entered into by developed countries under the Convention and the Protocol" which could be seen as "a kind of way of bringing pressure to bear on developing countries in the context of voluntary commitments that would become binding commitments."

The rejection of the 'Convention-track' proposal was, it seems, first and foremost based on the fear that it would sooner or later become the cornerstone for developing countries being *forced* to take on binding targets with the concomitant burdens. Was this fear justified? Indeed, are developing countries right in their deep-rooted belief that this would be an injustice?¹⁶ These are indeed very important questions. The former touches on the deep-rooted distrust of the motives of industrialised countries, while the latter can only be dealt with by operationalising the differentiation of responsibilities referred to in Article 3 of the Framework Convention. Unfortunately, these issues are beyond the scope of this note and will have to be taken up in another context.¹⁷

What can be said here is that by using the concept of 'commitments' – instead of the less inflammatory, and actually more accurate 'non-binding/no-lose/no-compliance target' terminology – and by referring to areas for which there are existing Annex II obligations (technology transfer and adaptation funding) as incentives for taking on these commitments, the language of the Russian proposal could not have been designed any better if one had wanted to sink it.

For one, it could have been foreseen that the idea of new 'developing country commitments' – in whatever guise – remains completely unacceptable for most developing countries, in the same way in which most developed countries would reject out of hand any discussion of 'liability for impacts,' or anything that might possibly imply it.¹⁸

Moreover, while some of the Annex II interventions expressed astonishment on why one would wish to reject giving Parties the opportunity to do something voluntarily, others made it quite clear that they see the Convention-track proposal as a stepping stone to the 'evolution' of the regime. Japan, for example, prefaced their discussion of the Russian proposal with a statement that the division of countries into Annex I and non-Annex I

"decided upon and which was created in 1992 should not be a perpetual institution" because it is divisive and has "to stop ... so that a new alliance [of major emitters] on the basis of common but differentiated responsibilities will emerge and replace this division."

Given the sensitivities among many developing countries, it was not surprising that Japan's wholehearted support of the Convention-track proposal¹⁹ was unlikely to allay fears about it being a Trojan horse for a legally binding 'evolution' of the regime. And it did lead to the rather rare occasion of a named rebuke by another Party:

"We are astonished that the Japanese delegate said that the principles provided in the 1992 Convention will affect the solidarity of the international community to address climate change. We believe that both the Convention and the Protocol are the basis of our response to climate change, and these are the principles we must stick to in our long-term efforts in the future."²⁰

All this is truly regrettable, because the resulting *de facto* sinking of the idea of 'nonbinding targets' was based on an entirely preventable misinterpretation which failed to do justice to the potential ('win-win') benefits for everybody of the idea. This is why it would be wrong to abandon the idea at this stage, and why it may be useful to have a closer look at the details of the proposal, to see what could, and indeed should be salvaged from the Bonn Convention-track fiasco.

The Way Forward?

Given the near unanimity of the Workshop interventions on the 'Kyoto-track' proposal, the way forward would seem to be non-controversially obvious: enter as soon as possible into negotiations on how to simplify the accession procedures to both Annex I of the Convention and Annex B of the Kyoto Protocol. As concerns the 'Convention-track,' however, the situation may appear less straight-forward in light of the diametrically opposed positions – wholehearted support and out-of-hand rejection – professed by Annex I and non-Annex I Parties, respectively.

As it happens, the Russian Convention-track proposal was, contrary to appearance, not only insisting that what was at issue were some form of *non-binding*, *no regret* emission reduction activities/targets, but it also clearly stated that developing countries could *only* be expected to engage in such activities, if these "would enhance their economic development and integration into the global economy."²¹ Indeed, the Convention-track proposal can – according to the Russian Proposal – only be attractive to developing countries if it contributes to achieving their sustainable development goals.

Moreover, the Russian Proposal refers to 'conditional commitments' – by which "a Party takes on commitments under the condition that it will be provided with technologies/financing in order to achieve voluntary targets."²² – which seem to echo strongly an article of the convention that has enjoyed general support from developing countries, namely:

"The extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology and will take fully into account that economic and social

development and poverty eradication are the first and overriding priorities of the developing country Parties."[UNFCCC, Art. 4.7]

In short, the Russian Convention-track proposal does have elements which should, in principle, be perfectly acceptable to developing countries, but which were unfortunately overshadowed by less acceptable features. The first thing to do in any attempt to resuscitate – let alone take forward – the Convention-track proposal thus must be to remove these unacceptable aspects, i.e. to discard the unfortunate and misleading 'commitment' terminology as well as to drop all references to the proposed incentive structures regarding technology transfer and adaptation funding.

Conditional Targets

The next step should then be to look at the remaining core of the original proposal with regard to its potentially most acceptable forms of implementation, beginning, for example, with the proposed options of conditional and unconditional targets.²³ Conditional targets, as mentioned before, are closely related to the commitments for Annex II countries under Art. 4.1 of the Convention, the only difference being that developing countries would be taking on some form of target, the fulfilment of which would be dependent on Art. 4.1-type commitments. Given the rather lukewarm efforts by Annex II so far in complying with Art. 4.1 as it stands, developing countries could be forgiven for regarding the taking on of such conditional targets as simply inviting failure to reach the targets due to factors (Annex II compliance) beyond their control. And while the failure to reach a non-binding target does not entail any compliance responses, it definitely does imply a reputational loss which countries, in most cases, are as eager to avoid as compliance costs.

Given the risk of such reputational losses outside of ones control, it is unlikely that conditional targets – in the sense of the Russian proposal – would be very attractive to developing countries, indeed to any country at all. Of course, the idea could very simply be adapted so as to eliminate this 'dependency risk,' namely by Annex II Parties themselves adopting a voluntary commitment to, as it were, a quantified version of Art. 4.1: i.e. to providing the technology/funding necessary required to reduce emissions in developing countries *to a certain quantified target level*. But – in light of the compliance history of Art. 4.1 to date – this does not seem to be a very likely option either.

Unconditional Targets

Under 'unconditional targets' – as defined by the Russian Proposal – Parties are meant to employ their own resources to achieve the targets and use "the resulting benefits to attain [their] own development goals."²⁴ The key question here is, of course, how are these benefits meant to accrue?

Some such benefits may well be derived 'domestically', as it were, say through energy savings, but the gist of the adapted²⁵ Russian idea would seem to be that the benefits are generated through some international flexibility mechanism, such as the Kyoto Protocol's International Emission Trading or (unilateral) CDM.

International Emissions Trading (IET). In the standard account of non-binding targets, the incentives for adoption are given by the right to sell overachievements into an

emission trading scheme. The idea has traditionally been that non-binding targets are reduction targets - i.e. targets which amount to a reduction below Business as Usual (BaU), if not in absolute terms - and that any reductions beyond that target level can be offered for sale in an emission trading scheme.

As in the case of the conditional target options (see above), this sort of unconditional scheme may incur reputational losses but not *non-compliance penalties* if targets are not actually reached. Unlike the conditional schemes, however, there can be *direct non-compliance costs*, as it were. For instance, if the target is a genuine reduction target – i.e. below BaU – then any effort to reduce emissions which does not reach the target will only incur costs and no benefits, since by not surpassing the target level, no sellable permits will be generated. Indeed, even if the target is surpassed and permits are generated, there is no guarantee that the revenue that can be generated by a sale will cover the (additional) carbon reduction costs incurred. And this is true even if the target is not actually a reduction target, but BaU (as for CDM).

That is to say, unconditional targets – in the sense of the Russian Proposal – do carry not only reputational, but genuinely financial risks. This is why, even though they are nonbinding, they cannot really be described as 'no-loss' targets. And consequently they may not be as attractive for developing countries as one might have thought, even in the case of CDM style BaU (no reduction) targets. Why? While it is true that many of the existing CDM projects are indeed 'unilateral' – i.e host country financed – they are mostly, if not all, privately funded. The unconditional targets under discussion here are meant to be government targets, and governments, it stands to reason, would be inherently more risk averse than the private sector in this respect.

Another important point in this context is that these government-level (unconditional) targets are *not* likely to be project-based, as the CDM in its current format. Instead they would or should be on a policy-relevant larger scale, if not country-wide. This is, of course, where recent developments in the discussion on the evolution of the CDM become particularly relevant, in particular with respect to, or 'policy' ('sectoral', 'programmatic'²⁶) CDM. The reason for this particular relevance is that the CDM has come a long way in terms of its acceptability in developing countries. After an initially skeptical reception, the CDM has now become wholeheartedly accepted in practically all developing countries (even by those that were most sceptical about the CDM as a tool to implement 'voluntary commitments' with regards to developing country emissions would not be perceived as threatening a move towards 'evolution' – i.e. towards forcing developing countries to take on legally binding targets.

Solution: Policy CDM with carbon investment safeguards

This is why the best, and probably the only way to take forward the Russian Conventiontrack proposal is by such policy generalisations of the CDM, not least because of the fact that influential voices from the developing world have already advocated the use of such generalisations in the post-2012 framework. Ambassador Chandrashekar Dasgupta – Distinguished Fellow at The Energy and Resources Institutes (TERI) in New Delhi and former chief climate change negotiator for India – to name but one, recently expressed the view that "it is essential to raise the Clean Development Mechanism from a projectbased level to a sector- or programme-based level. This holds the key to success for a second commitment period under the Kyoto Protocol."²⁷ Indeed, it instructive to look at what he identified as the benefits of such a generalised CDM:

- First, it would provide the most cost-effective means of reducing global emissions. It would enable the industrialized countries to greatly increase their emission reduction commitments without a corresponding increase in costs.
- Second, it would facilitate equitable burden sharing between Annex I Parties. It would answer the legitimate concern of countries like Japan, which have already attained very high levels of energy efficiency and which, therefore, feel that further commitments might involve disproportionately high costs for the economy. A programmatic CDM would provide Japan with ample opportunities to meet ambitious emission reduction targets without incurring higher costs than other Annex I Parties.
- Third, an enhanced CDM would automatically provide much needed funds for Adaptation. CDM provides the only automatic source of funding for adaptation to climate change.
- Last but not least, a programmatic CDM would enable the developing countries to greatly increase their contribution to international cooperation in mitigation. It would enable them to access funds to cover incremental costs for programmes yielding benefits for their sustainable development goals as well climate change mitigation. It would thereby encourage developing countries to formulate and incorporate into their development plans sectoral or programmatic measures with climate change co-benefits.²⁸

Indeed, during the Q&A session that followed his address, Ambassador Dasgupta identified another important benefit of this sort of 'enhanced' CDM: While under the present purely project-based version of the CDM host country government involvement is minimal (essentially issuance of host country approval letters), enhanced versions of the CDM would inevitably require a much greater involvement of 'mainstream' ministries, for it would require the promulgation of legislation and/or regulations.

While individual projects could and often would be fully financed through overseas investments, it clearly cannot be expected that the investment needs to carry out sectoral or policy CDM activities could or should be met by foreign sources (be it bilateral ODA or private sector FDI). Undertaking a sectoral/policy CDM activity can (realistically) only be what has become known as 'unilateral,' i.e. domestically financed, or – to put it in the terminology of the Russian Proposal – 'unconditional,' and as such it is subject to the above-mentioned investment risk whether the revenue from the CERs (Certified Emission Reductions) generated by the activity will cover the additional costs incurred in generating the emission reductions.

Dasgupta implicitly addresses this issue in his expectation that sectoral/policy CDM will encourage industrialised countries to "greatly increase their emission reduction commitments," which in turn would ensure a sufficient demand for CERs. However, it is questionable whether countries would take on the investment risk of sectoral/policy CDM activities purely on the basis of such an expectation, particularly in light of the fact that hitherto, the most prominent guarantee given is that there are to be national ceilings on the number of CERs that would be accepted in the EU Emission Trading Scheme. It may be important to assure the 'supplementality' of CERs in such Annex I schemes, but it is equally important to provide some degree of carbon investment security if one is intent on encouraging developing countries to adopt policy CDM measures. One option that has been suggested in this context is for industrialised (Annex II) countries to commit – as part of a post-2012 mitigation regime – to acquiring a minimum level of CDM CERs, to take on, a certain level of '*CER Obligations*' ('CEROs') as part of their post-2012 package.²⁹

This would by itself have had some significant advantages, such as in the context of one of the problems that has been clouding the image of the CDM, namely the geographical concentration of projects (countries that take on such CEROs unilaterally, for example, would obviously be allowed to choose where to buy from and hence could, as a matter of public policy, decide to favour some of the less-well endowed regions). However, in the context of mitigating the host country carbon investment risk for (policy) CDM activities, it might be more appropriate not only to use a volume floor but some sort of price guarantee. In the words of financial derivatives, it might be appropriate to re-interpret the idea of CEROs as Annex II underwriting a certain number of policy CER Put Options (CERPOs)'

The idea is that Annex II Parties would – be it as part of their post-2012 obligations, or unilaterally – be giving developing countries the right to sell a certain number of CERs generated in policy CDM activities at a certain price ('strike price'). A couple of things are important in this context. First, developing countries are not forced to exercise this right. They can try and realise a more favourable price. And they are *not* legally bound to generate any such CERs at all, even if they enter such put option agreements. Second, Annex II countries are not asked to finance policies (which would be very difficult to defend politically), but only the greenhouse gas reductions that have been achieved by policies, albeit possibly at a premium, which in turn would seem to be justifiable, particularly in light of the obligation they have taken on under Article 4.1 of the Framework Convention.

There are a number of reasons why the spot price of CERs may collapse and hence why it would be rational for DCs to exercise their CERPO rights. There could be an over-supply of CERs due to 'import barriers,' i.e. domestic Annex B limits as to the maximum allowed number of CERs. Or it might simply reflect a general collapse of the carbon price, due to a lack of environmental stringency of Annex B targets. In the case of the latter, the CERPO scheme could also be used to improve the overall stringency simply by retiring the policy CERs acquired under it. Indeed, the scheme could be designed so as to *ex ante* provide incentives for Annex B governments to adopt more stringent targets.

Somewhat paradoxically, the only politically acceptable way forward for the Convention-track of the Russian Proposal thus seems to be the introduction of an enhanced CDM – with certain carbon investment risk management tools – under the Kyoto Protocol.

Endnotes

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² Although this difference is apparently not recognised by the authors of the OutlineP, as becomes in their claim that "Apart from the above-mentioned cumbersome bureaucratic procedures [for taking on Annex B targets], the UNFCCC and the KP do not contain any reference to voluntary commitments of countries, their approval and incentives mechanisms."[Outline:1]

³ Assistant to the Head of the Russian Federal Service for Hydrometeorology and Environmental Monitoring

⁴ Transcript by the author. See Webcast at <u>http://unfccc.meta-fusion.com/kongresse/SB26/templ/</u> <u>ply sbi.php?id kongresssession=539&player mode=isdn real</u>

⁵ UNFCCC (2000): *Tracing the Origins of the Kyoto Protocol: An Article-by-Article Textual History*, Technical paper, Prepared under contract to UNFCCC, by Joanna Depledge, FCCC/TP/2000/2, 25 November 2000; http://unfccc.int/resource/docs/tp/tp0200.pdf

⁶ UNFCCC (2000): § 476.

⁷ ibid.

⁸ Quantified Emission Limitation and Reduction Objectives

⁹ UNFCCC (2000): §479.

¹⁰ Op.cit.: §477

¹¹ *Op. cit.* §490

¹² UNFCCC Workshop Webcast. Author's slightly edited transcript of simultaneous translation.

¹³ UNFCCC Workshop Webcast. Author's slightly edited transcript of simultaneous translation.

¹⁴ "It was a very full statement, but I think the message is clear"

¹⁵ UNFCCC Workshop Webcast. Transcript by the author.

¹⁶ Switzerland, quoting the IPCC as demonstrating that the equality of the contribution to global emissions by Annex I and non-Annex I, clearly seemed to imply that this is not so. However, one must be rather careful not to jump to conclusions as to what constitutes a proper measure of responsibilities.

¹⁷ See, for example, Benito Müller, Niklas Höhne, Mathias Friman, and Roda Verheyen, *Responsibility for Climate Change: Operationalising the 1997 Brazilian Proposal within the MATCH framework*, OIES Energy and Environment Working Paper Series, Oxford: forthcoming.

¹⁸ Such as burden-sharing in proportion to responsibility – as witnessed by the failure of the 1991 AOSIS insurance pool proposal, which was meant to be financed through mandatory contributions from Annex II countries in proportion to their emissions. (Cf. "Elements related to Mechanisms", contained in doc. A/AC.237/WG.II/CRP.8, 1991)

¹⁹ "Lastly let me thank the Russian Federation for raising this important issue which I am sure will contribute further for building a new alliance with less division."

²⁰ Chinese intervention. Author's transcript of simultaneous translation, UNFCCC Workshop Webcast.

²¹ Outline:2

²² Outline:3.

²³ In keeping with the proposed re-formulation of the proposal, I shall use '(non-binding) target/activity' instead of the original controversy-laden '(voluntary) commitments'.

²⁴ Outline:3

 25 As mentioned earlier, the other two incentive types mentioned in the Outline, namely access to an "international technology fund" and/or access to adaptation funding, are – given the experience of the Bonn Workshop – best ignored.

²⁶ There have been a number of proposals concerning the way the CDM could be scaled up over and above the present project-based level. For the sake of terminological simplicity, they are all referred to as 'policy CDM' for the purposes of this paper.

²⁷ Chandrashekhar Dasgupta (2007). "Mitigating Climate Change – The Role of Developing Countries", Keynote Address to the Conference on The Evolving Climate Regime, Graduate Institute of International Studies, Geneva, 18 January.

²⁸ Dasgupta (2007).

²⁹ The idea of CEROs was originally introduced in Benito Müller, *Framing Future Commitments: A Pilot Study on the Evolution of the UNFCCC Greenhouse Gas Mitigation Regime:* Oxford OIES, 2003