SUBMISSION BY FRANCE ON BEHALF OF THE EUROPEAN COMMUNITY AND ITS MEMBER STATES

This submission is supported by Bosnia and Herzegovina, Croatia, the Former Yugoslav Republic of Macedonia, Montenegro, Serbia and Turkey

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Subject: **Land use, land-use change and forestry (AWG-KP)**

Information to enhance understanding of the implications of possible options for addressing, where applicable, the definitions, modalities, rules and guidelines for the treatment of LULUCF, including implications for accounting, before its resumed sixth session

The EU submits the following in response to the paragraph 3 of the conclusions of the first part of the sixth session of the AWG-KP on Land use, land-use change and forestry (LULUCF) held in Accra, which encourages Parties to share information to allow better assessment of the implications of the options and issues identified in the annex to the conclusion, including implication for accounting. It follows the structure of the annex to the conclusions on LULUCF that were adopted at the Accra meeting at the first part of the sixth session of the AWG-KP and provides EU views on the different options outlined in the annex.

In relation to accounting rules for forest management, the underlying point is that net-net and gross-net accounting could give the same incentive to additional action from the forest sector during the commitment period; the point is the relationship between the accounting method, the base year emissions and the level of commitment.

The EU already submitted a data analysis on the numerical consequences of LULUCF accounting rules based on data reported by Annex I Parties under the Convention for the period 1990-2006 before the meeting in Accra. The EU has for the purpose updated the data compilation to correspond to the options 1, 2 and 4 in the annex to the conclusions from Accra at the end of this submission but without attaching the full analysis. It has not been possible to do a numeric assessment of option 3.

OPTION 1

A. Definitions

Land use flexibility:

The EU notes that current article 3.3 accounting rules already provide for a degree of land use flexibility since emissions from deforestation in one part of a country can be compensated by removals from afforestation and reforestation activities in other parts of the country. The EU further sees the issue as a consequence of non election of forest management.

The EU believes that land swapping, if any, should be made on the basis that future carbon stocks in the replacement area will reach the full stocks on the deforested area, and not simply on land area. What matters for the atmosphere is that the new situation is the same as the antecedent case. Provisions on this type of flexibility in any future agreement would have to take this into account.

Wetland degradation and restoration:

The EU notes that wetland degradation and restoration are already partly captured under the existing provisions of articles 3.3 and 3.4 activities, as wetland is commonly found on grassland and forestland and is reported under these activities.

Without prejudice to future choices, the EU believes that a new activity of wetland degradation and restoration should not remove areas already accounted for under the current 3.3 and 3.4 activities, in order to avoid a discontinuity in reporting and allocating emissions and removals. The EU also notes that introduction of wetland degradation and restoration will require the development of new definitions and methodologies. In this context it is important that any provisions related to wetlands, remain consistent with the IPCC 2006 Guidelines for flooded lands.

Forest degradation:

The EU believes that increases as well as decreases in forest carbon stocks should be included in the accounting of forest management and that it should not be necessary to add an activity on forest degradation to capture forest degradation effect.

Devegetation:

The EU believes that the accounting for revegetation activities should be balanced.

B. Article 3 paragraph 3

The current debit-credit rule prevents debits from harvesting a unit of land during the first commitment period to exceed credits accounted for on that unit of land. It is not clear how an extension into the second commitment period would deal with credits accounted for in the first commitment period but such a provision will be increasingly difficult to monitor in future commitment periods.

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C. Article 3, paragraph 4

Gross-net accounting for forest management together with applying a cap or a discount factor is one pragmatic way of dealing with factoring out of both age class structure and indirect climate change and nitrogen deposition effect. In general, age structure and harvesting cycles of the forests make it impossible to increase the standing stocks forever. A cap or a discount factor will also reduce or remove the effect on accounting of natural disturbances.

It is the EU's understanding that both the cap and the discount factor would apply symmetrically to emissions and removals from forest management. While a cap gives full incentives within the cap it does not provide any incentives to act when a Party is outside the cap range. A discount factor is likely to be more effective in this respect as the country will always have an incentive to do better. The EU believes that the methodology used to derive a cap or a discount factor should be applied consistently to all Parties. A single discount factor should apply to all Parties.

D. Article 12

The EU notes that non-permanence is addressed when possible reversals are fully compensated, either through a national accounting scheme ensuring continuity of the monitoring and accounting over time or through the cancellation and replacement of the amount of credits corresponding to the reversals occurred. The EU is open to exploring other options but notes that the current rules deal effectively with this issue of permanence.

Other issues

Voluntary vs compulsory:

The EU notes that voluntary election of article 3.4 allows Parties to leave out activities where there exists methodological problems and as a consequence the uncertainties related to emissions or removals are high or where the risk of emissions, e. g. due to natural disturbances, is perceived to be high.

Compulsory accounting on the other hand increases incentives for increasing carbon sequestration or reducing emissions and gives broader coverage of anthropogenic emissions and removals, thus approximating the accounting system to the real fluxes of carbon to and from the atmosphere e.g. ensure that anthropogenic emissions linked to the exportation of biomass from the land-use system for energy use is accounted for in the land-use sector.

In the context of gross-net accounting of forest management, a possible way forward the following concept - as referred to in Para 21 of the Annex to 16/CMP.1 - could be considered. Under this proposal, each Party included in Annex I would account for emissions and removals resulting from forest management. A Party would be able to choose not to account for emissions and removals resulting from forest management if transparent and verifiable information is provided that this activity is not a source.

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This concept provides on the one hand for broader coverage of anthropogenic emissions from forest management while allowing flexibility for Parties where e.g. implementation seems difficult.

The election of particular activities provided by article 3.4 of the Kyoto Protocol was made after consideration of a large set of rules, described in the Kyoto Protocol itself and further described in the Marrakech Accords. The discussions on options for future treatment of Annex 1 LULUCF that have been tabled include many variations to these current rules that apply for the first commitment period. Accounting rules can be fundamentally changed for the second commitment period. Options cover issues like net-net for all activities, use of discounting, changes of base year/period, forward looking baselines, treatment of natural disturbances, time out, etc.

The interpretation made by some Annex 1 Parties of article 3.4 implied mandatory accounting for the second commitment period and beyond. Anticipating a future commitment has played fundamental role in electing of particular activities in those Parties. Changing the rules may have profound implications for Parties that already elected some article 3.4 activities. The transition between current and future accounting systems becomes therefore particularly important for those Parties and, in the EU's view, the debate on new rules should also consider questions such as:

- Which accounting system applies to Parties that already elected activities (the current, the future, or option to choose between the two)
- Should activities remain optional, what obligations should apply to Parties wishing not to elect for the second commitment period activities which had previously been elected for the first commitment period taking into account the provisions of decision 16/CMP1. paragraph 19.

<u>Harvested wood products or emissions from wood removed from an area of forest:</u>

The EU believes that any future accounting rules for the harvested wood products should seek to provide a basis for further incentives to promote the sustainable use of wood products. Future rules should also provide for a closer temporal approximation to emissions from harvested wood products, than is currently assumed in default approach, which assumes immediate oxidation at harvest.

In order to achieve balanced accounting, rules for wood products need to be linked to accounting rules for emissions and removals from forests. This means that a Party should only be able to account for harvested wood products if the Party also accounts for emissions and removals from such forests and only to the extent that emissions from harvests are actually accounted.

The EU believes that any accounting of harvested wood products or emissions from wood removed from an area of forests needs to include emissions from for the pre-existing harvested wood products pool. If this is not done it would generate an additional large amount of credits in the system without any corresponding additional mitigation action.

<u>Natural disturbances:</u>

The EU understands that the effect of natural disturbances can be large and do not fall under the control of Parties. The magnitude of damage caused by such disturbances may increase in the future due to climate change, which will require parties to develop strategies to adapt their forests accordingly.

However, the nature of many of these disturbances (fires, storms, pests) will in most cases be the same as with current climate conditions (although aggravated) and therefore the EU believes that any approach to adjust for natural disturbances would have to be linked only to events that are extreme, and criteria to decide when a particular event falls into that category need to be developed. The EU would like to explore further the implications of adjusting *ex post* abnormal emissions due to natural disturbances from the LULUCF balance of a country.

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The EU notes that some Parties have already developed reporting strategies to smooth the effects of natural disturbances through averaging of emissions and removals over several years or similar reporting practices. Any approach to deal with large natural disturbances should clearly separate between reporting and accounting.

An indirect way to deal with the treatment of natural disturbances is linked to the issue of whether article 3.4 can be voluntary or mandatory.

OPTION 2

A. Definitions

Same as option 1

B. Article 3 paragraph 3

Same as option 1

C. Article 3, paragraph 4

Net-net with a base year would bring the accounting rules for forest management activities closer to the accounting rules for other article 3.4 activities and non-LULUCF sectors and could provide a pragmatic way to address factoring out of both age structure and indirect climate change and nitrogen deposition effects.

Using a base period would do the same but could help diminish the random impact of selecting a single base year.

The shorter the time between the base year / base period and the commitment period the better the approximation for factoring out will be, both for age class effect but also other non anthropogenic factors whether they enhance removals or emissions.

It is the EU understanding that in the case of net-net accounting for forest management no cap nor discount factor would apply, which would provide stronger incentives to Parties to take mitigation action, as all marginal management actions would be fully credited. The effect of natural disturbance would be fully reflected in the accounting system, thus increasing compliance risk unless appropriate adjustment are applied. However, the choice of base year/period is to some extent arbitrary and will largely determine whether a Party will be accounting debits or credits for the same type of action during the commitment period relatively to a base year. In general, age structure and harvesting cycles of the forests make it impossible to each year maintain a larger sink than during the base year. Furthermore, forest managed in a sustainable manner would at a certain stage lead to a stable level of the optimum forest carbon stocks and hence zero increment at a national level.

D. Article 12

Same as option 1

Other issues

Same as option 1. In addition, for “harvested wood products”, as marginal management effects (including harvesting) would be fully accounted, there would be an additional rationale for accounting for harvested wood products.

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OPTION 3

A. **Definitions**

Same as option 1

B. **Article 3, paragraph 3**

Same as option 1

C. **Article 3, paragraph 4**

The EU is of the view that, through the baseline setting, this approach runs the risk at least partially, of disconnecting the accounting mechanism from the reality of what is happening on the ground. This is a conceptual step that none of the other proposals consider for the accounting regime for forest management, being it gross/net or net/net. Furthermore the concept is not included for other sectors for the current commitment period of the Kyoto Protocol. Since the projected removals and emissions are likely to be large numbers compared to the additional management effects uncertainties on the baseline could affect the accounting more than on the ground activities would.

The EU notes that given that the forward looking baseline approach strongly relies on the baseline setting, a necessary condition for such an approach to be explored further would be to develop a sound methodological process for baseline setting, that could realistically be applied in all Annex I national circumstances. An independent review of the baseline setting would have to be carried out to validate the baseline proposed by the country and would also require the development of adequate guidance, building on lessons learned from the assigned amount reviews carried out for the first commitment period.

Ex-post adjustment of the emissions from the effects of natural disturbances would provide a way in which countries could deal with the effect of extreme natural disturbances. The EU notes that it will be necessary to develop methodologies to identify and differentiate such extreme natural disturbances and its consequences for emissions and how to address the removals that follows emissions as well as an appropriate review.

The EU further notes that this part of option 3 is not so different from the time out proposal for dealing with the effects of natural disturbances and is interested in exploring the implications of this idea further.
In conclusion, the integrity of the accounting regime depends strongly on the quality of the forward looking baseline for which no international agreed methodologies exist.

D. **Article 12**

Same as option 1

Other issues

Same as option 1 except "natural disturbances" is then dealt with under Article 3 paragraph 4.

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OPTION 4

The land-based accounting for all managed land builds on the reporting under the Convention and would treat LULUCF as any other sector by adding the emissions and removals to Annex A to the Kyoto Protocol. It would be a net-net approach to accounting for all land categories reported under the Convention and it would be a simplification in that there would not be any need to distinguish between article 3.3 and 3.4. The same accounting rules would apply to all managed land.

It would imply a much broader coverage as all managed land would be covered on a mandatory basis. While methods are available it would likely imply further effort by parties for estimating emissions and removals for some areas. Applying net-net accounting would generally reduce the effect of uncertainties in the trend.

Accounting for all land would remove any perverse incentives arising from partial and inconsistent accounting rules. However, this could also increase compliance risks for parties and the issue of effects due to natural disturbances, age structure and harvesting cycles also apply to this option.

D. Article 12

Same as option 1

Other issues

Same as option 1. In addition:

- for "voluntary vs compulsory", it would include all other existing and proposed activities, e.g. wetland restoration, by default.
- for "harvested wood products", as marginal management effects (including harvesting) would be fully accounted, there would be an additional rationale for accounting for harvested wood products.

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Annex

Table 1. Accounting options assessed. See Table 3 for methodological details.

Option	**Art. 3.3**	**Art. 3.4**
0 (KP rules)	Mandatory, gross-net	Voluntary. FM gross-net with fixed cap. Other 3.4: net-net
1	Mandatory, gross-net	FM gross-net with discount factor. Other 3.4: net-net
2	Mandatory, gross-net	FM net-net with no discount factor. Other 3.4: net-net
4	Convention reporting (FL, CL, GL, WL, S, OL), net-net	
KP activities: Art 3.3: afforestation/reforestation (AR) and deforestation (D). Art. 3.4: forest management (FM), cropland management (CM), grassland management (GM), revegetation (RV). **Convention categories**: Forest land (FL), Cropland (CL), Grassland (GL), Wetlands (WL), Settlements (S), Other land (OL)		

Table 2. Main results for the options assessed, using the accounting period 2001-2005 and the base yr 1990 or the base period 1990-1999 when relevant. See footnotes and table 3 for other methodological information.

Net emissions: % compared to 1990 GHG without LULUCF (accounting period: 2001-2005)											
when relevant, net -net activities with□		1990 base year					1990-1999 base period				
Options □	**0** (KP rules)[1]	**1**[2,3]			**2**[2]	**4**	**1**[2,3]			**2**[2]	**4**
Discount for FM(%)		*100*	*85*	*0*			*100*	*85*	*0*		
EU	**-1,2**	**-0,6**	**-1,8**	**-8,7**	**-1,9**	**-1,9**	**-0,7**	**-1,9**	**-8,8**	**-1,0**	**-0,8**
Other AI	**-1,0**	**0,6**	**-0,9**	**-9,4**	**-1,3**	**-2,6**	**1,3**	**-0,2**	**-8,7**	**0,0**	**-0,7**
TOTAL AI	**-1,1**	**0,2**	**-1,2**	**-9,2**	**-1,5**	**-2,4**	**0,7**	**-0,7**	**-8,7**	**-0,3**	**-0,8**

[1] Only the 3.4 activities already selected by Parties for the 1st commitment period were included.
[2] All 3.4 activities were selected, not to prejudge which activities Parties will elect.
[3] For illustrative purposes, the full range (0-100%) of discount factors is shown. The eventual use of a discount factor will be subject to negotiations.

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Table 3. Methods and assumptions used for estimating net emissions under the different options.

ACTIVITY	OPTION	Estimates in Table 2 come from:
3.3 D (deforestation)	0, 1, 2	I) the value reported in CRF table 5, *or* II) the sum of emissions reported under the subcategories "Forest converted to…" + emissions from UNFCCC tables 5(i)-5(v) when relevant. It is assumed that all emissions reported under I) or II) arise from deforestation events occurred after 1990.
3.3 AR (afforestation/ reforestation)	0, 1, 2	The value reported in CRF table 5A2 (Land converted to Forest Land), assuming that all the reported forest expansion may be considered as "human induced". We took into account the time series used by the Parties because, when the time series of AR started before 1990, the removals in the accounting period (e.g. 2001-2005) are affected also by plantations made before 1990. Although it is impossible to disentangle the effect of pre-1990 plantations in the absence of additional country-specific data, we made the following correction to obtain an approximate estimate "since 1990" when the time series started before 1990: (value of removals in accounting period) / (length of transition period, typically 20 yrs) x (numbers of years between 1990 and the selected accounting period, e.g. (average 2001-2005) - 1989 = 14).
3.4 FM (forest management) We assumed that "managed forest" (UNFCCC)= "forest management" (KP)	0	CURRENT RULES: if FM was elected, we considered the value of the cap under the KP, assuming that all Parties will reach this cap (very likely in most cases). Only for this option, if a Party has net removals from FM beyond the level of the cap, it was allowed to offset eventual net emissions under Art 3.3 up to 9 Mt C/yr.
	1	DISCOUNT: [emissions/removals from FL-FL] x [discount factor of X %].
	2	NET-NET: [net emissions of "FL-FL" in accounting period, including tables 5(i)-5(v) when relevant] - [net emissions of " FL-FL " in base yr *or* period]
3.4 CM (cropland management)	0, 1, 2	NET-NET: [net emissions of "CL" in accounting period] - [net emissions from "FL - CL" since 1990, including tables 5(i)-5(v) when relevant] - [net emissions of "CL" in base yr *or* period]
3.4 GM (grassland management)	0, 1, 2	NET-NET: [net emissions of "GL" in accounting period]- [net emissions from "FL - GL" since 1990 including tables 5(i)-5(v) when relevant] - [net emissions of "GL" in base yr *or* period]
3.4 RV (revegetation)	-	NO estimate is provided: we considered not possible derive RV from UNFCCC reporting
Convention categories	4	NET-NET: [net emissions of all land use categories in accounting period]- [net emissions of all land use categories in base yr *or* period]

The results illustrated in Table 2 use the 2001-2005 period as "accounting period" and the base year 1990 *or* the base period 1990-1999 when relevant (i.e. according to the option considered). Estimates were calculated as follow:

- For options 0, 1 and 2: [net emissions in KP activities (estimated and accounted as described in Table 3)] / [emissions reported for the KP base yr, including provisions of Article 3.7 when relevant] x 100
- For option 4: [whole LULUCF net emissions reported under the Convention (accounted as described in Table 3)] / [1990 emissions reported under the Convention, excluding LULUCF] x 100

Unless specified above, we could not take into account other specific rules for KP reporting and accounting (Decision 16/CMP.1). For example, in the absence of the appropriate information, we could not consider the effect of priorities in land classification (e.g., land under art. 3.3 has precedence over art 3.4, D has precedence over AR), nor the fact that 'debits resulting from harvesting in the first CP following AR since 1990 shall not be greater than credits accounted for on that unit of land'.

Given the many assumptions and the methodological limits of this analysis (mainly due the difficulty to derive KP activities from UNFCCC land use categories in the absence of additional country-specific information) estimates for options 0, 1 and 2 presented in Table 2 should be considered with caution.

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