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Proposal for a Council Regulation

concerning the establishment of a voluntary FLEGT licensing scheme for imports of timber into the European Community

EXTENDED IMPACT ASSESSMENT

{COM(2004)515 final}

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1. EXECUTIVE SUMMARY

The EU Action Plan for Forest Law Enforcement, Governance and Trade (FLEGT) was adopted by the Commission in May 2003 (¹). Council Conclusions were adopted in October 2003 (²), and the European Parliament passed a motion in January 2004 (³).

The Action Plan aims to reinforce improved governance in developing and transition countries, with the legal instruments and leverage offered by the EU internal market. The core components of the Action Plan are support for governance reforms, and a licensing scheme to ensure only legal timber enters the EU, to be implemented through voluntary partnerships with affected countries.

Scenario analysis has highlighted the economic, social and environmental impacts of the proposed voluntary licensing scheme. In general terms, the strongest impact from the scheme would be felt in Africa, where the legal supply is constrained in relation to demand from the EU. In Asia and Latin America, the EU market has more limited significance.

Partner countries stand to capture substantial additional revenues. Expected environmental benefits include reduced pressure on forest resources and protected areas. The proposal has more nuanced social impacts, with the loss of local jobs dependent on illegal logging offset by the improved practice that generally accompanies legal enterprises. There is a clear risk of illegal trade being directed to other markets, with legal production exported to the EU. Measures should be taken to mitigate this risk during implementation.

Within the EU, impact of the proposal would be transmitted through potential changes to the price and supply of imported timber. The internal impact is expected to be modest. Timber prices could rise as illegal timber is eliminated from supplies to the EU, but the impact on markets would depend on the price elasticity of timber products, and the extent to which substitute products become attractive.

The magnitude of impact depends on overall coverage achieved under the licensing scheme. Impact would be minimal if only some of the EU's major exporters participate, but would rise if all major exporters take part.

Impacts arising through implementing the scheme in tropical countries would be focused most strongly in six Member States which together account for 83% of imports of tropical timber products to the EU. Concerning timber from temperate countries, particularly Russia, impacts would be focused in the Nordic countries. Imports to the EU from Russia greatly exceed the volume of imports from tropical countries, and this would need to be accounted for in the design of any voluntary licensing scheme in partnership with the latter.

2. ILLEGAL LOGGING AND ASSOCIATED TRADE IN ILLEGAL TIMBER

The EU Action Plan for Forest Law Enforcement, Governance and Trade (FLEGT) sets out a process and a package of measures by which the European Commission proposes to address

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¹ Com(2003) 251

OJ C 268, 07/11/2003 P. 0001-0002

Parliament document 7014/04

the growing problem of illegal logging and related trade. Addressing this issue is one of the European Commission's priorities in the follow-up to the 2002 World Summit on Sustainable Development (WSSD).

The FLEGT Action Plan was adopted by the Commission in May 2003. Council Conclusions were adopted on the Action Plan in October 2003, and the European Parliament passed a motion in January 2004.

2.1. Economic, social and environmental impact of illegal logging

Illegal logging has a significant economic impact. The clandestine nature of illegal logging makes its scale and value difficult to estimate in relation to the global trade in forest products (estimated by the OECD to be worth over €150bn per year) (⁴), but strong evidence suggests that it is a substantial and growing problem. The World Bank's 1999 review of its global forest policy observed: "In many countries, illegal logging is similar in size to legal production. In others, it exceeds legal logging by a substantial margin." (⁵)

The illegal exploitation of natural resources, including forests, is closely associated with corruption and organised crime. In some forest-rich countries, the corruption fuelled by profits from illegal logging has grown to such an extent that it is undermining the rule of law, principles of democratic governance and respect for human rights.

In some cases the illegal exploitation of forests is also associated with violent conflict. Profits from the illegal exploitation of forests (and of other natural resources) are often used to fund and prolong these conflicts.

Illegal logging and associated trade undermines the competitiveness of legitimate forest industry operations in both exporting and importing countries. In so doing, this limits the ability of these industries to conduct operations that foster sustainable forest management, and sustainable development generally.

Illegal logging also costs governments vast sums of money. Estimates suggest that illegal logging costs timber-producing countries $\in 10$ -15 billion per year in lost revenues (6), which could otherwise be spent on the provision of better healthcare, education and other public services, as well as the implementation of sustainable forest management.

The social impact of illegal logging is less well acknowledged. However, serious human rights abuses have been documented, particularly where local communities or concerned citizens have attempted to stand up to powerful logging interests. Illegal logging also provokes conflict over land and access to resources; and where laws are unjust, local people using forest resources to meet their basic needs are forced into illegal behaviour through a lack of alternative means to earn a living. Illegal logging does also provide rural employment, which has a positive social impact, but this employment is often short-term in nature as the resource is not managed on a sustainable basis.

Illegal logging also causes enormous environmental damage and loss of biodiversity, for instance through logging of national parks, and can facilitate the illegal exploitation of

⁴ OECD Environmental Outlook (2001)

World Bank, Forest Sector Review (1999)

World Bank Revised Forest Strategy (2002)

wildlife. It can be a contributory factor to the process of deforestation, and can increase the vulnerability of forests to fires – both of which have climate change implications. It undermines sustainable forest management and has a long term negative impact on the livelihoods of forest-dependent people, many of whom are amongst the world's poorest and most marginalised people.

2.2. Underlying motives and forces

The underlying motives and forces for illegal logging are a lack of institutional capacity in affected wood-producing countries, compounded by weak rule of law, corruption and failings of governance. These factors in developing and emerging market countries are compounded by strong international demand for timber, which provides incentives for illegal behaviour.

2.3. The situation under a "no policy change" scenario

Under a "no policy change" scenario, illegal logging would continue unchecked, exacerbating the impacts identified in section 2.1. In particular, corruption and bad governance in the forest sector would be allowed to fester unchallenged, further undermining economic development and raising the risk of conflict and social discord. The social impacts of corruption fall most heavily on the poor, so equitable development and poverty reduction efforts would be impaired.

2.4. Who is affected by illegal logging?

A range of actors are affected by illegal logging. Governments in afflicted countries lose large potential revenues; citizens lose a valuable productive resource. Citizens of the EU are affected through the impact illegal logging has on global public goods, such as lost biodiversity and the long term impact of forest loss on climate change.

The EU is also affected by illegal logging in a more direct way, since EU donors contribute aid to badly affected countries, while at the same time a valuable productive resource is looted and the profits generated are lost to the state. Illegal logging also undermines many essential elements of the EC's development objectives: public sector financing for development targeted at the poor, peace, security, good governance, the fight against corruption, and sustainable environmental management.

3. THE OBJECTIVES OF THE EU ACTION PLAN FOR FOREST LAW ENFORCEMENT, GOVERNANCE AND TRADE (FLEGT)

3.1. The policy objective

The EU Action Plan for Forest Law Enforcement, Governance and Trade (FLEGT) aims to reduce illegal logging and the associated trade in illegally harvested timber. The Action Plan aims to achieve this objective by strengthening governance in affected wood-producing countries; and reinforcing these efforts with the incentives and legal framework offered by the EU market.

3.2. The policy context and established objectives

At an international level, the design of the proposal has taken into account objectives established by the G8, which in 2002 proposed countries take measures to facilitate legal timber production, linked to measures denying market access to illegal products.

At the Community level, this is a new policy initiative and the EU had no previously established objectives in this specific field. The proposal does, however, take account of the Community's overall policy objective in the forest sector, which is to achieve sustainable forest management.

Although legality and sustainability are distinct and different concepts, in many countries forest legislation is based on the premise of sustainable forest management, and so better law enforcement will in general lead to more sustainable forest management. Better forest governance is therefore an important step on the path to sustainable development, and the Action Plan should thus be placed in the context of the overall efforts of the European Community to achieve sustainable forest management.

4. POLICY INSTRUMENTS TO REDUCE ILLEGAL LOGGING AND ASSOCIATED TRADE

4.1. The basic approach

The EU Action Plan for Forest Law Enforcement, Governance and Trade (FLEGT) sets out a process and a package of measures which places particular emphasis on governance reforms and capacity building, supported by demand-side measures designed to reduce the consumption of illegally harvested timber in the EU (and ultimately major consumer markets elsewhere in the world).

4.2. Proposed policy instruments

Controlling illegal logging and the associated trade is a complex task which requires the use of a range of policy instruments. These are set out in detail in the Communication on an EU Action Plan for Forest Law Enforcement, Governance and Trade (FLEGT).

In summary, the policy instruments which the Commission proposes using include technical co-operation assistance in support of strengthened governance; measures to address the trade in illegal timber; complementary use of public procurement policy; complementary and parallel private sector initiatives, based on principles of corporate social responsibility; and financing and investment safeguards.

To support implementation of the above activities, a co-ordinated EU response is being developed, drawing on the different strengths and capacities of the Commission and EU Member states.

4.3. Trade-offs associated with the proposed options

Many of the policy instruments identified above, and the proposed actions, are relatively straightforward in their application and are not addressed in detail in this extended impact assessment. The use of technical co-operation assistance is governed by well established procedures, and relies on a systematic programming cycle which includes feasibility studies and impact assessment where appropriate. The actions proposed in relation to public

procurement, private sector initiatives, and financing and investment safeguards are light and involve only the provision of guidance, encouragement and facilitation services on the part of the Commission

Options concerning the trade in timber are more nuanced, however, and the trade-offs between different possible options requires more careful consideration. Three options for Community-level action on this aspect of the Action Plan have been identified and considered. Annex 1 presents relevant summary data on the trade in timber products.

Multilateral options. Given the pattern of trade in wood products, a multilateral framework to regulate the international trade in timber would be the most comprehensive way to tackle the issue. Progress in the international dialogue on forest policy has been slow, however, and there is clearly little prospect of arriving at a multilateral agreement to address the trade in illegal timber.

A solution based on voluntary co-operation with other major consuming markets offers better prospects. This is identified as an important element in the trade-related measures set out in the Action Plan, in which the Commission proposes to engage other major timber consumers and explore ways of working together towards a more comprehensive framework to combat illegal logging and associated trade.

Initial exchanges of views with major consumer blocks indicate there may be potential to develop this type of co-operation, but as with the multilateral dialogue on forests, progress is likely to be slow.

Bilateral option. Given the complexity of building a multilateral framework and considering the urgency of the problem, the Commission has identified an option based on bilateral and regional co-operation with key wood producing countries and regions.

This option would be based on voluntary partnerships with wood-producing countries and regions. These partnership agreements would blend political dialogue, governance reforms, development co-operation, and a commitment to ensure trade in timber between the producing country and the EU consists only of legally harvested material.

This option offers a more flexible approach, allowing effort and resources to be focused on countries and regions where an identified problem exists, while not affecting countries and regions which do not have a serious problem.

This option has the additional advantage that once a caucus of the main wood-producing (and importing) countries are working closely together to combat illegal logging and the associated trade, it could become appropriate to look at ways of transforming this step-by-step approach into a global process, whether by multilateral agreement or by a series of linked regional agreements.

The main weakness of this approach is that it is voluntary, and some countries may, for various reasons, choose not to collaborate with the EU on this matter.

Unilateral option. There is currently no Community legislation prohibiting the import and marketing of timber or timber products produced in breach of the laws of the country of origin.

The Community could introduce such legislation on a unilateral basis. This option would have the advantage of being a strong and direct response to the problem, and would address an intuitive shortcoming in the legislative framework – that it is not illegal to import and sell material which has been produced illegally in the country of origin.

The main weakness of this approach is that there are legal, political and practical questions which arise over the implementation of any such legislation.

4.4. Assessment of the available options

After considering the range of trade-offs, none of the above options have been discarded, but a clear hierarchy of priority has been established.

The **bilateral option** based on partnerships with wood-producing countries offers the best means to act quickly and flexibly, and respond to differing needs and circumstances found in countries which face problems with illegal logging. This approach also allows the EU to act on the basis of partnership with wood-producing countries, and does not entail the unilateral imposition of an EU policy on third countries, or the cumbersome and lengthy procedures required to establish a multilateral system.

The **unilateral option** would represent an additional step to reinforce the bilateral option, in the event that voluntary collaboration with wood-producing countries proved an ineffective means to address the problem. Questions over implementation would first have to be resolved. The Commission has committed to looking at these questions more closely, and will report back to Council on this later in 2004.

A **multilateral option** would be most effective, if a functioning multilateral framework could be set up. For practical and political reasons, any such system lies far in the future. The Commission will pursue this option, initially through dialogue with major markets, with a view to possible future co-operation on this issue.

4.5. Subsidiarity and proportionality

There is a clear need for Community-level action to address the demand-side of illegal logging and associated trade, since many of the proposed policy instruments are Community competences.

The FLEGT Action Plan also proposes the use of policy instruments which are Member States competencies, such as money laundering legislation and public procurement policy. The joint EU approach to implementation is designed to draw on these different competencies, and address the problem efficiently and according to the principles of subsidiarity.

Of the three options highlighted above, the bilateral option offers the most proportional approach to the solving the problem, since it allows for a flexible approach, with effort and resources focused only on countries and regions where an identified problem exists.

5. POTENTIAL IMPACTS OF COMBATING ILLEGAL LOGGING THROUGH PARTNERSHIP AGREEMENTS AND A VOLUNTARY TIMBER IMPORT LICENSING SCHEME

5.1. Summary description of the proposal

The EU, as a significant consumer of wood products, shares responsibility with timber-producing countries to tackle illegal logging and the associated trade. However, there are no practical mechanisms for identifying and excluding illegal timber from the EU market.

The FLEGT Action Plan therefore proposes a voluntary licensing scheme for timber exports to the EU, to be implemented through voluntary partnership agreements between the EU and wood-producing countries and regions.

Under the licensing scheme, legally produced timber products exported to the EU would be identified by means of licences issued in partner countries and regions. Timber products originating in a partner country or region and arriving at a point of import without such a permit would not be released for free circulation in the EU.

The Action Plan identifies four key regions and countries which may fall within the scope of FLEGT, and which together contain nearly 60% of the world's forest and supply a large proportion of internationally traded timber – Central Africa, Russia, Tropical South America and Southeast Asia.

5.2. Economic, social and environmental impacts of the voluntary licensing scheme

A firm of consultants were contracted to analyse the economic, environmental and social impacts, and legal and institutional implications of the proposed voluntary licensing scheme both in the EU and in potential partner countries (7). Indonesia, Cameroon and Brazil were selected as case study countries to highlight the likely impact of the licensing scheme in wood-producing countries.

5.3. Scenario analysis

Scenario analysis was used to highlight the potential impacts of the licensing scheme. Three "with regulation" scenarios were formulated to reflect potential impacts resulting from introduction of the voluntary licensing scheme. Each of these scenarios was compared against a basic "without regulation" scenario.

Scenario one assumes that introduction of the voluntary licensing scheme results in the highest fiscal gain to the partner country by ending non-payment of log and export taxes, resulting in improved revenue collection.

Scenario two assumes that introduction of the voluntary licensing scheme results in the highest environmental benefit, through a reduction in the volume of illegal logging.

Scenario three assumes the least fiscal and environmental impact, with illegal exports to the EU replaced with the existing legal supply, and the remaining illegal supply channelled to third countries.

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The consultants' final report is available online at: http://europa.eu.int/comm/development/body/theme/forest/initiative/index_en.htm

Adjustment to the voluntary licensing scheme is in practice likely to take place through all these processes, but each was considered separately in the assessment to highlight potential impacts more clearly.

Assumptions used in the analysis are set out in the Annex 2. The analysis extrapolates impacts on the basis of the best available estimates of illegal logging in the producing countries, and an estimate of the illegal timber captured by introduction of the voluntary licensing scheme. The estimate of illegal timber captured by the voluntary licensing scheme is based on the overall rate of illegal logging in the partner country expressed as a percentage of the volume of trade between the EU and the partner country.

5.4. Impact in producing countries

The potential impacts in producing countries were assessed through case studies carried out in Brazil, Cameroon and Indonesia, which are major exporters of tropical forest products to the EU. Each producer is fairly representative of the producers in Southeast Asia, Central and West Africa, and Brazil, particularly in terms of the profiles of the trade in timber products with the EU

Scenario one

Table one summarises the impact of scenario one, which assumes the highest fiscal gain in partner countries. The strongest impact from the timber licensing scheme would be felt in Cameroon, which would generate an additional US\$16.5 million if full tax compliance was achieved. This compares with US\$25m collected in taxes from the sector in 2002/2003, so the timber licensing scheme would increase tax revenue by about two thirds.

Increased revenue in Indonesia would amount to US\$15.6m, but the forest sector is very large compared to that in Cameroon, and so in relative terms the impact would be more modest. In Brazil the impact would be quite limited, with the timber licensing scheme generating an additional US\$2.2m.

Table 1	Impact of the ti	mhar licansing	cohomo undor	coonario ono
i anie i	impact of the H	mper licensing	scheme under	scenario one

Country	Total roundwood production	Estimated illegal roundwood production	Volume of illegal roundwood captured under the voluntary licensing scheme			Additional tax revenue collected
	mill. m ³	mill. m ³	000 m ³ (rwe)	% illegal roundwood	% of total roundwood production	US\$m
Brazil	55	11	192	1.7	0.4	2.2
Cameroon	2.8	1.4	454	32.4	16.2	16.5
Indonesia	64	44.8	337	0.8	0.5	15.6

There is potential to substantially increase revenue from timber collection in many other African countries. Research commissioned by the World Bank ahead of the Africa Ministerial Conference for Forest Law Enforcement and Governance (AFLEG) found (at a very conservative estimate) that the Central Africa Republic is losing an estimated €2.6m annually to weak regulation of timber production, Congo-Brazzaville (US\$8.1m), the Democratic Republic of Congo (€3.6m), Gabon (€8.5m), Benin (US\$5.8m), and Ghana (€37m).

The following secondary impacts were identified under scenario one:

Economic impacts

- Competitiveness of legal operations would increase vis-à-vis illegal operations. From the point of view of illegal operators, the requirement to pay full taxes would represent an additional cost
- Illegal operators may try to compensate for the reduction of their profit margins by transferring the increased cost to timber prices. A modest increase may be possible in Cameroon where the portion of the timber supply captured by the licensing scheme is fairly large compared to the overall total. In Indonesia and Brazil, where a smaller part of the total timber supply is captured, this price effect will be negligible.

Environmental impacts

- Environmental regulations are likely to be better observed in legal logging operations than in illegal activities, resulting in less logging-related damage to the environment.
- Increased costs due to tax payments could make some areas uneconomic for harvesting and exploitation. In principle, the effect would be positive because there are indications that at least in Cameroon and Indonesia, current harvesting volumes are not sustainable.

Social impacts

- In all case study countries, legislation has some provisions requiring respect for communities' rights. Illegal operations seldom pay heed to these rights, but legally operating loggers are obliged to respect them and settle disputes through institutionalised procedures.
- Legally operating loggers would pay more attention to workers' safety and health and payment of social security charges.
- If increased costs due to taxation lead to reduced volume of illegal harvesting, associated
 employment would also be reduced. Introduction of the FLEGT licensing scheme should
 therefore be accompanied by efforts to provide alternative livelihoods to those affected by
 loss of employment in the forestry sector, particularly where those affected have no
 alternative means of employment.

Scenario two

Table two summarises the impact of scenario two, which assumes the highest environmental gain in partner countries. Under scenario two, the proportion of illegal timber currently traded with the EU is assumed to be eliminated from production.

In Brazil and Indonesia the reduction in total roundwood production would be very limited. Job losses associated with the projected fall in production would be 530 in Brazil and 4,495 in Indonesia, where forestry work is more labour-intensive. In both countries, these figures represent a modest share of total employment. In Cameroon, the impact would be more significant. Production would drop by 16.2%, with an estimated 4,600 jobs lost.

Table 2 Impact of the timber licensing scheme under scenario two

Country	Total roundwood production	Illegal roundwood production	Reduction in roundwood production following introduction of the voluntary licensing scheme			Reducti employn forest s	nent in
	mill. M ³	mill. m ³	000 m ³ (rwe)	% illegal roundwood	% of total roundwood production	Number	% of total
Brazil	55	11	192	- 1.7	- 0.4	530	- 0.4
Cameroon	2.8	1.4	454	- 32.4	- 16.2	4 600	- 8.5
Indonesia	64	44.8	337	- 0.8	- 0.5	4 495	- 1.0

The following secondary impacts were identified under scenario two:

Economic impacts

- Curbing illegal activities would drive illegal operators out of business and strengthen the position of legal loggers and processing enterprises.
- Restrictions on supply would increase timber prices. This would boost profits for legal operators and enhance government revenue. Higher market prices would be passed on to consumers.
- A drop in timber exports entails a strain on the balance of payments and local economies would forego the multiplier effects of illegal production. On the other hand, the benefits of illegal logging are often temporary because the harvesting levels are unsustainable and cannot continue infinitely. The World Bank has estimated that on current trends, timber resources in Indonesia will be exhausted around 2015. In Brazil and Cameroon, the effect is less pronounced.

Environmental impacts

- Reduced timber harvesting enhances the sustainability of forest use. As harvesting potential in production forest falls, so illegal operators are increasingly moving into protected areas and national parks to supply their markets. Reduction in timber harvesting could therefore have particular significance for reducing the pressure on protected areas.
- Decreased illegal activities is of general benefit to the environment because illegal loggers ignore environmental safeguards and regulations.

Social impacts

- Reduced illegal activities tends to benefit local populations because illegal loggers show little respect for customary rights and needs of local populations
- Reduced illegal harvesting entails a decrease in local job generation. As noted above, the temporary nature of employment in illegal logging should be taken into consideration when evaluating the impact of the licensing scheme. However, in the event of this outcome, introduction of the FLEGT licensing scheme should be accompanied by efforts to provide alternative livelihoods to those affected by loss of employment in the forestry sector, particularly where those affected have no alternative means of employment.

Scenario three

The potential impact of the licensing scheme under scenario three is much reduced. Scenario three assumes that illegal exports to the EU are replaced with the existing legal supply, and in all cases the volumes of timber exported to the EU are well below the existing legal supply (table 3).

This suggests that, in principle, it would be possible to circumvent the effect of the timber licensing scheme by redirecting the flows of export timber; legal supply would be channelled to the EU and illegal timber to less discerning markets.

Table 3 EU imports of roundwood and sawnwood as % of total legal supply, 2001

Country	Estimated legal supply of	Exports of roundwood and	EU exports of total legal
	industrial roundwood	sawnwood to the EU	roundwood production
	m ³	m ³ (rwe)	%
Brazil	44,000,000	957,133	2.2
Cameroon	1,400,000	905,612	64.7
Indonesia	3,020,000	481,105	15.9

Under this scenario additional economic, social and environmental benefits would be minimal.

5.5. Impact of extending the scope of the voluntary licensing system

The scenario analysis was also used to examine the impact of extending the timber licensing scheme to increase the effectiveness of the proposal. There are two principle means to expand the coverage of the timber licensing scheme: by increasing the range of products covered (8); and by increasing market coverage. The analysis thus looked at two further permutations:

- (i) Including plywood and veneer within the products covered (9);
- (ii) Collaborating with other major markets such as Japan and the US to expand the geographical coverage of the system.

The current proposal and the above-mentioned alternatives can be combined into four options for the coverage of the voluntary licensing scheme:

- Option 1: Tropical roundwood and sawn timber to EU (original proposal)
- Option 2: Tropical roundwood, sawn timber, plywood and veneer to EU
- Option 3: Tropical roundwood and sawn timber to EU, Japanese and US markets

Option 4: Tropical roundwood, sawn timber, plywood and veneer to EU, Japanese and US markets

COM (2003) 251 discusses implementing the scheme for roundwood and sawn timber.

These additional products were considered because the chain of custody system proposed in the voluntary licensing scheme can be readily applied.

Table 4 summarises the different impact of these options under scenarios one and two in terms of the volume of illegal timber that would be eliminated through introduction of the voluntary licensing scheme.

Under scenarios one and two, the impact of expansion differs markedly in each of the case study countries. In Brazil, expanding the licensing scheme to include plywood and other major markets would have little impact, as the country does not export large volumes of timber products.

In Cameroon plywood production is limited, so expanding the range of products has no significant additional impact. The Cameroon forest sector depends strongly on trade with the EU, so including other major markets also does not generate significant additional impact.

In Indonesia, including plywood in the range of products covered would have an important effect, since the country is a large manufacturer of plywood. The effect would be particularly pronounced if the voluntary licensing scheme, or equivalent, was adopted in other major markets, since Japan is an important market for Indonesian plywood.

Table 5 illustrates the impact of scenario three. In Brazil, the EU demand for legal timber could be accommodated under all the options. In Cameroon the portion of demand taken by the EU is high but still well below the available legal supply, and this does not change significantly with expansion of the scheme. This means that under all options, the existing legal supply could be used to supply the EU.

In Indonesia, expansion of the scheme to cover plywood and veneer would result in the EU market absorbing more than half of the legal timber supply, which would serve to substantially increase effectiveness.

Table 4 Impact from extending the voluntary licensing scheme

	Proportion of illegal timber captured by the voluntary licensing scheme (%)				
	Brazil	Cameroon	Indonesia		
Scenarios 1 and 2					
Option 1	1.7	32.4	0.8		
Option 2	2.8	34.2	2.5		
Option 3	2.1	33.4	1.9		
Option 4	4.1	35.6	9.9		

Table 5 Impact from extending the voluntary licensing scheme

	Trade with EU	Trade with EU as a percentage of total roundwood production				
	Brazil	Cameroon	Indonesia			
Scenario 3						
Option 1	2.2	64.7	15.9			
Option 2	5.3	68.3	54.8			
Option 3	2.7	66.6	41.2			
Option 4	10.0	70.3	281.4			

The types of economic, social and environmental impacts triggered by expanded versions of the timber licensing scheme would be similar to those of the basic scheme, highlighted in section 5.4. These impacts would be amplified as the effectiveness of the licensing scheme is enhanced.

5.6. Impact in the EU

Impact in the EU of the voluntary licensing scheme for tropical timber imports

The impact of the voluntary licensing scheme within the EU would be transmitted through potential changes to the price and supply of timber imported to the EU from partner countries. Overall, the impact of the FLEGT licensing scheme within the EU is expected to be relatively modest and localised, due to the small proportion of tropical timber consumed as a percentage of total timber demand, and the ready availability of substitute products in the event that imports to the EU should fall as a result of the licensing scheme.

The EU imported 1.7 million m³ and 3.5 million m³ of tropical roundwood and sawnwood respectively in 2001. The main source of these imports were the countries of West and Central Africa, with important supplies also sourced in parts of Southeast Asia and Latin America (tables 6 and 7).

Table 6 EU tropical roundwood and sawnwood imports (2001)

Country	Tropical roundwood	Tropical sawnwood	Tropical roundwood and sawnwood	Share of imports to the EU
	m^3	\mathbf{m}^3	m³ (rwe)	%
France	691,200	376,589	1,318,848	17.5
Netherlands	69,254	363,528	675,134	9.0
Germany	138,486	113,112	327,006	4.4
Italy	269,018	480,281	1,069,486	14.2
UK	21 213	451,095	773,038	10.3
Ireland	4,647	63,150	109,897	1.5
Denmark	1,673	43,788	74,653	1.0
Greece	58,913	385,216	700,940	9.3
Portugal	231,570	53,752	321,157	4.3
Spain	148,993	941,698	1,718,490	22.9
Belgium	21,354	227,301	400,189	5.3
Sweden	466	8,947	15,378	0.2
Finland	0	5,692	9,487	0.1
Austria	65	731	1,283	0.0
EU	1,656,852	3,514,880	7,514,985	100

Source: EUROSTAT

Table 7 EU tropical roundwood and sawnwood imports by source (2001)

Country	Tropical roundwood	Tropical sawnwood	Tropical roundwood and sawnwood	Share of imports to the EU
	m ³	m ³	m ³ (rwe)	%
Gabon	711,594	38,476	775,721	10.3
Cameroon	298,433	702,388	1,469,080	19.4
Liberia	208,249	8,033	221,637	2.9
Congo	159,818	37,350	222,068	2.9
Equatorial Guinea	97,115	3,353	102,703	1.4
CAR	84,527	14,810	109,210	1.4
Congo (Dem. Rep.)	48,031	11,859	67,796	0.9
Indonesia	363	187,342	312,600	4.1
Malaysia	794	432,520	721,661	9.6
Ghana	4,151	285,826	480,528	6.4
Brazil	637	424,825	708,679	9.4
Ivory Coast	7324	665,496	1,116,484	14.8
Nigeria	1380	264,464	442,153	5.9
Sub-total	1,622,416	3,076,742	6,750,319	89.4
Extra EU total	1,669,719	3,530,255	7,553,477	100

Source: EUROSTAT

Scenario one

Under scenario one, which assumes the highest fiscal gain in partner countries, the impact within the EU would be negligible. Under this scenario, the volume of timber harvested in producer countries is assumed to remain unchanged, with the only difference that full taxes and royalties are paid on the harvested timber.

This does not result in any change in production levels in producer countries, and so timber exports to the EU would remain unchanged. It is likely that any cost increases which do arise through additional tax payments would be borne by illegal loggers in the exporting countries (see section 5.4, scenario 1).

Economic impact

The economic impact of this outcome within the EU would be modest but positive.

Importers may achieve some market gains through the assurance of legality offered by the licensing scheme. This would be of particular significance if large public and private buyers continue to introduce more stringent controls on procurement. Several EU Member States have recently introduced changes to timber procurement practices to ensure their purchasing policies do not encourage bad practice in the producing country. Several more have indicated they intend to take up a similar position.

Within the private sector, several EU private timber importers associations are currently working to elaborate codes of practice which require that only legally harvested timber is sourced in their supplier countries. The licensing scheme would support and assist these efforts, and may help to achieve a price premium on tropical timber, or failing that, help to maintain the existing market share of tropical timber products, which is jeopardised due to negative publicity surrounding the trade in illegally harvested tropical timber.

Social impact

The social impact of this outcome within the EU would be negligible.

Environmental impact

The environmental impact of this outcome within the EU would be negligible, but the positive environmental impact gained in producer countries would in an abstract sense increase welfare levels within the EU through providing further security over the global public goods provided by forests, such as biodiversity and protection from climate change.

Scenario two

Scenario two, which assumes the highest environmental gain, is the only scenario likely to lead to high impact in the EU. Under scenario two, the proportion of illegal timber currently traded with the EU is assumed to be eliminated from production. This would reduce the supply of roundwood and sawnwood by an estimated 35-53%, or 2.6-4m cubic metres.

Economic impact

The projected economic impact of this scenario within the EU depends on the extend of the coverage achieved under the voluntary licensing scheme (see below).

Under this scenario, illegal roundwood production would be reduced in partner countries. This could result in reduced exports to the EU, which would in turn lead to rising prices. On the one hand, this provides incentives for good practice in wood-producing countries – which is in part the objective of the FLEGT initiative – but on the other hand it may have an adverse effect on EU tropical timber importers.

The extent to which these effects come into play depends on the price elasticity of tropical timber products. For products with high price elasticity, substitute products will become more attractive. This would be of benefit to European producers of softwood, who would stand to gain if softwood timbers became more competitive relative to tropical timbers as a result.

For price inelastic tropical timber products, importers would be able to pass the price premium onto the consumer market.

Studies of the timber market suggest that tropical, temperate and softwood products have a high price elasticity, particularly in the long-run, while there is a low price elasticity between wood and non-wood products. This implies that substitution will take place between tropical and softwood products, but that the overall market for wood products will remain unchanged.

In the short-run, demand is most likely to shift from tropical to temperate hardwoods. Currently more than half of the supply of temperate hardwoods comes from EU Member States, suggesting EU hardwood producers may benefit from this shift.

Social impact

Under scenario two, potential social impacts within the EU depend on the impact of rising prices. If rising prices lead to a fall in market share for tropical timber products, the subsequent adjustment in the industry could result in job losses. These losses would be offset

at a local level by a shift in supply to temperate hardwoods and at an aggregate level by gains in employment for the manufacture of substitute goods, such as European softwood products.

Environmental impact

As for scenario one, the environmental impact of this outcome within the EU would be negligible, but the positive environmental impact gained in producer countries would increase welfare levels within the EU through providing further security over the global public goods provided by forests, such as biodiversity and protection from climate change. The higher environmental impact of scenario two in producing countries would result in further amplification of the positive impact on EU welfare.

Scenario three

Under scenario three, producers are assumed to redirect legal timber to the EU and direct illegal timber to less discerning markets.

If the countries from which tropical timber originates were able to reorient their trade flows so that legal supply would go to the EU, the impact on the EU timber market would be limited. Only in few countries, such as Liberia, Cameroon, Gabon and Ghana, do current imports to the EU seem to exceed or be close to estimates of the available legal supply (table 8). This may also be the case in Ivory Coast, if the incidence of illegal timber is high, although no reliable estimate of illegal logging is available.

Economic, social and environmental impacts under scenario three would thus be minimal within the EU, since no disruption in supply is implied.

Table 8 EU tropical timber imports compared to legal supply in selected exporting countries (2001)

Country		High estimate of legal supply	Imports to EU as % of legal supply	Low estimate of legal supply	Imports to EU as % of legal supply
	m ³ (rwe)	m ³ (rwe)	m³ (rwe)	m³ (rwe)	%
Cameroon	1,471,421	1,400,000	105	1,400,000	105
Central Africa	109,260	793,500	14	264,500	41
Equat. Guinea	102,715	182,000	56	182,000	56
Gabon	775,849	775,200	100	775,200	100
Congo	222,193	938,250	24	312,750	71
DRC	67,836	2,739,750	2	913,250	7
Liberia	221,664	196,400	113	196,400	113
Ivory Coast	1,118,702	2,648,250	42	882,750	127
Nigeria	443,035	7,063,500	6	2,354,500	19
Ghana	481,480	484,800	99	484,800	99
Brazil	710,095	44,272,000	2	44,272,000	2
Indonesia	313,224	19,200,000	2	19,200,000	2
Malaysia	723,102	13,252,020	5	10,504,650	7

5.7. Factors affecting the magnitude of impact within the EU

The magnitude of the impact of the voluntary timber licensing scheme within the EU depends crucially on the coverage which is achieved. This is particularly true in the case of scenario two.

The FLEGT initiative aims to implement the voluntary licensing scheme with all major trading partners that face problems due to illegal logging. Due to the voluntary nature of the scheme, however, some countries may choose not to enter into such collaboration. There are thus two possible outcomes which can be used to highlight potential impacts within the EU:

Outcome 1: Partial coverage

Outcome 2: Full coverage

Outcome one

If only some of the countries which export substantial quantities of timber to the EU participate in the voluntary licensing scheme, two possible effects could be anticipated.

On the one hand, traders may seek to source timber in those countries because of the additional assurances of legality offered, which in turn helps to preserve their reputations as responsible and environmentally aware traders. This outcome may help to create a price premium for guaranteed legal timber, particularly if governments and large private buyers continue with efforts to ensure the timber they purchase comes from legal sources.

An alternative outcome under a voluntary licensing scheme providing only partial coverage of the main EU suppliers would see EU processing industries attempting to find alternative, less stringent sources of supply.

Outcome two

If all major exporting countries participated in the scheme, and illegal timber imports were eliminated entirely from the supply of tropical sawnwood and roundwood entering the EU market, the supply of tropical roundwood and sawnwood would fall by an estimated 35-50%, (2.6m - 4m cubic metres).

This would have several inter-related effects. The assurance of legality, and the boost this provides to the image of tropical wood products, could help to increase demand for tropical wood products. However, a reduced supply would raise prices and so may serve to generate demand for substitute materials, such as softwoods and plastics.

5.8. Distribution of impact within the EU

The EU imported 1.7 million cubic metre and 3.5 million cubic metre of tropical roundwood and sawnwood respectively in 2001 (table 6). The three largest importers of tropical timber are Spain, France and Italy, which taken together account for more then half of the EU's roundwood and sawnwood imports. Three next largest importers are the UK, Greece and the Netherlands. Taken together, these six Member States account for 83% of tropical roundwood and sawnwood imports. Impact of the voluntary licensing scheme within the EU, such as it exists, would affect these countries more than the other Member States.

5.9. Impact in the EU of the voluntary licensing scheme for timber imports from Russia

Sustainable forest development is a policy priority for the Russia government and reforms are in progress. Illegal logging is a key issue for the government, which recently initiated a

regional process to address forest governance and illegal logging (¹⁰). The Russian government aims to host an inter-ministerial conference of this issue in August 2005.

EU Member states import major quantities of roundwood and sawnwood from Russia. In 2001 roundwood imports totalled 15.8 million cubic metre and those of sawnwood 4.0 million cubic metre. The largest importers are the Nordic countries. Finland alone accounted for more than half of the imports and Sweden received more than 10% (table 8).

Most of the imports to the EU originate from Northwest Russia. For example, about 90% of timber imports to Sweden come from this region. In 2002, the total volume of timber imports from Russia to the EU was 23.9 million m³. One recent estimate of illegal logging in Northwestern Russia puts legal timber production in Northwestern Russia at 33 million m³, with illegal production estimated at 11 million m³. An alternative estimate suggests only 5% of total roundwood production has been illegally harvested.

As a result, the share of illegal imports entering trade with the EU is difficult to estimate, however. Some of the major importing companies have developed tracking systems which, in principle, enable them to ensure that export timber is of legal origin. Not all companies apply similar methods. It is likely that illegal supply to the EU is less than its share of total production but not insignificant.

Table 8 EU roundwood and sawnwood imports from Russia (2001)

Country	Roundwood imports	Sawnwood imports	Roundwood + sawnwood*)	Share of imports to EU
	m ³	m ³	m³ (rwe)	
France	676	400,454	801,584	3.4
Netherlands	126,326	436,404	999,134	4.2
Germany	803,599	552,241	1,908,081	8.0
Italy	13,973	694,609	1,403,191	5.9
UK	68,312	561,464	1,191,240	5.0
Ireland	39	4,252	8,543	0.0
Denmark	305	73,868	148,041	0.6
Greece	56,732	615,935	1,288,602	5.4
Portugal	1,368	522	2,412	0.0
Spain	4,462	167,775	340,012	1.4
Belgium	52,924	224,220	501,364	2.1
Luxembourg	0	253	506	0.0
Sweden	2,700,323	8,615	2,717,553	11.4
Finland	11,842,058	165,279	12,172,616	51.0
Austria	187,805	92,879	373,563	1.6
EU Total	15,858,902	3,998,770	23,856,442	100.0

^{*)} conversion factor 50%

Source: Eurostat

Scenario one

As for the tropical timber exporting countries, under scenario one, which assumes the highest fiscal gain in partner countries, the impact within the EU would be negligible. Under this scenario, the volume of timber harvested in producer countries is assumed to remain

The Europe and North Asia Forest Law Enforcement and Governance process

unchanged, with the only difference that full taxes and royalties are paid on the harvested timber.

As for tropical timber, positive environmental benefit would be reflected in increase welfare levels within the EU through providing further security over the global public goods provided by forests, such as biodiversity and protection from climate change. Quantifying this effect is beyond the scope of the assessment.

Scenario two

Scenario two, which assumes the highest environmental gain, would have an impact on the EU if it leads to a fall in timber production which is transferred to timber imports to the EU. Under scenario two, the proportion of illegal timber currently traded within the EU is assumed to be eliminated from production.

Economic impact

The economic impact of diminished timber supply could be significant in countries importing large volumes of Russian timber. Reduced supply would result in rising costs, with associated impact on competitiveness and employment.

Under the high estimate of illegal logging in Northwestern Russia, this scenario would imply that large importers within the EU – particularly Finland and Sweden – would face difficulties in finding alternative sources of supply within an economic distance from their mills. Under the low estimate of illegal logging, the existing legal supply still would be sufficient to meet demand within the EU.

European forest owners would benefit from the fall in supply of timber from Russia, and their own timber output would become more competitive.

Social impact

The main potential social impact lies in the loss of jobs from wood processing industries resulting from a contraction in the supply of legal timber from Russia.

Environmental impact

An amplified version of the effect described for scenario one would be reflected in increase welfare levels within the EU through providing further security over the global public goods provided by forests, such as biodiversity and protection from climate change.

Scenario three

Under scenario three, producers are assumed to redirect legal timber to the EU and direct illegal timber to less discerning markets.

In Russia, the legal timber supply would be sufficient to satisfy the demand from Europe. Economic, social and environmental impacts under this scenario would thus be minimal within the EU.

It should, however, be noted that the control on imports to the EU is already stricter than to other export destinations. Despite this, illegal timber traders still attempt to export their goods

to the EU, which may indicate that the EU is a more lucrative market than alternative destinations. It is possible that with more stringent controls at least part of the illegal timber traders would find it more advantageous to legalise their goods rather than redirect them to alternative, financially less attractive markets. This would have a positive impact on forest management in Russia.

In discussion of all scenarios in the Russian context, consideration needs also to be given to the large volume of trade, particularly with Finland and Sweden. Finland, for example, reportedly imports approximately 300,000 shipments from Russia every year. Sweden, although importing less, also conducts a large and important trade with Russia.

5.10. Impact on EU customs authorities

The main responsibility for enforcing the FLEGT licensing scheme will fall to customs agencies. Member State customs authorities were surveyed in the course of preparing this impact assessment, with five providing responses. Respondents felt that the impact on daily customs work would be moderate, suggesting there is no need for additional capacity, financial or human resources. In addition, EU customs agencies are already familiar with operating many types of licensing systems, and no problems are anticipated with extending this type of procedure to timber.

5.11. Technical options

A number of technical options are available for this ranging from government-based control systems to third party independent verification.

Box 1 Technical Options for tracking and verifying the legality of timber

	Technical option:	Assessment:
Tracking	Country-level approach: current	poor track record in many countries (ineffectiveness, corruption
	tracking and CoC system with	etc.), requires relatively developed overall governance structures
	government based	relatively high cost and labour intensive
	documentation and control	subject to errors
		often not transparent to other actors
		+ covers all products and producers, potentially highest effectiveness
		+ established basis for further development
		+ linked with existing regulatory system and policy implementation
		+ can be strengthened by outsourcing and technology development
	Exporting company approach:	limited to interested companies (reduced effectiveness)
	adequate robust tracking and	costs born by the companies alone, and uncertainty about net
	CoC systems with interested	benefits
	volunteer producers, processors	lack of broader contribution to governance and local capacity
	and traders that are currently	building
	exporting to the EU (or would	requires external verification and common rules
	like to)	requires development and capacity building
		+ possibility to apply stepwise/phased approach
		+ based on business interest of existing exporters to EU
		+ good transparency for participating companies

	Importing company approach: tracking integrated in the supply	risks for different requirements by importing companies and common rules	
	chain management systems of major importers	serves mainly interests of the importing company, unequal sharing of benefits lack of broader contribution to governance and local capacity building	
		risk for trade diversion requires external verification effectiveness limited to participating	
		importers' suppliers	
		+ possibility to apply stepwise/phased approach	
		+ fast-track to implementation, established practices + focuses on trade-flows where legality is most demanded	
	International database	- ineffective as the sole measure	
	maintained by an identified body	+ low-cost option + potentially powerful complementary element in other systems	
	Cooperation arrangement	in many countries associations are weak and lack capacity to	
	between trade and industry associations in the EU and	implement demanding common policies + potentially more effective than individual exporter/importer	
	partner countries	approaches	
Verification	Self-regulation reinforced by	+ useful complementary elements in other systems requires cultural trust and confidence in the forest sector, which is	
	Government verification	often missing	
		requires strong and consistent commitment by government poor track record in many countries (ineffectiveness, corruption	
		etc.), requires relatively developed overall governance structures	
		often not transparent to other actors + simple implementation, potentially low cost	
		+ linked with existing regulatory system and policy implementation	
	Verification by a designated	+ does not increase cost to producers requires establishment of an independent government body with	
	government body	forestry auditing expertise	
		poor track record, prone to corruption, problems with reliability limited transparency in the past	
		requires increased budgetary allocations	
		+ integrated part of the regulatory system	
		+ does not increase cost to producers + not as sensitive to political changes and pressures as outsourced	
		systems	
	Third party independent	+ possibility to upgrade existing bodies, faster implementation high cost but potentially can yield net benefits (increased revenue	
	verification	collection)	
		potential brain-drain effect to public sector institutions (salary differences)	
		cumbersome contracting procedures/high transaction costs	
		political sensitivity of transferring responsibility for law enforcement	
		requires strong implementing capacity including control of auditors	
		by the verification company likely to require increased budgetary expenditures	
		+ effectiveness	
		+ fast-track possibility + technology development	
	0.10	+ transparency and reliability	
	Self-assessment complemented by third party independent	effectiveness limited to voluntarily participating companies requires strong implementing capacity by participating companies,	
	verification (possible linkage	including internal auditing procedures	
	with a fiscal or other incentive scheme)	+ transparency and reliability + close link with policy implementation	
	scheme)	+ possibility to link with certification	
		+ lower costs than c), costs born by companies	

Based on the assessment the preferred technical solutions would seem to be:

- (i) in countries with sufficiently well developed governance structures the best technical option for timber tracking a) and for verification b) or c).
- (ii) In countries where these conditions do not exist (lack of capacity, political will and commitment, weak overall governance), the optimal solution for timber tracking b) and/or c), and for verification d).

For timber tracking option d) is in all cases a good complementary element to any other system put in place. Co-operation through industry and trade associations (tracking e) also has a role in promotion of awareness, commitment, reporting, and capacity building.

To ensure that the process of granting the licence itself is not corrupt or otherwise tainted, a centrally accessible data based should be maintained that auditors use to verify this process. This may be a critical risk regarding the whole licensing system as it is extremely difficult to document and verify how this process has taken place.

5.12. Cost of operating a voluntary licensing scheme

Operating the voluntary licensing scheme entails a direct economic cost through establishing a tracking and verification system to secure the legal origin of timber. The direct cost of establishing timber tracking and verification systems is likely to be modest, irrespective of the technical option chosen. Costs of existing systems are in the region of €1-3 per cubic metre for an operational outsourced third party control system. With increased economies of scale the cost could be further reduced.

The significance of these costs depends somewhat on the value of the export product and the degree of processing. Compared to export prices of tropical logs and sawnwood, which are US\$150-250 and US\$450-600 per cubic metre respectively, these costs represent only a fraction of the export value. Pulpwood exported from Russia to the Nordic countries has a lower export price of around US\$30-40 per cubic metre, suggesting that the direct costs of establishing a control system in temperate zones could be proportionately more significant than in tropical countries. On the other hand, in these countries, the current control systems are usually better developed than in the tropics, which reduces the marginal cost of system improvement.

Rapid technological development and integration of information systems will further reduce direct cost pressures. Even highly technical systems can be implemented at moderate expense. The crucial issue is that the financial implications of an effective scheme can be very significant for those who currently benefit or lose from illegal timber trade. This suggests that the choice of technical options is more of a political question than an economic issue.

5.13. Institutional arrangements: options for implementation

The vast majority of wood supply chains have a degree of monitoring and control at various points. Frequently, however, the incentives to subvert the system are so great in comparison to the disincentives that the monitoring and control systems exist in name only.

Monitoring for compliance can be implemented by three different parties:

• by the commercial organisation managing the control points;

- by government; and
- by independent verification organisations;

All parties can work effectively only when the incentives to comply are appropriately balanced. Businesses managing their own control points generally only function effectively when there are strong and very obvious business reasons for doing so. If the fiscal incentives not to comply are significant, then monitoring by Government is appropriate. If Governments do not have the capacity to monitor effectively, then independent verification is the logical choice.

Among the case study countries there are limited incentives for the private sector to monitor compliance and to contribute to the timber licensing scheme; the markets are rather insensitive to legality issues and the weakness of law enforcements makes the cost of non-compliance limited.

In Russia the companies importing timber to the EU – mainly the Nordic corporations – have strong market-based incentives to ensure compliance. Many of them have established tracking systems on their own, and if a timber licensing scheme is introduced in Russia, these systems could be used as a major source of information and reference.

In Cameroon and Indonesia the government control systems are weak and a substantial input to capacity development would be needed to secure adequate performance. Full reliance on them may not be a realistic option in the short run. In Brazil, the control system has been strengthened, and opportunities to use it as a basis for a monitoring system should be analysed further.

Applying third party independent verification is an attractive option in countries where the government-run monitoring systems are weak, where outsourcing different functions to the civil society and private sector is part of the mainstream political thinking, and where relatively well organised and staffed civil society and private sector entities exist. It is also the preferred option for the NGO community¹¹.

5.14. Capacity in partner countries

In countries where governments typically have limited implementation capacity, it will be necessary to ensure that implementation is accompanied by substantial capacity building and institutional strengthening. Support would be needed at all levels of governments including central and local levels of forest administration as well as in related entities such as police, customs, and judicial system. Arrangements should also seek to provide the private sector with an interest in participating in the scheme. Measures also need to be taken to mitigate the risks posed by corruption to the effectiveness of the voluntary licensing scheme.

In the potential partner countries, capacities and the strength of institutions vary substantially. This will need to be reflected in the design of the licensing scheme and the partnership agreements. Capacity constraints are most obvious in Africa. Capacity in Asia, Latin America and Russia is stronger.

A near-unanimous view expressed by the NGO community in consultations in Indonesia

6. MONITORING AND EVALUATION

The policy will be implemented through voluntary partnerships with wood-producing countries. Provision for monitoring will be build into the partnership agreements with wood-producing countries and the Regulation to establish the voluntary licensing scheme for timber exports.

Provisions are also foreseen for a review mechanism, under which the FLEGT licensing scheme should be subject to periodic review, to allow analysis of the effectiveness and impact of the scheme. The first such review would take place no later than three years after the effective starting date of the licensing scheme.

Review missions are also foreseen where there are problems with implementation of the scheme.

Publication of annual reports on statistics to facilitate implementation and monitoring of the FLEGT licensing scheme will be required from partner countries and regions, and EU Member States.

7. STAKEHOLDER CONSULTATION

To begin preparation of the EU FLEGT Action Plan, the Commission hosted an international workshop in Brussels from 22-24 April 2002. The workshop was attended by representatives of the EU Member States, the governments of several non-EU wood-producing and wood-importing countries, the forest industry, non-government organisations, research institutes and technical experts. The workshop examined methods of combating illegal logging, through demand and supply side measures (¹²). The Commission's proposal draws heavily on the workshop findings, and the subsequent regular dialogue which has continued in both domestic and international fora thereafter (Annex 3).

Specific consultation meetings with the governments of potential partner countries have also been initiated through a series of joint missions involving the Commission and interested Member States. These consultation meetings fulfil one requirement of the October 2003 Council Conclusions on FLEGT, which invite "the Commission together with Member States to enter into discussions with timber producer countries and regional organisations about their readiness for, their views on and the scope of voluntary FLEGT Partnership Agreements". Summaries of these meetings are annexed to the Recommendation for a Mandate to Negotiate FLEGT Partnership Agreements, submitted to Council along with this impact assessment.

8. CONCLUSIONS AND COMMISSION DRAFT PROPOSAL

The analysis of the three scenarios highlights potential risks and trade-offs in the Commission proposal. The scenarios were analysed independently of each other, but in reality adjustment to the timber licensing scheme is likely to include elements of all three. On the basis of the scenario analysis, the following conclusions can be drawn on the Commission's proposal.

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See http://europa.eu.int:8082/comm/external_relations/flegt/intro/index.htm for further details.

- The potential revenues generated through the voluntary licensing scheme appear to exceed the costs of establishment.
- The environmental impact is potentially significant.
- There is clearly a risk of illegal trade being directed to other markets, with the legal production exported to the EU. Measures must be taken to mitigate against this risk.
- In general terms, the strongest impact from the scheme would be felt in Africa where the legal supply is constrained in relation to the demand from the EU. In Asia and Latin America, the EU market has limited significance and the legal supply necessary to satisfy the demand from Europe is readily available.
- The EU has an important but limited influence over the global trade in timber products, and this is reflected in the projected impacts of the voluntary licensing scheme. The effect will be modest if applied only to roundwood and sawn timber. To increase effectiveness, coverage should be extended to include plywood and veneer.
- To increase effectiveness in the longer term, attempts should be made to develop collaborative arrangements with the Japanese, US and Chinese markets. This would add significantly to the potential impact of demand side measures as a policy instrument with which to combat illegal logging. This is of particular importance in Asia, and to a lesser extent, Latin America.
- Preventing leakage to third countries is key to ensuring effectiveness of the voluntary licensing scheme implemented by specific countries and the EU. Border controls between the partner country and neighbouring countries may not always be effective, raising the risk of leakage. This should be address through dialogue, development co-operation support in the producer country, and in the medium term the voluntary licensing scheme could be operated on a regional or sub-regional basis.
- Care is needed to ensure that partner countries do not face a cost disadvantage relative to non-partner countries as a result of implementing the licensing scheme.
- Governance capacity varies from country to country. No standard system is likely to function across the board, and the operation of the voluntary licensing scheme needs to be tailored to the situation of the partner country, while offering the required assurance of legality. Independent monitoring, inspection and audit, and support to build capacity and institutions are important instruments in this regard.
- The impact within Europe would appear to be limited, but particular care needs to be taken of the important trade between Russia and the Nordic countries.
- Most of the trade in timber between Russia and the European Union are covered by existing mechanisms for identifying and verifying the origin of imported timber. The design of any voluntary licensing scheme implemented through partnership with Russia would need to take account of this large volume of trade, and the existing mechanisms. The same applies to tropical timber, where such schemes exist.

On this basis, the Commission proposes a timber import licensing scheme, to be implemented on a voluntary basis through partnerships with wood-producing countries. A detailed proposal in this regard is presented along with this extended impact assessment.

ANNEX 1: SUMMARY OF THE INTERNATIONAL TRADE IN TIMBER PRODUCTS

The world market for the production, processing and trading of wood is largely dominated by the temperate zones and developed countries (US, EU, Canada, Japan). Tropical products account for a small proportion of total world exports of wood, namely 16% of industrial roundwood, 13% of sawnwood, pulp and paper and 39% of panels. Only plywood made of tropical hardwood accounts for a dominant proportion of the international market (71%).

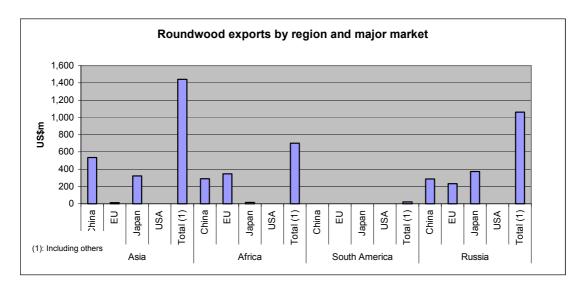
Another particularity of world trade in wood products is that much of the trade in forest products is within regions. According to the World Bank, 80% of Europe's trade is between European countries, 85% of exports from countries in Asia are to countries in the same region and 80% of North American imports come from within the region. The only major interregional trade flows (over US\$5 billion) are from North America to Europe and from North America and Europe to Asia and Oceania.¹³

Nevertheless, the figures below confirm the potential for EU trade-based measures to exert an influence on the global trade in timber, and also highlights the importance of working towards wider collaboration on this issue with the other major wood consuming countries in the longer term

Roundwood

Key points:

- Demand for roundwood from Asian producer countries is dominated by China and Japan.
- The EU is the largest importer of African roundwood by value.
- Trade in roundwood from South America is negligible.
- Imports of roundwood by China, Japan and the EU from Russia are of roughly equal value (although the EU is the largest importer by volume).



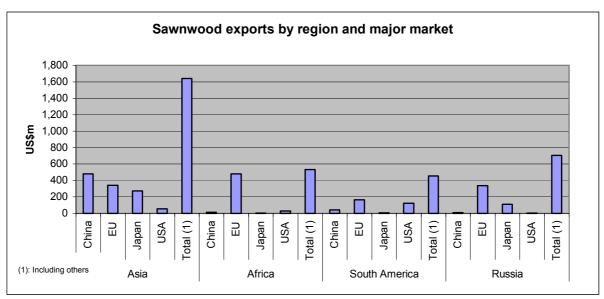
World Bank. Future Developments in Forest Products Markets (1999).

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Sawnwood

Key points:

- The EU is the second largest market for sawnwood from Asia, accounting for 21% of the trade with Asia by value.
- The EU is the largest importer of sawnwood from Africa, accounting for 91% of Africa's trade by value with the four major markets.
- The EU accounts for 38% of the value of sawnwood exports from South America.
- EU imports account for nearly half of Russia's trade in sawnwood.

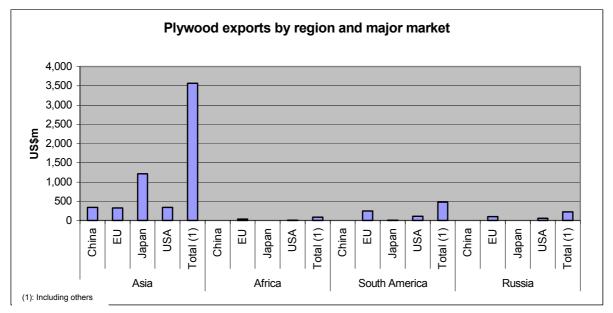


Source: FAO FAOSTAT online database

Plywood

Key points:

- The EU is the second largest market for Asian plywood, accounting for 9% of trade by value.
- The EU is the largest importer of plywood from Africa, accounting for 43% of Africa's (very modest) trade by value.
- The EU accounts for 51% of the value of plywood exports from South America.
- EU imports account for nearly half of Russia's plywood exports.



Source: FAO FAOSTAT online database

ANNEX 2: ASSUMPTIONS USED IN THE ANALYSIS

Assumptions	Brazil	Cameroon	Indonesia	
Effectiveness of timber licensing scheme	No illegal timber enters the EU	No illegal timber enters the EU	No illegal timber enters the EU	
Share of illegal timber of tropical (hardwood) round and sawnwood production as well as of exports of these products to the EU	20% (in Amazon region)	50%	70%	
Amount of log and export taxes	General taxes on revenue PIS (1.65% domestic) COFINS (7.6% domestic) ICMS (12-17% domestic) CPMF (0.38% domestic and exports)	Felling tax = 0.025 * (Price FOB/m³ - 15%) Export tax = 0.175 * (Price FOB/m³ - 15%) Factory admission fee = 0.0175 * (domestic price/m³)	Non-tax levied by central govt. a. Reforestation fund b. Forest resource provision Tax levied by central govt. Tax & non-tax levied by local govt. Other levies Export tax 15% included in the price	
Other	Plantation-based wood, whether softwood or eucalyptus, is 100% legal and is consequently excluded from the analysis			

To simplify the analysis it was assumed that the timber licensing scheme is technically effective and no illegal timber enters the EU from the Partner Countries.

In Brazil, the scope of the analysis is restricted to tropical timber and natural forests. With a recent amendment of legislation legalising forest conversion for agricultural production, the share of illegal timber dropped to 20% (from 80%) in the Amazon region (¹⁴). The greater part of the country's natural forests are located in this region, and so it was assumed that the estimate applies to all natural forest. Plantation wood is much less vulnerable to illegal practices, since plantation owners usually exercise efficient control over their assets. It was therefore assumed that timber from plantations is fully legal.

In Cameroon, the percentage of illegal timber is estimated to be 50% (¹⁵). It is based on data provided by WWF (2004). In Indonesia, reports indicate that the share of illegal logging is 73% (¹⁶). However, the estimate is based on the situation in the 1990s and it is somewhat dated. The Ministry of Forestry has recently lowered the Annual Allowable Cut and reduced the issuance of harvesting licenses, so that in 2003 only about 10-15% of the estimated consumption would have been legal. In this study, the share of illegal logging was established at 70%. In Northwestern Russia in 2002, legal timber production was reportedly 33 million m³ while illegal production was estimated at 11 million m³ (¹⁷).

The calculations made in this study are based on the assumption that the share of illegal timber in exports is the same as in roundwood production.

¹⁴ McQueen (ed.) 2003

¹⁵ WWF (2004).

¹⁶ WWF (2004).

¹⁷ WWF (2003)

ANNEX 3: STAKEHOLDER CONSULTATIONS

Date	Event	Location	Attendance	Outcome
Apr 02	Stakeholder workshop	Brussels	±150 people; all major international and EU stakeholder groups	Initiation of EU FLEGT Action Plan
Aug 02	Side event on combating illegal logging and associated trade	World Summit on Sustainable Development (WSSD), Johannesburg	±100 people; all major international stakeholder groups	Input to design of FLEGT initiative
Oct 02	Industry dialogue	Brussels	±10 people; EU industry federations	Awareness raising of EU proposal
Oct 02	Seminar on Prohibiting Illegal Timber Imports: Options for Europe (organised by FERN)	Brussels	±50 people; all major EU stakeholder groups	Input to design of FLEGT initiative
Nov 02	European Tropical Forest Advisers Group	Frankfurt	±30 people; EU Member State experts	Input to joint Commission-MS work programme
Feb 03	Meeting between Nielson Cabinet and NGO coalition	Brussels	±10 people; coalition of EU NGOs	Exchange of views and information
Jun 03	Stakeholder workshop on the EU FLEGT Action Plan (organised by RIIA) [1]	London	±100 people; all major EU stakeholder groups	Input to design of FLEGT initiative
Jul 03	Industry dialogue	Brussels	±10 people; EU industry federations	Awareness raising of EU proposal; exchange of views and information
Sep 03	Stakeholder workshop on aspects of the EU Action Plan (organised by RIIA)	London	±30 people; all major stakeholder groups	Input to design of FLEGT initiative
Oct 03	Stakeholder workshop on aspects of the EU Action Plan (organised by RIIA)	London	±50 people; all major EU stakeholder groups	Input to design of FLEGT initiative
Oct 03	Africa Ministerial Conference for Forest Law Enforcement and Governance (AFLEG)	Cameroon	±250 people; all major international and EU stakeholder groups	Initial presentation to African stakeholders
Nov 03	Open seminar on the EU FLEGT Action Plan (organised by Govt of Finland)	Helsinki	±30 people; all local stakeholder groups	Exchange of views and information
Nov 03	European Tropical Forest Advisers Group	Helsinki	±20 people; EU Member State experts	Input to joint Commission-MS work programme
Dec 03	Industry dialogue	Brussels	±10 people; EU industry federations	Dialogue on complementary private sector initiatives
Jan 04	EU industry working group on FLEGT	Brussels	±10 people; EU industry federations	Establishment of an industry FLEGT working groups
Feb 04	Informal Member State co-ordination meeting	Brussels	±20 people; Member States representatives	Preparation of join consultative missions to potential partner countries
Apr 04	Stakeholder workshops on the impact assessment of the EU FLEGT Action Plan in selected potential partner countries	Yaoundé; Brasilia; Jakarta	±20 people in each case; local stakeholder groups	Input from local stakeholders to design of FLEGT licensing scheme
May 04	Consultation meetings with Government of Ghana, Malaysia and Indonesia (part of an ongoing programme of consultations with potential partner countries).	in situ	Commission, Member States & host govt.	Initial consultation with potential partner countries
May 04	Stakeholder workshop on the impact assessment of the EU FLEGT Action	Brussels	±20 people; all major EU Stakeholder groups.	Input from EU stakeholders to design of FLEGT licensing scheme

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