ENQUIRY ON MCPFE QUANTITATIVE INDICATORS FOR SUSTAINABLE FOREST MANAGEMENT

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Reporting Form 1: Forest area

Country: United Kingdom

MCPFE indicator 1.1: Area of forest and other wooded land, classified by forest type and by availability for wood supply, and share of forest and other wooded land in total land area

Table 1: Forest area

					By forest type	By forest type						
	Cotogony	Ref.	Total area	(1000 ha)								
	Category	year	(1000 ha)	predominantly coniferous	predominantly broadleaved	mixed						
Code			T	С	В	М						
1.1	Forest	2005	2845	1555	1080	210						
		2000	2793	1562	1031	200						
		1990	2611	1526	905	180						
1.1.1	Forest available for wood	2005	2375	1515	730	130						
	supply	2000	2323	1522	681	120						
		1990	2141	1486	555	100						
1.2	Other wooded land	2005	20	0	20	0						
		2000	20	0	20	0						
		1990	20	0	20	0						
1.2.1	Other wooded land	2005	0	0	0	0						
	available for wood supply	2000	0	0	0	0						
		1990	0	0	0	0						
1.3	Total forest and other	2005	2865	1555	1100	210						
	wooded land	2000	2813	1562	1051	200						
		1990	2631	1526	925	180						

Data sources:

Forest area: FRA 2005 - UK report

Forest available for wood supply: Based on NIWT HF Cat 1 (see comments)

Other wooded land area: FRA 2005 - UK report

OWL available for wood supply: None

Forest area/OWL/FOWL by forest types 2: FRA 2005 - UK report workings and NIWT mixed (see comments)

Country specifications:

Main categories included in "OWL": Wood pastures, as in FRA 2005 and FRA 2000

Minimum height of trees: 2 metres in air photos, and potential in survey

Approach to calculation/specification for FAWS: see comments

Data quality:

Likely range of true value of latest estimate reported (in 1000 ha):

Forest area: 2750 - 3000 FAWS area: 2200 - 2550 OWL area: 10 - 100

Total FOWL area: 2750 - 3100

Country comments:

Difference between total forest and forest available for wood supply is estimated to total 470,000 ha and split by type (40C / 350B / 80M) for all years; this was estimated as being the difference between High Forest Cat 1 and total species in NIWT 95-99, plus half of woods <2ha. Mixed was estimated as 7% from NIWT (as in FRA 2000), subtracted equally from conifer and broadleaved figures in FRA 2005 workings.

- 1. The share of FOWL in total land (see indicator text) will be calculated by UNECE, using figure for "total land" as in FAO FRA2005.
- 2. Data sources by forest type should be given separately for "predominantly coniferous", "predominantly broadleaved" and "mixed", in the categories "forest area", "OWL" and "Total FOWL" if sources differ.

Reporting Form 2: Growing stock

Country: United Kingdom

MCPFE indicator 1.2: Growing stock on forest and other wooded land, classified by forest type and by availability for wood supply

Table 2: Growing stock

			T-4-1		By forest type	By forest type						
	Category	Ref.	Total growing stock	(1000 m³)								
	Category	year	r (1000 m³)	predominantly coniferous	predominantly broadleaved	mixed						
Code			T	С	В	M						
2.1	Forest	2005	340000	231000	85000	24000						
		2000	308000	200000	86000	22000						
		1990	266000	144000	103000	19000						
2.1.1	Forest available for	2005	300000	217000	62000	21000						
	wood supply	2000	267000	186000	62000	19000						
		1990	222000	132000	74000	16000						
2.2	Other wooded land	2005	1000	0	1000	0						
		2000	1000	0	1000	0						
		1990	1000	0	1000	0						
2.2.1	Other wooded land	2005	0	0	0	0						
	available for wood	2000	0	0	0	0						
	supply		0	0	0	0						
2.3	Total forest and other	2005	341000	231000	86000	24000						
	wooded land	2000	309000	200000	87000	22000						
		1990	267000	144000	104000	19000						

Data sources:

Growing stock on forest area: FRA 2005 - UK report

Growing stock on forest available for wood supply: Commercial in FRA 2005 - UK report

Growing stock on OWL available for wood supply: Estimate based on area

Growing stock on total FOWL area: Sum of the above

Growing stock according to forest types²: FRA 2005 - UK report (workings - see comments)

Country specifications:

Minimum diameter (DBH) used: 7 cm Minimum top diameter used: 7 cm Minimum branch diameter used: 7cm

Is volume above ground (AG) or above stump (AS) ?: AG

Data quality:

Likely range of true value of latest estimate reported (in 1000 m³):

Growing stock on forest area: 300000 - 380000 Growing stock on FAWS: 250000 - 350000 Growing stock on total FOWL:300000 - 380000

Country comments:

Results from integrated modelling based on NIWT 95-99 are still not available, so these are the same estimates given in FRA 2005. Conifer and broadleaved initially from workings for FRA T10 and comments on FRA T5; as indicated in FRA 2005 there are concerns about some of the internal consistency and extrapolations(e.g. broadleaved 1990). Mixed was estimated as 7%, subtracted equally from conifers and broadleaves, to give breakdown by type. FAWS by type are estimates based on the other figures; detailed calculations not reworked for this report.

- 1. Growing stock is measured over bark.
- 2. Data sources on growing stock by forest type should be given separately for "predominantly coniferous", "predominantly broadleaved" and "mixed", in the categories "forest area", "OWL" and "Total FOWL" if sources differ.

Reporting Form 3: Age structure and/or diameter distribution

Country: United Kingdom

MCPFE indicator 1.3: Age structure and/or diameter distribution of forest and other wooded land, classified by forest type and by availability for wood supply

Table 3.1: Age class distribution (even aged stands)

		Ф	Age class									
		enc ar					(100	0 ha)				
Code	Category	Reference year	≤10 years	11-20	21-40	41-60	61-80	81-100	101-120	121-140	>140	Unspecif ied
			а	b	С	d	е	f	g	h	i	j
3.1	Forest: even-	2005	266	299	778	522	301	147	89	79	71	293
	aged stands	2000	264	334	815	524	235	117	80	79	52	293
		1990	333	403	735	414	191	93	79	47	44	272
3.1.4	of which:	2005	253	270	680	404	219	103	58	49	46	293
	FAWS even-	2000	238	301	706	403	167	82	50	49	34	293
	aged stands	1990	297	345	613	314	136	59	48	29	28	272
Forest	: even-aged stand	ds by fo	rest type:									
3.1.1	predominantly	2005	148	210	599	281	100	25	9	7	7	169
	coniferous	2000	156	265	622	260	56	15	7	7	6	168
		1990	265	311	511	198	56	11	7	4	5	158
3.1.2	predominantly	2005	94	69	130	204	176	109	72	65	58	103
	broadleaved	2000	89	48	141	225	159	92	66	66	41	104
		1990	47	66	178	187	120	74	65	39	35	94
3.1.3	mixed	2005	24	20	49	37	25	13	8	7	6	21
		2000	19	21	52	39	20	10	7	6	5	21
		1990	21	26	46	29	15	8	7	4	4	20

Data sources:

Age classes for even aged forests: NIWT 1995-99 (as reported in Forestry Statistics) and adjustments
Age classes for even aged FAWS: Not-AWS by planting year estimated as in Table F1, then subtracted
Age classes for even aged forests according to forest types ²: NIWT 1995-99 (as reported in Forestry Statistics) and adjustments

Country specifications:

Method to determine age: Planting years in NIWT, from estate records or estimated on site

Data quality:

Likely range of latest estimate reported (in 1000ha) 3:

Age classes, on average for even aged forests:

Age classes, on average for even aged FAWS:

Country comments:

Unspecified is internal open space, coppice and felled. GB NIWT 1995-99 adjusted to 2000 and N Ireland added. NIWT breakdown is by species. Applied conifer species age breakdown to derive predominantly conifer type, similar for broadleaved, mixed by subtraction. 1990 and 2005 modelled from this 2000 base, adjusted to match totals in F1.

- 1. Respondents are asked to intra- or extrapolate data for age classes if data derived from inventories is from other than reference dates requested.
- 2. Data sources of age classes of forests by forest type should be given separately for "predominantly coniferous", "predominantly broadleaved" and "mixed" if sources differ.
- 3. Data quality should be reported separately for age classes or groups of age classes, if data quality differs between classes.
- 4. If data is only available for the class "Forest available for wood supply", please provide data for this class and provide the information under "Country comments".

Table 3.2 Diameter distribution (uneven aged stands)

				Uneve	n aged							
	Category	Ref.	Ref. Diameter classes in cm									
	Calegory	year	/ear (in m³/ha)									
Code			0-19	20-39	40-60	>=60						
			а	b	С	d						
3.2	Forest: uneven-	2005	0	0	0	0						
	aged stands	2000	0	0	0	0						
		1990	0	0	0	0						
3.2.4	of which:	2005	0	0	0	0						
	FAWS uneven-	2000	0	0	0	0						
	aged stands	1990	0	0	0	0						
Forest	: uneven-aged sta	ands by forest type:										
3.2.1	predominantly	2005	0	0	0	0						
	coniferous	2000	0	0	0	0						
		1990	0	0	0	0						
3.2.2	predominantly	2005	0	0	0	0						
	broadleaved	2000	0	0	0	0						
		1990	0	0	0	0						
3.2.3	mixed	2005	0	0	0	0						
		2000	0	0	0	0						
		1990	0	0	0	0						

Data sources:

Diameter distribution for uneven aged forest: In NIWT, all areas assigned to a single age class, so no uneven aged forest identified

Diameter distribution for uneven aged FAWS:

Diameter distribution for uneven aged forest according to forest types 2:

Data quality:

Likely range of latest estimate reported (in m ³/ha):

Diameter distribution for even aged forests:

Diameter distribution for even aged FAWS:

Country comments:

It would be possible to identify some uneven aged forest by a supplementary analysis of NIWT data, selecting sections containing elements of more than one age class. However no such analysis has yet been done, and the data recorded may mean that it would not identify all uneven aged. Also diameter was not recorded. Better information may be available from the next National Inventory, for which the first half of field survey is expected to report in 2013.

- 1. Diameter classes refer to diameter at 1.3 m height above ground (d.b.h., d 1.3).
- 2. Data sources of uneven-aged forest by forest type should be given separately for "predominantly coniferous", "predominantly broadleaved" and "mixed" if sources differ.
- 3. If data is only available for the class "Forest available for wood supply", please provide data for this class and provide the information under "Country comments".

Reporting Form 4: Carbon stock

Country:

United Kingdom

MCPFE indicator 1.4: Carbon stock of woody biomass on forest and other wooded land

Table 4: Carbon stock

	Category	Ref.	Carbon stock of woody biomass total	of total car		of total carbon stock: dead wood	
		year	totai	above ground	below ground	adda wood	
				(ton ca	arbon)		
Code			Т	AG	BG	DW	
4.1	Forest	2005	115100000	95000000	17000000	3100000	
		2000	106600000	88000000	15500000	3100000	
		1990	98600000	82000000	13500000	3100000	
4.2	Other wooded land	2005	600000	500000	100000	0	
		2000	600000	500000	100000	0	
		1990	600000	500000	100000	0	
4.3	Total forest and other	2005	115700000	95500000	17100000	3100000	
	wooded land	2000	107200000	88500000	15600000	3100000	
		1990	99200000	82500000	13600000	3100000	

Data sources:

Carbon stock of woody biomass³: FRA 2005 - UK report (workings, less rounded than in report), deadwood and total revised to use the new deadwood estimates in Table F15

Conversion factors: FRA 2005 - UK report

Country specifications:

Thresholds used for "woody biomass" (e.g. min. diameter): 7cm diameter for growing stock and fallen trees, 15 cm diameter for other deadwood

Conversion factors used: m3 to biomass odt: 0.43 conifers, 0.83 broadleaves; odt to tC: 0.5

Data quality:

Likely range of latest estimate reported on total FOWL (ton carbon):

Carbon stock of total woody biomass: 100 million - 130 million

Carbon stock of above ground living woody biomass: 85 million - 105 million Carbon stock of below ground living woody biomass:15 million - 19 million

Carbon stock of dead wood: 3 million - 6 million

Country comments:

- 1. Note that carbon stock in soils is reported by ICP Forests (Level I).B14
- 2. Note that total woody biomass includes deadwood. Above and below ground biomass refer to living parts only (as in IPCC GPG LULUCF and FAO 2004).
- 3. Data sources: please specify sources separately for forest, other wooded land and total FOWL if sources differ.
- 4. Conversion factors: Please list all conversion factors such as biomass expansion factors and indicate related source of conversion factor if more than one factors are used.
- 5. "Below ground living woody biomass": The threshold for fine roots to be included is 2 mm diameter, below this threshold fine roots often cannot be distinguished empirically from soil organic matter or litter. If other than 2 mm threshold is used for fine roots, please specify under "Country specifications".

Reporting Form 5: Forest damage

Country: United Kingdom

MCPFE indicator 2.4: Forest and other wooded land with damage, classified by primary damaging agent (abiotic, biotic and human induced) and by forest type

Table 5: Forest damage

			Total area	Primarily d			amaged by agents	-	primarily induced
	Category	Ref. year	with damage	Insects & disease	Wildlife & grazing	Storm, wind, snow, etc.	Fire	Forest operations	Other
	Unit					(1000 ha)			
Code			Т	ID	WG	SW	F	FO	0
5.1	Forest	2005	56	5	45	5.5	0.5	0	0
		2000	56	5	45	5.5	0.5	0	0
		1990	56	5	45	5.5	0.5	0	0
5.2	Other wooded	2005	0	0	0	0	0	0	0
	land	2000	0	0	0	0	0	0	0
		1990	0	0	0	0	0	0	0
5.3	Total forest and	2005	56	5	45	5.5	0.5	0	0
	other wooded land	2000	56	5	45	5.5	0.5	0	0
		1990	56	5	45	5.5	0.5	0	0
	by forest type:								
5.3.1	pred. coniferous	2005	23	2	15	5.5	0.5	0	0
5.3.2	pred. broadleaved	2005	30	3	27	0	0	0	0
5.3.3	mixed	2005	3	0	3	0	0	0	0

Data sources: (see Reporting note 9)

Insects and diseases: Extrapolated from annual estimates in Global FRA 2005 UK report

Wildlife and grazing: NIWT 1995-99, mammal bark stripping and browsing > 50% of trees affected

Storm, wind, etc: Global FRA 2005 - UK report, text of 8.2.3, based on NIWT 1995-99

Fire: Global FRA 2005 - UK report, text of 8.3.1 Forest operations: No extensive damage reported

Other: No extensive damage reported

Country specifications:

Minimum size of damaged FOWL reported (recommended: minimum size >1 ha): sections in sample 1 ha Criteria and minimum thresholds used to determine area as "damaged": see sources

Criteria used to determine which agents were "primarily" damaging: each cause assessed separately

Human-induced damages reported under "Other": none

Data quality:

Likely range of latest estimate reported for total FOWL (in 1000 ha):

Insects and diseases: n.a. - monitoring data are not available for this basis of reporting

Wildlife and grazing: 40 - 80 (estimate based on a single survey in 1995-99)

Storm, wind, etc: 3 - 10 (estimate based on a single survey in 1995-99)

Fire: 0.2 - 2 (on assumption that damage only lasts for one year)

Forest operations: n.a.

Other: n.a.

Country comments:

For damage from insects and disease, the threshold (as in FRA 2005) is "cause mortality or such severe dieback that the forest ecosystem changes", rather than the lower levels reported in Level I monitoring.

- 1. Damaged areas to be reported is areas with <u>damage present in the reporting year</u>. Note: this is different from FAO FRA 2005, where newly damaged area in the respective year was requested.
- 2. It is up to the countries to define the threshold level for the minimum size of damaged forest and other wood land to be reported. It is recommended that the minimum size be >1 ha (or corresponding level of other characteristics).

- 3. "Primarily" is mainly related to the severity of damage. The area damaged by various agents (no matter which kind of agent and how many subsequent agents) has to be counted just once.
- 4. Sub-class "Primarily damaged by biotic agents Wildlife and grazing": this category includes a range of damages by different wildlife, including bark removal by deer and damages caused by rodents. Please use "Country comments" to specify types of damages included.
- 5. Sub-class "Primarily damaged by abiotic agents Fire": in this enquiry, as in the MCPFE 2003 report, fire is categorized as an abiotic agent. However, a large part of fires affecting forests are human induced. Please indicate under "Country comments:" the % of area affected by fire that is human induced.
- 6. Sub-class "Primarily damaged by abiotic agents Storm, wind, snow, etc." comprises: Storm, wind, snow, drought, mudflow, avalanche and other identifiable abiotic factors.
- 7. Sub-class "Damage primarily human induced Forest operations": these include damages incurred by road building (permanent roads, landings) or harvesting damage, incl. through skidding tracks, hauling and transport.
- 8. Sub-class "Damage primarily human induced Other": these include e.g. damage from visitors to forests, vandalism, etc. Note that human induced fire is not to be reported in this class, but to be specified under "Country comments". Please indicate which "other" damage classes are reported here.
- 9. Data sources: please specify sources separately for forest, other wooded land and total FOWL if sources differ.

Reporting Form 6: Increment and fellings

Country: United Kingdom

MCPFE indicator 3.1: Balance between net annual increment and annual fellings of wood on forest available for wood supply

Table 6: Increment and fellings

	Forest available for wood supp					
Ref. year	Net annual increment	Annual fellings				
	(1000 m³ overbark)					
Code	6.1	6.2				
2005	20700	9900				
2000	20700	9400				
1990	18000	8000				

Data sources:

Increment: UK Indicators of Sustainable Forestry 2002

Fellings: Based on removals

Country specifications:

Method used to determine "fellings": Removals (underbark) x 1.25, rounded to 100,000 m3

Data quality:

Likely range of latest estimate reported (in 1000 m3):

Increment: 16000 - 22000 Fellings: 9500 - 11500

Country comments:

Factor of 1.25 combines factors for underbark to overbark (1.12 SW, 1.14 HW) and overbark to standing volume (1.11).

Reporting notes: none

Reporting Form 7: Roundwood

Country:

United Kingdom

MCPFE indicator 3.2: Value and quantity of marketed roundwood

Table 7: Roundwood

	Marketed roundwood								
	Volu	ume	Va	lue					
Ref. year			(million	([national					
	(1000 m³)	(m³/ha FAWS)	[national	currency]/ha					
			currency])	FAWS)					
Code	7.1	7.2	7.3	7.4					
2005	7930	3	196	83					
2000	7550	3	196	84					
1990	6370	3	178	83					

Data sources:

Marketed roundwood volume: UK report for FRA 2005, converted back to underbark Marketed roundwood value: UK report for FRA 2005, converted back to national currency

Country specifications:

Bark conversion factor from "over bark" to "under bark": Divide by 1.120 for softwood and by 1.143 for hardwood Approach used to determine "marketed": All identified in FRA 2005 assumed to be marketed Approach used to determine value: See UK report for Global FRA 2005

Data quality:

Likely range of latest estimate reported (in 1000 m³):

Volume: 7800 - 8400 Country comments:

- 1. "Marketed" roundwood comprises all roundwood sold on markets. It excludes roundwood harvested for self-consumption (subsistence) and other forms of uses without market transaction.
- 2. Roundwood is to be reported "under bark".
- 3. The value reported should be the market value at the site of removal. If possible, felled (roadside) values should be reported. If a different basis is used (e.g. standing sales value), values should be converted to felled (roadside). In case where values are obtained from a point further down the production chain, transport costs and possible handling and/or processing costs should be discounted. Values and conversion factors used in the calculation should be provided in the country specifications.

Reporting Form 8: Non-wood Goods

Country:

United Kingdom

MCPFE indicator 3.3: Value and quantity of marketed non-wood goods from forest and other wooded land

Table 8: Non-wood Goods

	Marketed plant	ar	N	Marketed <u>plant</u> mater	•		Marketed	ar	N	larketed <u>anima</u> matei	
Code	product / raw material	Ref. year	Unit	Quantity	Value (1000 [nation. currency])	Code	animal product / raw material	Ref. year	Unit	Quantity	Value (1000 [nation. currency])
ပိ				Q	V	တ				Q	V
	Christmas trees	2005	pcs	6500	52000		Game meat	2005	Sé	3500	3500
8.1		2000	1000 p	5500	35750	8.8		2000	tonnes	2600	2600
		1990	100	2500	12500			1990	to	800	800
	Mushrooms and	2005	3S	50	375		Game harvest	2005	bcs	0	0
8.2	truffles	2000	tonnes	50	375	8.9		2000	1000 p	0	0
		1990	악	50	n/a			1990		0	0
	Fruits, berries and	2005	3S	5	16	0	Pelts, hides,	2005	sod	0	0
8.3	edible nuts		skins and 2000 trophies			0	0				
		1990	악	5	n/a		·	1990	1000	0	0
	Cork	2005	Se	0	0	_	Wild honey and	2005	Se	183	500
8.4		2000	tonnes	0	0	8.1	bee-wax	2000	tonnes	122	800
		1990	달	0	0			1990	14	200	n/a
	Resins, raw material-	2005	Ś	29	6		Raw material for	2005	Ś	0	0
8.5	medicine, aromatic products, colorants,	2000	tonnes	29	6	_	medicine, colorants	2000	tonnes	0	0
	dyes	1990	to	29	n/a		Coloranto	1990	to	0	0
	Decorative foliage,	2005	SS	45	4000	~	Other animal	2005	Sé	0	0
8.6	incl. ornamental	2000	tonnes	45	4000	3.13	products	2000	tonnes	0	0
	plants (mosses,)	1990	유	45	n/a	~		1990	to	0	0
	Other plant products	2005	es	120	432						
8.7		2000	tonnes	120	432						
		1990	ţ	120	n/a						

Data sources:

For each non-wood good volume / value reported: FRA 2005 - UK report (inc workings)

Country specifications:

For each non-wood good volume reported, as necessary: See UK report for Global FRA 2005 For each non-wood good value reported, as necessary: See UK report for Global FRA 2005

Data quality:

Likely range of true value for each non-wood good volume reported

Christmas trees: 1000 pieces: 6000 - 7000 for FRA 2005, but more recent market reports indicate that imports are taking a

much larger share

Mushrooms and truffles: tonnes: 30 - 80

Cork: tonnes: 0 - 0

Resins, raw material: medicine, ar. products, colorants, dyes: tonnes: 20 - 40 Decorative foliage, incl. ornamental plants (mosses,..): tonnes: 30 - 60

Other plant products: tonnes: 80 - 200 Game meat: tonnes: 2500 - 5000 Game harvest: 1000 pieces: 0 - 0

Pelts, hides, skins and trophies: 1000 pieces: 0 - 0 Wild honey and bee-wax: tonnes 120 - 250 Raw material for medicine, colorants: tonnes: 0 - 0

Other animal products: tonnes: 0 - 0

Country comments:

Data quality: range for fruits, berries, edible nuts (missing from above box), tonnes: 2 - 10

- 1. "Marketed" non-wood goods comprise all non-wood goods sold on markets. It excludes non-wood goods harvested for self-consumption (subsistence) and other forms of uses without market transaction.
- 2. Reference area for reporting is "Total FOWL", not further divided into sub-classes "Forest" and "Other wooded land". If data is available for sub-class "Forest" only, please report on this sub-class with explicit reference to "Forest" and provide note under "Country comments". If data is available for certain forest areas or ownership classes (e.g. state forests), but not for others, data should be reported with explicit indication of area (ha) and/or reference to the ownership class.
- 3. The classes "Christmas trees", "Game harvest" as well as "Pelts, hides, skins and trophies" are to be reported in 1000 pieces, all other proucts in tonnes. If goods are reported in different measurement units, please specify under "Country specifications".
- 4. "Christmas trees", which in many countries are not classified as forests or OWL, should be reported. Countries with Christmas tree plantations not classified as forests should report this fact under "country comments".
- 5. "Mushrooms and truffles" and "Fruits, berries and nuts": Products from mushroom farms or fruits from trees outside forests, such as orchards, are to be excluded.
- 6. "Resins, raw material for medicine, aromatic products, colorants and dyes" includes extracts e.g. tannins, raw material for industrial extracts, essential and cosmetic oils.
- 7. "Other plant products" includes other products collected from forest and other wooded land, such as fooder and forage (grazing, range), reproductive material (e.g. seeds, parts of plants) or other plant-based raw material for food and beverages. Please specify further categories if necessary.
- 8. "Game meat" (in tonnes) and "Game harvest" (in 1000 pieces) "from forest and other wooded land" is to be understood to include game whose habitat is forest-related or –dependent. Please use expert judgement in classifications and provide information on game classes included under "country comments". Meat and harvest from game farms are to be excluded. Note that marketed game only is to be included. Licenses for hunting are to be reported as "Marketed Service" under Reporting Form 9 "Services".
- 9. A separate Pilot Study on NWGS is being prepared.
- 10. Please specify unit for other plant and animal products (item 8.7 and 8.13)

Reporting Form 9: Services

Country:

United Kingdom

MCPFE indicator 3.4: Value of marketed services on forest and other wooded land

Table 9: Marketed Services

Code	Category	Ref. year	Value of marketed service (1000 [national currency])
9.1	Recreational services	2005	18000
9.2	Environmental services	2005	n.a.
9.3	Protective services	2005	n.a.
9.4	Other services	2005	n.a.

Data sources:

Recreational services value: Forestry Commission Annual Reports & Accounts

Environmental services value: n.a. Protective services value: n.a. Other services value: n.a.

Country specifications:

Method of estimation used for:

Marketed recreational services value: Income classified as "Recreation, Conservation & Heritage"

Marketed environmental services value: n.a. Marketed protective services value: n.a.

Marketed other services value: n.a.

Reference area if different from "Total FOWL": e.g. ownership class or 1000 ha: State (FC) woodland in GB only

Data quality:

Likely range of true value for latest estimate provided 1000 [national currency]:

Value of marketed recreational services: £15m - £25m

Value of marketed environmental services: n.a.

Value of marketed protective services: n.a.

Value of other marketed services: n.a.

Country comments:

Total RCH income from 2005-06 Accounts for England, Scotland, Wales = £17,911k; total rounded for table. FC is thought to cover most of marketed recreation, but the total in accounts will not include all the income of those providing services through franchises (e.g. bike hire, cafes in forest centres). Marketed environmental and protective services are thought to be small. Among other services, windfarms are of increasing importance, but statistics on value are not available.

- 1. This is a pilot enquiry, intended to show which data is available in different countries, and in which specifications.
- 2. Marketed services reported should be forest-dependent or mainly forest-related, but are not necessarily to be marketed by forest owners (e.g. eco-tourism). Please provide information on types of services included in the different classes under "Country specifications" and/or "Country comments".
- 3. <u>Marketed recreational services include</u> e.g. hunting or fishing licences, renting of huts and houses as well as forest-based leisure, sport and outdoor adventure activities and educational services that are not free of cost to consumers (the pubic, schools,..). Forest-based means that forests constitute an essential element of the service marketed. Please use "Country comments" to report on further criteria used for delineation. Recreational services not exchanged via market transaction are not to be reported. (see also MCPFE indicator 6.10)
- 4. <u>Marketed environmental services</u> include services related to MCPFE indicator 4.6 (in-situ or ex-situ gene conservation of genetic resources) as well as MCPFE indicator 4.9 (protected forest area) e.g. nature protection on a voluntary contractual basis with compensation or other payments from private or public bodies (this includes NATURA 2000). Note that the reporting under this category is complementary to reporting under indicator 4.9 (Reporting Form 17). While in indicator 4.9 the main objective is to determine the quality of protection, the main focus here is to determine monetary values from market or quasi-market transaction for environmental services.
- 5. <u>Marketed protective services</u> include those related to MCPFE indicators 5.1 and 5.2 (soil, water and other environmental functions as well as infrastructure and managed natural resources) on a voluntary contractual basis with compensation or other payments from private or public bodies.
- 6. <u>Other marketed services</u> include payments to woodland owners for licences for gravel extraction, telecommunication masts, wind farms and electricity distribution.
- 7. The reference area for reporting is "Total FOWL", not further divided into sub-classes "Forest" and "other wooded land". If data is available for some forest areas, e.g. for state forests or sub-class "Forest", please give an expert judgement on the likely value for "total forest and other wooded land". Please report on actually available data on which expert judgement is based under "Country comments".

Reporting Form 10: Forests under management plans

Country:

United Kingdom

MCPFE indicator 3.5: Proportion of forest and other wooded land under a management plan or equivalent Table 10: Forests under management plans

	Category	Ref. year	Management plans	Equivalents
		yeai	(%)	(%)
Code			MP	EQ
10.1	Forest	2005	51	14
10.2	Other wooded land	2005	0	0
10.3	Total forest and other wooded land	2005	51	14

Data sources: (see Reporting notes)

Management plans: Personal communications from state forest agencies and from Grants & Licences Equivalents: Personal communications from state forest agencies, estimate for other woodland

Country specifications:

Types of documents included in category:

Management plans: Forest design plans (state forests); management plans in grant schemes

Equivalents: Other FC/FS state forests; other grant-aided woodland.

Data quality:

Likely range of true value for latest estimate provided for total FOWL (%):

Management plans: 50 - 55

Equivalents: 10 - 20

Country comments:

Formal Forest Design Plans now exist for most FC/FS state forest: the only areas reported as not covered are 4% in Scotland and 9% in England, total about 38,000 ha as "equivalents" only. For other woodland, 834,000 ha in GB reported as having management plans in grant system; estimate for NI added. Total grant-aided woodland is about 1 million hectares, and should considered to have an "equivalent" if not a formal management plan. Areas covered by a felling licence could also be considered as "equivalent", but not included here.

- 1. Figures to be reported separately and exclusively for the two categories. The percentage of forest land and percentage of other wooded land with
 - a) <u>forest management plans</u>, defined by the MCPFE as "Information (in the form of text, maps, tables and graphs) collected during (periodic) forest inventories at operational forest units level (stands, compartments), and operations planned for individual stands or compartments to reach the management goals (MCPFE, 2002)."
 - b) <u>equivalents</u>, defined by the MCPFE as "Information collected on forest area, at forest management or aggregated forest management unit level (forest blocks, farms, enterprises, watersheds, municipalities, or wider units), and strategies/management activities planned to reach the management or development goals". (MCPFE, 2002)
- 2. The maximum sum of area covered is up to 100% of total FOWL. Areas covered by a management plan and an equivalent should thus be counted only once, and reported in category "Management plans".
- 3. Data sources: please specify sources separately for forest, other wooded land and total FOWL if sources differ.

Reporting Form 11: Tree species composition

Country:

United Kingdom

MCPFE indicator 4.1: Area of forest and other wooded land, classified by number of tree species occurring and by forest type

Table 11: Tree species composition

	Category	Ref.	Area	with number o	of tree species of	occurring (1000) ha)
	Category	year	1	2-3	4-5	6-10	>10
Code			а	b	С	d	е
11.1	Forest	2005	1598	1027	187	33	0
		2000	1622	972	171	28	0
		1990	1612	822	151	26	0
11.2	Other	2005	0	20	0	0	0
	wooded land	2000	0	20	0	0	0
		1990	0	20	0	0	0
11.3	Total forest and	2005	1598	1047	187	33	0
	other wooded	2000	1622	992	171	28	0
	land	1990	1612	842	151	26	0
FOWL by	forest type:						
11.3.1	predominantly coniferous	2005	1141	405	8	1	0
11.3.2	predominantly broadleaved		435	508	135	22	0
11.3.3	mixed	2005	22	134	44	10	0

Data sources: (see Reporting note 3)

For 2000, estimated from number of elements per section, recorded in NIWT 1995-99, for each forest type, analysis by J Gilbert (2006, not yet published). These proportions by forest type were then applied to the total area by forest type. For 2005 and 1990, extrapolated from this 2000 base, taking account of new planting and restocking, which have tended to increase diversity. No information for OWL - assumed to be 2-3 species.

Country specifications:

Minimum size of trees to be included:

Approach to adjustment to "forest stand" as reference area for the assessment: No adjustment. A section in NIWT was a stand, or part-stand contained in a 1 ha square.

Data quality: (see Reporting note 4)

Likely range of true value for latest estimate provided for total FOWL (%):

On average, per class:

1 tree species occurring: 50 - 60 2-3 tree species occurring: 30 - 40 4-5 tree species occurring: 5 - 10 6-10 tree species occurring: 0 - 2 >10 tree species occurring: 0 - 1

Country comments:

To estimate for 2005 from 2000, estimate that about 20% of 75,000 ha restocking is converted from single to 2-3 species/stand; assume all new woodland creation in this period at least 2-3 per stand. Figures for 1990 extrapolated on a similar basis, with about 20% of 150,000 restocking converted from single to 2-3 species, and around 20% of 180,000 ha new planting being single-species stands.

- 1. Threshold to indicate a tree species: >5% of tree cover or basal area by this tree species.
- 2. The reference area for the assessment is the forest stand.
- 3. Data sources: please specify sources separately for forest, other wooded land and total FOWL if sources differ.
- 4. Data quality: please specify data quality separately for different classes, if data quality differs between classes.

Country:

United Kingdom

MCPFE indicator 4.2: Area of regeneration within even-aged stands and uneven-aged stands, classified by regeneration type

Table 12: Regeneration

			Area of forest land with regeneration type (1000 ha)							
	Category	Ref. year	Natural regeneration	Natural regeneration enhanced by planting	Regeneration by planting and/or seeding	Coppice sprouting				
Code			NR	NP	PS	CS				
12.1	Forest: even-	2005	12	0	133	24				
	aged stands	2000	4	0	148					
		1990	0	0	113	30				
12.2	Forest:	2005	0	0	0	0				
	uneven-aged	2000	0	0	0	0				
	stands	1990	0	0	0	0				
12.3	Other wooded	2005	0	0	0	0				
	land	2000	0	0	0	0				
		1990	0	0	0	0				
12.4	Total forest and	2005	12	0	133	24				
	other wooded land	2000	4	0	148	24				
		1990	0	0	113	30				
FOWL by	/ forest type:									
12.4.1	pred. coniferous	2005	1	0	111	0				
12.4.2	pred. broadleaved	2005	9	0	12	24				
12.4.3	mixed	2005	2	0	10	0				

Data sources: (see Reporting note 2)

Forest-even aged: Forestry Statistics, UK Indicators of Sustainable Forestry 2002 Forest-uneven aged: None identified in NIWT 1995-99, so all treated as even-age

Other wooded land:

Total FOWL:

Country specifications:

Threshold used to classify area as "under regeneration" (number of years): 10

Characteristics used to determine the class "natural regeneration enhanced by planting":

characteristics to distinguish from class "natural regeneration": n/a

characteristics to distinguish from class "regeneration by planting and/or seeding": n/a

Data quality:

Likely range of true value for latest estimate provided for total FOWL (1000ha):

Regeneration type:

Natural regeneration: 8 - 20

Natural regeneration enhanced by planting: n/a

Planting and/or seeding: 120 - 150

Coppice sprouting: 18 - 30

Country comments:

The total area of restocking is about 15,000 ha a year (Forestry Statistics and supporting data tables). The area restocked by natural regeneration is 1500-1700 ha a year since 1998-99 (UKISF 2002). No data for natural regeneration enhanced by planting, so allocate the rest to planting/seeding. Total coppice area (actively managed) in NIWT 1995-99 = 24,000 ha (declined from 39,000 ha in 1980). Assume all has been actively managed (with some sprouting) in previous 10 years, and no further decline in area since 1995-99.

- 1. The class "natural regeneration enhanced by planting" also includes "regeneration by planting and/or seeding enhanced by natural regeneration". Please specify thresholds used to delineate this class under "Country specifications".
- 2. Data sources: please specify sources separately for forest even aged, forest– uneven aged, other wooded land and total FOWL and for the different regeneration types if sources differ.

Reporting Form 13: Naturalness

Country:

United Kingdom

MCPFE indicator 4.3: Area of forest and other wooded land, classified by "undisturbed by man", by "seminatural" or by "plantations", each by forest type

Table 13: Naturalness

				Area clas	ssified by		
	Catagony	Ref.	Undisturbed by	Semi-r	natural	Plantations	
	Category	year	man	Total	of which Modified natural	Fiditations	
				(100) ha)		
Code			UM	SN	MN	PL	
13.1	Forest	2005	0	921	646	1924	
		2000	0	859	646	1934	
		1990	0	734	646	1877	
13.2	Other wooded land	2005	0	20	10	0	
		2000	0	20	10	0	
		1990	0	20	10	0	
13.3	Total forest and	2005	0	941	656	1924	
	other wooded land	2000	0	879	656	1934	
		1990	0	754	656	1877	
FOWL b	y forest type:						
13.3.1	pred. coniferous	2005	0	50	18	1505	
13.3.2	pred. broadleaved	2005	0	841	628	259	
13.3.3	mixed	2005	0	50	10	160	

Data sources: (see Reporting note 1)

Area undisturbed by man: FRA 2005 - UK report

Modified natural: FRA 2005 - UK report Semi-natural: FRA 2005 - UK report Plantations: FRA 2005 - UK report

Country specifications:

Criteria or thresholds used to

Delineate "undisturbed by man" from "modified natural":
Determine "modified natural" within "semi-natural":

Determine "semi-natural" from "plantations":

Data quality:

Likely range of true value for latest estimate provided for total FOWL (1000ha):

Undisturbed by man: 0 - 20 Semi-natural: 900 - 1000 Modified natural:600 - 700 Plantations: 1850 - 2000

Country comments:

For breakdown by forest type, estimate of ancient Caledonian pinewood area from FC Scotland, and other semi-natural area derived as described in FRA 2005 UK report. Mixed is estimate based on age breakdown in NIWT 1995-99 (unpublished table, 2006). Mainly broadleaved derived by subtraction.

- 1. Data sources: please specify sources separately for forest, other wooded land and total FOWL if sources differ.
- 2. Please use "Country comments" to specify classification of "semi-natural forests" and "modified natural".

Reporting Form 14: Introduced tree species

Country:

United Kingdom

MCPFE indicator 4.4: Area of stands of forest and other wooded land dominated by introduced tree species Table 14: Introduced tree species

	Category	Ref.	Area of stands introduced tree s	•
		year	total	of which invasive
Code			Т	IN
14.1	Forest	2005	1420	0
		2000	1435	0
		1990	1380	0
14.2	Other	2005	0	0
	wooded land	2000	0	0
		1990	0	0
14.3	Total forest	2005	1420	0
	and other	2000	1435	0
	wooded land	1990	1380	0

Data sources: (see Reporting notes)

Introduced tree species: Total conifers from FRA 2005 UK report, less Scots pine from NIWT

Invasive tree species: None

Country specifications:

Reference period used to classify as "introduced": 400 years

Reference area for assessment (size of average stand): n/a ha

Criteria or thresholds used to classify species as "invasive": n/a

Data quality:

Likely range of true value for latest estimates provided for total FOWL (number):

Introduced tree species: 1400- 1500

Invasive tree species: 0 - 10

Country comments³:

The estimate of introduced tree species here consists of all conifers other than Scots pine. The main non-native broadleaves, sycamore and sweet chestnut, may have been in UK for up to 2000 years.

- 1. Threshold for stands dominated by introduced tree species:>50 % of basal area by tree species introduced. Introduced tree species ((synonyms: non-indigenous species, exotic species): Tree species occurring outside their natural vegetation zone, area or region. Includes: Hybrids (TBFRA 2000).
- 2. Data sources: please specify sources separately for forest, other wooded land and total FOWL if sources differ.
- 3. Please specify under "Country comments" which tree species were included (list of tree species and respective habitats in which they are classified as introduced and, if so, invasive).

Reporting Form 15: Dead wood

MCPFE indicator 4.5: Volume of standing and of lying deadwood on forest and other wooded land, classified by forest type

Country:

United Kingdom

Table 15: Dead wood:

		Ref.	Vol	lume of deadwo	ood
	Category	year		(m³/ha)	
		year	total	standing	lying
Code			Т	S	L
15.1	Forest	2005	3.9	0.8	3.1
		2000	3.9	0.8	3.1
		1990	3.9	0.8	3.1
15.2	Other wooded land	2005	0.0	0.0	0.0
		2000	0.0	0.0	0.0
		1990	0.0	0.0	0.0
15.3	Total forest and	2005	3.9	0.8	3.1
	other wooded land	2000	3.9	0.8	3.1
		1990	3.9	0.8	3.1
FOWL I	by forest type:				
15.3.1	pred. coniferous	2005	4.2	0.6	3.6
15.3.2	pred. broadleaved	2005	3.6	1.0	2.6
15.3.3	mixed	2005	2.8	0.7	2.1

Data sources: (see Reporting notes 4)

Standing deadwood: Unpublished analysis of NIWT 1995-99, J Gilbert (2006) Lying deadwood: Unpublished analysis of NIWT 1995-99, J Gilbert (2006)

Country specifications:

Minimum length of standing and lying dead trees reported: 2 m for lying deadwood, all dead trees and limbs for standing deadwood

Minimum diameter of standing and lying dead trees reported: 7 cm dbh for fallen trees, 15 cm for other deadwood

Data quality:

Likely range of true value for latest estimates provided for total FOWL (%):

Total standing dead wood: 0.7 - 1.4

Total lying dead wood: 2.5 - 5.0

Country comments:

Based on analysis of NIWT data, excluding Grampian and N Ireland, using data for report to be published in 2007. Revised since earlier draft that was used for Global FRA 2005.

- 1. Total volume = sum of standing and lying volume
- 2. Minimum length of standing and lying dead trees: 2 m $\,$
- 3. Minimum diameter of standing and lying dead trees: It is up to the countries to define the threshold level for the minimum size of diameter to be reported. It is recommended that the minimum size be: Standing deadwood: 10 cm d.b.h., Lying deadwood: 10 cm mean diameter
- 4. Data sources: please specify sources separately for forest, other wooded land and total FOWL if sources differ.

Reporting Form 16: Threatened forest species

MCPFE indicator 4.8: Number of threatened forest species, classified according to IUCN Red List categories in relation to total number of forest species

Country:

United Kingdom

Table 16: Threatened forest species

	Cotogony	Ref. year	vulnerable		endan	endangered		critically endangered		the wild
	Category	Rei. yeai	absolute number	in % of taxa	absolute number	in % of taxa	absolute number	in % of taxa	absolute number	in % of taxa
Code			VN	VP	EN	EP	CN	CP	XN	XP
16.1	Trees	2005	6		1		3		0	
		2000								
		1990								
16.2	Birds	2005	0		0		0		0	
		2000								
		1990								
16.3	Mammals	2005	4		0		0		0	
		2000								
		1990								
16.4	Other	2005	0		0		0		0	
	vertebrates	2000								
		1990								
16.5	Invertebrates	2005	13		21		0		4	
		2000								
		1990								
16.6	Vascular	2005	19		9		4		0	
	plants	2000								
		1990								
16.7	Cryptogams	2005	44		26		18		0	
	and fungi	2000								
		1990								

Data sources: (see Reporting notes)

Birds: IUCN 2006. 2006 IUCN Red List of Threatened Species. <www.iucnredlist.org>

Mammals: Spreadsheet of "Conservation Designations for UK Taxa" http://www.jncc.gov.uk/page-3409. Hodge, S.J. &

Broome, A.C. (1998) Database of Red Data Book species in woodlands. Forest Research. Unpublished.

Other vertebrates: as for mammals Invertebrates: as for mammals Vascular plants: as for mammals

Cryptogams and fungi:Spreadsheet of "Conservation Designations for UK Taxa" http://www.jncc.gov.uk/page-3409. Simonson, W. & Thomas, R. (1999). Biodiversity Making the Links. English Nature, Peterborough. Ward, S.D. (1999). Review No. 70 Local Biodiversity Action Plans- technical information on species: 1. cryptogamic plants and fungi. Scottish Natural Heritage, Perth. Hodge, S.J. & Broome, A.C. (1998) Database of Red Data Book species in woodlands. Forest Research. Unpublished.

Country specifications:

Please specify which main taxa in table and reporting notes are not assessed in your country:

Data quality:

Likely range of true value for latest estimates provided for "endangered" (%):

Birds: n.a. - % figures not provided
Mammals: n.a. - % figures not provided
Other vertebrates: n.a. - % figures not provided
Invertebrates: n.a. - % figures not provided
Vascular plants: n.a. - % figures not provided
Cryptogams and fungi: n.a. - % figures not provided

Country comments:

Source for trees: IUCN 2006. 2006 IUCN Red List of Threatened Species. <www.iucnredlist.org> . Percentages not calculated, as information not available on total number of species in each category.

Reporting notes:

1. Data sources: please report data sources separately for threat classes in case sources differ

Reporting Form 17: Protected forests

Country:

United Kingdom

MCPFE indicator 4.9: Area of forest and other wooded land protected to conserve biodiversity, landscapes and specific natural elements, according to MCPFE Assessment Guidelines

Table 17: Protected forests

			MCPFE	MCPFE	MCPFE	MCPFE	
	Category	Ref. year	Class 1.1	Class 1.2	Class 1.3	Class 2	
				(100	00 ha)		
Code			а	b	С	d	
17.1	Forest	2005	7	3	135	646	
		2000	7	3	135	646	
17.2	Other wooded	2005	0	0	0	0	
	land	2000	0	0	0	0	
17.3	Total forest and	2005	7	3	135	646	
	other wooded land	2000	7	3	135	646	

Data sources: (see Reporting notes)

MCPFE Class 1.1: (for 2000) MCPFE 2003 - UK report; (for 2005) not yet available, so 2000 copied MCPFE Class 1.2: (for 2000) MCPFE 2003 - UK report; (for 2005) not yet available, so 2000 copied MCPFE Class 1.3: (for 2000) MCPFE 2003 - UK report; (for 2005) not yet available, so 2000 copied MCPFE Class 2: (for 2000) MCPFE 2003 - UK report; (for 2005) not yet available, so 2000 copied

Data quality:

Likely range of true value for latest estimates provided on total FOWL (1000ha):

MCPFE Class 1.1: 5 - 10 MCPFE Class 1.2: 2 - 5 MCPFE Class 1.3: 120 - 150

MCPFE Class 2: 300 - 800 (note uncertainty about previously reported figure)

Country comments:

Figures reported in first data collection were for 1998, and have been used as estimates for 2000. Figure for MCPFE class 2 being checked, different figure in report for COST group. Estimate of changes to 2005 being prepared, expect increase in Class 2 because of new National Parks. National categories allocated to each class (see UK report for Global FRA for more detail): 1.1 = Some SSSIs that are NNRs or SACs, 1.2 = other NNRs and SSSIs with relevant management agreements, 1.3 = some woodland in National Parks, plus semi-natural woodland not above, and some PAWS/planted, 2 = other categories of semi-natural woodland.

- 1. MCPFE classes: see "Terms and Definitions", and MCPFE Assessment Guidelines as well as the relevant Explanatory Note [http://www.mcpfe.org, to be posted soon]
- 2. Reclassification of data to "Reference year" 2000: Please use the data your country reported in the first data collection in 2002, published in the MCPFE State of Europe's Forests 2003 report, the first detailed pan-European data collection using the MCPFE Assessment Guidelines. Using the data reported to the MCPFE for the MCPFE 2003 "State of Europe's Forests" as the basis, please determine status of protection of areas of the different protection classes in your country for the year 2000 as far as possible. Please document the process for further reference and use "country comments" for reporting on major aspects.
- 3. Determining state for "Reference year 2005": please assess status of each sub-class for the year 2005 as far as possible.
- 4. Data sources: please specify sources separately for forest, other wooded land and total FOWL if sources differ.

Reporting Form 18: Protective forests – soil, water and other ecosystem functions

Country:

United Kingdom

MCPFE indicator 5.1: Area of forest and other wooded land designated to prevent soil erosion, to preserve water resources, or to maintain other forest ecosystem functions, part of MCPFE Class "Protective Functions".

Table 18: Protective forests – soil, water and other ecosystem functions

Code	Category	Ref.	Soil, water and other forest ecosystem functions
		year	Subclass of MCPFE Class 3
			(1000 ha)
18.1	Forest	2005	5
		2000	5
18.2	Other wooded	2005	0
	land	2000	0
18.3	Total forest and	2005	5
	other wooded	2000	5

Data sources: (see Reporting notes)

FRA 2005 - UK report: primary function

Data quality:

Likely range of true value for latest estimates provided on total FOWL:

MCPFE Class 3 subclass: from 2 to 10 (1000ha)

Country comments:

This was an expert estimate of area of woodland with primary function protection of soil, not derived from any categories of designation.

- 1. MCPFE classes: see "Terms and Definitions", and MCPFE Assessment Guidelines as well as the relevant Explanatory Note [http://www.mcpfe.org, to be posted soon]
- 2. Reclassification of data to "Reference year" 2000: Please use the data your country reported in the first data collection in 2002, published in the MCPFE State of Europe's Forests 2003 report, the first detailed pan-European data collection using the MCPFE Assessment Guidelines. Using the data reported to the MCPFE for the MCPFE 2003 "State of Europe's Forests" as the basis, please determine status of protection of areas of the different protection classes in your country for the year 2000 as far as possible. Please document the process for further reference and use "Country comments" for reporting on major aspects.
- 3. Determining state for "Reference year 2005": please assess status of each sub-class for the year 2005 as far as possible.
- 4. Data sources: please specify sources separately for forest, other wooded land and total FOWL if sources differ.

Reporting Form 19: Protective forests – infrastructure and managed natural resources

Country: United Kingdom

MCPFE indicator 5.2: Area of forest and other wooded land designated to protect infrastructure and managed natural resources against natural hazards, part of MCPFE Class "Protective Functions".

Table 19: Protective forests - infrastructure and managed natural resources

Codo	Catagony	Ref.	Infrastructure and managed natural resources
Code	Category	year	Subclass of MCPFE Class 3 (1000ha)
19.1	Forest	2005	0
		2000	0
19.2	Other wooded	2005	0
	land	2000	0
19.3	Total forest and	2005	0
	OWL	2000	0

Data sources: (see Reporting notes)

Data quality:

Likely range of true value for latest estimates provided on total FOWL:

MCPFE Class 3 subclass: from 0 to 5 (1000ha)

Country comments:

No area has been identified as designated for these purposes

- 1. MCPFE classes: see "Terms and Definitions", and MCPFE Assessment Guidelines as well as the relevant Explanatory Note [http://www.mcpfe.org, to be posted soon]
- 2. The intention of this indicator is to identify those forests where protection of infrastructure and managed natural resources is the primary management objective. "Infrastructure" includes roads, railwys, settlements, buildings, etc. "natural resources" includes e.g. agricultural land, vineyards, orchards. This class also includes protective forests with the primary management objective being the protection of humans (e.g. from noise or visibility protection).
- 3. Reclassification of data to "Reference year" 2000: Please use the data your country reported in the first data collection in 2002, published in the MCPFE State of Europe's Forests 2003 report, the first detailed pan-European data collection using the MCPFE Assessment Guidelines. Using the data reported to the MCPFE for the MCPFE 2003 "State of Europe's Forests" as the basis, please determine status of protection of areas of the different protection classes in your country for the year 2000 as far as possible. Please document the process for further reference and use "Country comments" for reporting on major aspects.
- 4. Determining state for "Reference year 2005": please assess status of each sub-class for the year 2005 as far as possible.
- 5. Data sources: please specify sources separately for forest, other wooded land and total FOWL if sources differ.

Reporting Form 20: Forest holdings

Country: United Kingdom

MCPFE indicator 6.1: Number of forest holdings, classified by ownership categories and size classes

Table 20: Forest holdings

				Total	Nun	nber of fore	st holdings	in size clas	ses
	Forest	Ref.	Total area	number		(ab	solute numl	oer)	
	holdings (of FOWL)	year	(1000ha)	of holdings	<10 ha	11 -100 ha	101 - 500 ha	501 - 10,000 ha	>10,000 ha
Code			Т	N	а	b	С	d	е
20.1	In public	2005	983	646	0	380	101	128	37
	ownership	2000	1011	646	0	380	101	128	37
		1990	1081	646	0	380	101	128	37
20.2	In private	2005	1862	106700	82500	20600	3100	500	0
	ownership	2000	1782	102600	79800	19300	3000	500	0
		1990	1530	99800	79400	17500	2500	400	0
20.3	Other	2005	0	0	0	0	0	0	0
	ownership	2000	0	0	0	0	0	0	0
		1990	0	0	0	0	0	0	0

Data sources:

Forest holdings of FOWL:

In public ownership: Area FRA 2005 and holdings FRA 2000 - UK reports

In private ownership: Area FRA 2005, holdings from Agriculture statistics and extrapolated non-farm (see below)

In other ownership: None

Country specifications:

Minimum forest holding size reported: includes some less than 1 ha, from Agriculture statistics

Data quality:

Likely range of true value for latest estimates provided for total numbers of holdings:

In public ownership: 500 - 1000 In private ownership : 90000 - 150000

In other ownership: 0 - 0

Country comments:

Public forest area (2005) derived in same way as in FRA 2005: 838 FC/FS (as published) + 20 adjustment as in FRA T1 +125 other public as in FRA T2. Public number of holdings: assumed no net change from FRA 2000 - some rationalisation but some new. Private number of holdings based on data for farm woodlands, plus extrapolated estimate for non-farm. Extrapolation similar to method for TBFRA 2000, but using new data for total area, and now assuming that half the growth in non-farm woodland area is from new holdings, half from increase on existing holdings.

- 1. Holdings of forest and other wooded land are to be reported.
- 2. A separate Pilot Study on "Private Forest Ownership in Europe" is being prepared.

Reporting Form 21: Energy from wood

Country:

United Kingdom

MCPFE indicator 6.9: Share of wood energy in total energy consumption, classified by origin of wood

Table 21: Energy from wood

Ref. period	Total energy from wood		Directly from forests	Wood processing residues	Black liquors	Post consumer wood energy
	TJ/year	% of total		TJ/year		
Code	21.1	21.2	21.3	21.4	21.5	21.6
2005	11700	0.1	2900	1200	n/a	n/a
2000	17600	0.2	2000	700	n/a	n/a

Data sources:

Total energy from wood: Digest of UK Energy Statistics 2005 Share of national energy: Digest of UK Energy Statistics 2005 Energy directly from forests: Joint Forest Sector Questionnaire

Wood processing residues: Sawmill Survey, reported in UK Timber Statistics

Black liquors: None

Post consumer wood energy: None

Country specifications:

Approach to calculate or estimate wood directly from forests (marketed and self-consumption): Initially, this just reports JQ estimate; to be reviewed for 2007 Energy Enquiry

Data quality:

Likely range of true value for latest estimate provided:

Total energy from wood (TJ/year): 6000 - 20000

Share of national energy (%): 0.1 - 0.3

Energy directly from forests (TJ/year): 2000 - 8000 Wood processing residues (TJ/year): 1000 - 3000

Black liquors (TJ/year): n/a

Post consumer wood energy (TJ/year): n/a

Country comments:

Amount of wood directly from forests marketed (excluding self-consumption) (TJ/yr): Notes: Conversion 1TJ = 23.884 toe. DUKES: Domestic wood 0.20 mtoe; industrial wood 0.22 mtoe in 2000, 0.08 mtoe in 2005. Direct from forest, from JQ, 0.25 million gt =0.05 mtoe in 2000; 0.35 million gt = 0.07 mtoe in 2005. (Wood processing residues: sawmill survey 2004 0.1 million tonnes = 0.02 mtoe incomplete estimate). Total energy from wood implicitly includes estimates of post-consumer (including post-industrial) use, Total energy from wood implicitly includes estimates of post-consumer (including post-industrial) use. To be reviewed in preparing Joint Wood Energy Enquiry 2007.

- 1. Category "Directly from forests" comprises wood used for energy taken directly from forest, other wooded land or from trees outside forest, such as orchards, hedges etc. whether or not marketed or recorded in official statistics (the volumes concerned may be estimated on the basis of household energy use surveys). This category thus includes self-consumption. If figures for marketed wood for energy directly from forests are available, please report these under "country comments".
- 2. Category "Wood processing residues" comprises residues used for energy including wood and bark from sawmills, wood based panel mills, pulp and paper mills, furniture and secondary processing plants.
- 3. Category "Black liquors" comprises lignin etc. from chemical pulping used for energy.
- 4. Category "Post-consumer wood energy" comprises wood derived from used palettes and boxes, demolition wood etc.
- 5. Reporting is in Tera Joule (TJ), net calorific value (NCV).

Reporting Form 22: Accessibility for recreation

Country:

United Kingdom

MCPFE indicator 6.10: Area of forest and other wooded land where public has access for recreational purposes and indication of intensity of use

Table 22: Accessibility for recreation

	Category	Ref. year	Area with a legal right of access		public for r	ilable to the ecreational oses	Access with recreational purposes as one main management goal	
			total (1000 ha)	% of total	total (1000 ha)	% of total	total (1000 ha)	% of total
Code			LT	LP	RT	RP	GT	GP
22.1	Forest	2005	1600	56	2083	73	105	3.7
		2000	0	0	1533	55	90	3.2
22.2	Other wooded	2005	0	0	0	0	0	0.0
	land	2000	0	0	0	0	0	0.0
22.3	Total forest and	2005	1600	56	2083	73	105	3.7
	OWL	2000	0	0	1533	55	90	3.2

Data sources:

Area with legal right of access: see below

Access available to the public for recreational purposes: see below

Area with recreation as one main management goal: FRA 2005: area with primary function

Country specifications:

Criteria used to include areas in "Access available to the public for recreational purposes": For 2000: FRA 2005 total area with function. For 2005 includes all forest in Scotland (see below).

Criteria used to include areas in "Area with recreation as one main management goal": FRA 2005: area with primary function.

Data quality:

Likely range of true value for latest estimate provided for total FOWL (1000 ha):

Area with a legal right of access: 1400 - 1700

Access available to the public for recreational purposes: 1400 - 1700

Area with recreational purposes as one main management goal: 50 - 200

Country comments:

Additional country information on the intensity of use:

Number of visits (1000 visits) and visitors in forests: (1000 persons), compiled from ha. See below a) Household surveys since 1990 have indicated annual totals of around 300 million day visits to woodland from home by adults. This excludes visits made while staying away from home, visits by overseas tourists, visits by children (under 16) and visits not considered to be leisure (e.g. some routine dog walking). b) These household surveys also indicate that around 40% of UK adults have made at least one such visit in the previous year. An alternative source (Public Opinion of Forestry survey) indicates that about two-thirds of UK adults have visited woodland in the last few years. c) The definition of "legal right of access" is difficult to interpret in UK circumstances. Under the Countryside and Rights of Way Act 2000, most state woodland in England and Wales has been dedicated, but access to private woodland is permissive, not a legal right. In Scotland, the Land Reform Act 2003 gives a statutory right of responsible access, which in principle applies to almost all woodland. The estimate for area with legal right of access, and so also included in area and

- 1. The area in category "Access available to the public for recreational purposes" comprises area with a legal right of access as well as areas with no formal legal right, but with customary rights or other de-facto forms of access available to the public.
- 2. MCPFE Indicator 6.10 requests further information on the intensity of use. Where such information is available for certain forest areas, please specify under "country comments".

Reporting Form 23: Cultural and spiritual values

Country:

United Kingdom

MCPFE indicator 6.11: Number of sites within forest and other wooded land designated as having cultural or spiritual values

Table 23: Cultural and spiritual values

		Sites								
			Design	ated nature mon		Other sites with				
Category	Ref. year	Archaeo-logical	Forested landscape	Trees	Other forest related	Designated historical sites	Other sites with recognized cultural & spiritual values			
		(number of sites)								
	Code	23.1	23.2	23.3	23.4	23.5	23.6			
Total forest and OWL	2005	4567	n.a.	n.a.	n.a.	n.a.	n.a.			

Data sources:

Archaeological sites: UK Indicators of Sustainable Forestry, indicator E5

Designated natural monuments: none

Designated historical sites: none; some may be included with archaeological sites

Other sites with recognized cultural & spiritual values: none

Country specifications:

Criteria used for sites reported:

Archaeological sites: Scheduled ancient monuments in woodlland, in GB

Designated natural monuments: n.a. Designated historical sites: n.a.

Other sites with recognized cultural & spiritual values: n.a.

Data quality:

Likely range of true value for latest estimate provided on total FOWL (sites):

Archaeological sites: not known Designated natural monuments: n.a. Designated historical sites: n.a.

Other sites with recognized cultural & spiritual values: n.a.

Country comments:

Reporting is limited to the number of scheduled ancient monuments in woodland (or within 5 metres) as reported in the UK Indicators of Sustainable Forestry (2002) and amended on the website. No information has been compiled for other archaeological sites or for the other categories in this table.

- 1. Please note that sites reported here should be sites that are officially and explicitly designated for the protection of cultural and spiritual values and/or officially recognize such values, e.g. through governmental bodies.
- 2. For practical reasons the reference area for reporting is "Total FOWL" only, not further divided into sub-classes "Forest" and "Other wooded land". If data is available for sub-class "Forest" only, please report on this sub-class with explicit reference to "Forest" and provide note under "Country comments".
- 3. For sites reported under sub-class "other forest-related designated nature monument" please provide details on which sites are included under this class.
- 4. If data is available for certain forest areas or ownership classes (e.g. state forests), but not for others, data should be reported with explicit indication of area (ha) and/or reference to the ownership class.