ECOREGION Widely distributed and migratory stocks
STOCK Ling (*Molva molva*) in Divisions IIIa and IVa, and in Subareas VI, VII, VIII, IX, XII, and XIV (other areas)

Advice for 2011

Constrain catches to recent average (2003-2008) and a reduction in catches should be considered in order to be consistent with the MSY (see section 1.2.4 of ICES Advisory Report).

Stock status

Fishing mortality	2007	2008	2009
F_{MSY}	Unknown	Unknown	Unknown
F_{PA}/F_{lim}	Unknown	Unknown	Unknown
Spawning Stock Biomass (SSB)	2008	2009	2010
MSY $B_{trigger}$	Unknown	Unknown	Unknown
B_{PA}/B_{lim}	Unknown	Unknown	Unknown

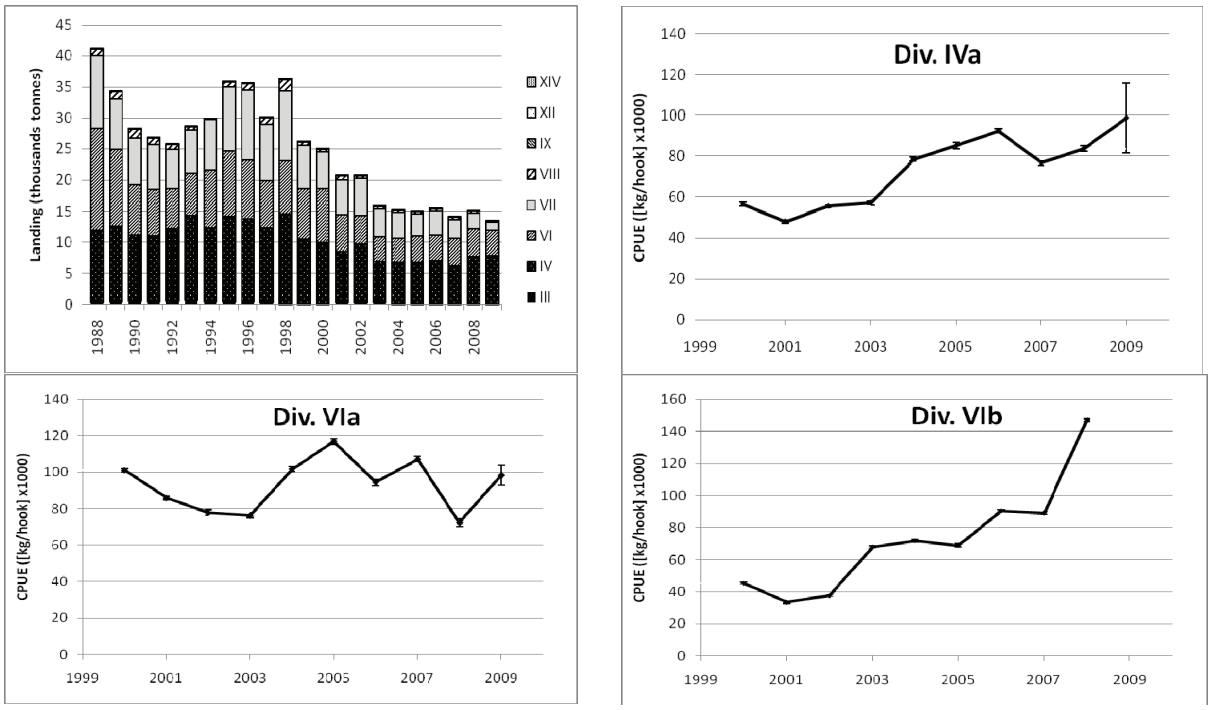

Figure 9.4.10.4.1 Ling in other areas. Total landings (top left); Norwegian cpue ([kg/hook] x1000) for ling for separately for subareas IVa, VIa and VIb for the period 2000 through 2009 (preliminary estimates for 2009).

The cpue series in the major fishing areas are either stable (VIa) or increasing (IVa and VIb).

Management plans

No specific management objectives are known to ICES.

In the light of the EU policy paper on fisheries management (17 May 2010, COM(2010) 241) this assessment unit is classified under category 6.

The fisheries

The major directed fishery for ling in Divisions IVa and Subarea VI is by Norwegian longline. The bulk of the landings from other countries are bycatches in trawl fisheries mainly directed at roundfish or deep-sea species. The landings from the central and southern North Sea (IVb,c) are bycatches in various other fisheries. In Subarea VII the main landings are generated by Norwegian and some Irish and Spanish longline fisheries. In Subareas VIII, IX, XII, and XIV all landings are bycatches in various fisheries.

Quality considerations

Cpue series of the main fleet in Division IVa, VIa and VIb are used as indicators of the stocks trend. Catch and effort data for Norwegian longliners are available, both from the overall fleet (1971–1993), from the entire fleet of longliners (2000–2009).

Scientific basis

Assessment type	CPUE trends based assessment
Input data	Commercial cpue
Discards and bycatch	Not included in the assessment
Indicators	-
Other information	-
Working group report	WGDEEP

ECOREGION Widely distributed and migratory stocks
STOCK Ling (*Molva molva*) in Divisions IIIa and IVa, and in Subareas VI, VII, VIII, IX, XII, and XIV (other areas)

Reference points

No reference points are defined for this assessment unit.

Outlook for 2011

No reliable assessment is available for this assessment unit and fishing possibilities cannot be projected.

The historic cpue data were reinterpreted and suggest that the stock was stable 2003-2008. Catches in these Subareas should be kept at the same level as the average catch during the period 2003 through 2008 (15 000 t). The ICES' advice relates to all catches of ling in these areas. A reduction in catches should be considered in order to be consistent with the MSY (see section 1.2.4 of ICES Advisory Report).

Additional considerations

The interpretation of the information of the stocks has changed since the 2008 advice. This has been due to the separation of the cpue series into a number of different gears whose effort series are no longer comparable through time. Since 2000, cpue from autolines (longlines) have been used as indices of abundance and this information is the basis of the advice. The interpretation of the cpue does not suggest a decline in the stock. The current exploitation does not seem to be detrimental to the stock, but recent levels relative to historic levels are unknown.

The fishery covers a wide area and to avoid local overexploitation and disproportionate allocation of effort among areas should be avoided.

Since 2003 an annual unilateral TAC was introduced by the EC for all Subareas, and the regulation is valid for EU vessels fishing in the EU EEZ as well as in international waters. There is no species-specific regulation in the Norwegian EEZ. A TAC is negotiated for Norwegian vessels fishing in EU waters.

Assessment and management area

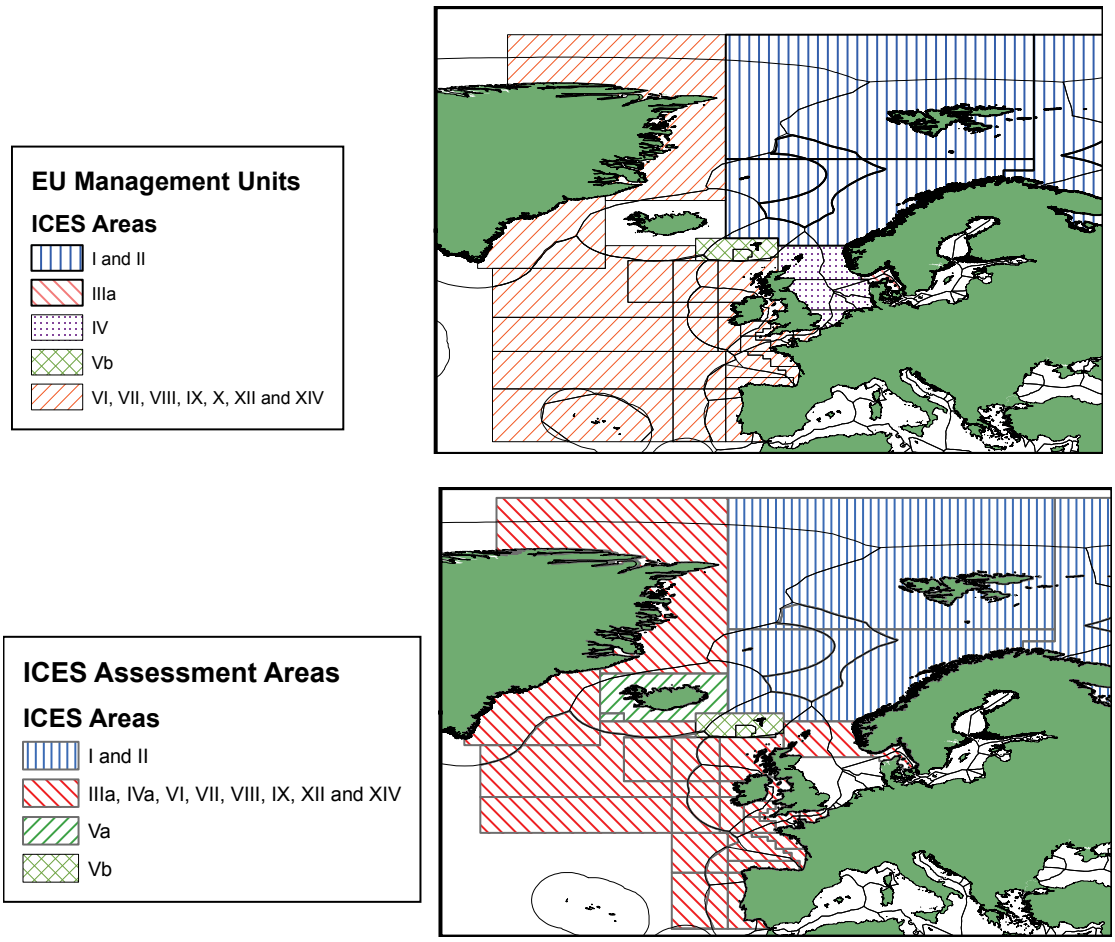

Figure 9.4.10.4.2 Ling in other areas. EU TAC Regulation areas (top) and ICES assessment areas for ling in the Northeast Atlantic (bottom).

Sources

ICES. 2010. Report of the Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources, 7–13 April 2010, ICES Headquarters, Copenhagen. ICES CM 2010/ACOM:17.

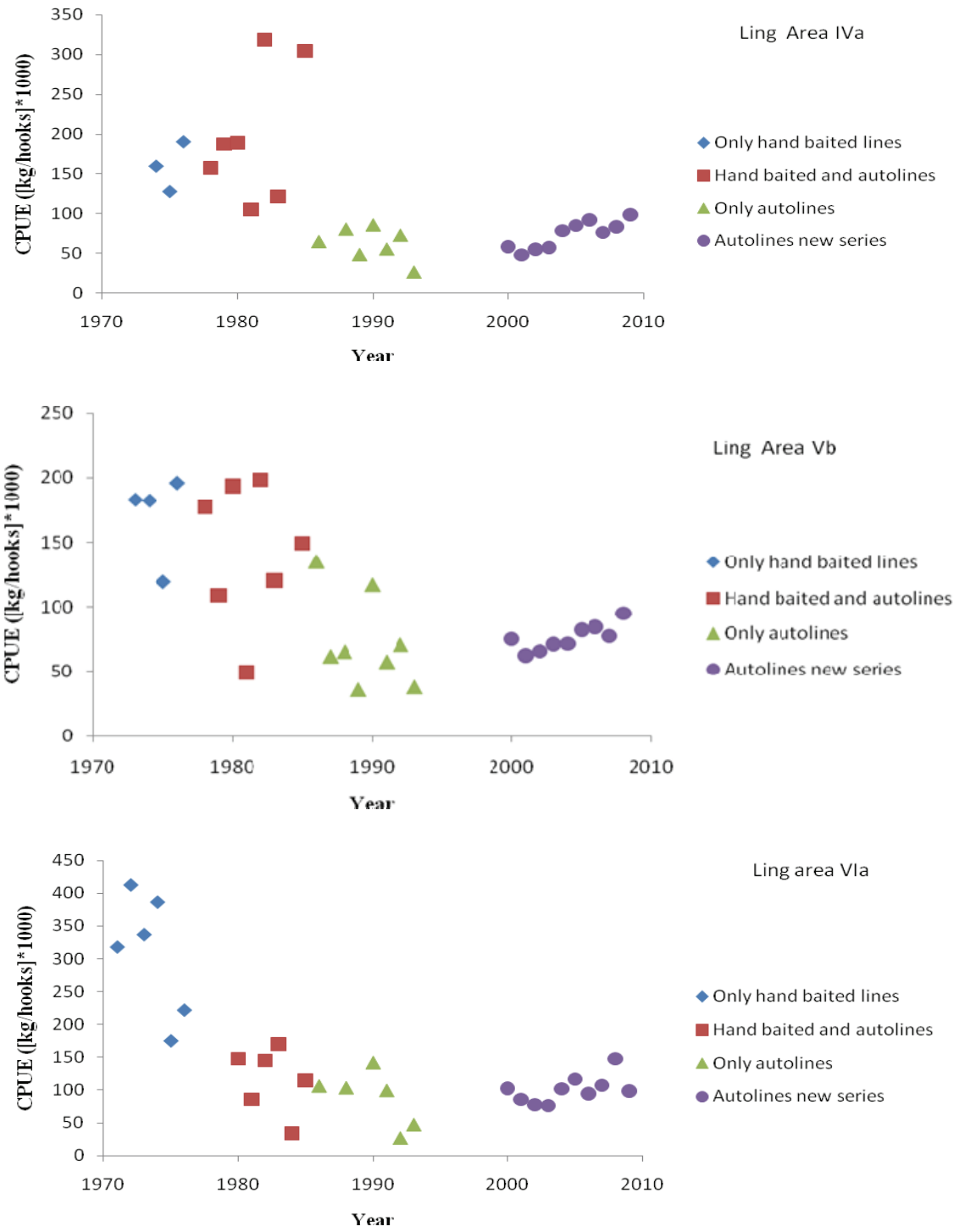

Figure 9.4.10.4.3 Ling in other areas. Estimates of cpue (kg/1000 hooks) of ling based on skipper's logbooks (pre-2000) and official logbooks (post-2000). Note gap in time-series between 1993 and 2000, and the differences in cpue scale between areas (preliminary estimates for 2009). The data used for the period 1971-1993 are, early on only hand baited lines (blue diamonds), then a mix of both hand baited and autolines (red squares) and finally only autolines (green triangles). The new data series is denoted by purple circles.

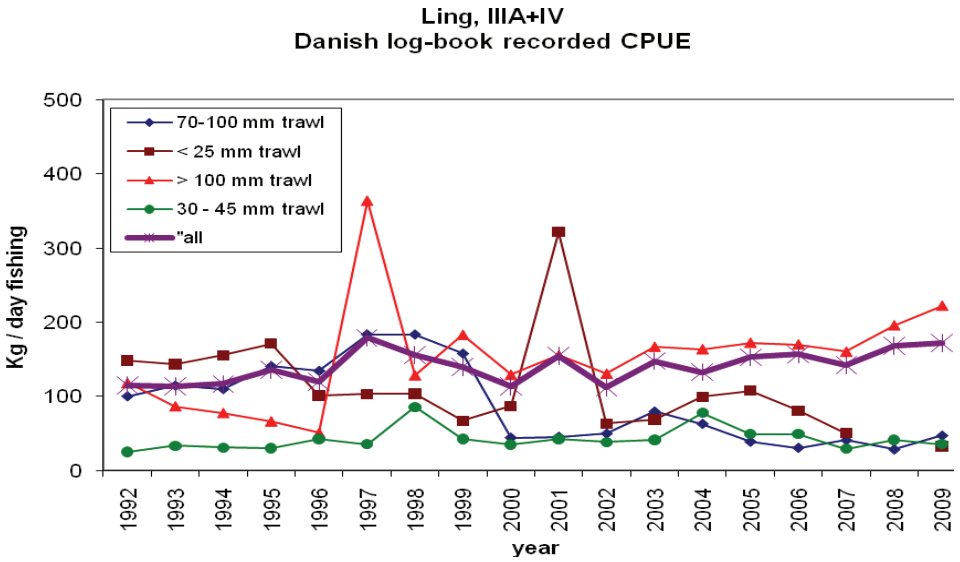

Figure 9.4.10.4.4 Ling in other areas. Cpue of ling for Danish trawlers in Subareas IIIa and Subarea IV. Based on logbook data.

Table 9.4.10.4.1 Ling in other areas (Divisions IIIa and IVa, and in Subareas VI, VII, VIII, IX, XII, and XIV). ICES advice, management, and landings.

Year	ICES Advice	Predicted catch corresp. to advice	TAC EU Subarea III	TAC EU Subarea IV(EU waters)	TAC EU Subarea IV(Norway waters)	TAC EU Subareas VI, VII, VIII, IX, X, XII and XIV	TAC Faroe Subareas VI, VII, VIII, IX, X, XII and XIV(EU waters)	TAC Norway Subareas VI, VII, VIII, IX, X, XII and XIV (EU waters)	ICES Landings Other areas[1]
2003	30% reduction on fishing effort[2]	-	0.136	4.666		14.966	0.8	9.5	16.2
2004	Biennial[2]	-	0.136	4.666		14.966	0.8	9.5	15.5
2005	Effort reduced by 30%	-	8.136	3.966	1	14.966	0.8	5.78	15.3
2006	Biennial	-	0.136	4.666	1	14.966	-	-	15.4
2007	Reduce about 30% in catches	10	0.119	3.173	1	11.976	0.25	5.78	13.9
2008	Biennial	10	0.100	2.856	0.85	10.776	0.25	5.638	15.0
2009	Constrain catches	10	0.100	2.856	0.85	10.776	0.25	5.638	13.4
2010	Biennial	10	0.092	2.428	0	7.003		6.140	
2011	Constrain catches to 2003-2008 average, and a reduction in catches should be considered	15							

Weights in '000 t.
[1] Divisions IIIa and IVa, and in Subareas VI, VII, VIII, IX, XII, and XIV
[2] Advice for ling in the Northeast Atlantic (not split in several assessment units).

Table 9.4.10.4.2 Ling in other areas. Landings (tonnes) in Subareas IIIa, IV, VI, VII, VIII, IX, XII, and XIV (ICES estimates).

Year	III	IVa	IVbc	VIa	VIb	VII	VIIa	VIIbc	VIIde	VIIf	VIIg-k	VIII	IX	XII	XIV	All areas
1988	331	11 223	379	14556	1765	5057	211	865	779	444	4415	1028		0	3	41 056
1989	422	11 677	387	8631	3743	5261	311	577	700	310	1012	1221		0	1	34 253
1990	543	10 027	455	6730	1505	4575	169	678	799	233	1077	1372		3	9	28 175
1991	484	9969	490	4795	2662	3977	125	749	680	302	1394	1139		10	1	26 777
1992	549	10 763	842	4588	1891	2552	105	1286	519	137	1593	802		0	17	25 644
1993	642	12 810	797	5301	1522	2294	219	1434	436	223	2334	510		0	9	28 531
1994	469	11 496	323	6730	2540	2185	284	1595	451	400	3254	85		5	6	29 823
1995	412	13 041	659	8847	1638		305	1944	1389	602	6131	845		50	17	35 880
1996	402	12 705	569	8577	1124		210	2201	1477	399	6850	1041		2	0	35 557
1997	311	11 315	699	6746	814		264	1780	1472	547	5045	1034	0	9	61	30 097
1998	214	13 631	627	7362	1394		198	1034	1500	561	7814	1797	2	2	6	36 142
1999	216	9810	446	6899	1175		84	1366	1060	312	4189	452	1	2	1	26 013
2000	228	9246	384	6909	1879		73	1182	846	218	3578	339	1	7	26	24 916
2001	262	7854	284	5143	788		87	1226	807	220	3360	594	0	59	36	20 720
2002	263	9072	309	4127	533		119	964	891	453	3526	467	0	8	23	20 756
2003	261	6433	234	3246	660		112	524	787	176	2940	436		19	83	15912
2004	232	6306	241	2769	1064		97	640	801	161	2427	492		0	10	15240
2005	210	6449	149	3028	1142		61	429	786	184	2053	450		1	0	14942
2006	188	6719	144	2573	1411		88	668	687	130	2407	398		1	0	15414
2007	174	5858	159	3119	1314		43	358	710	125	1749	312		0	5	13927
2008	168	7259	200	2950	1545		14	255	569	187	1503	345		0	1	14996
2009*	149	7412	193	1423	2756		11	131	348	52	691	182		1	3	13352

*Preliminary