

COMMISSION SERVICES SUPPORTING DOCUMENT
LANDING OBLIGATION EXEMPTIONS DEDUCTIONS FOR 2024
29 NOVEMBER 2023

*This document serves as a basis for discussion with Member States.
It cannot in any circumstances be regarded as the official position of the Commission.
It is intended solely for those to whom it is addressed.*

1. Background

Landing obligation exemption deductions for 2024 were calculated by the Commission services as follows. First, they are based on Fisheries Dependent Information (FDI) data submitted by Member States in response to a Data Collection Framework (DCF)¹ data call² and a subsequent analysis of that data, including in relation to the exemptions from the landing obligation by a Scientific, Technical and Economic Committee for Fisheries (STECF) Expert Working Group (EWG)³, as reviewed by the STECF. The FDI data includes data on landings and discards in 2022, which is the most recent data available. Second, the calculations took into account: (i) the contribution to total catches of the fleet segment subject to the exemption to the landing obligation; (ii) for *de minimis* exemptions, the corresponding *de minimis* percentage of the exemption for that fleet segment; and (iii) for survivability exemptions, the discard rate and the species survival rate (the latter based on scientific evidence⁴). Third, where FDI data was not of sufficient quality, International Council for the Exploration of the Sea (ICES) data was, if possible, used in lieu of the FDI data. Fourth, if data of sufficient quality was unavailable altogether, the deduction applied for 2023 was rolled over.

Sections 2 and 3 of this document list stocks, respectively autonomous EU stocks and stocks shared with the United Kingdom (UK), for which it is proposed to apply landing obligation exemptions deductions for 2024.

Moreover, the Excel table ‘Overview of landing obligation exemptions for 2024-2027’, as prepared by the STECF, provides an overview of the applicable landing obligation exemptions, as set out in Commission Delegated Regulations (EU) 2023/2459 and 2023/2623⁵.

¹ Regulation (EU) 2017/1004 of the European Parliament and of the Council of 17 May 2017 on the establishment of a Union framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the common fisheries policy and repealing Council Regulation (EC) No 199/2008 (recast) (OJ L 157, 20.6.2017, p. 1).

² <https://datacollection.jrc.ec.europa.eu/documents/d/DCF/fdi-datacall-letter-2023>

³ <https://stecf.jrc.ec.europa.eu/ewg2310>

⁴ Including scientific evidence referred to in the evaluation by the STECF of the landing obligation exemptions proposed by the Member States Regional Groups in their joint recommendations and respective supporting information.

⁵ Commission Delegated Regulation (EU) 2023/2459 of 22 August 2023 supplementing Regulation (EU) 2018/973 of the European Parliament and of the Council by specifying details of the landing obligation for certain fisheries in the North Sea for the period 2024-2027 (OJ L, 2023/2459, 06.11.2023).

Commission Delegated Regulation (EU) 2023/2623 of 22 August 2023 supplementing Regulation (EU) 2019/472 of the European Parliament and of the Council by specifying details of the landing obligation for certain fisheries in Western Waters for the period 2024-2027 (OJ L, 2023/2623, 22.11.2023).

2. Autonomous EU stocks

TAC	Sea basin	Deduction for 2023 (rounded)	Explanation	Deduction for 2024 (rounded)	Explanation
NEP/03A.	NS	-16,4%	Based on ICES data.	To be determined.	
PLE/03AS.	NS	-46.6%	No data, deduction rolled over.	-46,6%	No data, deduction rolled over.
SOL/3ABC24	NS	-1.2%		-0,9%	
ANF/8C3411	SWW	-4.1%	No data, deduction rolled over.	-4,1%	No data, deduction rolled over.
HKE/08C3411	SWW	-2.3%		-2,2%	
LEZ/8C3411	SWW	-4,0%	No data, deduction rolled over.	-4,0%	No data, deduction rolled over.
NEP/8ABDE.	SWW	-31,2%	Based on ICES data.	-31,3%	Based on ICES data.
SOL/08AB	SWW	-2,3%	Capped to match ICES data.	-2,4%	No data, deduction rolled over.
WHG/08	SWW	n/a		-0,8%	
JAX/09	SWW	-4,3 %	No data, deduction rolled over.	-4,3%	No data, deduction rolled over.

3. Stocks shared with the UK

TAC	Sea basin	Deduction for 2023 (rounded)	Explanation	Deduction for 2024 (rounded)	Explanation
PLE/03AN.	NS	-16,1%		-20,2%	
PLE/2A3AX4	NS	-37,8%		-25,6%	
WHG/03A.	NS	-19,6%		-6,0%	
WHG/2AC4.	NS	-1,9%		-2,6%	
HAD/7X7A34	NWW	-5,6%		-7,9%	
PLE/07A.	NWW	-15,4%	No data, deduction rolled over.	-32,6%	
PLE/7D	NWW	-17,9%	Deduction for PLE/7DE.	-33,5%	
PLE/7E	NWW	-17,9%	Deduction for PLE/7DE.	-7,7%	Capped to match ICES data.
PLE/7FG.	NWW	-19,8%		-12,5%	
SOL/07A.	NWW	-2,5%		-2,6%	
SOL/07D.	NWW	-2,0%		-2,0%	
SOL/7FG.	NWW	-2,5%		-2,5%	
WHG/7X7A-C	NWW	-1,5%		-2,2%	
JAX/2A-14	NWW	-2,0%	Capped to match ICES data.	-1,8%	
JAX/4BC7D	NS / NWW	-1,6%	Capped to match ICES data.	-2,4%	Capped to match ICES data.

**Annex to Commission services supporting document on landing obligation exemptions deductions for 2024
Overview of landing obligation exemptions for 2024-2027**

North Western Waters - Commission Delegated Regulation (EU) 2023/2623

Type	Exemption Article (New)	Area	Description	Fishing Techniques	Gear code	FDI gear code	Mesh size regulation	Vessel length	SPECON	Target Assemblage	Species	Species codes	Meshes threshold cm	Present ICES	
Demersal	2023/2623 Article 13.1	VII and VIII	Beam trawl (B72)	Beam trawl	B72	TBB	80-119	All	All	All	Whiting	WHG	no	3	
	2023/2623 Article 13.2	VIII and VIII	Bottom trawls, Seines, Pelagic trawls	Bottom trawls, Seines, Pelagic trawls	OTB-OTT-PTB-PTB-SSC-SDN-SPR-SK-SV-TBN-TBS-TB-TX OTM-PTM	OTB-OTT-PTB-PTB-SSC-SDN-SPR-SK-SV-TBN-TBS-TB-TX OTM-PTM	>80	All	All	All	Whiting	WHG	no	3	
	2023/2623 Article 13.3	VIII and VIII	Trawl and gill nets	Trawl and gill nets	OTM-PTM	OTM-PTM	All	All	All	All	Whiting	WHG	no	3	
	2023/2623 Article 13.3.a	VIII and VIII	Beam trawl equipped with Flemish panel	Beam trawl equipped with Flemish panel	TBB	TBB	80-119	All	TBBP	All	Sole	SOL	no	3	
	2023/2623 Article 13.4.a	VIII and VIII	Bottom trawls, Seines, less than 30% Neptrops	Bottom trawls, Seines, less than 30% Neptrops	OTB-OTT-PTB-PTB-SSC-SDN-SPR-SK-SV-TBN-TBS-TB-TX	OTB-OTT-PTB-PTB-SSC-SDN-SPR-SK-SV-TBN-TBS-TB-TX	>100	All	All	All	Haddock	HAD	no	5	
	DR-2023/2623 Article 13.4.b	VIII and VIII	Bottom trawls, Seines, more than 30% Neptrops	Bottom trawls, Seines, more than 30% Neptrops	OTB-OTT-PTB-PTB-SSC-SDN-SPR-SK-SV-TBN-TBS-TB-TX	OTB-OTT-PTB-PTB-SSC-SDN-SPR-SK-SV-TBN-TBS-TB-TX	>80	All	All	All	Haddock	HAD	no	5	
	DR-2023/2623 Article 13.4.c	VIII and VIII	Beam trawl with Flemish panel	Beam trawl with Flemish panel	TBB	TBB	>80	All	TBBP	All	Haddock	HAD	no	5	
	DR-2023/2623 Article 13.5	VIII and VIII	All gears in those areas by vessels using bottom trawls	All gears in those areas by vessels using bottom trawls	OTT-OTB-TBS-TBN-TB-PTB	OTT-OTB-TBS-TBN-TB-PTB	All	All	All	All	Borfish	BOR-BOC-ZAC-ZAI-EVI-PZH-RIG-SWH-ENV-EMV-ZAL	no	0,5	
	DR-2023/2623 Article 13.6	VII	Beam trawls selected as part from DR 2023/2623 Article 13.6	Beam trawls selected as part from DR 2023/2623 Article 13.6	B72	TBB	80-119	All	All	All	Megrim	MEG-LDB-LEZ	20	4	
	DR-2023/2623 Article 13.6.a	VII	Bottom trawls in 7b, the part of subarea 7b, the part of subarea 7c, North and the part of division 7i, North of latitude 49° 30' North and East of longitude 11° West, for TBB vessels with catches comprising more than 55 % of whiting or 55 % of anglerfish, hake or megrim combined	Bottom trawls in subarea 7, outside the abovementioned area, for TBB vessels	OTT-OTB-TBS-TBN-TB-PTB-OTT-PTX	OTT-OTB-TBS-TBN-TB-PTB-OTT-PTX	70-99	All	All	All	Megrim	MEG-LDB-LEZ	20	4	
	DR-2023/2623 Article 13.6.b	VII	Bottom trawls in subarea 7, outside the abovementioned area, for TBB vessels	Bottom trawls in subarea 7, outside the abovementioned area, for TBB vessels	OTT-OTB-TBS-TBN-TB-PTB-OTT-PTX	OTT-OTB-TBS-TBN-TB-PTB-OTT-PTX	70-99	All	All	All	Megrim	MEG-LDB-LEZ	20	4	
	DR-2023/2623 Article 13.7	VIIa	Beam trawl with Flemish panel	Beam trawl with Flemish panel	B72	TBB	80-119	All	All	TBBP	All	Sole	SOL	no	3
	DR-2023/2623 Article 13.8	VIIb-VII	Catches from all gears in those areas, caught by Bottom trawl	Catches from all gears in those areas, caught by Bottom trawl	OTT-OTB-TBS-TBN-TB-PTB-OTT-PTX	OTT-OTB-TBS-TBN-TB-PTB-OTT-PTX	>100	All	All	All	Great silver smelt	ARG-ARU-ARY	no	0,6	
DR-2023/2623 Article 13.9	VII and VIII	Bottom trawls, Seines, beam trawls	Bottom trawls, Seines, beam trawls	OTB-OTT-PTB-PTB-SSC-SDN-SPR-SK-SV-TBN-TBS-TB-TX	OTB-OTT-PTB-PTB-SSC-SDN-SPR-SK-SV-TBN-TBS-TB-TX	All	All	All	All	Horse Mackerel	HMM-JAX-HOM-HMC-HMZ-HMG-TUZ	no	3		
DR-2023/2623 Article 13.10	VII and VIII	Bottom trawls, Seines, beam trawls	Bottom trawls, Seines, beam trawls	OTB-OTT-PTB-PTB-SSC-SDN-SPR-SK-SV-TBN-TBS-TB-TX	OTB-OTT-PTB-PTB-SSC-SDN-SPR-SK-SV-TBN-TBS-TB-TX	All	All	All	All	Mackerel	MAC	no	3		
DR-2023/2623 Article 13.11	VIIb-VII	Industrial pelagic trawler fishery targeting that species in ICES subareas 5b, 6 and 7 and processing that species on board to obtain surimi	Industrial pelagic trawler fishery targeting that species in ICES subareas 5b, 6 and 7 and processing that species on board to obtain surimi	(blank)	OTM-PTM	All	All	All	All	Blue whiting	YHB	no	5		
DR-2023/2623 Article 13.12	VIII	Pelagic trawls with pelagic trawlers using mid-water trawl (OTM-PTM), and targeting mackerel, horse mackerel and herring in ICES division 7d	Pelagic trawls with pelagic trawlers using mid-water trawl (OTM-PTM), and targeting mackerel, horse mackerel and herring in ICES division 7d	OTM-PTM	OTM-PTM	All	All	V0000-V0002-V0028-V0084	All	Horse Mackerel	HMM-JAX-HOM-HMC-HMZ-HMG-TUZ	no	1		
DR-2023/2623 Article 3.1.a	VII	Pelagic trawls	Pelagic trawls (up to 5km)	FPO-FYK-FYK	FPO-FYK-FYK	All	All	All	All	NEP	NEP	no	-		
DR-2023/2623 Article 3.1.b	VII	Bottom trawls	Bottom trawls	OTT-OTB-TBS-TBN-TB-PTB-OTT-PTX	OTT-OTB-TBS-TBN-TB-PTB-OTT-PTX	>100	All	All	All	Norway lobster	NEP	no	-		

Surrenderability

DR-2023/2623 Article 3.1.c		Bottom trawls, with one of the following selective gears: square mesh panel, max 200 mm, duration 120 min; Skates & rays gear, max 12 m, duration 30 min; Spring grid 35 mm, 100 mm cod end, dual cod end < 90 mm/100 mm.	Bottom trawls, with one of the following selective gears: square mesh panel, max 200 mm, duration 120 min; Skates & rays gear, max 12 m, duration 30 min; Spring grid 35 mm, 100 mm cod end, dual cod end < 90 mm/100 mm.	OTT: OTB-TB; TBN-TB; PTB-OT-PTX; PTB-OT-PTX; OTB-OT-PTX; OTB-OT-PTX	70-99	80D100-70D80	All	GRID35-SELTRA-NETGRID-SEPNEP-T90	All	Norway lobster	NEP	no
DR-2023/2623 Article 3.1.d	Via (within 12 NM)	Other trawls, within 12 NM	Other trawls	OTT: OTB-TB; TBN-TB; PTB-OT-PTX; PTB-OT-PTX	80-110	80D100-100D110	All		All	Norway lobster	NEP	no
DR-2023/2623 Article 4.1.a	Vid	Other trawls, within 6 nautical miles, max power 221 kW, max 10 m, depth 30m, duration 1.30 h, outside nursery areas	Other trawls, within 6 nautical miles, max power 221 kW, max 10 m, depth 30m, duration 1.30 h	OTT: OTB-TB; TBN-TB; PTB-OT-PTX	80-99	80D100	All	V10010	All	Sole	SOL	24
DR-2023/2623 Article 4.1.b	Vile	Other trawls (OTB) within 6 nautical miles, outside nursery areas, max 12 m	Other trawls (OTB) within 6 nautical miles, outside nursery areas, max 12 m	OTB	80-99	80D100	All	V10010-V10102	All	Sole	SOL	24
DR-2023/2623 Article 5		All gear catching Skates & rays	All gear catching Skates & rays	OTB			All		All	Skates & rays	SRK-JAD-IDP-RJA-RJB-RJC-RIE-RJF-RJG-RJH-RJI-RJK-RJM-RJN-RJO-RJR-RJL-RJY-SKA-TFO-TTR	no
DR-2023/2623 Article 6.1.a	Vr-VII	Trammel nets	Trammel nets	OTT: OTB-TB; TBN-TB; PTB-OT-PTX	All		All		All	Skates & rays	PLE	no
DR-2023/2623 Article 6.1.b	VIII-VIIX	Other trawls	Other trawls	OTT: OTB-TB; TBN-TB; PTB-OT-PTX	All		All		All	Skates & rays	PLE	no
DR-2023/2623 Article 6.1.c	VIX-VIIX	Beam trawl, max power 221 kW, flip up or bentic panel	Beam trawl, max power 221 kW, flip up or bentic panel	OTT: OTB-TB; TBN-TB; PTB-OT-PTX	All		All		All	Skates & rays	PLE	no
DR-2023/2623 Article 6.1.d	VIX-VIIX-VIIX-VIIX-VIIX-VIIX	Beam trawl, max power 221 kW, or max 24m, within 12 nm, duration 1.30 h	Beam trawl, max power 221 kW, or max 24m, within 12 nm, duration 1.30 h	TBB	All		All		All	Skates & rays	PLE	no
DR-2023/2623 Article 6.1.e	VIIIX-VIIX-VIIX-VIIX-VIIX-VIIX	Danish seines	Danish seines	SDN	All		All		All	Skates & rays	PLE	no
DR-2023/2623 Article 6.1.f	VIIIX-VIIX-VIIX-VIIX-VIIX-VIIX	Seines	Seines	SSC	All		All		All	Skates & rays	PLE	no
DR-2023/2623 Article 7	V (red V)/Vb-VI	Pots, traps, creel	Pots, traps, creel	FPO-FPK-FTK	All		All		All	Skates & rays	PLE	no
DR-2023/2623 Article 8.1 to 8.5	VI	Purse seine with several operational measures	Purse seine with several operational measures	(blank)	All		All		All	Skates & rays	MAC-HER	no
DR-2023/2623 Article 8.6	VIIc-VIIX	Ring net fishery targeting pelagic species (not subject to quotas in ICCS divisions 2e and 2f)	Ring net fishery targeting pelagic species (not subject to quotas in ICCS divisions 2e and 2f)	(blank)	All		All		All	Skates & rays	MAC-HER	no

Annex to Commission services supporting document on landing obligation exemptions deductions for 2024
Overview of landing obligation exemptions for 2024-2027

South Western Waters - Commission Delegated Regulation (EU) 2023/2623

Type	Exemption Article (New)	Area	EEZ	Description	Fishing Techniques	Gear code	FDI gear code	Mesh size regulation	Vessel length	SPECOM	Target Assemblage	Species	Species codes	MCRS threshold cm	Percent MCRS
Dermatosis	DR-2023/2623 - Article 14.1	VIII-X		Travels and seines	Travels and seines	OTM-PTM-OTT-OTB-PTB-OT-PT-TBN-TB-TX-SSC-SPR-TB-SDM-SX-SV	OTT-OTB-PTB-OTM-PTM-SDM-SPR-SSC-SV-SB	All	All	All	All	Hake	HKE	no	5
	DR-2023/2623 - Article 14.2	VIIIa-VIIIb		Pelagic trawls, beam and bottom trawls	Pelagic trawls, beam and bottom trawls	OTM-PTM-TTB-OTB-OTT-PTB-TBN-TBS-OT-PT-TX-GNS-GND-GND-GNC-GTN-GTR-GEN	OTB-OTT-PTB-OTM-PTM-TTB-GND-GND-GNC-GTR-GTN	All	All	All	All	Sole	SOL	no	5
	DR-2023/2623 - Article 14.3	VIIIa-VIIIb		Trammel and gill nets	Trammel and gill nets	LHM-LHP-ILD-LLS	LHM-LHP-ILD-LLS-LTL	All	All	All	All	Sole	SOL	no	3
	DR-2023/2623 - Article 14.4	X		Hooks and lines	Hooks and lines	LHM-LHP-ILD-LLS	LHM-LHP-ILD-LLS-LTL	All	All	All	All	Alfonsinos	ALF-BRX-BYS	no	5
	DR-2023/2623 - Article 14.5														
	DR-2023/2623 - Article 14.6	VIII-X		Beam trawls, bottom trawls and seines	Beam trawls, bottom trawls and seines	OTB-OTT-PTB-TBN-TBS-TBB-OT-PT-TX-SSC-SPR-SDM-SX-SV	TBB-OTT-OTB-PTB-SDM-SPR-SSC-SV-SB	All	All	All	All	Horse Mackerel	HMM-JAX-HOM-HMC-HMZ-HMG-JAA-TUZ	no	5
	DR-2023/2623 - Article 14.7	VIII-X		Gillnets	Gillnets	GNS-GND-GNC-GTN-GTR-TBB-OTT-PTB-TBN-TBS-SDM-SX-SV	GND-GNS-GNC-GTR-GTN	All	All	All	All	Horse Mackerel	HMM-JAX-HOM-HMC-HMZ-HMG-JAA-TUZ	no	3
	DR-2023/2623 - Article 14.8	VIII-X		Beam trawls, bottom trawls and seines	Beam trawls, bottom trawls and seines	GNS-GND-GNC-GTN-GTR-TBB-OTT-PTB-TBN-TBS-SDM-SX-SV	GND-GNS-GNC-GTR-GTN	All	All	All	All	Mackerel	MAC	no	5
	DR-2023/2623 - Article 14.9	VIII-X		Gillnets	Gillnets	GNS-GND-GNC-GTN-GTR-TBB-OTT-PTB-TBN-TBS-SDM-SX-SV	GND-GNS-GNC-GTR-GTN	All	All	All	All	Mackerel	MAC	no	3
	DR-2023/2623 - Article 14.10	VIII-X		Beam trawls, bottom trawls and seines	Beam trawls, bottom trawls and seines	OTB-OTT-PTB-TBN-TBS-TBB-OTT-PTB-TBN-TBS-SDM-SX-SV	TBB-OTT-OTB-PTB-SDM-SPR-SSC-SV-SB	All	All	All	All	Mackerel	MAC	no	5
	DR-2023/2623 - Article 14.11	VIII-X		Gillnets	Gillnets	GNS-GND-GNC-GTN-GTR-TBB-OTT-PTB-TBN-TBS-SDM-SX-SV	GND-GNS-GNC-GTR-GTN	All	All	All	All	Mackerel	MAC	no	3
	DR-2023/2623 - Article 14.12	VIII-X		Beam trawls, bottom trawls and seines	Beam trawls, bottom trawls and seines	OTB-OTT-PTB-TBN-TBS-TBB-OTT-PTB-TBN-TBS-SDM-SX-SV	TBB-OTT-OTB-PTB-SDM-SPR-SSC-SV-SB	All	All	All	All	Mackerel	MAC	no	5
	DR-2023/2623 - Article 14.13	VIII		Gillnets	Gillnets	GNS-GND-GNC-GTN-GTR-TBB-OTT-PTB-TBN-TBS-SDM-SX-SV	GND-GNS-GNC-GTR-GTN	All	All	All	All	Mackerel	MAC	no	3
	DR-2023/2623 - Article 14.14	VIII-X		Beam trawls, bottom trawls and seines	Beam trawls, bottom trawls and seines	OTB-OTT-PTB-TBN-TBS-TBB-OTT-PTB-TBN-TBS-SDM-SX-SV	TBB-OTT-OTB-PTB-SDM-SPR-SSC-SV-SB	All	All	All	All	Mackerel	MAC	no	5
	DR-2023/2623 - Article 14.15	IXa in Gulf of Cadiz		Beam trawls, bottom trawls and seines in the Gulf of Cadiz part of ICES subarea IXa	Beam trawls, bottom trawls and seines in the Gulf of Cadiz part of ICES subarea IXa	OTB-OTT-PTB-TBN-TBS-TBB-OTT-PTB-TBN-TBS-SDM-SX-SV	TBB-OTT-OTB-PTB-SDM-SPR-SSC-SV-SB	All	All	All	All	Red seabream	SBR	no	5
	DR-2023/2623 - Article 14.16	IXa in Gulf of Cadiz		Beam trawls, bottom trawls and seines in the Gulf of Cadiz part of ICES subarea IXa	Beam trawls, bottom trawls and seines in the Gulf of Cadiz part of ICES subarea IXa	OTB-OTT-PTB-TBN-TBS-TBB-OTT-PTB-TBN-TBS-SDM-SX-SV	TBB-OTT-OTB-PTB-SDM-SPR-SSC-SV-SB	All	All	All	All	Soles	SOL-SOO	no	1
	DR-2023/2623 - Article 14.17	VIII		In the industrial pelagic trawler fishery, which targets blue whiting in ICES subarea 8 using midwater trawls (OTM) and midwater pair trawls (PTM) and processes that species on board to obtain surimi base	Industrial pelagic trawl fishery using midwater trawls and midwater pair trawls (PTM) and processes that species on board to obtain surimi base	OTM-PTM	OTM-PTM	All	All	All	SPF-SIP	Blue whiting	VHB	no	5
	DR-2023/2623 - Article 14.18	VIII		Pelagic trawls	Pelagic trawls	OTM-PTM	OTM-PTM	All	All	All	All	Horse Mackerel	HMM-JAX-HOM-HMC-HMZ-HMG-JAA-TUZ	no	4
	DR-2023/2623 - Article 14.19	VIII-X-X-CECAF 34.1.1-34.1.2-34.2.0		Purse seines	Purse seines	PS	PS	All	All	All	All	Horse Mackerel	HMM-JAX-HOM-HMC-HMZ-HMG-JAA-TUZ	no	4
												Mackerel	MAC	no	4
												Anchovy	ANE	no	1
												Horse Mackerel	HMM-JAX-HOM-HMC-HMZ-HMG-JAA-TUZ	no	4
												Mackerel	MAC	no	4
												Anchovy	ANE	no	4
												Horse Mackerel	HMM-JAX-HOM-HMC-HMZ-HMG-JAA-TUZ	no	4
												Mackerel	MAC	no	4

