### **Welfare of Fish: Own Initiative**

**Chair: Katerina Marinou DVM, MVM, PhD** 

Head of the Animal Welfare for Farm and Laboratory Animals Department Ministry of Rural Development and Food



#### The EU Animal Welfare Platform:

promoting dialogue on animal welfare issues relevant at EU level.



### **Fourth Meeting**

Brussels, 19 November 2018





### **Central Competent Authority**

for the implementation of legislation on animal welfare for farm animals including fish (including welfare in farms, during transport and at the time of killing)

### Strategy

based on actions derived from legislative texts and other guidelines (legally binding or not)

# Webpage: www.minagric.gr

# Why this Own Initiative?

Science has recently brought insight into the complex lives of fish, their capacities for learning and social interactions.

However, the most important factor is the growing evidence that **fish are sentient beings and can feel pain** (OIE, 2008, EFSA, 2009).

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# Why this Own Initiative?

There are indications that the public, particularly in the industrialized world, consider that fish are entitled to advanced welfare (Mejdell C. and al., 2007).

As consumers begin to inquire about welfare in industrial fish farming, the production sector cannot ignore fish welfare; bad publicity may affect the sales of farmed fish (Broom, 2007).

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## Why a Greek Initiative? (data 2014-2016)

	Number of farms	Fish production (in tons and millions of fish)	Value (millions of €)	Number of farms	Fish production (in tons and millions of fish)	Value (millions of €)	Number of farms	Fish production (in tons and millions of fish)	Value (millions of €)
Seabass-Seabream-Other species	336	95.876,00*	436,314.00	326	91.900,00*	491,610.00	326	95.000,00*	506,300.00
Hatcheries for Seabass- Seabream-Other species	38	399,000**	85,660.00	29	405,000**	89,556.00	29	411,000**	90,900.00
Live bivalve molluscs	590	18,011.00	6,706.00	585	18,510.00	6,890.00	585	19,010.00	7,050.00
Shrimp culture	1	0.00	0.00	1	0.00	0.00	1	0.00	0.00
TOTAL	965	113.887,00& 399,300	1 2/8 680 00	941	110.410,00& 405,000	1 288 026 00	941	114.010,00& 411,000	604.730.00

Expressed interest from:
And support from MS
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# **Invited presentation**

# Seizing the day for fish welfare

6<sup>th</sup> June 2018, Brussels, Belgium







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# **Inaugural Meeting**

# **Brussels 25 September 2017**



**EU Platform on Animal Welfare** 

### **NEXT MEETING: ATHENS, 15 JANUARY 2019**

### **Option for Telephone or Skype meetings**

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### **Terms of Reference**

'Assist PAW in questions related to the implementation of existing legislation and advancing fish welfare by producing clear and informative materials which will be disseminated and support all involved in the aquaculture sector to improve fish welfare in the EU and beyond'

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#EU4AnimalWelfare



### **Members**

PAW Member	Subgroup Delegate				
	Bente Bergersen (until 1st Oct 18)				
	Jonathan Vaz (from 1st Oct 18)				
Norway	Inger Fyllingen (Co-delegate)				
Germany	Stephan Reiser				
Greece	Katerina Marinou				
Denmark	Birte Broberg				
Spain	Pilar Leon				
Poland (observer)	Anna Klockiewicz				
Italy	Amedeo Manfrin				
Linda Keeling	Albin Gräns				
Evangelia N. Sossidou	Evangelia Sossidou				
International Society for Applied Ethology					
(ISAE)	Dr Moira Harris				
RSPCA (Alexandra Hammond-Seamann)	John Avizienius				
Eurogroup for Animals	Douglas Waley				
Compassion in World Farming	Krzysztof Wojtas				
FVE	Kari Norheim				
FEAP	Bernhard Feneis				
EFFAB	Ana Granados Chapatte				
Animals Angels	Helena Bauer				
OIE (observer status)	Djahne Montabord				
DG MARE (observer status)	Birgit Van Tongelen				
Secretariat:					
Eurogroup for Animals	Alessia Virone				
FEAP	Courtney Hough				



**Fourth Meeting** 

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### **Own Initiative PRIORITIES**

Members highlighted the need to choose work topics for which **scientific data is available**. First term until June 2019.

The main proposals of the participants for the work of the subgroup were:

- welfare during grow out
- welfare during transport
- welfare during killing
- handling
- water quality

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### Fish Welfare at Farm Level

All guidelines for critical factors affecting welfare in fish farms are applied by the industry

Photographs: Courtesy of Dr Michael Pavlidis

especially in terms of water quality, water exchange rate, water temperature, stocking density, oxygen levels, food supply, handling etc.



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# Fish Welfare during Transport

Provisions of Regulation 1/2005/EC are fully implemented including the provisions of Annex I "Technical Rules" applying to fish transport (overland transport by truck and sea transport by well-boat)

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## Future work: Fish Welfare at Killing

 General requirements for killing and related procedures of the Council Regulation 1099/2009/EC apply to fish killing





 Ice slurry suitable for seabass and seabream - current practice in some MS

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# **Topic No 1: Handling Fish**

Where handling is necessary, it shall be carried out with a minimum of stress and disturbance for the fish handled and to the other fish and for the shortest time possible.

Sedation or anaesthesia may be appropriate.

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# **Topic No 2: Water Quality**

- The parameters affecting water quality, such as oxygen, ammonia, CO2, pH, temperature, salinity and water flow, are interrelated. Their variation will influence the water quality and therefore affect the welfare of fish.
- Water quality parameters shall at all times be within the acceptable range that sustains normal activity and physiology for a given species (unless certain parameters in exceptional situations cannot be managed by the farmers provided that the site has been chosen in accordance with Article 7).
- Water quality parameters shall also take into account the fact that the requirements of individual species may vary between different life-stages.

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