

Past present and future of QUASIMEME's proficiency testing in the marine environment

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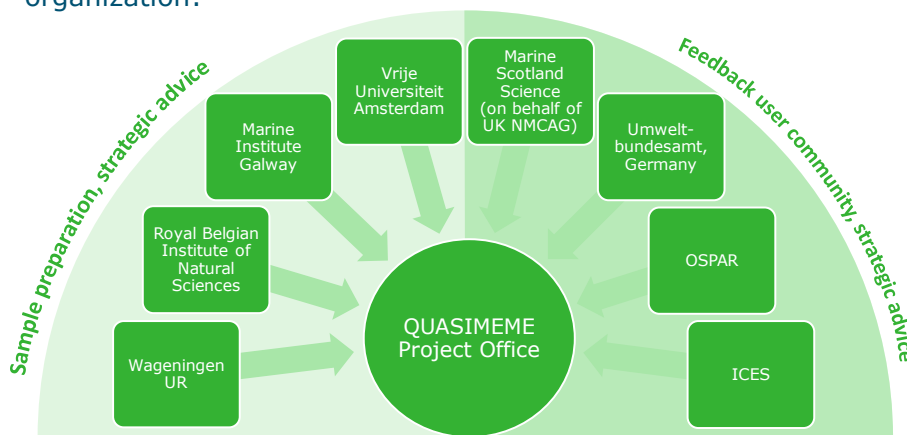


Background

Marine ecosystems provide a range of invaluable services to humans. Consequently, actions and policies to protect marine environment are of paramount importance. Such policies are based on research, monitoring and assessment carried out in an international context. The information base underpinning these activities must be reliable for environmental management to be effective.

The past

In the 1980s, a series of ICES interlaboratory studies revealed that laboratory results were poorly comparable and that monitoring programs and laboratory performance needed to be improved. QUASIMEME was initiated as quality improvement program in 1989 funded by the EU-BCR and continued as a proficiency testing provider in 1996. QUASIMEME has developed intensive cooperation with marine institutes in a network-type organization:



The present

Nowadays, an integrated approach is taken that takes pressures from different types of human activities and different issues into consideration. Monitoring and assessment of contaminants remains an important issue. QUASIMEME sets itself to continue high level support the quality of data for marine monitoring and assessment.

QUASIMEME is a non-profit organization and organizes accredited proficiency tests on a routine basis (26 matrix/measurand combinations, two rounds with several samples annually).

	Estuarine and/or seawater	Biological tissue	Sediment
Nutrients	X		
DOC	X		
Total alkalinity and DIC	X		
Chlorophyll and Pheopigments	X		
Volatile Organic Compounds (VOC's)	X		
Pentachlorophenol	X		
Triazines & Organophosphorus Pesticides	X		
Trace metals	X	X	X
Chlorinated organics	X	X	X
Polycyclic Aromatic Hydrocarbons (PAH's)	X	X	X
Organotins	X	X	X
Brominated Flame Retardants (BFR's)		X	X
Perfluorinated Alkyl Substances (PFAS's)		X	X
ASP - Shellfish Toxins		X	
Lipophilic - Shellfish Toxins		X	
PSP - Shellfish Toxins		X	

QUASIMEME organizes development exercises and workshops in areas where improvement of methodology is necessary.

The future

New compounds emerge that require attention from environmental management and may be included in monitoring and research. New technologies are developed and introduced that enable a more efficient monitoring. Laboratories embed new technology in their quality systems and need external quality assurance as part thereof.

QUASIMEME interacts continuously with the marine community to assess current and future needs and takes initiatives to develop and implement development programs and new proficiency tests with its current and with new experienced partners.

Examples of new interlaboratory studies:

- Microplastics in different media
- Passive sampling
- Tetrodotoxin in shellfish
- Ocean acidification

Over the years, QUASIMEME has gathered a significant amount of data. These data can provide important information when monitoring data are statistically analyzed. QUASIMEME is willing to provide information within constraints determined by data-confidentiality considerations.

QUASIMEME invites members of the marine community to express their needs regarding quality assurance and is open for cooperation to develop new initiatives.