



SUPPORT MEDITERRANEAN MEMBER STATES TOWARDS COHERENT AND COORDINATED IMPLEMENTATION OF THE SECOND PHASE OF THE MSFD

Invitation to Scientific Gaming - MEDCIS Project

Play and participate to the European competition

Test the skills of your students in the field of Mediterranean marine ecosystem monitoring and protecting with '***Scientific Gaming***', an online game for students (ages 10 and up) coming from schools through all Europe! developed within the European research project MEDCIS.

MEDCIS Scientific Gaming will allow your students to study and apply the method of scientific research applied to the monitoring of ecological and environmental status of Mediterranean marine ecosystems in a entertaining way through the use of a video game focused on ecological tools useful to describe the marine ecosystem status, such as *biodiversity*, *water noise*, *eutrophication*, *alien species* and on the approach of the Marine Strategy Framework Directive (MSFD).

About the project and the Game

'MEDCIS Scientific Gaming' is an innovative effort to motivate students by replicating the excitement of scientific research applied to address a major ecological challenge in the Mediterranean Region, i.e. monitoring and protecting the health of the Mediterranean Sea. The MEDCIS Scientific Gaming is a participative and user-friendly tool of the MEDCIS project developed in the context of the need of a science-based knowledge to make fully operational an innovative European Directive focusing on the protection of the life in the Mediterranean Sea, as well as of all services that it is supplying since millennia to the socio-economic development of our communities: the Marine Strategy Framework Directive (MSFD). The MSFD is approaching the goal of a safe, productive and healthy Mediterranean Sea through an integrated process, involving the European Mediterranean countries to set the targets, define the conditions of good environmental status, organise a network of monitoring areas and setup a programme of measures coordinated among countries, since ecosystems do not follow administrative boundaries. However, to tackle the grand challenges facing human society (for example climate change, extreme events, loss of biodiversity, etc.), scientific collaboration and advanced technologies are necessary. More information about the MEDCIS project which is set to implement the second cycle of the MSFD to achieve a coherent, coordinated and consistent updates for reaching good environmental status, will be available soon on the MEDCIS website.

About the European game

Playing '***MEDCIS Scientific Gaming***', students will learn more about marine ecosystems, their health and the procedures to monitor and assess their actual ecological status, engaging the foundations of the 'deductive thinking' and 'logical reasoning' necessary not only for science, but also for their future life of young students.

The game '***Scientific Gaming***' includes two phases:



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- **Phase 1 - 'Carry out a research project'** – students, organised in teams, carry out a scientific research project including experimental activities, which is going to be evaluated and to contribute to the final score (provisional DEADLINE for project result delivery **April 13th, 2018**)
- **Phase 2 - 'Final online competition'** – teams compete simultaneously playing a video game online (provisional date of the online game **May 4th, 2018**). For more information about the organization and presentation of the research project, documents will be available soon on the web site of the game at the Section RESOURCES.

Developing content of the MEDCIS Scientific Gaming

The MEDCIS Scientific Gaming is organised referring to the objectives of the Marine Strategy Framework Directive (MSFD). Players, as student “scientists”, during the game will be asked to answer questions, solve problems, drag and drop images in the proper research infrastructure category, analyse figures and tables about research show cases, read and understand summaries of scientific papers. The game includes three objectives to be reached by each player. In a demo of the game, the player starts the journey demonstrating that has basic knowledge on the Marine Strategy Framework Directive, building the correct correspondence of the MSFD Articles, identifying MSDF Descriptors vs Biological Elements. In the second objective, the player has to learn more about MSFD articles 9 and 10, focusing on approaches and methodologies towards Good Environmental Status (GES), targets and assessments in Mediterranean Regions. The third objective, about MSFD article 13, focuses on the tools and mechanisms to describe and assess progress in the implementation of the programme of measures.

Players should develop an understanding of the implications of human activities on the marine environment (such as eutrophication, chemicals, marine litter, contaminants, noise and other threats from socio-economic activities) and basic knowledge on the Marine Biodiversity including NIS (Non-indigenous species) and seafloor integrity.

The themes on which the MEDCIS Scientific Gaming will be organised will be the ecological status of the Mediterranean Sea, the European Legislation for monitoring and ensuring protection and conservation of Mediterranean Sea ecological status, the status descriptors and the ecological indicators used for monitoring.

MEDCIS Scientists in your country will be happy to be your mentor and assist you in this exciting game.

Link & contacts:

Registration will available on the web site from November 2017

'MEDCIS' project website (www.medcis.eu)

'MEDCIS Scientific Gaming': (www.medcis.eu [section 'Scientific Gaming'] available soon)

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