YNNAP	**QUESTIONNAIRE OF TECHNICAL DIALOGUE**	E1

(The questionnaire screening techniques may be found in a processable form in www. Hcg. Gr and at www . yen . gr)

Date	**13/05/2019**
To	**SNANN / DIP EA 4th**
Ref.	

Participant Data Sheet	
(To be completed by the participants)	
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Project Data Sheet	
(To be completed by the Service)	
Project Title:	Extension - upgrading of the Fisheries Monitoring Center (FMC) and integration of new modern technologies
Supply of items / Services	Supply of items
Submission:	No
Financial source:	E THAT
Type of Contest:	Electronic Regular Contest Open Procedure International Join Ochi
Award Criteria:	Most economically advantageous offer based on the best value for money
Delivery time:	████████████

Project Technical Description
(To be completed by the Service)

GENERALLY:

This project involves extending / upgrading the functions of the existing fishing vessel monitoring system (CFP) through the procurement of equipment / software to replace the existing system to fully meet the obligations of our country to respect the principles of the Common Fisheries policy. In order to achieve this objective, it is necessary to apply Greece's obligations in accordance with national and Community legislation as well as with the recommendations of the International Organizations (General Fisheries Commission for the Mediterranean, GFCM / FAO , International Commission for the Conservation of Atlantic Tunas, ICCAT).

The Fisheries Control System is the tool to ensure compliance with the rules of the Common Fisheries Policy (CFP, Regulation 1380/2013) , as well as compliance with commitments and obligations arising from Regional Fisheries Management Organizations (RFMOs)). The Control System operates at the intersection of various European regulatory provisions (mainly from the fisheries sector) and their respective national (fisheries, maritime surveillance, market surveillance).

The *main body* of the **institutional framework** for the implementation of the control system consists of the following:

- Regulation (EU) 1224/2009 establishing a Union system to monitor compliance with the rules of the Common Fisheries Policy.
- Implementing Regulation (EU) No 404/2011 laying down detailed rules for the implementation of Council Regulation (EC) 1224/2009.

- Regulation (EU) 1005/2008 on illegal, unreported and unregulated (IUU) fishing (I UU).
- Regulation (EU) 2017/2403 on the sustainable management of external fishing fleets.
- Council Regulation (EC) 1967/2006 of 21 December 2006 on management measures for the sustainable exploitation of fishery resources in the Mediterranean Sea.

The services involved in implementing the Control System at central level are:

- the Ministry of Rural Development and Food, in accordance with the powers laid down in the Presidential Decree. 97/2017 " *Organization of the Ministry of Rural Development* ".
- the Ministry of Maritime Affairs and Fisheries and Policy, in accordance with the competences laid down in p. 13/2018 " *Organization of the Ministry of Shipping and Island Policy* ", as in force.

The implementation of the above is supported by the extensive use of information systems that cover almost all the requirements of the control system. The most basic systems used are:

- The National Fishing Records (**EAM**), which includes the data of professional vessels and persons associated with them.

- The Satellite Surveillance Center (**FMC**), which includes the position and course data of the vessels.

- The Integrated Fishing and Tracking System (**ICPF**), including: electronic fishing log submission system, landing and sale declarations, 10m-12m vessel logging system, <10m vessel logging system, data logging - crossing - data verification subsystem , the Data Exchange System, the catch certificate subsystem, the Inspection subsystem, etc.

The above systems were set up to meet the requirements of the Control Regulation [Regulation (EC) 1224/2009 establishing a Community system for monitoring compliance with the rules of the Common Fisheries Policy] and are in the upgrading phase.

In particular, the procurement concerns the integration of new modern technologies, with a view to more effective policing of illegal fishing, the exploitation of existing instruments and the harmonization with new legislation. Will join new technologies and systems, through which the full interconnection with d mm a control systems (eg AIS will be achieved OQSG etc.) to effective policing of illegal fishing, the use of instruments and the harmonization with the legislation under review.

Existing System Description

## Brief Description of Existing Software - Equipment

The existing system is based on the following subsystem and software components:
- the Graphical User Interface (Application of Users)
- the ArcGIS 10.2 for Enterprise Enterprise Standard software
- the Vessel Monitoring Component subsystem
- the Gateway Server subsystem
- the Geospatial Database
- the l computer software ArcGIS 10.2 for Desktop Advanced
- the ArcGIS 10.2 Data Interoperability for Desktop software (an extension ArcGIS)

The application of the users compiles the functionality of the above Geographical Information Systems (GIS) software , providing a complete solution for the implementation of the system, but also for supporting daily work and workflows. The system consists of several levels of software (Server, Desktop, Web, Mobile) that create a complete system that meets the needs of each user.

Architecture layout

Each of the above-described parts of the existing system can behave as stand-alone modules, which are capable of expanding the system 's capabilities. The combination of these modules forms a n -tier architecture.
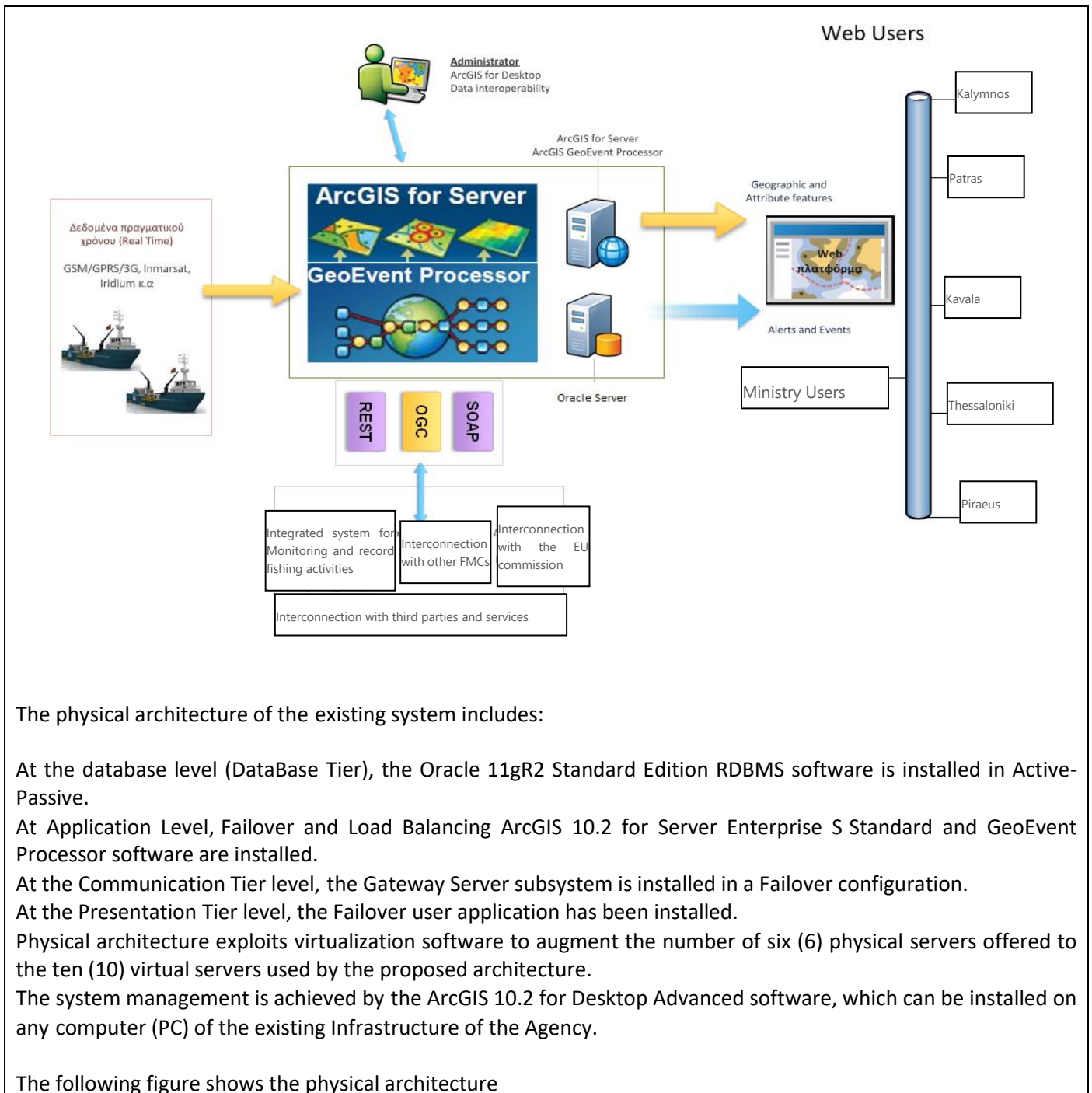
The physical architecture of the existing system includes:

At the database level (DataBase Tier), the Oracle 11gR2 Standard Edition RDBMS software is installed in Active-Passive.

At Application Level, Failover and Load Balancing ArcGIS 10.2 for Server Enterprise S Standard and GeoEvent Processor software are installed.

At the Communication Tier level, the Gateway Server subsystem is installed in a Failover configuration.

At the Presentation Tier level, the Failover user application has been installed.

Physical architecture exploits virtualization software to augment the number of six (6) physical servers offered to the ten (10) virtual servers used by the proposed architecture.

The system management is achieved by the ArcGIS 10.2 for Desktop Advanced software, which can be installed on any computer (PC) of the existing Infrastructure of the Agency.

The following figure shows the physical architecture
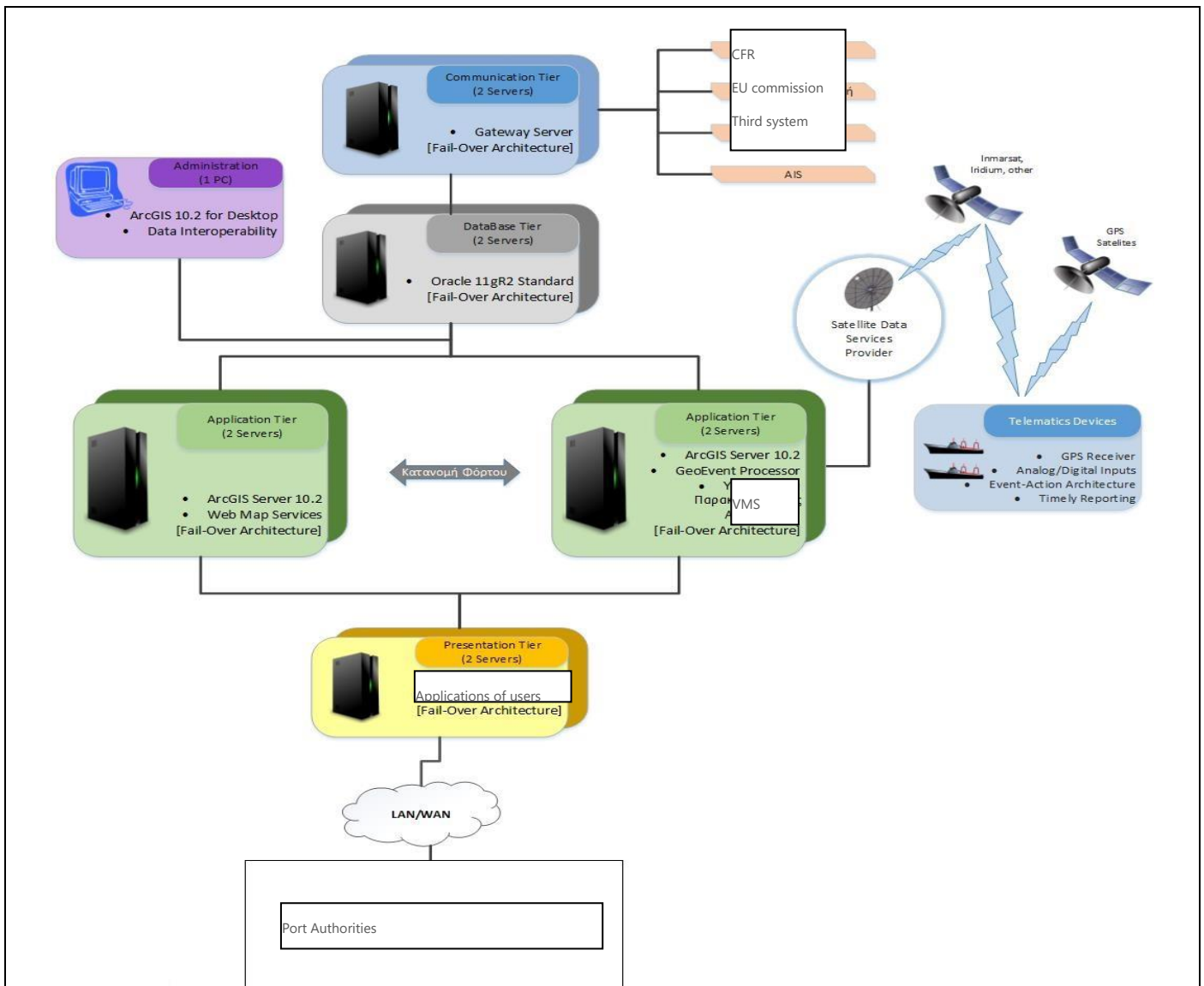
Satellite Positioning Devices

There are two types of devices interoperating with the CFA, those transmitting data only via satellite (Inmarsat) and those transmitting Iridium and Gprs (Hybrid) telephony . The frequency of data transmission is every half hour. The satellite tracking devices installed on EU fishing vessels shall ensure the automatic and regular transmission to the Vessel Monitoring Center (FMC) of the Member State of transmission of data concerning:

(a) the identity of the fishing vessel

(b) the latest geographical position of the fishing vessel, with a positional error of less than 500 meters, with a confidence level of 99%

(c) the date and time of the determination of the position of the fishing vessel (expressed in coordinated global time UTC); and

(d) the momentary speed and direction of the fishing vessel.

The data during their transmission are processed and controlled by the system in relation to their quality and at the same time geo-spatial controls are carried out.

Functional Capabilities

Through the CFA, ALS-EL.ACT. may check:

- if a Sub-Fund is operating in an area where no fishing activities are permitted,
- if a fund is in possession of the necessary licenses and quotas for fishing in that area
- if a Sub-Fund has landed in a port without declaring its landings
- if a Vessel vessel is engaged in a possible illegal fishing activity.

Tenderers during the preliminary consultations (Technical Dialogue - Public Consultation) <u>may, after consultation with the competent Directorate CONTRACTING let Authority (DELAL) to perform an autopsy on the functional space limit of the existing system / equipment in order to form a complete picture of the existing infrastructure</u> .

<u>Natural Object Description:</u>

Extend / upgrade the existing Fisheries Monitoring Center (CFP) to meet the requirements of EU and international legislation as outlined above. Upgrading is to replace the existing software / equipment with the supply and installation of a new one to improve the applications of the existing system, to achieve communication with third-party systems, to use modern technologies for immediate information of the stakeholders (shipowners - as defined by EU provisions and improved systems, with a view to more effectively policing illegal fishing, exploiting the means, and harmonizing with there view legislation.

More specifically, the new system will be achieved beyond the existing functions described above:

- Recording and digitizing on an electronic map all prohibited areas for fishing regardless of the gear unit
- Supply and integration in the application of internationally certified electronic charts (ENCs)
- Full interconnection with the National and Community Fisheries Registers
- Full interconnection with the ICPAT Integrated Fisheries Monitoring System
- Full interfacing with the THALCHOR application of the SNANP
- Full interfaces with AIS
- Complete interconnection with the System Fishery Language Universal Exchange (FLUX)
- Complete interconnection with the IMS system (Integrated Maritime Services) of the EFCA
- Creation of Regional FMCs by Regional Administration of RC-EL.AKT. and Port Authority
- Direct communication system Supply (chat) and document handling (filemanager / transfer) between supervisory authorities (YNANP, PEDILS-EL.AKT and port authorities)
- Supply - Installation and operation of a notification system in vessels to the vessel owners (sms server)
- Implementation of fishing speed determination capability per H / V vessel
- Use of new technologies for cross checking
- Implementation and design of a delinquency prediction and auto-call system
- Interoperability (exploration) of two-way (DUPLEX) communication between CPU and VMS
- Integrate a statistical analysis tool
- Incorporating an automatic function test tool for SBS.

Analytically:

Action	Result
Recording and digitizing on an electronic map all prohibited areas for fishing regardless of the gear unit	It covers operational needs for more effective control of illegal fishing activity .
Supply and integration intointernationally certified electronic maps (ENCs)	A powerful tool that due to updated points - swimmer, etc., will bring down the activation of OS operational tools and complaints and disputes from fishermen.
Full interconnection with theNational and Community Fisheries Registers	Direct communication / updating with the system that forms the basis of all fishing applications currently held by the two Competent Bodies (FMCG).
Full interconnection with ICPAT Integrated Fisheries Monitoring System	It covers operational requirements for automatic control and intersection of data between the two systems . (**<u>EU obligation</u>**)
Full interfacing with the THALCHOR application of the SNANP	It covers operational needs in terms of more effective control of illegal fishing activity and

	more immediate activation of operational resources.
Full interface with AIS	It covers operational requirements for automatic control and intersection of data between the two systems. The system will also record all AIS reports for future reference and control .
Complete interconnection withthe System Fishery Language Universal Exchange (FLUX)	**A Union obligation** which was not implemented during the initial procurement of the CFP since the obligation was not in place at that time .
Complete interconnection withthe IMS system (Inte grated Maritime Services) of the EFCA	It covers operational needs for more effective control of illegal fishing (for more details see[https://www.efca.europa.eu/en/conten t / efca-marsurv-service](https://www.efca.europa.eu/en/conten)) .
Creation of regional FMCs per PE.DI.L.-EL.ACT. and Port Authority	With the access of PEDI-EL.ACT. and the Port Authorities at the CFA with full control rights in the area of jurisdiction of each LA, there will be a direct perception and take action to control illegal fishing activity. With this capability, each Port Authority will have full access (displaying history, calling { poll } to vessels operating in its area of competence, etc.) .
Supply of instant messaging system (chat) and document handling (file manager /transfer) between the Audit Authorities (HYNAP , PEDILLS-EL.ACT , Port Authorities)	It will lead to a reduction of bureaucratic procedures and direct communication of actions between the parties involved (eg mandate for activation of operational means and control by the Central FMC to the Port Authorities and PEDILS-EL.ACT will be through the system within second-minute space) .
Supply - installation and operation of a system of sending notification messages to vessel owners of vessel vessels (sms server)	It is an **EU obligation** informing rulers if they commit an offense or do not operate the SBS of the vessel. By sending a message to the commander's mobile, it is ensured that it is immediately updated, is a proof of information and it is estimated that (this continuous automatic communication) will be a product of deterrence. I think it will need a pack of 1,000,000 messages per year. The costs will be borne by the contractor for the entire duration of the contract .

Implementation of fishing speed determination capability per H / V vessel	It will cover operational needs in terms of moreeffective control of illegal fishing activity and will in due course substantiate a matter of years that is not legally covered. The speed of fishing for each CMR vessel handled by the FMC will be integrated on this basis with the historical data sent by the SBS, and at this speed will also be the checks for entry into an illegal fishing area.
Use of new technologies for cross checking	The use of new technologies such as the use of satellite images, SAR imaging , etc. are considered to be credible evidence of fishing offense, especially in cases where there are no VMS or AISdata from suspect fishing vessels, and for controlling fishing activity in specific areas of interest.
Implementation and design of integrated automatic monitoring fishing vessels conduct system, risk assessment, and to autodial th (poll)	The European Maritime Safety Agency (EMSA) has developed the Integrated Maritime Services for the purpose of fuller maritime awareness (maritimeawareness). One of the built-in tools offered is Automatic Behavior Monitoring (AutomatedBehavioral Analysis) . More information can be found on the sitehttp://www.emsa.europa.eu/operation with / maritime-monitoring / items.html? cid = 86 & id = 3206 . The CFR, having the need to achieve fuller marine awareness with a view to effective fisheries control, has to incorporate a corresponding tool. In particular, this tool should incorporate algorithms for identifying suspicious behavior of fishing vessels (eg abrupt change of speed or course, encounter with another ship, etc.) and display corresponding alerts to the CFA operator. In addition and in accordance with new technological developments, the tool should include j automatic generation algorithm including algorithms suspicious behavior, based on the accumulated experience of the system, using machine learning technology (machine learning). In addition, the system should have a dynamic risk assessment tool for possible illegal fishing activity to achieve a high, medium and low risk fleet ranking based on historicality, speed, course, area of activity , etc. The system should then be complemented by an automatic polling tool) on high-risk fishing vessels to detect a possible fishing offense.
Incorporating two-way (DUPLEX) communication between KAP and VMS devices	It will enable the FMC to communicate promptly and rapidly with the VMS Vessel

	Vessel Vessel, especially in cases where it is not possible to communicate with other common telecommunication means (eg lack of coverage of a mobile network) with a view to informing the commander in cases of technical failure or non-functioning of the SBS and on the other hand the possibility of imposing immediate measures on offending situations. Additionally, a secure remote connection must be possible .
Integrate a statistical analysis tool	It will enable the statistical data processing of the CFP to be processed in order to improve the decision-making process in the surveillance and control of fishing activities .
Incorporating an automatic function test tool for SBS	It will make it possible to monitor the proper functioning of SBS and to detect interventions / malware to mislead the Office (EU obligation under Article 19 (2) of Regulation 404/2011) .

Software
During the preliminary consultations, the Candidate Contractors will provide a detailed description of the features / capabilities of the proposed software to meet the above functional requirements. Providing the Contractor with an ongoing data transfer of the existing system to the new one.

Equipment
During the preliminary consultations, the Candidate Contractors will provide a detailed description of the features / capabilities of the proposed / required equipment to meet the above operational requirements.
Consider the feasibility of implementation through the GTC cloud of GCP SA

Architecture
The architecture of the proposed system has the following features:
- Provides centralized management
- Ensures multi-user support
- Allows interconnection with other carriers
- It provides mechanisms to ensure the integrity and completeness of the data
- Provide design capabilities and geographic infor management rias
- It allows the management of large volumes of data
- Complies and follows with all open interoperability standards both in the GIS field and in the wider field of IT.

During the preliminary consultations, the proposed contractors will describe the proposed architecture to meet the above functional requirements.

Office equipment
A total of fifteen (15) computers (full sets), ten (10) laptops , five (5) multifunction devices (consumables), telephone recorder, ten (10) telephones and five (05) the needs of the FMC workstations.

Employees training

The Contractor will provide sufficient training to a sufficient number of ALS-EL.ACT executives to ensure continuous, satisfactory and efficient operation of the CAA / EL.A.- EL.AKT software. and their respective Regional FMCs.

The minimum number of executives is at least ten (10) of the Central Service of ALS-EL.ACT and nine (9) of the PE.DI.L.-EL.AKT.

The departments that will be set up for the training of the staff will consist of no more than ten (10) persons. The training will take place at ALS - EL.ACT. with due diligence, responsibility and expense of the Contractor.

Also, the contractor will provide training to Coast Guard officers through a webinar.

The program to be drawn up by the candidate Contractor will include at least:

• System users training.

• System administrators training. The training will include, among other things, issues on the functionality of the application and the configuration of the equipment.

• Training on technical support for the system. Specialized training will be provided for the central system software (Database Management System, web server software, etc.). Additionally, sufficient training will be provided on the software to be developed and its documentation for future customization by the trainees. It should be noted that the aim of this training is the possibility of full technical support of the system by the selected staff. During the preliminary consultations the proposed training program and thematic modules for the above categories should be proposed by the contractors.

Guaranteed commissioning

The Contractor warrants the smooth operation of all material and software for a period of at least seventy-two (72) months after the date of final Quality and Quantitative Acceptance of the Project. For this period, the Contractor warrants that it will provide maintenance-technical support services so that the system of the project in question remains in compliance with the specifications without any financial burden for the Contracting Authority. The above warranty includes work, spare parts, and costs of moving the necessary personnel to provide the above services or any other related costs that may arise. Any replacements for any improper hardware, hardware, software, software upgrades and / or damage repairs that will occur within the warranty period will be borne by the contractor. The time between installation and final Qualitative and Quantitative Acceptance is not included in the warranty period. A longer warranty period - technical support will be taken into account in the evaluation of the offer

Place of delivery

The transportation, installation, commissioning and adjustment of the equipment and software of the project will be at the responsibility and expense of the Contractor. The required permits, studies, constructions and materials for the delivery of the system will be borne by the supplier. The place of delivery of the deliverables is the headquarters of the Fisheries Control Directorate of the National Fisheries Control Agency (Akti Vasiliadis, Gate E 1 - E 2).

Timetable - Implementation Phases

Phase A: Implementation Study - Total Duration: Up to 1 month from signing the Contract.
Phase B: Physical Object Implementation - 3.5 months from the approval of Phase A implementation.
Phase C: Training - Fifteen days after the completion of the Phase B installation.
Phase D: Pilot mode - one (1) month from the completion of Phase C training.
These phases will be finalized during Preliminary Consultations.

Technique - Professional experience / Experience of candidates

Candidates for the Tender will have to prove that they have the necessary technical and / or professional competence. In particular, they must have proven skills, specialized knowledge and considerable experience in the design, development and completion of related projects, and in particular have at least one (01) work in place within the last five years

Proposed Technical Solution
(To be completed by the participants, details such as manufacturer, model, technical characteristics for each of the above.)

The current deployed version of PRISMA Connect meets most of the requirements that are specified in the RFI with little to no development/configuration.

PRISMA Connect is capable of recording and digitizing, on an electronic map, all prohibited areas for fishing regardless of the gear unit, PRISMA Connect provides highly-refined and detailed mapping capability that can be viewed using a number of chart layers. Comprehensive global mapping coverage is embedded into the user interface, allowing operators to zoom in or out and pan to reposition the map view with a click of the mouse. Our mapping solution scales information at different levels to ensure that information presented in a particular view is not overloaded.

The System allows the user to create zones for alerts, and it permits administrators to set boundaries and areas for the capture of statistical information. Points of interest such as ports and cities can be layered along with latitude and longitude. Users can easily drill in and out as required. The overall system built on Tile Map Service (TMS) is widely supported by web mapping clients and servers: The Web Map Service protocol is more widespread for enterprise mapping applications. The Open Layers JavaScript library supports TMS natively, while the Google Maps API allows URL templating. PRISMA Connect has the capability to enter shape files and is customizable using color to designate areas with common attributes such as closed fisheries, sensitive/restricted areas, and other geographical areas which need to be monitored for possible incursions. Users are able to create geofences to be displayed on the map by simply clicking a 'Create Geofence' icon in the toolbar over the map. In addition, the system administrators can create geofences from the Geofence administration page by pasting coordinates into the input field or by uploading a file with geofence coordinates. To view any saved geofences, users only need to enable the geofence layer using the map menu.

In addition, administrators can also create notifications for Geofences for vessels being monitored as well as for vessels using AIS data. Notifications include vessels that have entered or exited a geofence or that have remained inside for a designated number of minutes or within a designated number of miles. These notifications will be shown on the PRISMA Connect system and can also be emailed or send via SMS as needed.

Orolia's solution will be delivered with the ability to automatically increase a reporting rate within certain geofenced areas when compatible with the service providers.

PRISMA Connect can supply and is integrated with internationally certified electronic maps (ENCs) as well as full interface with AIS, it offers innovative software features including AIS plus weather, for complete maritime domain awareness, electronic nautical charts (ENC) for improved maritime navigation, and geofencing for compliance with protected or restricted zones. Real-time visibility to vessels is delivered through automated mapping.

PRISMA Connect will be capable of full interconnection with the National and Community Fisheries Registers, with ICPAT Integrated Fisheries Monitoring System, with the IMS system (Integrated Maritime Services) of the EFCA. This innovatice software is also capable of fully interfacing with the THALCHOR application of the SNANP. These features will require some integration but PRISMA Connect is flexible and modular by design to allow for such integration. PRISMA Connect is a flexible platform that is interoperable today, and it supports a number of communication mediums and protocols to enable data exchange. As a leader in the field of system integration, Oralia looks forward to working with the other VMS vendors and third-party systems to integrate their systems into PRISMA Connect. Once the integration is complete, all of the data ingested from those vendors and systems will be integrated and the analytics and reports required by the national authority for VMS will be available.

Complete interconnection with the System Fishery Language Universal Exchange (FLUX). This is an industry standard interface and will be implemented in PRISMA connect before handover.

Creation of regional FMCs per PE.DI.L.-EL.ACT. and Port Authority is possible in the current format PRISMA connect allows the management of fleets based on features such as owner, size, etc. The development needed here is the ability to manage/view vessels by a particular geographic region (area of competence). This development will be done before handover.

PRISMA Connect can supply an instant messaging system (chat) and document handling, it provides robust, customized reporting, with automated schedules via email and text. Incorporating two-way (DUPLEX) communication between KAP and VMS devices. Orolia, as part of services to other marine clients, has engineered PRISMA Connect with the ability to receive and parse different types of formats of electronic forms (e-forms). The transfer and processing of these forms sent between vessels and operators is a core feature of the PRISMA Connect system. PRISMA connect has the ability to send and receive emails to and from the vessels and also has a messaging feature which will provide messaging at standard satellite communications speeds.

The Administration hierarchy required for the VMS systems will be delivered as required. Multiple user roles with defined access and permissions will be organized to ensure the system is operated in the most efficient

and secure way. The national authority will be able to create new user accounts and allocate the role that best fits that account.

PRISMA Connect provides many capabilities as the presentation point for thousands of tracked vessels. It is also a highly effective communication tool that allows organizations to receive movement and catch information and effectively communicate that intelligence, either directly or summarized, with other sea and shore side parties. The flexibility provided by PRISMA Connect will allow the national authority to share information as required.

Use of new technologies for cross checking. Implementation and design of integrated automatic monitoring fishing vessels conduct system, risk assessment, and to autodial th (poll) PRISMA Connect doesn't currently support this feature. This feature can be developed in partnership with the national authority after the system is implemented.

Orolia understands the requirement for security and ensuring that the transferring of data is done so in a secure, authorized, and discreet manner. The PRISMA Connect solution proposed by Orolia will provide this information security and will include firewall protected, internal access only databases, 100% 128bit HTTPS Web based responses and requests, RDA database level encrypted credentials and other highly sensitive data. Databases will have no public connections to or from the outside world; the only access to the databases will be through the Firewall protected API and Web Server.

Advantages of Technical Solution
(To be completed by the participants, the technical characteristics of the product can be assessed positively for each of the above.)

Bringing together over 150 combined years of experience consolidating our proven brands: Boatracs, McMurdo, SARBE, Kannad, and Techno-Sciences, Orolia is the most trusted name in Vessel Monitoring, Fleet Management, and Emergency Readiness and Response. Also, Orolia is the industry's first, and only end-to-end vendor of lifesaving, satellite-aided search and rescue equipment. Orolia's distress beacons, satellite connectivity infrastructure, maritime monitoring/positioning hardware and software, and Command & Control management solutions have helped thousands of users around the world save lives and be more effective in their operations.

In order to deliver world class capabilities to national authorities for Vessel and Fleet Management, Search and Rescue, and Maritime Domain Awareness, Orolia has created a comprehensive Emergency Readiness and Response solutions platform called PRISMA: Preparation, Response, Identification, Surveillance, Management, Acceleration. PRISMA is a fully integrated software platform as well as a partner platform for the integration of products and data services, from a variety of manufacturers and external sources to work together cohesively and seamlessly, creating advanced tools for organizations focused on Vessel and Fleet Management, Search and Rescue, and Maritime Domain Awareness.

Orolia's PRISMA Connect is one of the core software packages in the PRISMA platform. It is our web-based, fully integrated VMS software interface used and trusted by numerous operators. Through PRISMA Connect, Commercial and Government vessel managers interact with a user-friendly platform that delivers superior monitoring and communication capabilities with vessels within their domain. Importantly, PRISMA Connect will provide the user with a software solution that is delivered as a browser-based product without any client computer software requirement. PRISMA Connect also offers a high degree of scalability, allowing multiple users in many locations to simultaneously operate at a high level of system performance without any degradation in service. PRISMA Connect communicates with multiple satellite providers in addition to other common and developing communications protocols, meaning it's a lower cost option if the national authority decides to extend their program. To provide maximum system availability, Orolia implemented intelligent replication processes and engineered automatic failover capabilities. Additionally, the web-based design enables rapid, system-wide software updates and modification.

In addition to vessel tracking, route planning, historical data and reporting, PRISMA Connect offers innovative software features including AIS with vessel and status filters, weather overlays and weather advisory warnings with automatic refreshing for complete maritime domain awareness, world-class electronic nautical charts for improved maritime navigation, and geofencing to help ensure the compliance of protected or restricted zones. Real-time visibility to vessels is delivered through automated mapping. In addition, PRISMA Connect can be configured to ingest and display Cospas-Sarsat distress alerting data.

Orolia has the experience and expertise to deliver to the national authority the highest quality service along with an efficient, technologically state-of-the-art turn-key solution compatible with all requirements

requested in this RFI. The solution will be delivered within the price guideline and will provide the national authority with the capability that is required in this RFI as well as ability to expand efficiently, if required, to service other EU fishing areas. Given Orolia's experience in the delivery of safety and security systems, this program will continue to receive additional value support and improvements as Orolia develops and integrates new technology.

Technical leaflets of a proposed solution   (To be completed by the participants for each of the above .)
Our proposal is fully detailed in the "technical proposal" enclosed.

Other Proposals (To be completed by the participants)	
Estimated cost of offered solution for each of the above.	███████ € excluding taxes and phase 4. Phase 4 consists of: • Use of new technologies for cross checking • Implementation and design of a delinquency prediction and auto-call system Orolia suggest that a 4th Phase be added to the project for the development, in partnership with the national authority, of those features and requirements which is not core functionality of a VMS system The total budget for the solution including all above features ████████████████████████ taxes)
Suggested Delivery Time for each of the above items	Initial implementation could be done ████████████ and this will include core functionality along with enhancements to the GUI and forms. Detailed timetable is available in the technical proposal enclosed.
Subject entry into Harmonized Standards for each of the above	YES NO (standards / certifications listed)