

Proyecto MEDGuard.



Deliverable

D1.3. Business Plan of activities other than fishing.

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2	CIFP Hespérides	HESPÉRIDES	ESP	Public
3	Identidades, valores y estrategias alternativas para los empresarios marítimos y pesqueros	IVEAEMPA	ESP	Non profit

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- Students from the Training course Maritime Transport and deep sea Fishing
- Students from the Training course Hiperbaric and underwater operations.
- Technical University of Cartagena (Underwater vehicles Laboratory)
- Asociación Ambiente Europeo.

Abstract

This document is the Deliverable “D1.3 Business plan of activities other than fishing” of the MEDGuard project co-funded by DGMare of the European Commission within the call “Guardians of the Sea, MARE/2014/24”. This call co-funds preparatory actions to promote the reassignment of fishing vessels and the professional re-orientation of fishermen for activities and services outside fishing. In the MEDGuard project the reassigned fishing vessel “Ciudad de Cartagena” is operated in the coast of Cartagena with the aim to identify the requirements needed to guarantee the sustainability of the reorientation of the medium size fishing fleet. This public document develops and analyzes the business plan of three activities other than fishing and for the vessel operating as a multiplatform carrying out the four activities.

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Bibliography

- Call MARE2014/24. Guardian of the Sea. Ref. Ares(2014)3588218 - 29/10/2014
- Grant Application Form “Guardians of the Sea”, MEDGuard project.

List of Abbreviations.

CTN	Centro Tecnológico Naval y del Mar
HESPÉRIDES	CIFP Hespérides
IVEAEMPA	Identities, values and strategies alternatives para los empresarios marítimos y pesqueros

1 Introduction.

The MEDGUARD Project is funded by DGMare of the European Commission within the call “Guardians of the Sea, MARE/2014/24”. This call funds preparatory actions to promote the reassignment of fishing vessels and the professional re-orientation of fishermen for activities and services outside fishing which should contribute to the sustainable management and use of marine and maritime resources.

In the MEDGuard project the reassigned fishing vessel “Ciudad de Cartagena” is operated in Cartagena coast to examine and demonstrate the feasibility and economic viability of substitute activities to fishing with the main aim of identifying the requirements needed to guarantee the sustainability of the reorientation of the medium size fishing fleet. The Project has the following specific objectives:

- ✓ To perform a series of tests in Western Mediterranean Coast using the reassigned fishing vessel “Ciudad de Cartagena”.
- ✓ To analyze the technical viability of using the acoustic systems and devices of fishing vessels for collecting lost fishing gears.
- ✓ To analyze the economic conditions and operational costs of vessels to perform maritime activities outside fishing and identify ways for future funding.
- ✓ To identify the relevant training needs of fishermen and vessel owners to perform the substitute activities.
- ✓ To provide useful data and information about costs and ways of funding to the promoters of the diversification activities, fishermen and the authorities with competences in the management of programmes related to the CFP Reform.

To achieve its objectives, the project has 5 work packages which relationships are shown in Figure 1.

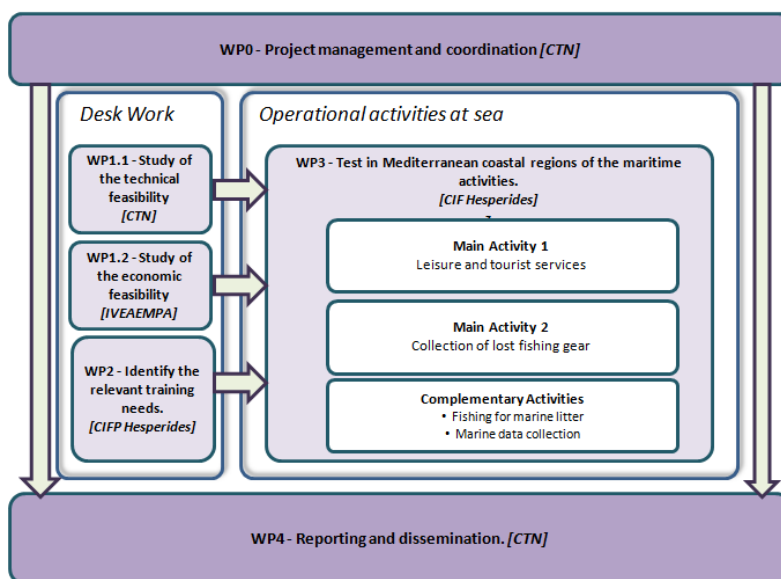


Image 1. Work Plan Structure.

In order to develop this business plan, it has been carried out by a team of entrepreneur formed by fishermen, sons of fishermen, and students from the fishing and aquaculture Training Centre, CIFP Hespérides, tutored/coached by the Sea accelerator IVEAMPA. This team has carried out the following tasks: i) It has developed a Canvas model (See D.1.2 CANVAS Diagram), from the proposed activities other than fishing. 2) It has tested the different business models by means of operational campaigns carried out on board the vessel Ciudad de Cartagena, to reach some metrics in cost terms and the acceptance of a potential customer, which allow to conclude if the business raised is profitable.(Deliverable “MEDGuard_D3.1 Results and the main conclusions of the campaigns”) ; and finally iii) The team, with the partnership of the tutors and coaches, has elaborated the current business plan and the analysis of the economic feasibility (Deliverable “MEDGuard_D1.4. Feasibility Report, evaluating and analyzing the economic sustainability of the diversification activities”).

The conclusions have helped also to develop a catalogue of activities other than fishing that intends to serve as a guide for all those fishermen that want to use their vessels and their experiences in activities other than fishing. (Deliverable “D2.5 Catalogue of activities other than fishing that can be carried out on board of reassigned vessels”).

The project is developed by a consortium formed by 3 entities coordinated by the CTN and has a time duration of 12 months starting in August 2015.

Further information about the Project in <http://medguard-project.eu/es/> and in medguardproject@ctnaval.com .

2 Objectives of this deliverable.

The business plan represents a fundamental instrument for the analysis of activities other than fishing that can be carried out by fishermen on board the reassigned fishing vessels. The business plan developed in this document has its main targets on:

- i) To identify, to describe and to analyze the business opportunities derived from activities other than fishing;
- ii) To examine its technical, economic and financial feasibility;
- iii) To identify financial sources that can allow to turn the opportunities into a concrete business project.

3 Methodology.

The methodology for the elaboration of a business plan is based on the processes of entrepreneurship and the acceleration of startups. In those processes there is a team of entrepreneurs (founding members of the business) that wish to turn a business idea into a project that allow them to self-employment and, to manage a company or an economic activity as high as possible. In the framework of this project, the vessel “Ciudad de Cartagena” after its reassignment from fishing, has been acquired by the public administration of the government of the Region of Murcia and made available for a team of entrepreneurs to contribute to the reflection and the experimentation, with the aim of analyzing the technical and economical feasibility of activities other than fishing.

The process carried out has been:

1. To identify the team of entrepreneurs.
2. To select the products and services to offer in each of the activities other than fishing and to establish its value proposition and its arrival to the market. (Canvas).
3. To develop a business plan for each activity and establish the economical feasibility for the development of the business.

3.1 To identify the team of Entrepreneurs.

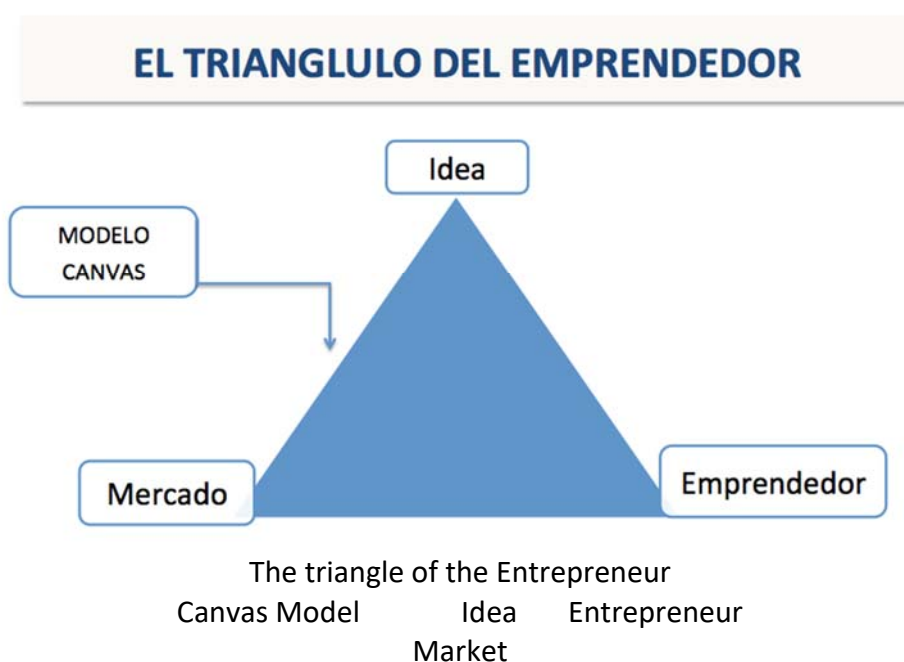
The team of entrepreneurs, with the help of tutors, develop the methods and integral techniques of mapping, as in the Canvas model, compiles the business plan and it is in charge of the Access to funds if needed..

The members of the team of entrepreneurs are the students of a training center, the CIFP Hesperides, that had always expressed their willingness to learn. The IES Hesperides is an integral training center that has a long tradition in training the professional “ Marine and Fishing “ family and has a students portfolio that are serving or have served the training that have enabled them to exercise the fishing professional activity as skippers, net menders, mechanics or sailors .A lot of them have worked for the fishing sector or have experienced the profession with direct relatives; grandfathers, fathers, brothers, that own handcrafted or quasi-handcrafted vessels linked to the brotherhood of fishermen of Murcia. After a survey to the students about if they wish to simulate being fishermen skippers, that have to decide between the scrapping of their vessel or to devote it to activities other than extractive fishing, 20 of them accept to participate in the experience. In order to classify the teams of entrepreneurs for the activities other than fishing and to establish the leader of each group, IVEAMPA has applied an entrepreneurship test. (See Anex 1. Entrepreneurship test to classify the teams of entrepreneurs and to establish the leader of each team.), to the members of the teams. From here, the participants have been selected from the entrepreneurship sessions taught by the tutors/coaches and Business Angels: Mrs Iolanda Piedra Mañes and Mr. Joan Alba Tort, both members of the team of IVEAMPA. The target is to foster potential teams of entrepreneurs with which it can be experienced the process that should be carried out before starting up an activity other than fishing.

The challenge for both teams is:

- To know the current techniques for the analysis of a business idea, its application and suggest a selling proposition for the activity other than fishing that has a potential market.
- To test the idea with the CANVAS method.

In 3 working sessions has been explained to the teams of entrepreneurs the basic concepts about the elements that integrate the triangle of the entrepreneur and the basic working tools for the planned accelerator coached sessions.



3.2 Identification of the business idea

This stage has a target to identify new business opportunities that can be carried out in the coastal side of Murcia with the reassigned fishing vessel Ciudad de Cartagena. With the students of the IES turned into teams of entrepreneurs, some training actions are carried out, together with some days of reflection in order to design the business plans.



Image 2. "Entrepreneurship sessions managed by tutors from IVEAEMPA" Source: CTN

Once balanced the basic entrepreneurship knowledges between the teams of entrepreneurs and having experienced with the CANVAS model, each team has selected the services to offer in order to analyze its profitability.

The real feasibility of these proposed services has been worked with a wide group of experts (representatives of employer organizations, fishermen brotherhoods, representatives of the different administrations and knowledge areas and sea professionals), in order to validate the selling propositions of the activities other than fishing.



Image 3. Meeting with the Stakeholders. Source: CTN

3.3 Analysis of the different selling propositions.

The teams of entrepreneurs have developed a first version of the CANVAS for each of the activities other than fishing:

- Marine and coastal Tourism.
- Lost fishing gear collection.
- Environmental parameters monitoring and services supporting scientific researches.



Image 4. “Entrepreneurship sessions in the Hespérides centre”. Source: CTN

The interest to develop a full acceleration process and to know the processes for Access to funding on the part of the investors has been remarkable in the participants. In fact, their concerns, questions or suggestions have allowed to develop a business plan closer to the local reality.

3.4 Business plan contents.

Hereafter are detailed the parts contained in the business plans of the proposed activities other than fishing.

3.4.1 A.- Executive summary

- Description of the business model that bears the opportunity, the value chain and the revenue model;
- Promoter team and manager of the Project, with special attention on his/her knowledge of the sector, management capacity, his/her business or corporative achievements records and his/her degree of commitment with the project;
- Summary of the most remarkable data about the relevant reference market (size, potential, barriers, customers, competitors, etc.);
- Analysis of the different management areas of the project, emphasizing in those that can be critical for the subsequent success of the project (production, marketing, human resources, etc.);
- Summary chart of the financial aspects and one assessment of the investment needs with their corresponding timetable;
- Final summary where appear the main risks and the corresponding countermeasures.

3.4.2 B.- Business plan.

3.4.2.1 *Business Idea. The Opportunity.*

- A push for the promoter team, the intrinsic attractive of the business, successful previous experiences or references to similar business models that have found a good reception in the market.
- Brief summary of the nature of the business, Project features, sector of the activity where the product or service is framed, its competitive advantages and the basis that support the statements expressed in the plan.

3.4.2.2 *Promoter Team.*

- Name and professional records of the promoters of the business and from all those professionals that cooperate in the writing of the business plan and the subsequent starting up of the activity.
- Capacities and complementarity of the promoter team of the Project, and how that team will make it possible the successful development and management in the market of the proposed business model.
- Professional experience, knowledge of the sector, complementarity and the proved successes in entrepreneur or managing activities are important references for the decision-makers.

3.4.2.3 *Business model.*

- Positioning of the business model in a particular business and market.
- Strategic review of the selling chain, which activities from it will be carried out, which ones will be outsourced and which ones will be critical for the selling proposition.
- Revenue model: Why and how the customers will acquire the products/services.
- (Unique Selling Proposition) that explains and answers the positioning of the product/service in the market or to the group of customers.
- Key cost-revenue factors contained in the revenue model.

3.4.2.4 *Sector analysis.*

- Sector where the activity is framed into.
- Current size of the market.
- Relevant Market segments and their size .Factors that can influence in the current market structure in a considerable way.
- Evolution, growth rate or rate of decline of the market.

- Process for the Purchase decision :
 - Features and purchasing behavior of the potential customers.
 - Elements where the customers base their buying decisions (Price, quality, distribution, service, etc.) and the possibility to modify those decisions by means of a change in the consumption habits.
 - Service perspectives of the market where it belongs.
- Identified and classified potential customers in relatively homogeneous groups with common recognizable features.
 - Degree of responsiveness of the potential customers to the offered services.
- Analysis of the competence and their services.
 - Location of the competitors, the features of their services, their prices, their quality, their distributing efficiency, their market share or estimated sales volume, their trade policies, financial profitability, and , in general, all the information that helps to position the service properly within the market reference or segment of business.
 - Leaders in the different views needed to position in a suitable way the launching of the service (who is the leader in quality, who in price, who in costs, who in distribution, etc.).
- Present and future entry barriers.
- Role of the public administrations in the Project, as suppliers or customers on the one hand or as market-based regulatory on the other. Existence of governmental implementations related to the social or environmental context that can affect in some way the activity.

3.4.2.5 Business strategy and marketing plan.

- Primary motivation of the customer for the acquisition of the service.
- Selling aims in units and in euros.
- Geographical context: Regional, National or International, their main reasons and the scheduled expansion plan.
- Price Strategy, comparing them with the ones of the competence and, if possible, pointing to the payback of the customer in months. In the economic study it will be measured the margin that can support the activity of the company, investments and expenditures involved. Finally, a test of sensitivity is carried out studying different price policies.
- Sales policy: structure, recruitment policies and qualification of the sales team in short, medium or long term.

- Promotion and advertisement: Media plan that documents the promotional means showing which media to address and why, number of press coverages, their size and duration, frequency, their economic value.

3.4.2.6 Operations plan and provisioning.

- Detailed description of the procedures and technical needs involved in order to provide an specific service.
- Equipment and facilities needed for the selling of services, features, models, acquisition formulae, production capacity, estimated cost and timing of the acquisitions and, finally, productive equipment service life and annual amortization;
- Decisions on Outsourcing of components and reasons for that , definition of the subcontracted(who are they, qualification and cost).
- Purchasing plan: List of raw material and materials needed to market the service.

3.4.2.7 Management of Human Resources

- Description of the leadership roles and the production line posts with the required profiles, number of employees according to their level and post, or the description of the staff if they were established with the listing of their responsibilities and defined tasks.

3.4.2.8 Economic-Financial analysis.

- The Financial-economic analysis allows to evaluate the economic potential of the activities other than fishing and to show feasible financial alternatives for them. The elaboration of this analysis starts from the assumptions collected in the different sections of the business plans such as market data, specific strategies, etc. The detailed financial and economic analysis is collected in Deliverable D1.4. "Report on feasibility, evaluation and analysis of the economic sustainability of the activities other than fishing".

3.4.3 Conclusions.

The most relevant conclusions of each of the businesses analyzed are described based on the following main assumptions:

- Description of the business plan that holds the opportunity;
- Promoter team and manager in charge of the Project, with special attention to his knowledge of the sector, management abilities, his/her business and corporative achievement records and his/her commitment with the project;
- Summary of the most relevant data of the reference relevant market;
- Analysis of the different areas of the project management, making a point in those that can be critical for the subsequent success of the project (production, marketing, human resources, etc.);

- Summary chart of the financial aspects and the assessment of the needs of its investment with its corresponding schedule;
- Final summary where the main risks are registered and their corresponding countermeasures.

4 Business plan for activities other than fishing.

4.1 Business plan for Marine and Coastal Tourism.

4.1.1 A.- Executive summary

The business plan for the marine and coastal activity is based in the selling of tickets to embarking on board the vessel Ciudad de Cartagena to carry out daily sailings for the practice of recreational diving and recreational fishing.

A market analysis of the marine and coastal activities points to an increase of the active recreational tourism that has to do with the direct contact with the environment, for this reason the service offers an strong potential as an activity other than fishing. Anyway, it should be taken into account that the activities other than fishing carried out on board reassigned vessels, collide with some legal vacuums and a lack of public policies aimed specifically to their promotion in the touristic and leisure segment.

In this case, the starting point is different to the entrepreneur team that is expected to carry out this business idea in the future. The promoter team and the manager in charge of the project, is formed by the crew of the vessel, teachers and students of the CIFP Hesperides, tutors/coaches and business angels and the staff of the CTN, that dispose of a great level of knowledge of the sector based on the experience. For the development of this project the different stakeholders of it have cooperated by means of a shared management of the resources, assigning the responsibilities and tasks according to the degree of commitment in the project. The final target is to simulate the ideal entrepreneur team by means of the participants in the experience.

The service for diving consists in one day sailings for the practice of diving, where 4 immersions are included of about 30 minutes each one with compressed air bottles. Apart from that, depending on the weather conditions, it has been planned to offer a meal on board to complete the experience.

The service for recreational fishing consists of a full fishing day on board the vessel floating/driftng or anchored at a maximum distance from the base port of approximately half an hour. The fishing modality is deep sea fishing or bottom fishing. In this fishing day is included in the price a seaman ranch food and the baits for fishing. The competitive advantage is in the input of knowledge about fishing techniques and the locating of the best fishing grounds to go.

The sailings are carried out from the Port of Cartagena where the vessel is moored (base Port) to the area of Cabo de Palos, where is the marine reserve of Cabo de Palos-Hormigas Islands. One of the most popular in the Spanish state for the practice of these sports. The added value of the service is to be able to carry out the activities in the best locations, because the fishermen, due to their experience and wide knowledge of the marine environment, transport the passengers to the places where in that precise moment are the best fishing grounds for the practice of recreational fishing and the most attractive locations for a safe diving. Apart from that, the customers will be able to enjoy the experience, tradition and culture of the fishermen by means of the activities that will be carried out on board during the trip.

The selling of the service is done by means of travel agencies, cruisers, web, Institutional promotion, Diving clubs or Diving associations. The maximum number of passengers on board is 12. The typology of the customer is one of recreational titled Divers and Fishermen amateurs between 18-60 years-old with a high purchasing power. The promotion of the activity must take into account the social networks, that are load speakers of the opinions of the customers and can influence in the decision making of potential customers, for that reason, the target must be to ensure an excellent service. A successful experience raises the capture of new customers, while a negative experience is remembered as a non-recommendable and expensive event, spread in the social networks as a viral bad advertising.

For both services, the relationship with the customer is generally occasional, (it is rented by days).

The key activities of the service are: Locating of the most attractive places to carry out the activities, a sailing that breeds confidence for the tourists, an appropriate level of comfortability, the entertainment on board during the trip with an offer of approaching to the fishing culture , gastronomic, advertising and marketing activities.

The key resources and the reassigned vessel as it is shown in D.1.1 The crew is formed in this case of a minimum of 4 persons (Ship owner-Skipper, 2 Sailors and naval mechanic).

The Diving activity is seasonal due to weather conditions (low temperature of the water) and should be focused from April, increasing the frequency up to September or October. In the project, a maximum of 119 days per year are considered to carry out this public service of diving. Recreational fishing is available 12 months a year, but from April to October, the trips are focused in diving because it is economically much more profitable. A maximum of 108 days per year are considered to provide the Fishing service.

The Price of one immersion is 50 euro per diver, that is, 200 euros maximum per person/day.

The Fishing day Price is 100 euros per fisherman per day, with the incentive that all the captures will be for the customers.

The activity is profitable for a 100% of the capacity of the vessel corresponding to the selling of 5.712 diving tickets and 1.296 fishing tickets(incoming of 415.200 Euros).

PROFIT AND LOSS FORECAST	YEAR 2017	YEAR 2018	YEAR 2019	YEAR 2020	YEAR 2021
EXPENSES					
Total Direct expenses	-216.249	-222.737	-229.419	-236.301	-243.391
Indirect expenses.	-21.312	-21.951	-22.610	-23.288	-23.987
Total expenses	-237.561	-244.688	-252.029	-259.590	-267.377
Total incomings	415.200	435.960	457.758	480.646	504.678
EBITDA	177.639	191.272	205.729	221.056	237.301
Amortization expenses for investments in Rescue an Safety	-1.367	-1.367	-1.367	-1.367	-1.367

Amortization expenses for specific investments for the activity	-63.604	-63.604	-63.604	-63.604	-63.604
Amortization expenses for accommodation investments	-1.896	-1.896	-1.896	-1.896	-1.896
Amortization expenses for starting up and formation of the company	-843	-843	-843	-843	-843
Total amortizations	-67.709	-67.709	-67.709	-67.709	-67.709
EBIT (BAII)	109.929	123.563	138.020	153.347	169.591
Interest cost o r interest revenues	-3.867	2.554	5.969	10.844	16.130
EBT (BAI)	106.063	126.117	143.989	164.191	185.721
Taxes	-37.122	-44.141	-50.396	-57.467	-65.002
E (BDI)	68.941	81.976	93.593	106.724	120.719

Table 1. Profit and loss accounts – annual.

the ROI of the Project is 26,09%.

Analysis of ratios

Profitability and growth ratios

	31-12-17	31-12-18	31-12-19	31-12-20	31-12-21
Profit margins = BAIT / Sellings (Incomes)	26,48%	28,34%	30,15%	31,90%	33,60%
ROI = BAIT / Financial assets	26,09%	23,97%	22,41%	21,00%	19,74%
ROE = BDT / RP	18,69%	18,18%	17,19%	16,39%	15,64%

Table 2. Profitability and growth ratios

The balance point that allows the feasibility of the business is reached from service levels of about 79% of the maximum occupancy in diving and 62% in recreational fishing, corresponding to some incomes of 305.638 euros and to the selling of about 5.313 tickets (4.513 from diving and 800 from fishing).

The Break-even point (minimum income) are shown in the table:

	YEAR 2017	YEAR 2018	YEAR 2019	YEAR 2020	YEAR 2021
Break-even point (Euros)	305.638	307.672	313.984	319.405	325.042

Table 3. break-even point

The Financial needs for the starting up of the activity are about 40.000euros if the promoter is the owner of the vessel, on the contrary, it should be added the investment in the vessel (300.000 Euros).

The details about the feasibility plan are found in the D1.4.

It can be concluded that it is a rising business model with a high potential for expansion, it is expected to reach the profitability with relative ease in a 5 years period according to the description of the business plan shown in this report.

4.1.2 B.-Business Plan.

4.1.2.1 *Business Idea. The opportunity.*

Some studies (Global Tourism Organization) sign to an increase of the active recreational tourism and particularly the one that is in direct contact with the environment, this point to a high potential of the marine and coastal tourism as an activity other than fishing.

The touristic offer proposed consists on trips focused in two particular marine and coastal activities: Diving and Recreational Fishing. These two activities are representative of all the range of possibilities inside the marine and coastal tourism, and suitable to combine between each other in the same vessel. The added value of this activity other than tourism is the experience provided by the fishermen, not only in the safe transport of the passengers, but also in the location of beautiful underwater places for the development of the activity of diving and the most attractive fishing grounds for the capture of fish for recreational fishing activities. It is proposed to link fishing and gastronomy, cooking high cuisine recipes with the fish captured by the tourists, link fishing with the awareness of the preservation of the environment or even to learn old fishing techniques or about guidance in the sea from thousands of years ago. The activities should take advantage, as far as possible from the natural, cultural and gastronomic heritage from the area in order to consolidate it and leverage it as an alternative of attractive marine and coastal tourism for potential customers.



Image 5. Diving in Murcia” Source: www.viajejet.com and “Deep sea fishing” Source: Youtube

4.1.2.2 *Promoter team.*

Formed by:

1. Crew. Selected from an entrepreneurship test (Annex 1. Test for entrepreneurship to classify the entrepreneur teams and to establish the leader of the group.) Taught by the IVEAEMPA to the students of the CIFP Hesperides of the fishing marine family:

Ángel Mercader is the Skipper of the vessel, Alejandro Díaz is a Young sailor, Carolina Rodríguez, staff from the CTN, certified innaval Mechanics and Naval Engineering and Alberto Díaz has a degree in Naval architecture and is teacher in the CIFP Hespérides.

2. Teachers and students of the CIFP Hespérides all of them from the marine fishing family: Elena Araque (Diving instructor), Juan Rafael Diez Bebia (physiotherapist), Carlos Barrio (Diving instructor), Sergio Pazos (Computer specialist), Pedro Jesús Bernal (Teacher of the CIFP Hespérides) and many other.
3. Tutors/coaches accelerators and Business Angels: Mrs. Iolanda Piedra Mañes and Mr. Joan Alba Tort, both members of the team of IVEAEMPA.
4. Staff from the CTN: Noelia Ortega, Fuensanta Riquelme and Jordi Solé .

4.1.2.3 Business Model.

The incoming model is based in the selling of tickets to the customers in order to carry out trips on board the vessel “Ciudad de Cartagena” for the practice of recreative diving or recreative fishing.

The harbor where is moored the vessel (base port) is in Cartagena, for what it is suggested to carry out the diving trips in the surroundings in order to minimize the fuel consumption

After analyzing the surroundings and potential competence, the area of Cabo de Palos is shown as the most appropriate for the carrying out of the activity. This area is inside the marine reserve of Cabo de Palos-Islas Hormigas, one of the best known in the Spanish Mediterranean coast for the practice of this sport.

In the map shown hereafter, it can be appreciated the great variety of remarkable places in the surroundings of Cabo de Palos for the practice of scuba diving, full of history with shipwrecks and very interesting underwater landscapes.



Image 6. Diving in Cabo de Palos” Source: Rivemar.com

The proposed service consists on sailing on board the vessel “ Ciudad de Cartagena “ to that area where up to 4 immersions per day are carried out. With the anchor lowered, to carry out some immersions with an instructor. It is suggested to organize diving trips in groups, because the vessel has a license to transport up to 12 passengers. After the immersions, according to the time, it can be offered a lunch on board. Finally, it comes back to the harbor where associated complimentary services to the memory of the experience are offered.

As far as recreational fishing is concerned, the activity raised consists in sailing to an area previously selected by the crew some hours before, depending on weather conditions and on the condition of the heritage value and on the commercial value stock, to spend a deep-fishing day with cane, bait and weights. The tourists, which most of them will be amateurs of this practice, have the opportunity to share and be advised by the fishermen, strict professionals of the capture and extraction of business valuable fish. The fishermen show their techniques, experiences and give useful advices to sports men or amateurs about how to deal with a sustainable recreational fishing and far from any discard. Due to the license of passengers on board, this touristic activity has a limit of 12 passengers on board.

The activity is carried out inside a maximum sailing distance of 30 minutes, not anchored. In the touristic package is also included a meal or lunch on board with typical seafood from the area.

4.1.2.4 Analysis of the Sector.

The touristic initiatives related directly with the fishing activity are raised as an interesting reconversion possibility given the great affluence of tourists that visit the Mediterranean coast every year.

Diving is a practice that nowadays have a great amount of amateurs and the recreational fishing is an activity that attracts high purchasing level customers, an interesting element to take into account.

The Diversification field of the fishing sector to other touristic activities is an option that is being strategically fostered from the European Institutions. The Fishing Maritime European Fund (FEMP) support aids to this type of initiatives since the year 2.000. Particularly, from the Spanish State, state member where the vessel “Ciudad de Cartagena” is allocated, the regulation of this sector is still pending despite the approval of a draft act in this sense in April 2014.

The approach and organization of the activities other than fishing in the segment of leisure and tourism have been very different especially depending on the territory. The law develops two main axes such as the planning and promotion of tourism, serving to sustainability, quality, diversification and distinction criteria. The competences for tourism revert in the autonomous communities, for what these activities are regulated by the autonomic legislation. Catalonia, Balears Islands and the Canary Islands are the communities that have introduced in their legislations the definitions and some considerations about the fishing or sailing tourism and

J. M.S., 2015, “Unequal results of the recreational Fishing activities” Magazine Mar

MedGuard –D1.3

the Fishing-Tourism by means of the following regulations: Decree 87/2012, 31st July, about recreational fishing, the fishing and sea fishing tourism and aquaculture and the fishing demonstrations in maritime and continental waters of Catalonia; Law 11/2008, from the December the third, from fishing in Galicia; Sea fisheries law, Shellfish and aquaculture in the Balears Islands, and the preliminary design of sea fisheries law in the Canary Islands.

In communities like Catalonia, Galicia or Andalucia have arised initiatives orientated to diversification, where recreational fishing activities are offered, together with seafaring tourism or guided tours to shellfish sites. The following table includes some of the main touristic initiatives for the diversification of the fishing sector in Spain.

NATIONAL INITIATIVES	PROMOTER	PRODUCT
Pescaturisme	Fishermen’s Guild of Blanes	To share a fishing day with the fishermen, watching their daily work.
Pesca turismo y Turismo pesquero Roses	President(Fishermen’s Guild of Cataluña)	The tourist lives a fishing day on board, and after that, to enjoy a guided visit to the fish market to see an auction.
Professional training and Diversification of the fishing sector in Ayamonte	City Hall of Ayamonte , City Hall of Punta Umbría	Touristic activities related to the alternative and environmental tourism, leisure and free time, in particular the organization of routes and nautical boats such as pedal boats or kayaks.
Sail and educate	Moncomunidad del Salnés (Galicia)	Training courses for students on board a reassigned vessel such as a schooner.
Tuna Tur	Grup Balfegó and Diving center of Subkro (Tarragona)	To Know the history, fishing, diet, biology and gastronomic value of the red Tuna, with an added value as the possibility to swim with them. For that, the visitors are boarded in a Catamaran, constructed specially for this activity, where by means of audiovisual media, will be able to know different aspects, together with a tasting of the product and which will transport them to the breeding pool, where they will be able to swim with the tuna. Apart from that, a new experience is incorporated to the training centres, named TUNA TOUR EDUCA.
MAR GALAICA Turismo Mariñeiro	Fishermen brotherhood of Lira (Galicia)	Integrated Tourism package, through the Galician coast, in order to promote the products and heritage of the areas that depend on fishing.

Table 4. Touristic initiatives for the diversification of the fishing sector in Spain.

4.1.2.5 Business strategy and marketing plan.

In a period where the social networks are speakers of the comments of the customers and influence the decision making of other potential customers, to guarantee an “excellent” service must be the target. A satisfying experience enhance the capture of new customers. A negative experience is remembered as a not recommended and expensive one spread by the social networks as a viral adverse publicity.

- **Diving**

In order to estimate the profitability reassignment of the vessel “Ciudad de Cartagena” project, it is needed an exhaustive planning of the activities that are pretended to carry out. For that reason, it has been drawn in a coordinated way an annual plan for each activity taking into account the period of the year and the profitability.

The Diving activity is the most profitable of the Project due to the high purchasing level of its public and the expected demand that will produce. The activity, however, suffer from its seasonality and should be concentrated in the summer months. In this period of the year it has been given priority over the rest of diversification activities.

It has been planned to offer trips from April, increasing the frequency until September and October.

April- 8 days

May – 8 days

June - 25 days

July - 25 days

August - 25 days

September - 20 days

October - 8 days

Total days: 119 per year

The touristic offer consists in 1 day trips, where 4 immersions are included of about 30 minutes with compressed air bottles. Together with that, depending on weather conditions it has been planned to offer a meal on board to complete the experience.

The cost of one immersion is of 50 euros per diver is 200 euros per trip/person.

- **Recreational Fishing**

Recreational Fishing consists of a full fishing day on board anchored or drifting in a maximum distance from the port of about half an hour.

The fishing modality is Deep Fishing. In this fishing day is included in the price a Seafood meal and baits to fish.

The activity is planned to be carried out during the 12 months of the year distributing the trips as follows:

January-3 days per month

February- 5 days per month

March to April-15 days per month

June to September- 5 days per month

October to November - 15 days per month

December- 5 days per month

Total days of the activity: 108 per year

As it has been pointed out, from April to October, it is fishing when the diving activity is not offered, prioritizing the diving activity over fishing, as it is more attractive from an economical point of view.

The Price to carry out the activity of one fishing day is estimated in 100 euros per fisherman/per day, with the added value that all the captures will be for the customers.

4.1.2.6 Operations and Provisioning plan.

The vessel “Ciudad de Cartagena” is in a correct and good conservation status, a thing that allows to ensure to carry out the selected economic activities.

The vessel “Ciudad de Cartagena” is a 20 years old reassigned vessel in the year 2014, with 24 meters of overall length. The vessel has 6,3 meters of sleeve and 3 m depth, regarding the engine, it has a 375 cv of power and a fuel consumption of 80 liters per hour working.

The vessel has been reassigned in order to carry out the activity and guarantee the safety. In the same way, complementary improvements have been raised that allow the transport of passengers in a comfortable way together with in a safety way. In the reassignment of the vessel it has been considered the needed basic investments for the inside and outside rehabilitation for comfortability and safety.

Investments for rehabilitation and acquisition of materials for safety and comfortability.

- It is needed the installation of safety rails to prevent falls of the passengers and define the risk areas, safety barriers to prevent the Access and signposting for the risk areas.
- The old life jackets and life rings of the fishermen do not meet the current regulations: Order FOM/1144/2003 April the 23rd, by which are regulated the equipment for safety, rescue, firefighting, sailing and prevention of waste water discharges that must carry on board the recreational vessels. It is necessary to acquire new lifeguard equipment, together with first aid kits, pyrotechnics, buckets and fire extinguishers in order to comply with the regulations.
- The kitchen of the vessel is refurbished to adapt it to the pretended new use in order to offer seafood meal ranch on board.
- It is required to sanitize and adapt the bathrooms and signposting properly, the ones aimed for the use of passengers and the ones aimed for the use of the crew.

It is also needed a Project elaborated and signed by a competent qualified technician that proves that the vessel meets with the established in the Order FOM/1144/2003.

Initial and intermediate inspections are also needed.

1. Investments for the activity of Diving.

For the practice of Diving it is compulsory the acquisition of materials in order to meet with the regulative order from October, 14th, 1997, by which the safety rules are approved for the exercise of underwater activities. First of all, the vessel must have an aluminum or stainless steel ladder, so that it is possible the direct access from the water to the vessel and vice versa. Secondly, it must be acquired an Alpha flag, accepted by the Inter governmental Maritime Consultative Organization (IMCO). This flag points the location of the diving team in the surface, avoiding this way the approach of other boats

Apart from these compulsory materials to meet with the regulation, it will also be compulsory the acquisition of all the compulsory materials to carry out the activity. This includes:

- Auxiliary inflatable boat: The compulsory model is a Mercury 470 HD XS Heavy Duty, with 4,7m length and a load capacity of 1200kg and equipped with a long axis engine Mercury F 25 ML EFI.
- Diving bottles of 15l capacity.
- Stainless Steel structure for the stowage of the scuba bottles.
- The vessel is not equipped with enough nautical material. It has been planned the purchasing of strands, boat hooks, etc.

2. Investments for the recreational Deep fishing activity:

This kind of activity do not need a specific refurbishment, but the general investments mentioned and the acquisition of the following materials:

- Basic fishing equipment formed by cane, reel, line and accessories.
- 40mm steerable fishing rod holder to fix in the rails.
- Lifting beams, together with the accessories for its installation,
- Miscellaneous equipment: baits, lines, tools for the installations, among others.

4.1.2.7 Management of Human Resources .

The team is formed by the crew of the vessel constituted by 3 profiles with the following training:

SHIP OWNER: Office automation (partial) – Operating system, Search for information: Internet/Intranet and e-mail address – Software applications for word processing – Software applications for spreadsheet.

SKIPPER/SAILOR: Immersions with air or nitrox using an autonomous or semi-autonomous diving system up to a maximum pressure of 5 atmospheres. (Partial) 1 STAR Diver FEDAS-CMAS + Practices –Basic life support.. First aids. (Diving) Provisioning, pre-processing and preservation of food. (Partial). Application of the regulations and hygiene and health conditions in catering. Crowd control, safety of passengers and safety training for the crew that provides a direct service to the passengers in the areas aimed for them. Action and training protocols for the crew of passenger vessels and training for the staff of the shipping companies that provide services in the port terminals for disabled people care. Environmental education programs (Partial): Execution of programs and activities for environmental education .

MECHANIC: First Aid. (Diving) – Auxiliary maintenance operations of the microcomputer systems-Environmental Education Programs.

For safety, it has been considered necessary that the crew has a diving instructor that coordinates the immersions. This profile is suitable with a crew member, for what it is proposed that one of the members of the crew to develop both tasks in order to improve the coordination and the commanding without losing an additional place on board aimed for customers.

The details of the training needs and the training route for the professional reconversion of the fishermen in this economic activity is found in the Deliverable: “D.2.1 Catalogue for the

training routes for the professional reorientation of the fishermen and ship owners” and “D2.2 Proposed definition for the new professional competences to carry out the new activities”.

4.1.2.8 *Financial-economic Analysis.*

The study of feasibility in D1.4 Shows a break-even point for this reconversion activity when are generated sales of 305.638 euros, equivalent for the sales of 4.513 tickets for recreational Diving and 800 euros for Recreational Fishing corresponding to a 79% and a 62% of the total capacity of the vessel. This total capacity has been estimated regarding the 227 days of activity per year, distributed between the diving activity carried out during from the month of April to October (maximum 119 days) and Recreational Fishing (maximum 108 days) that is carried out the whole year. The maximum number of passengers is 12. The price of the activity is 50 euros per immersion, with a maximum of 4 immersions per day, and 100 euros the recreational fishing day. The operation of the vessel at 100% of its production capacity involves a ROI of 26,09% .

About the financial needs (See “**¡Error! No se encuentra el origen de la referencia. ¡Error! No se encuentra el origen de la referencia.**”), it can be seen that, for the carrying out of the initial investments is needed a financing of 40.000euros, once the activity is started, it generates a positive financing cash flow for the 100% use.

For the estimation of the feasibility it has been considered that the reassigned vessel is owned by the ship owner that will carry out the reconversion activity. Regarding this, the vessel is considered as social capital, what allows not to include the value of the vessel in the initial investment needs, comparing the study to the reality, because the ship owner is the owner of the vessel before the starting up of the activity. The amortization period assigned to the vessel is 5 years, this way, after finishing the service life of the vessel, it has been considered the possibility that the promoter of the activity gets a new vessel to continue the business. The value of the vessel “Ciudad de Cartagena” considered in this study is of 300.000 euros. In the particular case that the crew of the vessel or group of fishermen not owning a vessel and wanting to promote the reconversion activity, it will be necessary to consider an initial investment equivalent to (300.000 euros) for the acquisition of the vessel.

The details of the Financial and economic analysis are collected in Deliverable D1.4 “Report on Feasibility, Evaluation and Analysis of the economic sustainability of the proposed reconversion activities”.

4.2 **Business plan for environmental activities: Lost fishing gear collection.**

4.2.1 **A.- Executive Summary.**

The Business plan for the lost fishing gear collection activity is based on providing a collecting service for floating and suspended wastes, and lost nets and fishing gears, for fishermen, the Public Administration, Public entities and environmental preservation entities.

A better preservation of the marine and coastal environment implies to collect from the sea all those wastes that can endanger the marine ecosystem, the safety and health of the bathers and watersports amateurs and/or the maritime economical activities. The marine media is also endangered by lost or abandoned nets, which cause negative effects for the fishing sector and

diminishes their captures, being also a risk for the fishermen, because the nets can cause accidents with the helixes.

In this case, the starting point is different than the one from the entrepreneur team that is planned to develop this business idea in the future. The promoter team and the manager of the project, is formed by the crew of the vessel, teachers and pupils from the CIFP Hesperides, tutors/coaches/accelerators and Business Angels and the staff from the CTN, that have a high level of knowledge of the sector based on their experience. For the development of this project have collaborated the different stakeholders from it by a shared management of the resources, assigning the responsibilities and tasks depending on the degree of commitment with the project. The final task is to simulate the ideal entrepreneur team by the participants of the experience.

The service consists in carrying out precise trips for the floating wastes collection in the coast of the Region of Murcia, next to the watercourses, where after the rains are used to be found great amounts of wastes and in the surroundings of urban areas, Ports, etc. Once the wastes are landed, it must be found a suitable facility for their processing in the appropriate treatment plants. The service is also available for fishermen that lose a net and need help to recover it. By the net collecting, the fishermen avoid the ghost fishing that reduces their captures and save the costs of the replacement of the net. The collected nets, if they cannot be re used, can work as raw material for recycling companies that transform them in textiles or other products.

The segment of clients is concentrated in fishermen, public Administration, Public entities and environmental preservation platforms.

The sale of the service is based on the realization of annual contracts and recurrent with the competent Public administration and special contracts with the other entities. There can also be timely contracts as a quick response to warnings of lost nets. The main distribution channels are the fishermen brotherhoods, the proper Public administration together with the audits of the beach or sensitive entities that defend the fulfillment of the Water and Marine Directions.

The main activities of the service are: i) Location of wastes by a coordinated mechanism with coastal surveillance patrols before the programming of trips, in order to establish more accurately the typology and volume of the detected wastes; ii) Once the wastes are landed, there must be a suitable facilities to process them because they must be classified and sent to a relevant treatment plant. The cost of the treatment of the wastes is not included in the service.

The main resources are the reassigned vessel as shown in D.1. and the crew formed by a minimum of 3 persons (Ship owner/Skipper, Sailor and naval mechanic). To adapt the vessel in order to carry out the activity it will be compulsory the acquisition of collecting tools and lifting systems such as cranes, and deposits to store the wastes on board and in the Port.

The market Price to carry out the activity for one collecting day is 977 Euros.

From the analysis of the income statements it was concluded that the lost fishing gear collection activity is not economically feasible because it generates losses from the beginning. This is because the operating costs are higher than the incomes that could be reached with a rate of use of the production unit (vessel "Ciudad de Cartagena")for nearly 100% of its use

capacity or saturation (160 days for waste collection and 67 for ghost nets) at a market price of 977 euros per day.

The details about the revenue and expenditure structure of the service are found in D1.4.

PROFIT AND LOSS FORECAST	YEAR 2017	YEAR 2018	YEAR 2019	YEAR 2020	YEAR 2021
Expenses					
Total direct expenses	-205.444	-211.607	-217.955	-224.494	-231.229
Indirect expenses.	-21.312	-21.951	-22.610	-23.288	-23.987
Total expenses	-226.756	-233.558	-240.565	-247.782	-255.216
Total incomings	221.688	232.773	244.411	256.632	269.463
EBITDA	-5.068	-786	3.846	8.850	14.248
Amortization expenses for investments in Rescue and Safety	0	0	0	0	0
Amortization expenses for Specific activity investments	-61.016	-61.016	-61.016	-61.016	-61.016
Amortization expenses for Accommodation investments	0	0	0	0	0
Amortization expenses relating to start up and formation of the company investments	-243	-243	-243	-243	-243
Full amortization	-61.259	-61.259	-61.259	-61.259	-61.259
EBIT (BAII)	-66.326	-62.044	-57.413	-52.409	-47.011
Interest cost or revenues	-5.209	-7.923	-8.717	-9.433	-9.868
EBT (BAI)	-71.535	-69.967	-66.130	-61.842	-56.878
Taxes	0	0	0	0	0
E (BDI)	-71.535	-69.968	-66.130	-61.842	-56.878

Table 5. Profit and loss accounts – annual.

The ROI of the activity is negative, what implies that it is not economically feasible.

ANALYSIS OF RATIOS

	31-12-17	31-12-18	31-12-19	31-12-20	31-12-21
Profitability and Growth ratios					
Profit margin = BAIT / Sales (Incomes)	-29,92%	-26,65%	-23,49%	-20,42%	-17,45%
ROI = BAIT / Actives	18,45%	-20,51%	-23,23%	-27,28%	-34,21%
ROE = BDT / RP	-31,31%	-44,14%	-71,59%	-202,58%	215,84%

Table 6. Profitability and growth ratios.

Considering 160 days of campaign per year, the break-even point that allows the feasibility for the lost fishing gear collection activity as a reconversion activity, is 1.830 euros per campaign. The break-even point (minimum incomes) is shown in the table:

	YEAR 2017	YEAR 2018	YEAR 2019	YEAR 2020	YEAR 2021
Break-even point(Euros)	292.791	300.572	303.324	307.871	313.518

Table 7. Break-even point

If the sale Price of 977 euros is maintained, that is the market price of the activity, it is needed to have a public support, such as a grant contribution of about 30.000 euros annually in order to take over the losses generated by the activity. Also, the needs for external financing are 110.000 euros for the fulfillment of the initial investments for the starting up of the business and to assume a collection period to clients of 6 months. If apart from that, the promoter of the activity is not the owner of the vessel to be reassigned, it should be included to the initial investment the value of the vessel, estimated in this case in 300.000 euros.

The lost fishing gear collection activity, is a rising business model due to the increase of sensibility both from the population and from the Administrations towards the environment, for what it is expected that this activity is an opportunity for future business attending to the description of the business plan shown in this report. Anyway, currently, it can only be considered as an alternative for the diversification or reconversion feasible for minor fishing vessels with less fuel consumption and minor crew needs. Consulting the fishing sector represented by IVEAMPA, this suggests that this activity should be kept just for minor arts as a complement of the fishing day or as a complement of other diversification activities. Even in these cases, it would be necessary the direct awarding or the concession of funds to carry out the service because the costs carried out by fishing vessels are higher than for the ones specifically designed for waste collection. That is, in order for a waste collecting activity to be a reconversion activity economically feasible, it is required the support/financing of the administration (Local, Regional, National or Community).

In the ghost net collection activity, it is recommended to execute preventive policies with the installation of locating systems in the nets of the fishermen so as that they can be located easily in the moment of the loss, because in the first month after the loss is when is produced the highest volume of ghost fishing. As long as this locating system is not introduced, it should be created a surveillance net where to warn or inform about the loss of a net and the use of locating systems such as SONAR, what increases predictably the operating costs both for the investment in equipment and for the expert staff for the rendering of the obtained images.

4.2.2 B.- Business Plan.

4.2.2.1 Business Idea. The opportunity.

This activity is framed in the exercising of a public interest activity, because all the groups of the coastal area of the Region of Murcia, and specially the fishing and Tourism sectors, are interested in the idea of the water cleanliness and free of wastes of the coastal areas. To contribute to a better preservation of the marine environment and of the coasts implies to collect from the sea all those wastes that endanger the safety and the health of the bathers and water sports amateurs, together with the marine ecosystem.

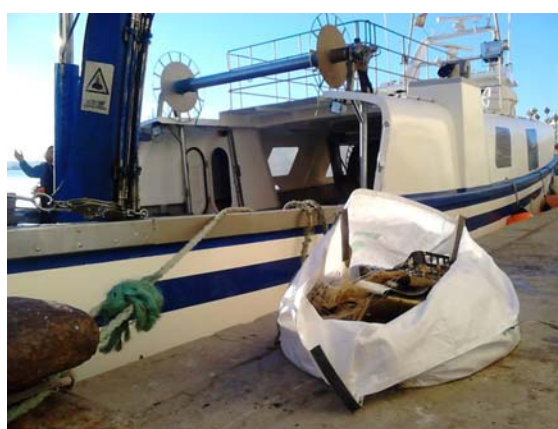


Image 7. "Marine litter collection" Source: lacronicaindependiente.com

4.2.2.2 Promoter team.

Finally formed by:

1. Crew. Selected from an entrepreneurship test (Annex 1. Test for entrepreneurship to classify the entrepreneur teams and to establish the leader of the group.) Taught by IVEAEMPA to students of the CIFP Hespérides from the Maritime fishing family: Ángel Mercader is the skipper of the vessel, Alejandro Díaz is a Young sailor, Carolina Rodríguez is titled in Naval machines and Naval Engineer, and staff from the CTN, and Alberto Díaz has a degree in Naval Architecture and teacher of the CIFP Hespérides.
2. Teachers and students from the CIFP Hespérides all of them from the Maritime Fishing Family: Elena Araque (Diving instructor), Juan Rafael Diez Bebia (Physiotherapist), Carlos Barrio (Diving instructor), Sergio Pazos (Computer specialist), Pedro Jesús Bernal (Teacher of the CIFP Hespérides) and many others.
3. Accelerators/Tutors/coaches and Business Angels: Mrs. Iolanda Piedra Mañes and Mr. Joan Alba Tort, both members of the team of IVEAEMPA.
4. Staff from the CTN: Noelia Ortega, Fuensanta Riquelme and Jordi Solé .

4.2.2.3 *Business model.*

It is a service for the competent administration and for the entities responsible of the floating litter collection in the coastal waters such as plastics, Wood, etc. Improving this way the quality of the waters and promoting the preservation of the marine environment. The service can also collect nets and lost fishing gears lost by the fishermen.

The service consists in carrying out punctual trips contracted by the Administration for the marine litter collection close to the coast of the Region of Murcia, next to the watercourses, where after the rains are usually found great amounts of wastes and next to the urban areas, Harbors, etc. The main threat for these watercourses are the frequent discharges of wrackage, debris, litter, effluents and all kind of wastes. The watercourses that generate more wastes in the Region of Murcia are the Nogalte watercourse in Puerto Lumbreras, the watercourses of Enmedio, Ramonete or Hortillo in Lorca, the watercourses of Los Lorentes and Pastrana in Mazarron and the ones of Charcon and the Culebras in Águilas, etc.



Image 8. Fatares watercourse, in the surroundings of the city of Cartagena. Source: Google Maps

Once located the wastes, they are collected and store don board to be moved later to the Harbor for their classification and treatment by authorized waste managing companies.

4.2.2.4 *Analysis of the Sector.*

The marine litter is not only an aesthetic problem, but apart from having an important socioeconomic impact, it threatens the human health and the safety, it shows negative effects over the marine organisms and habitats. It is widely documented that the impact of entanglement or swallowing of marine litter can have negative consequences on the physical state of the marine animals or even lead to their death. The swallowing of micro plastics is also a source of concern, because it can provide a route for the introduction of dangerous chemical products in the trophic chain. Also, it can damage or degrade the habitats (for example, in terms of choking) and increase the risk of transference of exotic species.

The different Administrations are the responsible to look after the state of the seas and coasts and guarantee a maintenance of the quality of the water according to the arranged by the Marine Directive and the Water Framework Directive (DMA). In a non-regulated way, some Harbors and City Halls deal with the collection in their beaches and coasts, together with some Diving clubs and environmental associations that carry out with the cleaning of sea bottoms and coastal zone.

The recruitment of the collecting services for marine litter in Spain, is carried out mainly by two routes: i) Public tenders for the contract award of the services, for which the fishermen can apply for such as the case of the Bay of Pasaia, Guipúzcoa (Spain) ii) in other communities like Catalonia, is the own community, by means of the “Agència Catalana de l’Aigua”, the one in charge of carrying out the works of litter collection.

NATIONAL INITIATIVES	PROMOTER	PRODUCT
Project LIMBO	Azti-Tecnalia	Study for technical Feasibility, environmental and economic for the possible reconversion and enabling of a fishing vessel for the collection of marine litter in certain periods of the year.
Pescal	ONAPE (National Organization of Fishing Associations) and CETMAR (Centro Tecnológico del Mar)	To develop fishing gear and litter collection in the sea bottoms actions, involving to the proper fishermen, and also evaluating the effects of the lost fishing gears in the Sea.

Table 8. Marine litter collection activities.

4.2.2.5 Business Strategy and Marketing Plan.

The recruitment of the collecting services for marine litter in Spain, is carried out mainly by two routes: i) Public tenders for the contract award of the services, for which the fishermen can apply for such as the case of the Bay of Pasaia, Guipúzcoa (Spain) ii) in other communities like Catalonia, is the own community, by means of the “Agència Catalana de l’Aigua”, the one in charge of carrying out the works of litter collection.

In order to estimate the feasibility of the reassignment of the vessel “Ciudad de Cartagena” Project for this activity, it is necessary to count on with an exhaustive planning. For that, it has been drawn in a coordinated way together with the collection of lost nets, an annual plan for each activity, taking into account the forecast and necessities of each one of them.

The litter collection is foreseen to be carried out more often in the rainy months and close to the summer period, benefiting this way to the touristic sector. The number of marine litter collection days in a year is estimated in 160 days.

	Jn.	Febr.	March	Apr	May	Jun.	Jul.	Aug.	Sept	Oct	Nov.	Dec.
Litter	5	15	15	15	15	15	15	15	15	15	15	5
Ghost nets	7	5	5	5	5	5	5	5	5	5	5	10

4.2.2.6 Operations and Provisioning Plan.

The service consists in daily trips to the place where the wastes have been located, collect them and to store them on board, move them to the Harbor for their classification and storage for their later treatment by authorized waste managing companies.

For the location of the wastes, it is needed to introduce an stable system of coordination with the coastal surveillance patrols before programming the trips, in order to establish as accurately as possible the typology and volume of the waste detected.

The collection is carried out with adapted fishing gear. The storage of the wastes for their transport to the Harbor can be carried out in the cellar, the deck or in specific containers according to the type of wastes.

Once the wastes are landed, there must be an appropriate facility in order to process them. They must be classified and sent to an authorized treatment plant. The Spanish legislation establishes that those that deliver wastes in the Harbor, must face the costs of the transport of the wastes for their treatment. The costs of the treatment of the wastes is not included in the service.

It will be compulsory the acquisition of all the necessary materials in order to carry out the activity such as waste containers, tools for the collection of wastes, and lifting systems such as cranes, winches, etc. In the case that the vessel do not dispose of them.

4.2.2.7 Human Resources Management

The team is formed by the crew of the vessel constituted by 4 people (Ship owner-Skipper, 2 sailors and naval mechanic), old fishermen that must acquire the following training:

SHIP OWNER: Office automation (partial) – Operating system, Search for information: Internet/Intranet and e-mail address – Software applications for word processing – Software applications for spreadsheet.

SKIPPER/SAILOR: Public use activities and preservation of the Environment.-Public use control in the rural and natural spaces.-Procedures on managing on control and preservation of the natural media.-Control and surveillance of wastes and/or discharges.

MECHANIC: Public use activities and preservation of the Environment.-Public use control in the rural and natural spaces.-Procedures on managing on control and preservation of the natural media.-Control and surveillance of wastes and/or discharges.

The detail of the training needs and the training route for the professional reconversion of the fishermen to carry out this economic activity is found in Deliverable D2.1” Catalogue for the training routes for the professional reorientation of the fishermen and ship owners.” And D2.2 “Proposal for the definition of the new professional competences in order to carry out the new activities”.

4.2.2.8 Financial economic analysis.

The study for feasibility from the D. 1.4, shows that the marine litter and ghost nets collection activities are economically, unfeasible for the medium size reassigned fishing vessels (18-30 meters of overall length), because the operation costs in these vessels are higher than the market Price of the freight rate. The break-even point for these reconversion activities to be feasible corresponds to a freight price of 1.290 euros per day, a cost higher than the average market price.

About the financing needs, (see “**¡Error! No se encuentra el origen de la referencia.** “), it can be seen that, to face the losses generated by this activity with a freight rate of 977 euros (underneath the break-even point), it would be necessary 110.000 euros from external financing to cover the losses of the daily operations, the initial investments and to assume a collection period from clients of about 6 months. About the needed non-repayable grants for the business to be profitable (see ...Public financing for the activity”). It would be necessary about 70.000 euros annually to face the operating losses that generate the activity at a freight rate of 977 euros.

For the estimation of the feasibility it has been considered that the reassigned vessel is owned by the ship owner that will carry out the reconversion activity. Regarding this, the vessel is considered as social capital, what allows not to include the value of the vessel in the initial investment needs, comparing the study to the reality, because the ship owner is the owner of the vessel before the starting up of the activity. The amortization period assigned to the vessel is 5 years, this way, after finishing the service life of the vessel, it has been considered the possibility that the promoter of the activity gets a new vessel to continue the business. The value of the vessel “Ciudad de Cartagena” considered in this study is of 300.000 euros. In the particular case that the crew of the vessel or group of fishermen not owning a vessel and wanting to promote the reconversion activity, it will be necessary to consider an initial investment equivalent to (300.000 euros) for the acquisition of the vessel.

The details of the Financial and economic analysis are collected in Deliverable D1.4 “Report on Feasibility, Evaluation and Analysis of the economic sustainability of the proposed reconversion activities”.

4.3 Business plan for the marine environmental parameters monitoring and services supporting scientific researches .

4.3.1 A.- Executive summary

The Business plan for the activity of Environmental parameters monitoring and services supporting scientific researches consists of the use of the vessel as a floating laboratory, where the scientists can carry out the different fieldworks that require the research, such as the environmental parameters data collection, maritime zones monitoring, bathymetric surveys of the bottom, etc.

The research centers in the marine area have their own vessels for the carrying out of their research campaigns, being the fleets assigned to projects with an adjusted programmed annual Schedule and that can be collapsed with unexpected events. On the other hand, the vessels are often oversized, what make them economically inappropriate for the carrying out of some campaigns that do not require the use of great technologies or instrumentation.

The reassigned vessels have operational costs much lower, what make them a good alternative for the carrying out of campaigns on board, provided that they have the suitable media for the display of the equipment

In this case, the starting point is different than the one from the entrepreneur team that is planned to develop this business idea in the future. The promoter team and the manager of the project, is formed by the crew of the vessel, teachers and pupils from the CIFP Hesperides, tutors/coaches/accelerators and Business Angels and the staff from the CTN, that have a high level of knowledge of the sector based on their experience. For the development of this project have collaborated the different stakeholders from it by a shared management of the resources, assigning the responsibilities and tasks depending on the degree of commitment with the project. The final task is to simulate the ideal entrepreneur team by the participants of the experience.

The service consists of doing punctual trips for the using of the vessel as a supporting platform in research activities such as data collection campaigns and /or samplings. In this service, scientists and their equipment are boarded for the environmental parameters data collection, the testing of methods and prototypes and the starting up of equipment and/or devices.

The segment of clients is focused in public or private organisms with a researcher or scientific profile, as the Spanish Institute for Oceanography (IEO), The Centre for studies and experimentation of public works (CEDEX), The proper Administration, Companies from the environmental fishing sectors and aquaculture, universities, etc.

The Sales of the service are based on the carrying out of partnership contracts in the form of Little freights made for a definite time for different campaigns made all over the year, .the activity is planned to be carried out over the 12 months of the year in a fair share of the trips along the year, since is not foreseen any kind of seasonality because the kind and target of the campaign to be carried out will establish the better conditions for its implementation.

The key activities of the service to give support to the scientific community in the environmental parameters monitoring activity are the transport, display and suitable handling of the equipment.

The key resources are the reassigned vessel as it is indicated in the D.1 and the crew formed in this case with a minimum of 3 persons (Ship owner/Skipper, Sailor and Naval Mechanic).

The minimum Price for one day of campaign is 1.468 euros, a very competitive Price in the market according to the surveys carried out to the potential customers during the campaigns.

The activity is profitable for a level of income of 322.874 euros corresponding for example, to the selling of 220 campaign days at a price of 1.468 euros per campaign.

The details of the revenue and cost structure of the service are found in D1.4.

PROFIT AND LOSS FORECAST	YEAR	YEAR	YEAR	YEAR	YEAR
	2017	2018	2019	2020	2021

EXPENSES					
Total direct expenses.	-236.819	-243.923	-251.241	-258.778	-266.542
Indirect expenses.	-21.312	-21.951	-22.610	-23.288	-23.987
Total expenses	-258.131	-265.875	-273.851	-282.066	-290.528
Total Incomings	330.000	346.500	363.825	382.016	401.117
EBITDA	71.869	80.625	89.974	99.950	110.589
Amortization expenses for investments in Rescue and Safety	-1.367	-1.367	-1.367	-1.367	-1.367
Amortization expenses for investments Specific of the activity	-60.600	-60.600	-60.600	-60.600	-60.600
Amortization expenses for investments in accommodation	-1.896	-1.896	-1.896	-1.896	-1.896
Amortization expenses relating to start up and formation of the company	-843	-843	-843	-843	-843
Full amortization	-64.706	-64.706	-64.706	-64.706	-64.706
EBIT (BAII)	7.164	15.920	25.268	35.244	45.883
Interest cost or interest revenue	-37	1.115	3.521	6.118	8.968
EBT (BAI)	7.126	17.035	28.789	41.362	54.851
Taxes	-2.494	-5.962	-10.076	-14.477	-19.198
E (BDI)	4.632	11.073	18.713	26.886	35.653

Table 9. Profit and loss accounts– annual.

El ROI of the activity is 2,18%.

ANALYSIS OF RATIOS

	31-12-17	31-12-18	31-12-19	31-12-20	31-12-21
Profitability and growth ratios					
Profit margin = BAIT / Sales (Incomes)	2,17%	4,59%	6,95%	9,23%	11,44%
ROI = BAIT / Actives	2,18%	4,63%	6,88%	8,83%	10,42%
ROE = BDT / RP	1,52%	3,51%	5,60%	7,44%	8,98%

Table 10. Profitability and growth ratios.

Considering 220 campaign days per year, the break-even point for the value of the sales that allows the feasibility of the environmental parameters monitoring activity and support to the

carrying out of scientific campaigns as a reconversion activity, is 1.468 euros per campaign. The break-even point (minimum incomes) is shown in the table:

	YEAR 2017	YEAR 2018	YEAR 2019	YEAR 2020	YEAR 2021
Break Even point (Euros)	322.871	329.538	335.499	341.770	348.288

Table 11. Break-even point

The activity environmental parameters monitoring and support to the carrying out of scientific campaigns is economically feasible for the medium size (18-30 meters length)reassigned fishing vessels. The compulsory conditions for this reconversion activity to be feasible are a level of incomes higher than 322.871 euros, what implies 220 days per year of the activity with a minimum price per campaign of 1.468 euros.

About the needs of financing (see “¡Error! No se encuentra el origen de la referencia.”), It is seen that, except for the need to carry out the initial investments, where it is needed a financing of about 27.000 euros, once the activity is started up, it generates a positive financing cash of about 80.000 euros annually.

The fishing vessel seems to be a good solution to the high demand that have the oceanographic vessels currently, and their high operating costs, being vessels with minor technologic services but feasible for campaigns that do not require having installed on board very specialized devices and that they can be boarded by the scientists that fright the vessel. So, because it is a business model based on expanding the offer in a saturated market, it is foreseen to increase the fleet of vessels available for this role is feasible according to the description of the business plan shown in this report. From an economical point of view, the cost of the freight will stablish its feasibility, depending on a series of factors such as the cost of the fuel, maintenance of the vessel, amount of people that form the crew or the type of campaign contracted.

4.3.2 B.- Business plan.

4.3.2.1 Business Idea. The opportunity.

Service available for the scientific community and the administration for the use of the vessel as a supporting platform for research activities such as the data collection campaigns, and/or simples in some areas .In this service, scientists and their equipment are boarded for the environmental parameters collection, the testing of methods and prototypes and the starting up of equipment or devices.

Large part of the monitoring programs of the marine managing descriptions, imply the collection of data in the media and for that reason, require a vessel with the greater possible availability and the minor associated costs, because normally, financing for oceanographic research is Little, Currently the capacity of the oceanographic vessels is considerably saturated, having very strict schedules and operating costs high enough (about 7.000 euros per campaign per day), so that its availability can adjust to the strictly foreseen for the campaign without the chance to test ideas that arise during it.

4.3.2.2 Promoter team.

Finally formed by:

1. Crew. Selected from an entrepreneurship test (Annex 1. Test for entrepreneurship to classify the entrepreneur teams and to establish the leader of the group.) Taught by IVEAEMPA to students of the CIFP Hespérides from the Maritime fishing family: Ángel Mercader is the skipper of the vessel, Alejandro Díaz is a Young sailor, Carolina Rodríguez is titled in Naval machines and Naval Engineer, and staff from the CTN, and Alberto Díaz has a degree in Naval Architecture and teacher of the CIFP Hespérides.
2. Teachers and students from the CIFP Hespérides all of them from the Maritime Fishing Family: Elena Araque (Diving instructor), Juan Rafael Diez Bebia (Physiotherapist), Carlos Barrio (Diving instructor), Sergio Pazos (Computer specialist), Pedro Jesús Bernal (Teacher of the CIFP Hespérides) and many others.
3. Accelerators/Tutors/coaches and Business Angels: Mrs. Iolanda Piedra Mañes and Mr. Joan Alba Tort, both members of the team of IVEAEMPA.
4. Staff from the CTN: Noelia Ortega , Fuensanta Riquelme and Jordi Solé.

4.3.2.3 Business Model.

It is proposed to reassign the fishing vessels, to be able for them to carry out “oceanographic campaigns that do not require a vessel with a lot of technology or whose instrumentation can be easily boarded and displayed with the common ways that are in the fishing vessels, because in general, these vessels have lifting machines for the lowering or lifting of equipment to the Sea.

The protected marine areas are an example of special interest place for the monitoring and control. In the Region of Murcia, the area of the Mar Menor and the Mediterranean east coast of the Region are considered special protected areas.

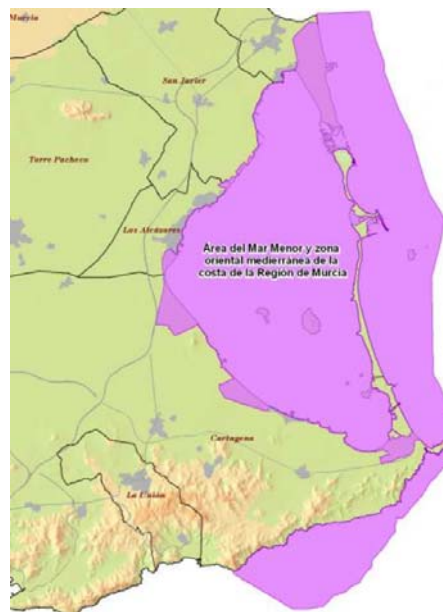


Image 9. Mar Menor area and the Mediterranean east coast of the Region of Murcia. Source: Wetlands and wáter courses of the Región of Murcia

4.3.2.4 ANALYSIS OF THE SECTOR.

The segment of clients is focused in public or private organisms with a researcher or scientific profile, as the Spanish Institute for Oceanography (IEO), The Centre for studies and experimentation of public works (CEDEX), The proper Administration, Companies from the environmental fishing sectors and aquaculture, universities, etc. by means of agreements and partnership contracts in the form of little frights made for a definite time for different campaigns made all over the year.

The initiative for activity other than fishing closest to the proposed in this business plan is shown in the following table.

NATIONAL INITIATIVES	PROMOTER	PRODUCT
Watchers on board the fishing vessels	National Institute for Fishing Development and Research (INIDEP)	<ul style="list-style-type: none"> - To control the regulatory compliance of the legislation on fishing as defined in the different National and International trawlers. - To carry out a wide biologic sampling: Control of captures, size and weight measures, and studies on sex and extraction of otoliths.

Table 12. Close initiatives detected.

4.3.2.5 Business Strategy and Marketing Plan.

For this activity with the vessel “Ciudad de Cartagena” are expected, then, one working day campaigns without overnight stay for the collection of environmental parameters in the surroundings of the base harbor.

It must be remarked that most of the Institutions have their own vessels for the carrying out of these campaigns, anyway, sometimes their fleets are assigned to projects with an adjusted programmed annual Schedule and can be collapsed by eventualities. On the other hand, the fleets are often oversized economically and technically for some campaigns that do not require the use of great technologies or instrumentation, being useful the use of other vessels with less technology and minor operating costs, but that are available for the carrying out of the campaigns.

The activity is foreseen to carried out during the twelve months of the year, sharing the trips in a fair way during the whole year, because is not foreseen any kind of seasonality, Because the type and target of the campaign to be carried out will set the better conditions for its realization. The distribution is shown in the following table:

	JN.	Febr.	March	Apr.	My.	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
Monitoriing	20	20	20	20	20	23	21	0	23	20	20	20

4.3.2.6 Operations Plan and Provisioning.

To carry out one activity of environmental parameters monitoring is compulsory to equip the vessel with the necessary media for the transport, display and handling of equipment..

The vessel “Ciudad de Cartagena” is a 20 years old reassigned vessel in the year 2014, with 24 meters of overall length. The vessel has 6,3 meters of sleeve and 3 m depth, regarding the engine, it has a 375 cv of power and a fuel consumption of 80 liters per hour working.

The vessel “Ciudad de Cartagena” is in a correct and good conservation status, a thing that allows to ensure to carry out the selected economic activities, In the reassignment of the vessel it has been considered the needed basic investments for the inside and outside rehabilitation for comfortability and safety, together with the adequacy of the vessel with working space for the scientists or researchers.

The most important investments have been addressed to cover the lack of elements in the vessel or to the ones that must be substituted for safety and/or are essential.

Investments in refurbishment and acquisition of materials for safety and comfortability.

- It is needed the installation of safety rails to prevent falls of the passengers and define the risk areas, safety barriers to prevent the Access and signposting for the risk areas.
- The old life jackets and life rings of the fishermen do not meet the current regulations: Order FOM/1144/2003 April the 23rd, by which are regulated the equipment for safety, rescue, firefighting, sailing and prevention of waste water discharges, that must carry on board the recreational vessels. It is necessary to acquire new lifeguard equipment, together with first aid kits, pyrotechnics, buckets and fire extinguishers in order to comply with the regulations
- The kitchen of the vessel is refurbished to adapt it to the pretended new use in order to offer seafood meal ranch on board.
- It is required to sanitize and adapt the bathrooms and signposting properly, the ones aimed for the use of passengers and the ones aimed for the use of the crew.

It is also needed a Project elaborated and signed by a competent qualified technician that proves that the vessel meets with the established in the Order FOM/1144/2003.

Initial and intermediate inspections are also needed

4.3.2.7 Human Resources Management

The minimum crew is formed by the three profiles detailed hereafter where the wished training is included before the starting of the activity;

SHIP OWNER: Office automation (partial) – Operating system, Search for information: Internet/Intranet and e-mail address – Software applications for word processing – Software applications for spreadsheet.

SKIPPER/SAILOR: Public use activities and preservation of the Environment.-Public use control in the rural and natural spaces.-Procedures on managing on control and preservation of the natural media.-Control and surveillance of wastes and/or discharges.

MECHANIC: Public use activities and preservation of the Environment.-Public use control in the rural and natural spaces.-Procedures on managing on control and preservation of the natural media.-Control and surveillance of wastes and/or discharges.

The detail of the training needs and the training route for the professional reconversion of the fishermen to carry out this economic activity is found in Deliverable D2.1" Catalogue for the training routes for the professional reorientation of the fishermen and ship owners." And D2.2 " Proposal for the definition of the new professional competences in order to carry out the new activities".

4.3.2.8 Financing- economic analysis.

The environmental parameters monitoring activity and support to the carrying out of scientific campaigns is feasible for the reassignment of middle size fishing vessels (18-30 meters length). The break-even point corresponds to a price of 1.479 euros per campaign, very competitive price in the market according to the surveys carried out to the potential customers during the campaigns.

About the needs for financing (See "**iError! No se encuentra el origen de la referencia.**"),it is observed that, excluding the initial investments where it would be necessary a financing of about 27.000 euros, once the activity is started up it generates a positive cash of about 80.000 euros annually..

5 Conclusions.

There have been elaborated business models for 3 activities other than fishing, that are marine and coastal activities (Diving and Recreational fishing) , Marine litter collection and/or ghost nets and the activity of environmental parameters monitoring and services supporting the scientific research.

The Business idea has been detailed for each one of the activities highlighting the added value for each one of them, which will be carried out by the promoter team that will make possible its successful development and the managing in the proposed business model of the market.

It has been established the economical feasibility of these activities analyzing the reference market in each case and their potential risks, concluding each case as follows:

- ✓ The activity for Marine and Coastal Tourism, being a market that points to an increase of the active sport tourism, shows a high potential as an activity other than fishing that is expected to reach the profitability easily according to the description of the business plan shown in this report.
- ✓ The activity for Marine litter collection is expected to be an opportunity of future business due to the rise of sensibility in the population and the Administration towards the environment, anyway, due to the current lack of market of this activity and its high operational costs (Resulting from the high fuel consumption and atmospheric pollution), the activity is recommended to be carried out by active fishing vessels and not for reassigned vessels, being the Administration (Local, Regional, National and/or Community) the one that funds this type of policies and its execution. In the activity for lost ghost net collection, it is recommended to execute preventive policies such as the installation of locating systems in the fishermen´s nets so that they can be located easily in the moment when they are lost. So, as happened for the activity of marine litter collection, it is considered an activity hardly feasible economically, for that reason, it should be focused more as a needed public service to improve the quality of the marine environment, indirectly benefiting to all those activities related with the maritime sector.
- ✓ In the activity environmental parameters monitoring and services supporting the scientific research, being a business model based in expanding a market offer that is now saturated of demand, it is expected that the expansion of the fleet of fishing vessels available for this activity will be an economically feasible activity because the minimum freight price that guarantees the profitability of the activity is a very competitive price.

6 Attached documents.

Table 13. List of attached documents		
Anex	Description	File name
Anex 1	Entrepreneurship test. With this test it was measured the level of entrepreneurship of the entrepreneurs of the project.	Entrepreneurship test to classify the teams of entrepreneurs and establish the leader of the group.

7 Annex 1. Test for entrepreneurship to classify the entrepreneur teams and to establish the leader of the group.

A = SÍ / EN TOTAL ACUERDO | B = BASTANTE / A MENUDO | C = ALGO / ALGUNA VEZ | D = NO / EN ABSOLUTO
Test del emprendedor

Nº	Pregunta	A	B	C	D
1	¿Te consideras una persona adaptable a los cambios?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	¿Tienes confianza en tus posibilidades y capacidades?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	¿Es importante para ti disponer de autonomía en el trabajo?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	¿Tienes facilidad de comunicación?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	¿Te consideras creativo?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	¿Afrontas los problemas con optimismo?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	¿Tomas la iniciativa ante situaciones complejas nuevas?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	¿Tienes predisposición para asumir riesgos?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	¿Tomas notas escritas sobre tus proyectos?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	¿Arriesgarías recursos propios si pusieras en marcha un proyecto empresarial?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	¿Te resultaría fácil asignar tareas a los demás?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	¿Sabes trabajar en equipo?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13	¿Sabes administrar tus recursos económicos?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	¿Tienes facilidad para negociar con éxito?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15	¿Planificas de forma rigurosa acciones concretas para el desarrollo de un trabajo o un proyecto?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16	¿Te planteas los temas con visión de futuro?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17	¿Cumples los plazos que te fijas para realizar un trabajo?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18	¿Sientes motivación por conseguir objetivos?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19	¿Te consideras profesionalmente bueno en aquello que sabes hacer?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20	¿Sacrificarías tu tiempo libre si el trabajo lo demanda?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Entrepreneurship test. Aceleradora del Mar IVEAEMPA

Yes/totally agree, quite/often, somewhat/sometimes, no/never

- Do you consider yourself a person adaptable to changes?
- Do you rely on your possibilities and abilities?
- Is it important for you to have independence at work?
- Do you have communication skills?
- Do you consider yourself creative?
- Do you face problems in an optimistic way?
- Do you lead the way facing new complex situations?
- Are you willing to take risks?
- Do you take written notes about your projects?
- Would you risk your own resources if you started up a business project?
- Would it be easy for you to assign tasks to people?
- Do you know how to work in teams?
- Do you know how to administrate your financial resources?
- Are you willing for successful negotiation?
- Do you plan concrete strict actions for the development of a work or project?
- Do you consider the issues with a long term view?
- Do you fulfill the deadlines that you set to carry out a work?
- Do you feel motivated for reaching targets?
- Do you consider yourself professionally good in what you know to do?
- Would you sacrifice your free time if your work required it?