

# ML-REPAIR APP

WP4 – Activity 4.2 - Fishing for litter catches:  
composition and quantities definition

## DELIVERABLE D4.2.2

Partner in Charge: MARE Società Cooperativa

Partners involved: All

Status: Final Version

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Date: December 2018

ML-Repair Reducing and preventing, an integrated Approach to Marine Litter  
Management in the Adriatic Sea – Axis 3 – SO 3.3

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Successively, the APP design and creation started. PP2 closely collaborated with Èdita srl. (by email and phone) in order to clarify the aim and the characteristics of the APP. On 11<sup>th</sup> of September 2018, PP2 met Èdita srl company to define the last details of the APP.



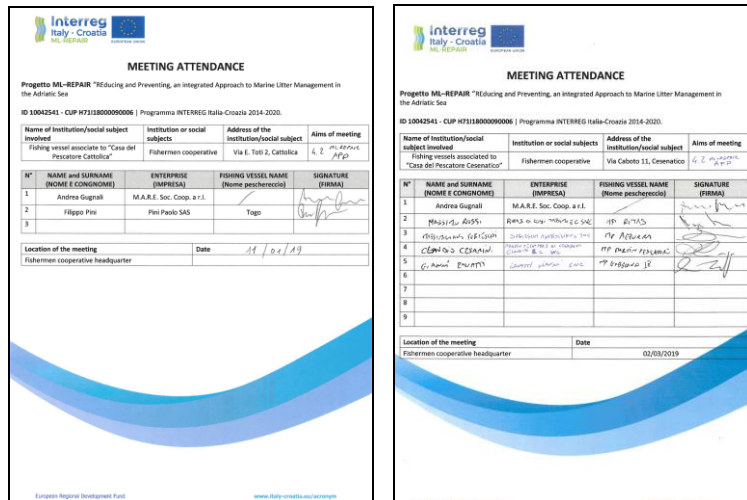
N°	NAME AND SURNAME (NOME E COGNOME)	ENTITY AND POSITION (IMPRESA E POSIZIONE LAVORATIVA)	SIGNATURE (FIRMA)
1	Andrea Guignali	M.A.R.E. Soc. Coop. a r.l.	<i>[Signature]</i>
2	Alto Saporetti	Èdita s.r.l.	<i>[Signature]</i>
3	Maurio Giorgi	Èdita s.r.l.	<i>[Signature]</i>
4			

Location of the meeting: Èdita s.r.l. headquarter  
Date: 29/09/2018

Fig. 2: Signature sheet of the first meeting with Èdita srl (11 September 2018)

Based on the information received, Èdita srl started to create the APP, sending periodically the updates to PP2 that monitored the APP development step by step. Èdita srl attended the second project meeting held in Cattolica on 22<sup>nd</sup> of November 2018 in order to explain the APP functioning and conception to project partners and receive feedback. On December 21<sup>st</sup>, the APP prototype was complete and ready to be downloaded and tested.

In the following months, the APP was installed on fishermen's tablets and illustrated to them in order to test its functioning. In Cattolica, the APP was presented to fishermen on 11th January 2019, while in Cesenatico it was presented on 2<sup>nd</sup> of March 2019.



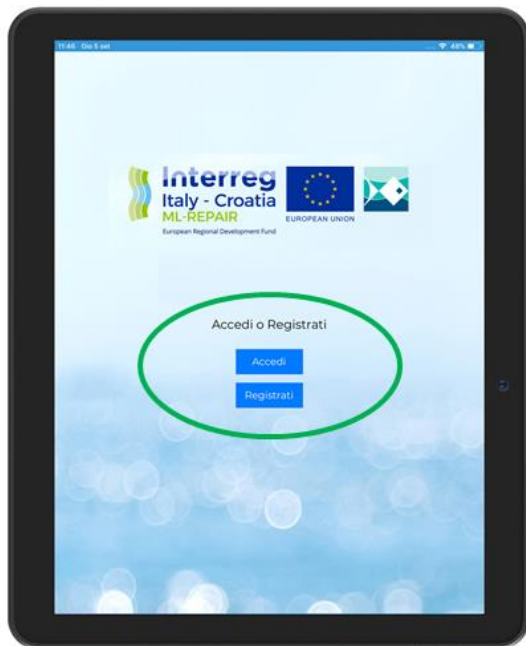
N°	NAME AND SURNAME (NOME E COGNOME)	ENTERPRISE (IMPRESA)	FISHING VESSEL NAME (Nome peschereccio)	SIGNATURE (FIRMA)
1	Andrea Guignali	M.A.R.E. Soc. Coop. a r.l.		<i>[Signature]</i>
2	Maggiore, 2055	REMIS DI VIA MARCONI S.p.A.	IP 20115	<i>[Signature]</i>
3	FRANCESCO CESARINI	COOPERATIVA PESCHERESCA	IP 20115	<i>[Signature]</i>
4	CELANO, CESARINI	COOPERATIVA PESCHERESCA	IP 20115	<i>[Signature]</i>
5	G. ANTONI	COOPERATIVA PESCHERESCA	IP 20115	<i>[Signature]</i>
6				
7				
8				
9				

Location of the meeting: Fishermen cooperative headquarter  
Date: 11/01/19

Fig.4: Signature sheets of the meetings with fishermen in Cattolica and Cesenatico for the APP presentation



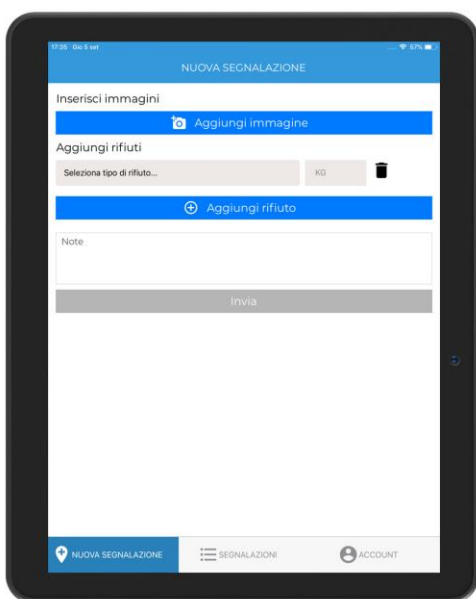
### 3 ML-REPAIR APP INSTRUCTIONS



[Download](#) the ML-Repair APP from Google Play or Google Store (Android)

In this image you can see the access page: if you have an account you can insert the vessel code and password to sign in (*Accedi*). Conversely, you need to register a vessel (*Registrati*).

After signing in, you will be directed to the home page:



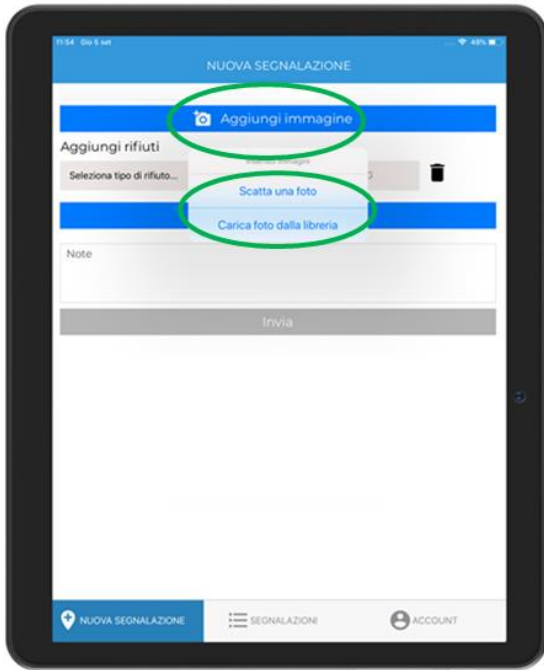
In this page you can:

- Add or take a photo (*Aggiungi immagine*)
- Choose a marine litter category (*Seleziona tipo di rifiuto*)
- Add new marine litter categories (*Aggiungi rifiuto*)

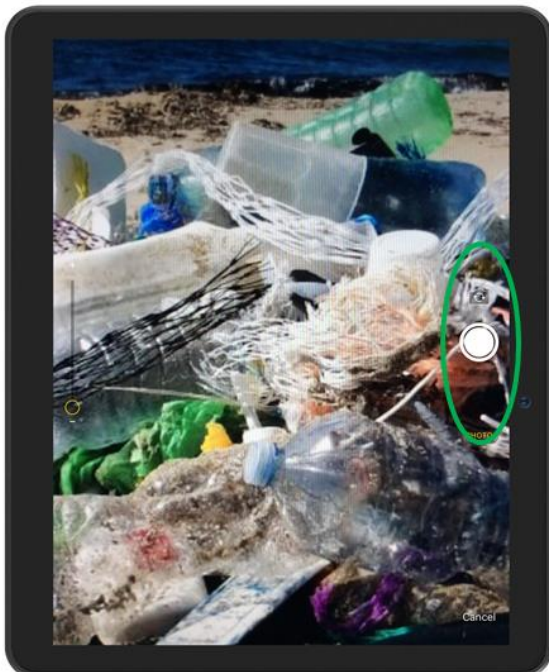
In the lower part of the APP's page, there is a panel that allows to:

- Insert a new report (*Nuova segnalazione*)
- Look at your submitted or pending reports (*Segnalazioni*)
- Access to your account details (*Account*)

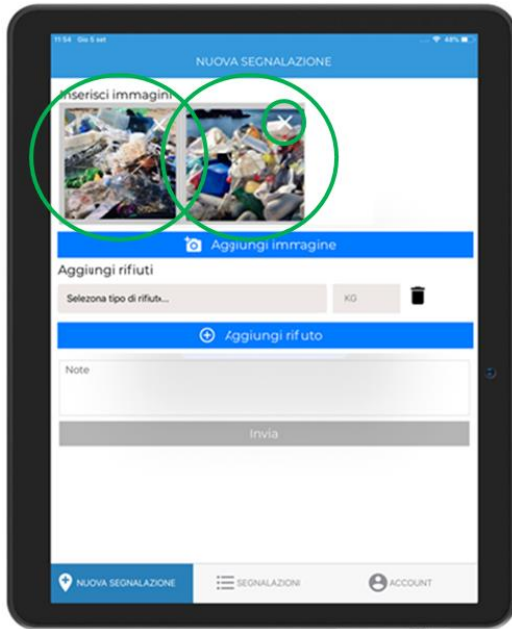




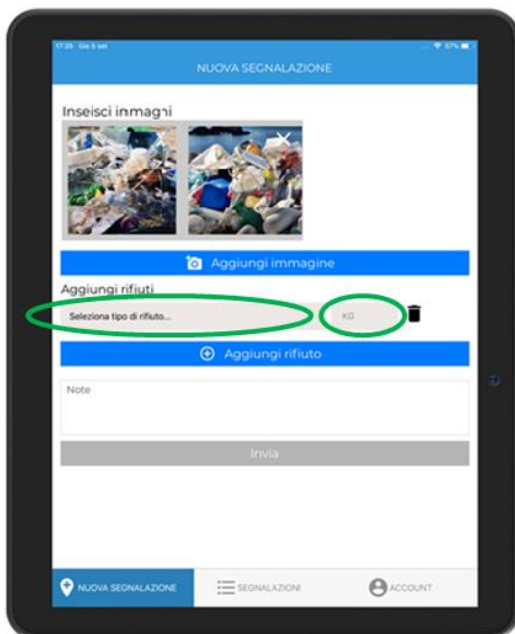
When you add a photo (*Aggiungi immagine*) you can either take a new photo (*Scatta una foto*) or upload a photo from the library (*Carica foto dalla libreria*)



Take a photo

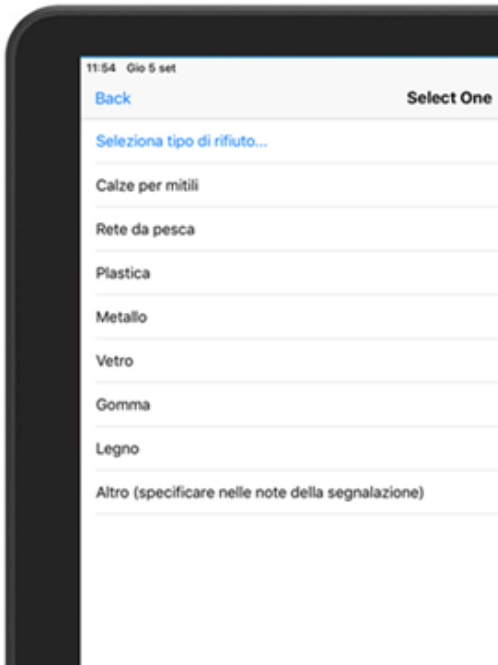


You can insert more than one photo for each sighting, and you can delete a picture (X)

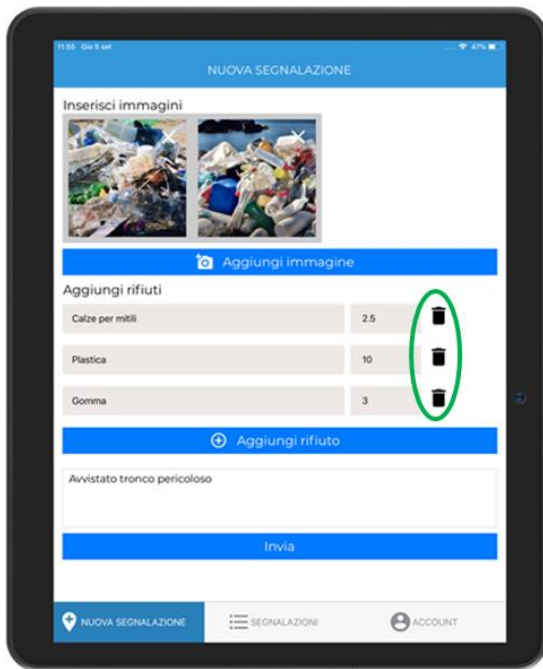


You can insert the type (*Seleziona tipo di rifiuto*) and the weight (KG) of marine litter in these two boxes. When you click in the text box with the sentence "selected type of marine litter" (*Seleziona tipo di rifiuto*) a predefined list will appear



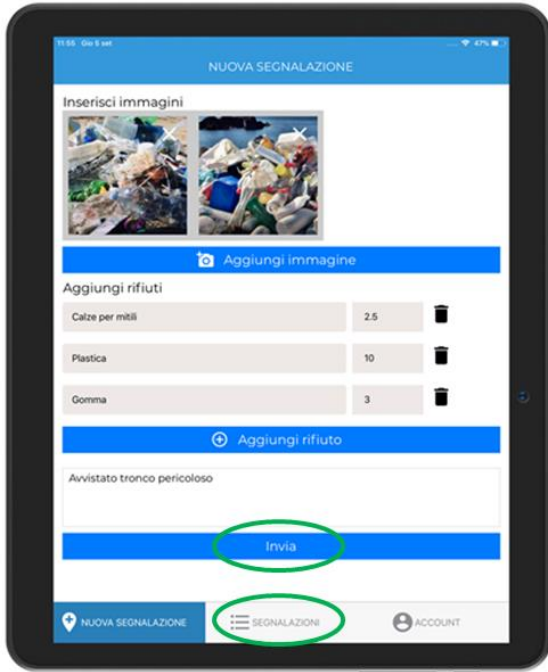


You can choose a marine litter category among some predefined categories that were previously agreed with fishermen, or conversely add the category "Other" (*Altro (specificare nelle note della segnalazione)*) if you find something that is not present in the list. By selecting "other", you have to write the type of marine litter in the notes.

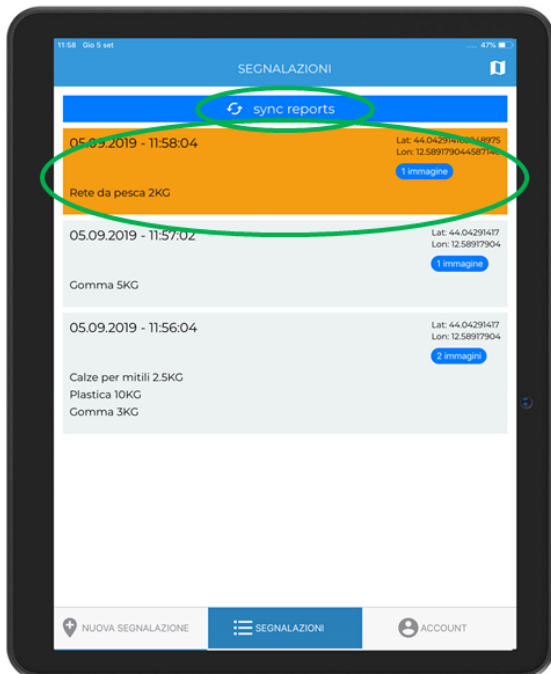


More than one category of marine litter can be entered for each sighting. By clicking on the icon "rubbish bin" you can delete a marine litter category that was wrongly inserted.

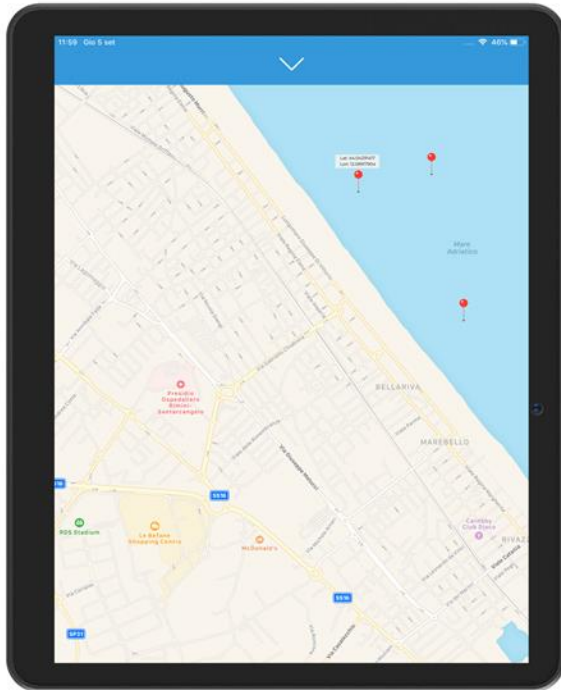
After inserting all waste categories and entered the weight for each category, you can send the report



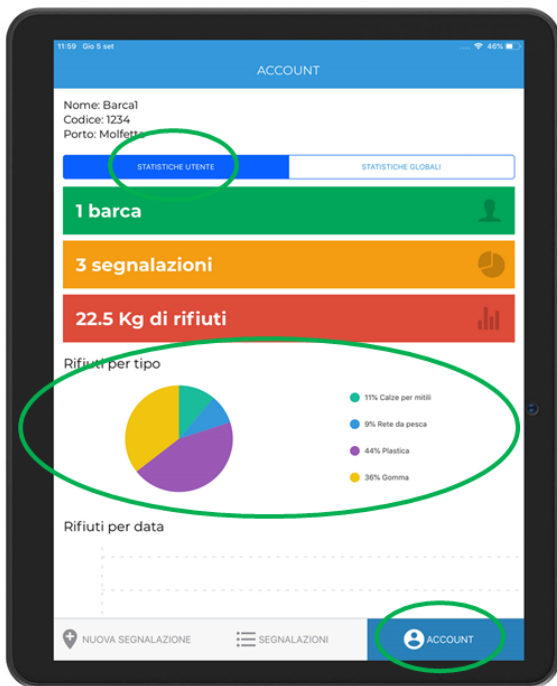
At this point, after clicking “send” (*Invia*), if you have a sim card into the tablet or if you have a wifi connection, the report will be immediately sent to the server. Otherwise, the report will be saved in the "pending" section. By selecting the "report" icon in the panel at the bottom of the page (*Segnalazioni*) you can access all your reports.



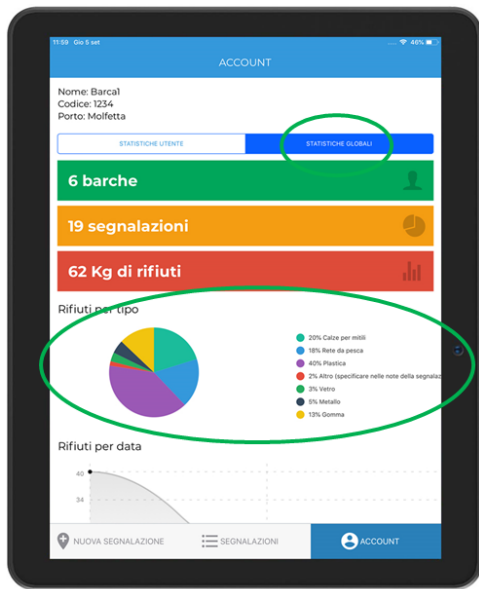
This is the page where all sightings are recorded. The reports that were not already sent are highlighted in yellow. They will be sent to the server once you connect to wifi or a telephone net (if you have a sim card) by clicking “sync reports”.



Reports can be viewed on Google Maps directly from the tablet/smartphone.



In the Account page, you can view the data collected by the boat that is using the APP (*Statistiche utente*)



But also the data related to all other registered fishing vessels (*Statistiche globali*)

#### 4 ML-REPAIR APP DATA

The reports sent by the fishing vessels over the 9 months were all collected on a specific back office web page that manages the reports, giving the possibility, thanks to filters, to have immediate and specific data relating to the individual vessel, to the individual port or to the total of participating vessels, regardless of the port (Fig. 6)

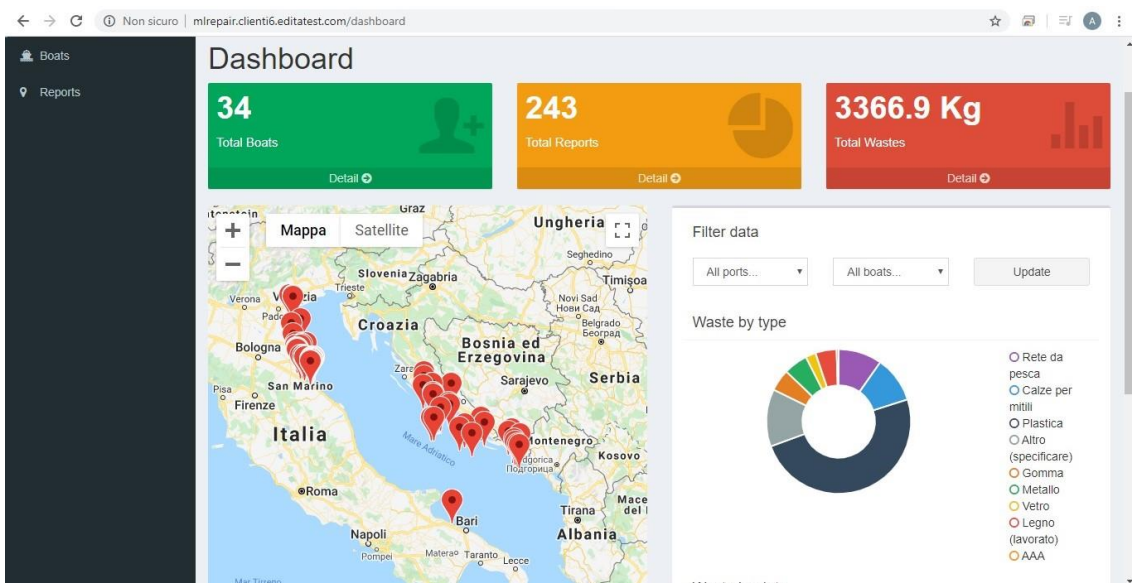
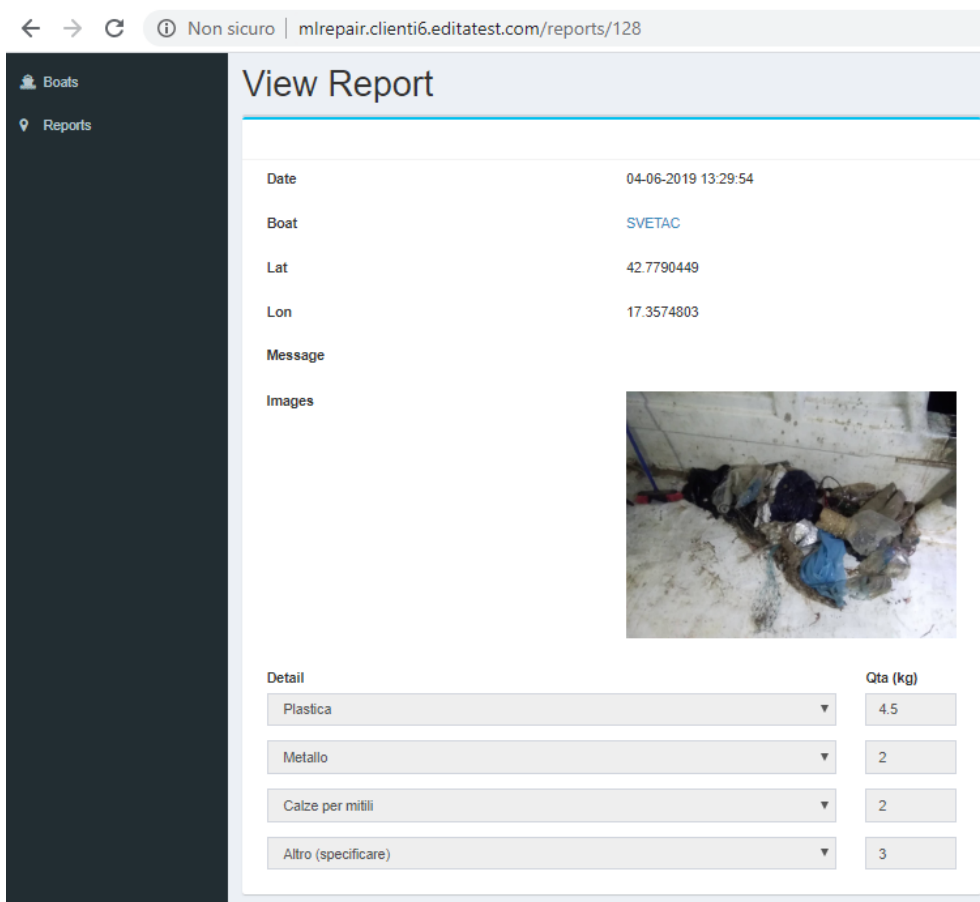


Fig. 6: Back office home page. In the upper part of the page are indicated the number of the vessels subscribed, the number of reports received and the kg of marine litter collected. On the map you can see the icons positioned in the points where the data were sent. On the right of the map the graphic with the percentage of the type of marine litter collected (the black part plus the blue one are plastic, corresponding to 60% of the fished marine litter).

During the 9 months of testing, 17 fishing vessels belonging to the REPAIR project have registered on the APP. More than 200 reports were sent through the APP and data corresponding to approximately 2000 kg of marine litters were collected.



← → ↻ Non sicuro | mlrepair.clienti6.editatest.com/reports/128

Boats  
Reports

## View Report

Date 04-06-2019 13:29:54


Boat SVETAC

Lat 42.7790449

Lon 17.3574803

Message

Images



Detail	Qta (kg)
Plastica	4.5
Metallo	2
Calze per mitili	2
Altro (specificare)	3

Fig. 7: Example of a report received on the back office page

The APP will remain available for future projects on the marine litter and will be downloadable for free on google play store by all those who wish to use it or even just view it, at the following link:

<https://play.google.com/store/apps/details?id=it.edita.mlrepair&hl=it>.

The purchase of the tablets was made by the partners after an online market survey. The cost of the tablet, in relation to its technical characteristics, was one of the lowest on the market.





Fig.8: Purchased tablets for the selected fishermen



Fig. 9. Fishermen Ivan Vidović (f/v Diniva) when receiving the tablet and learning how to use the APP