# CY-FIS

#### **Mobile application**

Cyprus's Recreational Fisheries application: exploring new "control" waters



#### Yiannos Kyriacou

Webinar: Recreational fisheries monitoring & control 4 December 2020





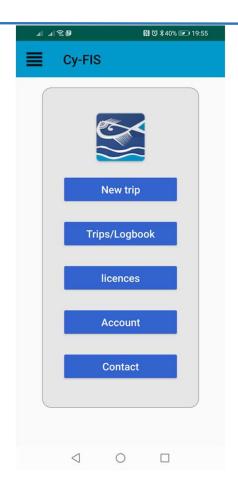






## Overview/content

- What / How / Why CY FIS
- Development /Timeline / Cost
- Web application
- CY-FIS mobile app
- Real time use of the app
- Challenges /Experiences /Lessons learned
- Next steps











### Background

- How important is recreational Fisheries? What is the impact of recreational Fisheries
  - Recreational fisheries can be of the same magnitude as commercial fisheries: The case of Cyprus (N. Michailidis et al. 2020)

https://www.sciencedirect.com/science/article/abs/pii/S0165783620302289

«The study indicates that MRF in Cyprus and probably elsewhere in the Mediterranean has been underestimated thus far and that it should definitely be taken into account when considering measures for fisheries management, N. Michailidis et al. 2020. »

- Action Plan for catch reporting
  - Use of electronic means to collect accurate and reliable catch data in a timely manner
  - Pilot/experimental project on the use of mobile applications for all fisheries activities









### CY FIS Mobile App

- CY FIS Cyprus Fisheries Information Service
  - Department of Fisheries and Marine Research
- Pilot project Voluntary use 2020.
  - "Sharing Information for Sustainable Management of Fisheries Resources" users involved in fishing, scuba diving, general leisure
- Primary use for recording and declaring Fishing Activities by Professional and Amateur Fishermen as well as other related activities for the purposes of fisheries resource management by the Department of Fisheries and Marine Research









#### Timeline

Contract signed March 2019

Project Delivered June 2020

Operational checks and final delivery June 2021

The project is co-financed by the European Maritime and Fisheries Fund - Action 3.1.7 of Article 76.2, Measure 3.1 Control and Enforcement, of the Operational Programme «Thalassa 2014-2020».

The application was developed by Quality & Reliability A.E. for the purpose of data collection by the Department of Fisheries and Marine Research.









## Cost

#	Description	Amount (€)
1.	App development (+5 years maintenance and technical support)	€40000
2.	Hardware (Servers)	€31136
3.	Firewall, Domain Name and SSI Certificate	€3000
4.	Database Licences	€23345
	Total	€97481



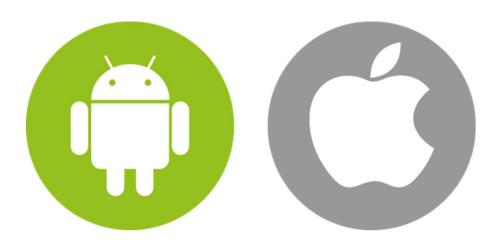






## CY-FIS Mobile app

Mobile Application



Web Application

https://dfmrapp.com.cy/











### Web application - Functionalities

- Administrators and super users
  - Mobile application Management
  - Master data register (use EU MDR codes)
  - License Management and customization for specific users/per license
  - Trips and fishing logbook
  - Monitoring of fishing fleets if enabled
  - Data extraction and analysis
  - Message center (sending and receiving)
- General Users
  - Logging of data as in the mobile app
  - Account management

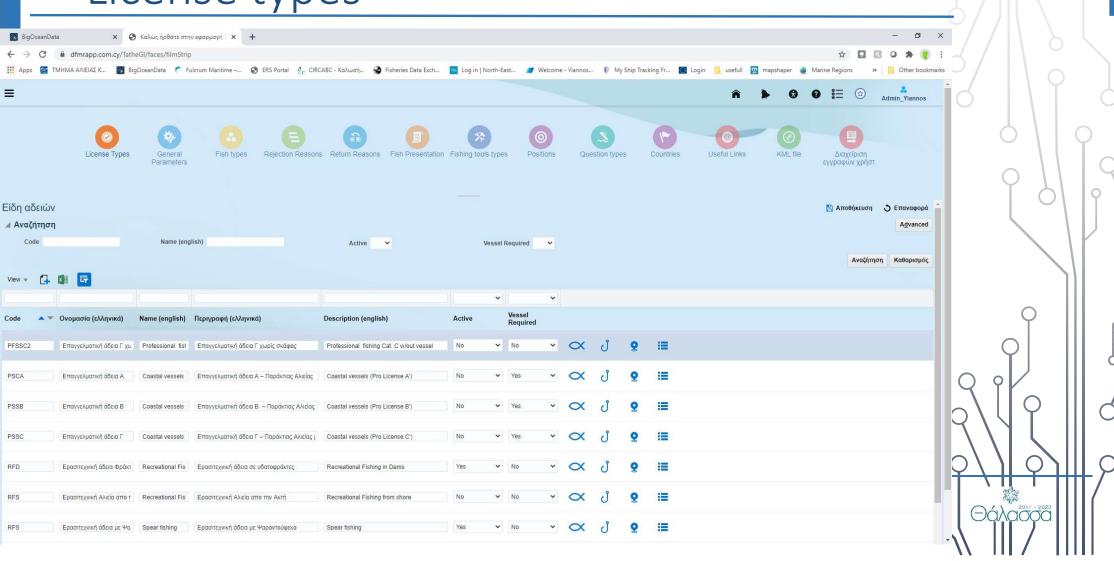




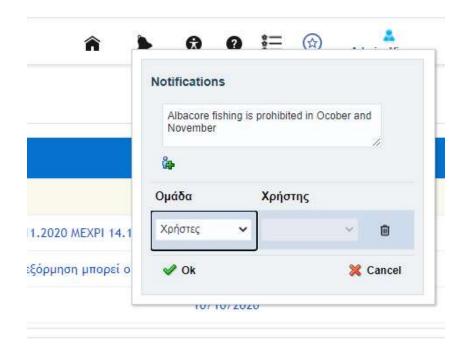


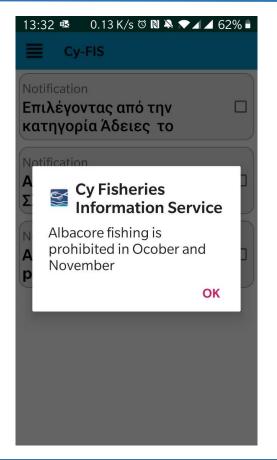


## License types



### Notifications















## Mobile application major functionalities

- Trips and fishing activities
- Communication with DFMR
- Useful links
- Map view and restricted area notifications
  - Operates with and without internet access (If internet access is available data is send at the beginning and at the end of the trip)

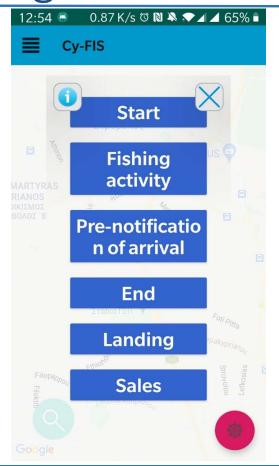








# Mobile app – logbook







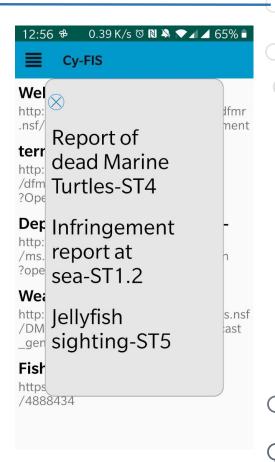




## Mobile app – reporting of events















## Mobile app - Χρήσιμα



#### Website DFMR-

http://www.moa.gov.cy/moa/dfmr/dfmr .nsf/index\_en/index\_en?OpenDocument

#### terms of use-

http://www.moa.gov.cy/moa/dfmr /dfmr.nsf/page08 gr/pag08 gr ?OpenDocument

#### **Department of Meteorology-**

http://www.moa.gov.cy/moa/ms /ms.nsf/DMLindex\_en/DMLindex\_en ?opendocument

#### **Weather Forecast-**

http://www.moa.gov.cy/moa/ms/ms.nsf /DMLforecast general en/DMLforecast \_general\_en?opendocument

#### **Fishing licenses Payment-**

https://www.jccsmart.com/e-bill /4888434









## Mobile app – Restricted Zones

#### Notifications real time (if GPS enabled)

- Fishing restricted zones
- No enter zones













### Reaction from "users"

- Users are very skeptical
- No data sent up to today and very few users registered!
- The ability to record positions (if enabled) is an issue for potential users.
- Some claim its not user friendly!
- Most ask "why should I use this app? what's in it for me..?"
- Collective bodies /Associations support it (in Theory)









#### What next???

- 2020 very little interest as a voluntary tool
- Need further publicity and information to potential users
- Further development will be assessed after there is substantial use
- Some limitations/issues regarding the app:
  - Android not consistent among different mobile brands and mobile version affecting mainly display of text.
  - GPS interference high in our area (especially affecting android phones)
- 2021- ???? Possible use as mandatory for some groups (legal basis is available in terms of having adequate control and for fisheries management)









#### What next???

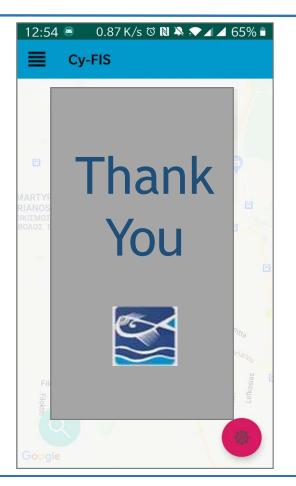
- Operational support (Human Resources)
  - IT support
  - Business Support
- Reliability of Data (will depend on legal obligations)
  - Validation and cross check?
- Data management and Use
  - Extraction
  - Interoperability













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