

# EXPECTED TECHNOLOGY TO DETER IUU-F



## **EXISTING PLATFORM**

### **The Integrated Maritime Intelligent Platform**



Automatic notification to FVs' owners through Whatsapp



Monitoring Monitoring of vessels movement through VMS and AIS



Alert page

293, Nama Kapal: KM YAD

ndikasi melakukan pelanggaran tanggal 2023-04-17 20:00:00.

Alert Automatic violation detection using geofencing feature



Dashboard A feature to watch the actual Fishing Productivity



Monitoring page





Dashboard page













#### VESSEL TRAFFIC CONTROL

#### KKP - PPP. Karimunjawa - 04/09/2024



ETA (WIB)	ВКР	ID TRANSMITTER	VESSEL NAME	PORT ORIGIN	BASE PORT	FISHING ACTIVITY	DPI VIOLATION	CROSS CONSERVATION ZONE	NEAR COASTLINE	VMS OFF	TRANSHIPMENT	PORT VIOLATION	RISK INDICATOR	LOGBOOK VALIDITY	CATCH (TONNAGE)	LAST LOGBOOK ACTIVITY	STATUS
09:27:32	8669	31215159	<u>SURYA</u> <u>BAHARI</u>	PP. Tegalsari	PPN. Pekalongan, PPP. Tegalsari	1	0	0	0	0	0	0	Low	0.00%	8.77	25/03/2024	APPROACH

- ALERTING VESSEL APPROACH TO PORT
- RESUME OF THE TRIP
- RISK PROFILING

### The Development of the Integrated Fishing apps "e-PIT"



REALECTANT OF THE REAL TENDER FRANCE AND THE FRANCE AND T
Kode Pengguna
A Password
0 A2 9 3 Z
A Kode Keamanan
Lupa password?
Untuk Pelaku Usaha silahkan download melalui tombol dibawah :
Panduan Pelaku Usaha

#### **Integrated Services**

- 1. SILAT
- SIPALKA
- TemanSPB
- eSLO
- Simphoni
- PIPP 6.
- SILOPI 7.

Platform 1. Web base

2. Android Base

- : License Data
- : Fishing Vessels Registration Data
- : Sail Permit
- : Legal Operation Standard of Fishing Vessels
- : Notification of billing payment of non-tax revenues
- : Fish landing data
- : electronic fishing log book

- : https://integrasi.djpt.kkp.go.id/pit
- : https://bit.ly/e-PIT

### The Development of the Integrated Fishing apps "e-PIT"





### The Development of the Integrated Fishing apps "e-PIT"







**Electronic Fishing Log Book** 

- **\* Offline feature**
- Position is generated automatically by the GPS

**Source: DG of Capture Fisheries** 



## **ECPECTING IMPROVEMENT**





#### What is Environmental DNA (eDNA)?

Environmental DNA is a relatively new and exciting tool in marine science. It involves collecting and analyzing genetic material-such as DNA fragments—present in the water. These fragments can come from fish, plants, and other marine organisms that shed cells or tissues into their environment. By analyzing water samples, scientists can identify the species present in a given area without needing to capture or observe them directly.



## HOW EDNA CAN REVOLUTIONIZE MONITORING

#### Enhanced Detection Capabilities

- One of the primary advantages of eDNA is its sensitivity
- eDNA allows us to detect species with a high degree of accuracy and even at low concentrations, providing a clearer picture of marine biodiversity and the presence of IUU fishing activities.

eDNA can be collected from water samples, making it possible to monitor large areas more efficiently. This is particularly useful in remote or difficult-to-patrol regions. By analyzing eDNA, we can quickly identify the presence of target species or detect species that are indicative of illegal fishing activities.



#### Improved Surveillance

## **RADIO DETECTION FINDER**



All fishing vessel using the radio to communicate



Cover wider area, compare to radar satellite



Detected object 8 times more compare to radar satellite



## Indonesia Pilot Project With



#### Didalam zona akuisisi data dari stasiun bumi BARATA

5 kapal terdeteksi oleh radar barata (perancak) 41 Kapal terdeteksi menggunakan radio

#### **Didalam laut teritorial Indonesia:**

29 Kapal menggunakan VMS 45 Kapal terdeteksi menggunakan radio komunikasi



# **THANK YOU** ขอบคุณ