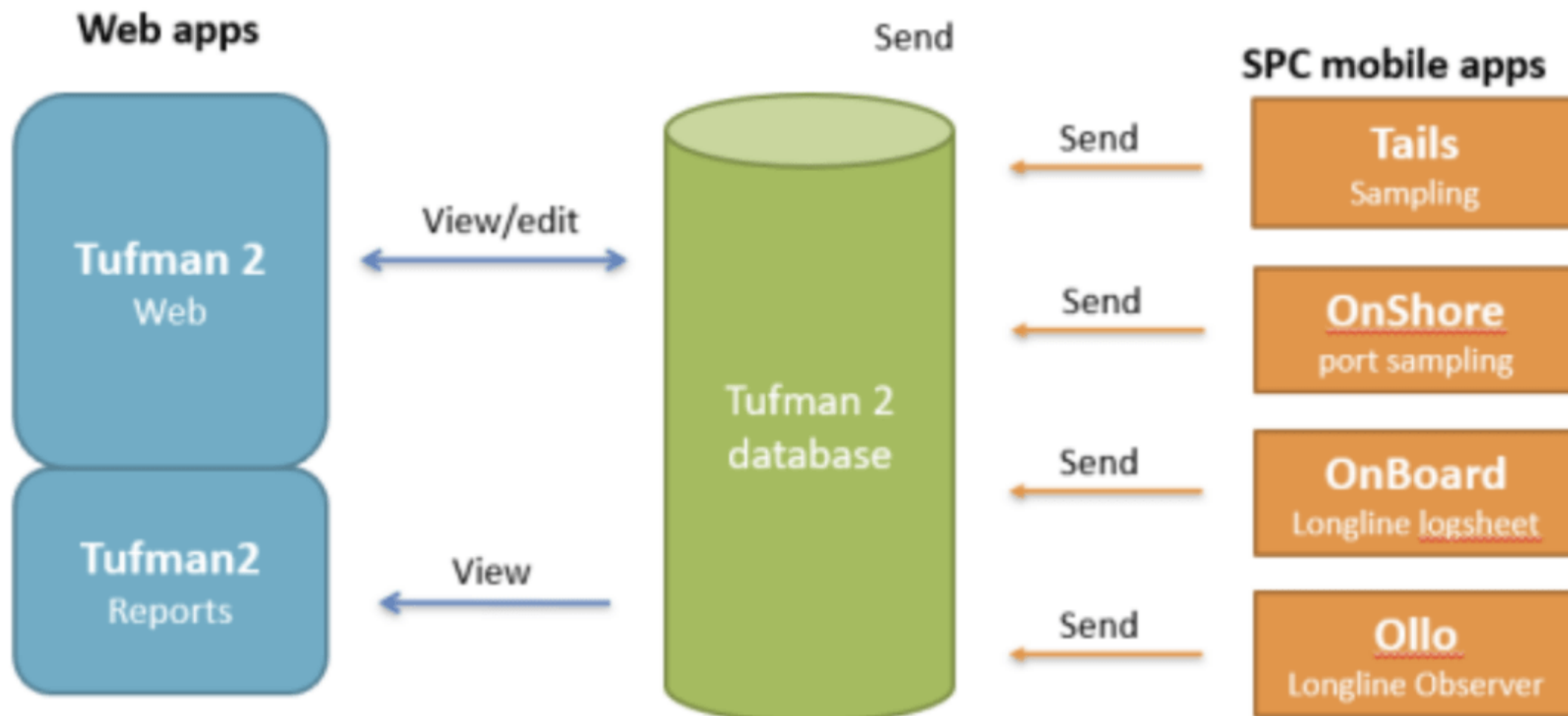


# Integrated fisheries and aquaculture data (WP 7)

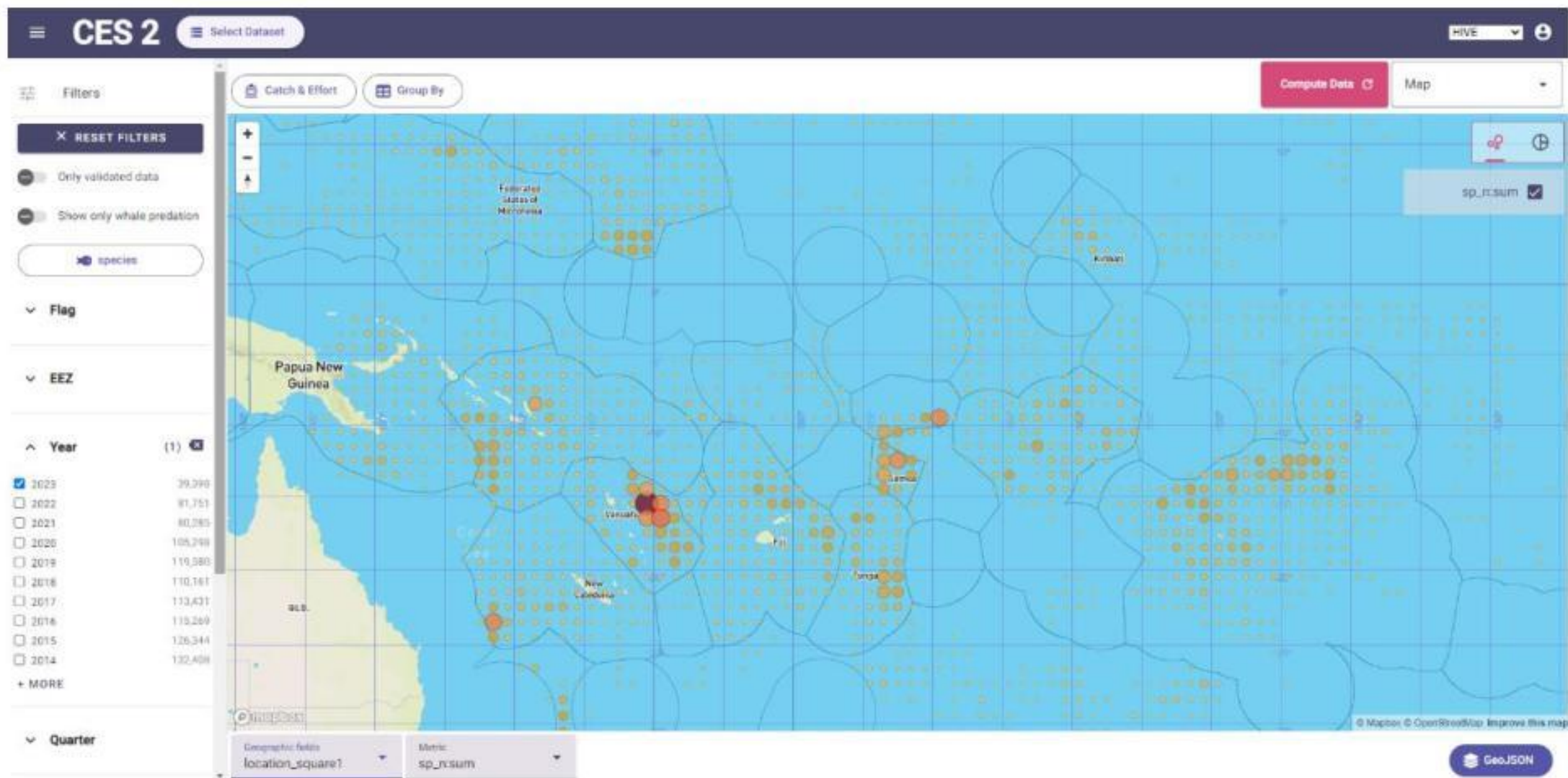
16<sup>th</sup> Heads of Fisheries  
25 April 2024

Franck Magron (CFAP) & Tiffany Vidal (OFP)

# Tuna fisheries data














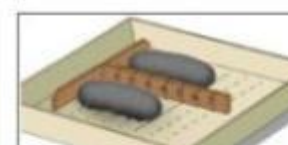



# Tuna fisheries data

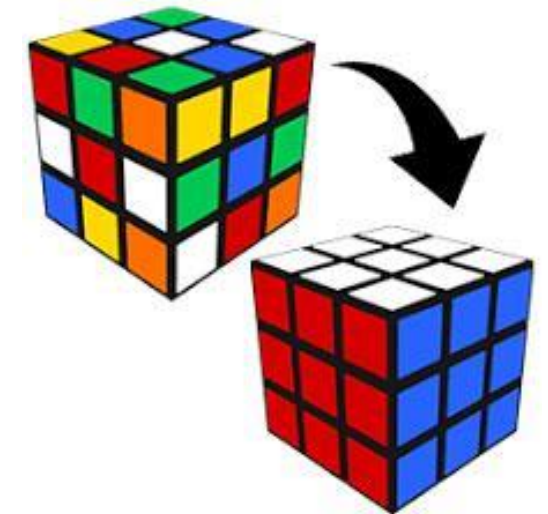


# Coastal fisheries and aquaculture data

The many facets of coastal fisheries and aquaculture into one site

Data collection



Management

# Integrating/interfacing with other sources of data and software through programmatic APIs & import/exports

Other apps



Dashboards



Analysis tools and virtual research environments



Other online databases



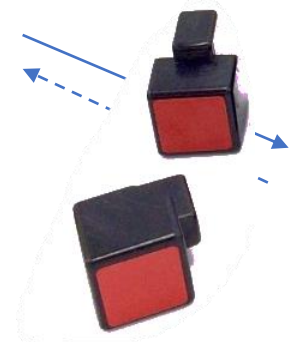
e.g. vessels registration

Excel / MS Access

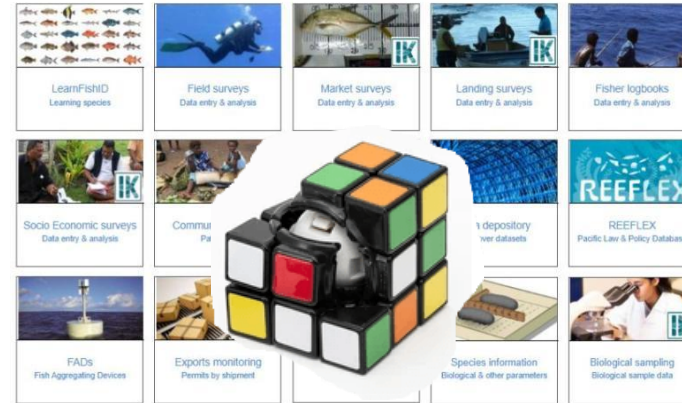
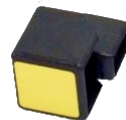


e.g. hatchery data

Communicate



Export



Paper forms



e.g. Sale invoices



Syncing

Import

# SPC FAME data governance policy



## GENERAL POLICIES

**Governance of fisheries, aquaculture and marine ecosystems data provided to SPC by its members**

### Appendix A

Types of data, indicative risk classification and dissemination categories

Data type	Indicative Risk classification	Indicative Dissemination category
Operational level catch/effort data	High	Non-public
Annual catch estimates stratified by gear/flag and species for the WCPFC Statistical Area.	Low	Public (WCPFC)
Annual catch estimates stratified by gear/flag, EEZ and species.	Low	Public (WCPFC)
Aggregated catch and effort data stratified by gear/year/month, 5x5 (LL) or 1x1 (surface), and flag, NOT FILTERED and members data only.	Medium	Non-public

### Annexe A

*Catégories de données, classes indicatives de risque et catégories de diffusion*

<i>Catégorie de données</i>	<i>Risque – classification indicative</i>	<i>Diffusion – catégorie indicative</i>
<i>Données de prise et d'effort (niveau opérationnel)</i>	<i>Élevé</i>	<i>Non publique</i>
<i>Estimations annuelles des prises ventilées par engin/ pavillon et espèce pour la zone de couverture statistique de la WCPFC</i>	<i>Faible</i>	<i>Publique (WCPFC)</i>
<i>Estimations annuelles des prises ventilées par engin/ pavillon, ZEE et espèce</i>	<i>Faible</i>	<i>Publique (WCPFC)</i>
<i>Données globales de prise et d'effort ventilées par engin/an/mois, maillage 5x5 (palangre) ou 1x1 (surface), et pavillon, NON FILTRÉES et fournies exclusivement par les membres.</i>	<i>Modéré</i>	<i>Non publique</i>
<i>Données globales de prise et d'effort ventilées par engin/an/mois.</i>		

# SPC FAME data governance policy

- 3 new data sources added (red)
- All are used to inform science at SPC/WCPFC
- All are classified as **Non-Public** and **highly sensitive**

FAD Sonar data	High	Non-public
Vessel Monitoring data	High	Non-public
Observer data	High	Non-public
Port Sampling data	Medium	Non-public
Transshipment data	High	Non-public
Cannery receipts	High	Non-public
Field measurement data		

# Tuna fisheries - Country webpages

Catch and Effort Summaries	
	Purse seine
All Gear types	Effort (28)
Catch (5)	Catch (3)
Catch Per Unit of Effort (1)	Catch Per Unit of Effort (5)
Size (1)	Size (6)
-----	
Longline	Pole-and-line
Effort (24)	Effort (5)
Catch (11)	Catch (2)
Catch Per Unit of Effort (23)	Catch Per Unit of Effort (2)
Size (6)	Size (5)

- *Problem:* Manually update, time-consuming, unable to respond effectively to member requests for customization
- *Solution:* Develop a Power BI dashboard for flexible data summarization and visualizations





# Tuna Fisheries Country webpages

Milestones/deliverables	Deadlines
Signature of contract	March 2024
Initial scoping phase + agreed architecture	14 April
Project setup + setup authentication provider (Entra ID or SPC own?)	21 April
Setup up web application, authentication service and roles	28 April
Setup up user administration and roles/user rights	5 May
Setup Power BI web app & R-Shiny web service + authentication	12 May
Setting up admin for maintaining visualisation dashboards	19 May
Setting up up deployment + production	26 May
Testing and Acceptance	2 June
Small bugfixes + re-test	9 June
Deployment to production and roll-out	16 June
Discussions/Meetings/Training	23 June
Closing of Project	30 June

# Ikasavea and TAILS

## Artisanal/creel landing data collection

Data collection	TAILS	IKASAVEA
Vessel/boat information		
Landing sites		
Fishing trips		
Fishing event/ effort		
Fishing zones		
Total catch		
Length measurements		
Fisher information		
Activity log (total fishing effort)		
FAD data		
Fishing habits		
Market, community, socio-economic survey		
Catch photos and AI for species ID & measurements		

# Recommendations

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- Discuss the preferred approach for collecting, curating, analysing, and disseminating data related to national coastal fisheries and aquaculture.
- Endorse the development strategy for a unified electronic application (e-application) dedicated to data collection from coastal fisheries, leveraging the strengths of Ikasavea and TAILS.
- Review the FAME data governance policy and confirm any necessary updates (Appendix A).
- Endorse the approach to provide training for members upon launching the updated country webpages in the second half of 2024.

# Breakout Group Questions

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- *What **other fisheries data systems** are you using that you would like to integrate with SPC coastal or oceanic fisheries applications? Are there any major **gaps in data collection or reporting tools** you have identified for aquaculture, coastal, or oceanic fisheries that you would like SPC to address?*
- *How can we **rationalize TAILS and Ikasavea** for artisanal landing surveys and ensure a smooth transition to an app that would combine the features of the two applications ? What are the **key components/features** that would be critical for your national agency to efficiently collect artisanal landings information?*