

Verification of the code of good practices in ANABAC & OPAGAC tuna purse seiners

SCRS/2015/061

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Verification of the code of Good Practices

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- 2- Initial situation (october 2014)
- 3- Training of skippers and observers
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Verification of the code of Good Practices

Voluntary initiative, self-imposed by ANABAC and OPAGAC.
Started in February 2012

1. General goals

Reduction of mortality by entangling or by incidental catch of FAD-associated sensible species (sharks, rays/mantas, sea turtles, whale sharks)



- Use of non entangling FADs
- Application of release operations for sensible species

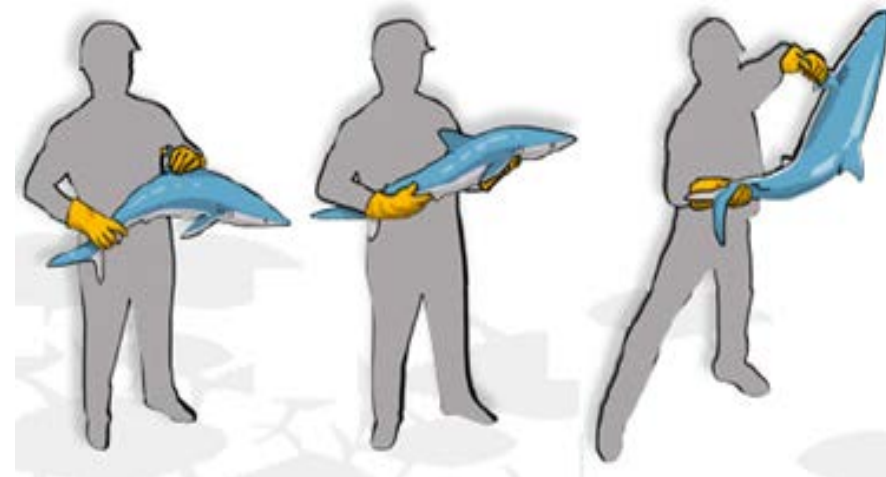
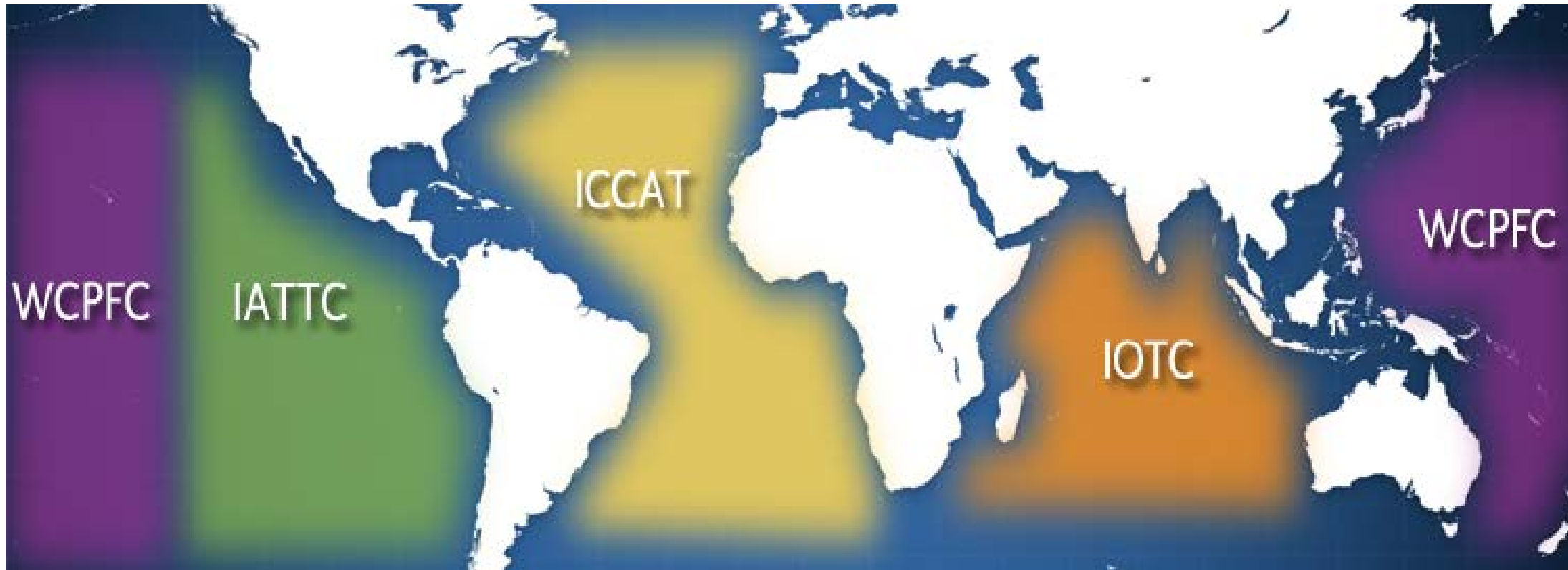


Illustration :

Poisson F., Vernet A. L., Séret B., Dagorn L., 2012. Good practices to reduce the mortality of sharks and rays caught incidentally by tropical tuna purse seiners. EU FP7 project #210496 MADE, Deliverable 6.2., 30p.

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1. General goals



3 Oceans; 4 RFMOs; 59 purse seiners and 19 auxiliary vessels
= **whole ANABAC & OPAGAC fleet** (Spanish and other flags)

100% observer coverage – 140 observers implied
(Voluntary in Atlantic and Indian Oceans).

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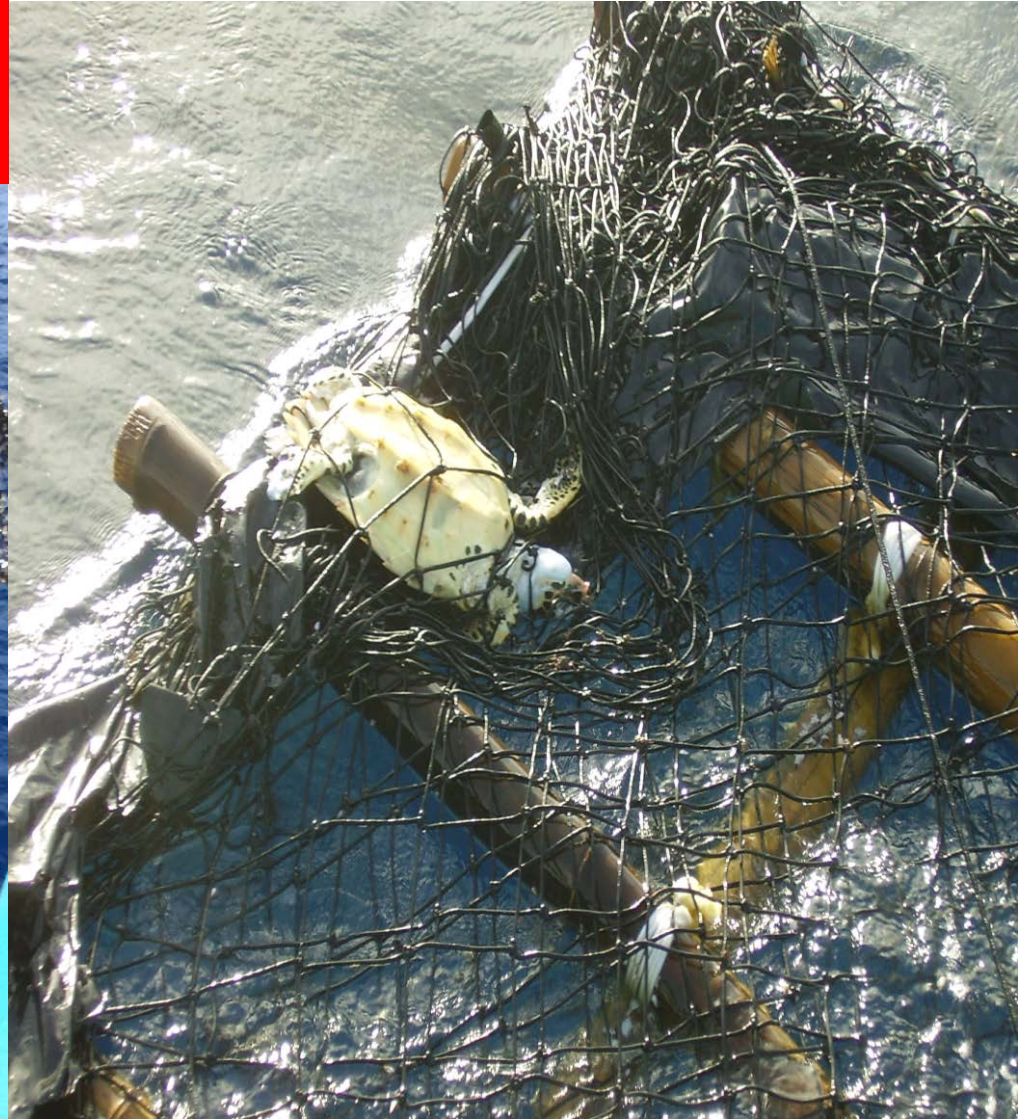
2. Initial situation

- Questionnaires transmitted to the skippers
- Goal: know the level of application of Code since 2012 i.e. use of non-entangling FADs and fauna release operations
- Fauna release operations applied by 93,7% to 100% of the skippers (depending on the species)
- All the skippers use at least one of the non-entangling FAD types defined in the code (raft and submersed part)
- Since december 2014: Observer validation of non-entangling FAD use and by-catch release operations.

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2. Previous situation – before implementing good practices

Before



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2. Initial situation – through implementing good practices

Now



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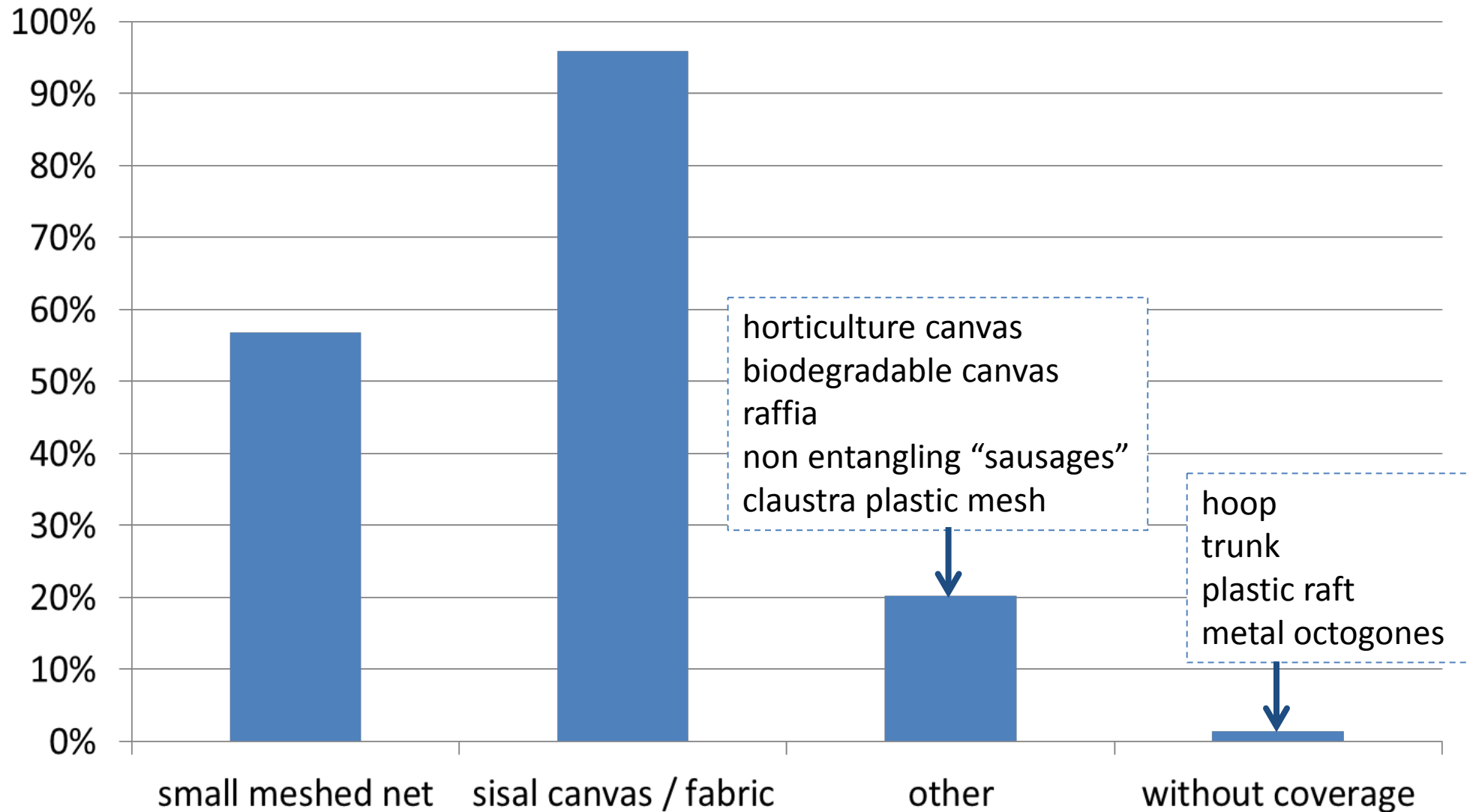
2. Initial situation – through implementing good practices

Now



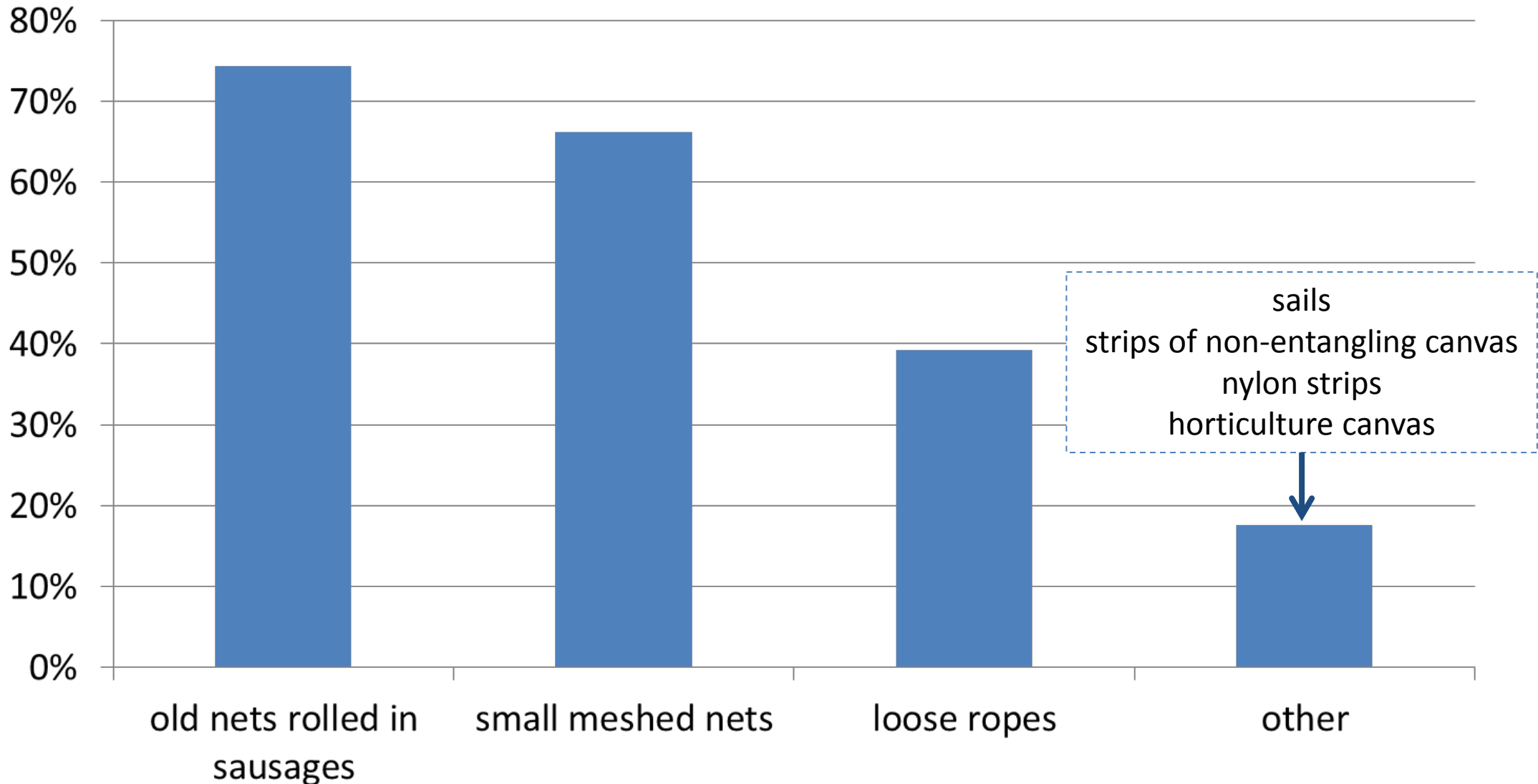
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2. Initial situation – Type of FAD coverage used



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2. Initial situation – Type of FAD submerged part used



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3. Training – application and observation of good practices

- For skippers: guide (crew safety, fauna release operations, non-entangling FAD design)
- Coordination with ISSF skipper workshops (over 300 Spanish skippers attended workshops)
- For observers: instruction handbook
- Training for observers organisms (Ocean Eye, CSP, SFA, Curaçao...)



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3. Application and observation of good practices

- Atlantic Ocean: observer on **100%** of ANABAC and OPAGAC fleet, observation of good practices on **91%** (100% soon)
- Associated average cost of observation:

	Atlantic	Indian	Pacific
Year, all vessels	1.209 M€	882 000€	485 000€

2.576 M€ / year

- Specific equipment for fauna release : 1000-2500€/vessel

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3. Application and observation of good practices

- Average FAD cost:

	Atlantic	Indian	Pacific
Old, entangling FADs	27.50€	27.50€	27.50€
Non-entangling FADs, unit	122-191€	122-191€	160-170€
% of initial cost	444-695%	444-695%	582-618%

Non entangling FAD: **4 to 7 times** cost of old FADs

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4. Information registered by the observers (sharks)

azti tecnalia

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RELEASE OF ASSOCIATED FAUNA

Form B2
version 2014

fishing set n°: _____ Date: _____ fishing trip code _____

route form n°: _____ route line n°: _____

fauna liberation form n°: _____

strapping start time
h h m m

Released fauna - sharks (1 line by individual, see example)


	individual			release mode				time		(4) state of the animal					
	(1) species	(2) size	(3) sex	using brailer by stretcher, fabric, sarria, cargo net	with specific equipment	manual from deck	after disentangling	non conform	animal detected	animal released	eyes	head	fins	skin	gill slits
0	FAL	140	2			1			7:35	7:47	P	P	M	M	P
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															

correct
release

non
conform

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4. Information registered by the observers (whale sharks manta rays)

		Verification of Good Practices ANABAC/OPAGAC RELEASE OF ASSOCIATED FAUNA		Form B3 version 2014	
fishing set n°:		Date:		fishing trip code	
route form n°:		route line n°:			
fauna release form n°:				strapping start time h h m m	

Released fauna - whale sharks, rays (1 line/individual, see example)

	individual			release mode					time		(4) state of the animal							
	(1) species	(2) size	(3) sex	drowning the corks	notch in the net	using the brailer (small shark)	using brailer	by stretcher, fabric, sarría, cargo net	with specific equipment	manual from deck	non conform	animal detected	animal released	eyes	head	fins	skin	gill slits
0	RHN	520	3	1								7:49	8:36	P	P	M	M	P
1																		
2																		
3																		
0	RMB	120	2							1		8:44	8:49	P	P	M	M	P
1																		
2																		
3																		
4																		
5																		
6																		

correct release

non conform

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4. Information registered by the observers (turtles)

Released fauna - turtles (1 line/individual, see example)															
	individual			release mode				onboard 1d	time		(4) state of the animal				
	(1) species	(2) size	(3) sex	after disentang.	manual from deck	through removing net/plastic remains or hook	non conform		animal detected	animal released	eyes	head	legs	skin	shell
0	TTL	90	1		1				9:04	9:21	P	P	P	M	P
1															
2															
3															
4															
5															
6															
7															

correct release

non conform

Extra care for turtles

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4. Information registered by the observers (FADs)

Verification of Good Practices ANABAC/OPAGAC													Form D2																			
1 line by FAD if no modification, 2 lines by FAD if modification (state when arriving and state when leaving)																																
BOAT name:										Fishing trip start date:																						
OBSERVER:										Fishing trip code:																						
Nº Form D	when arriving	when leaving	DATE	TIME	RAFT										SUBSURFACE STRUCTURE						OTHER COMPONENTS											
					Canes / Vegetal	Metallic or PVC	Superior coverage				Inferior coverage				they modify it	they replace it	net in sausage		open net	single net pieces		rope / no mesh	not visible	without tail	they modify it	they replace it	plastic containers	Corks	Bags	Palms, canes...	Color belts	weights
							Net	Net	Net	Net	Net	Net	Net	Net			≤ 3cm	> 3cm		≤ 3cm	> 3cm											
45	X		14/03/2014	13:22	X		X		X		X		X		X		X		X							X						
45		X	14/03/2014	13:22	X																						X					

non conform

correct raft

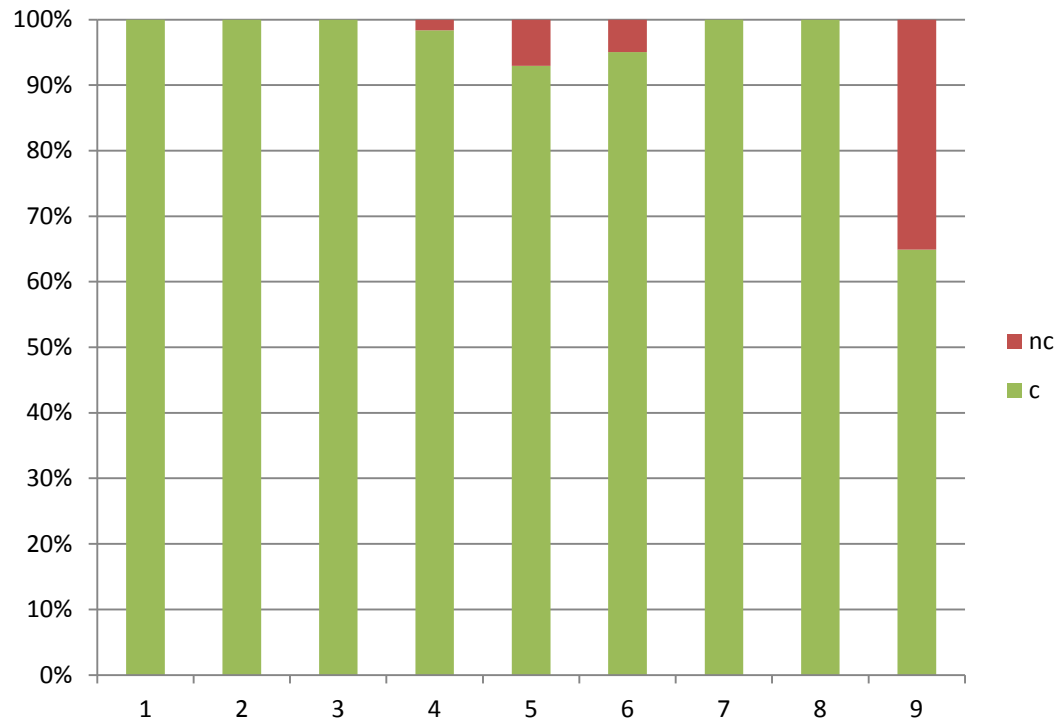
submersed part correct

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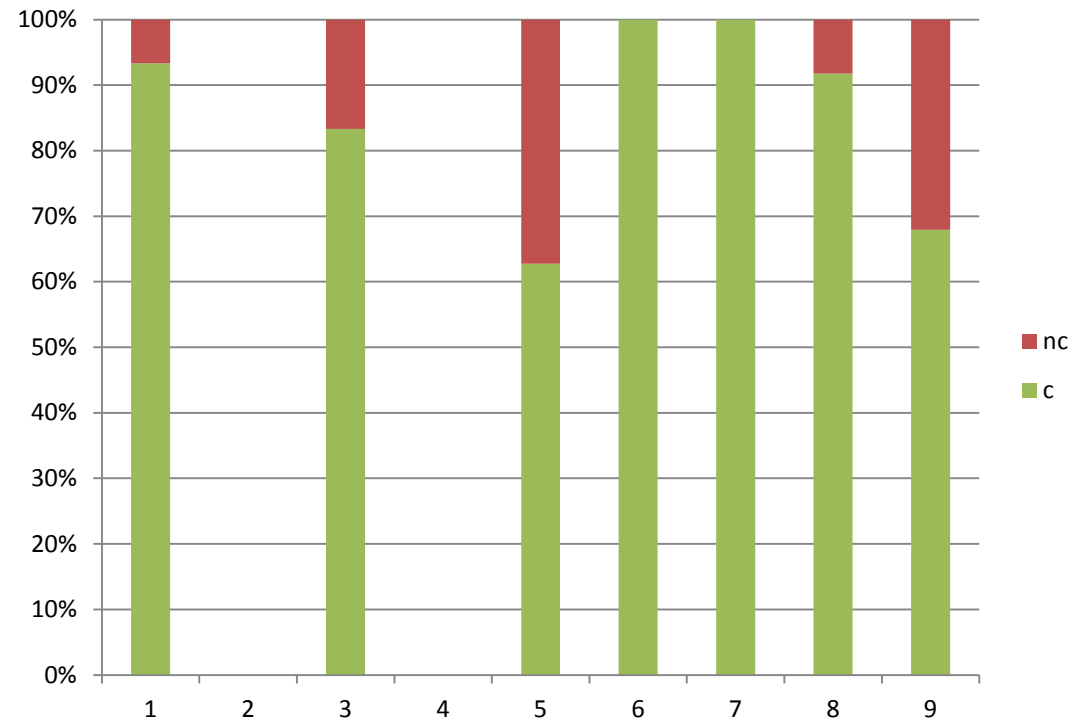
5. Preliminary results (Atlantic Ocean)

- Data from 9 vessels

% of conform vs non conform rafts by vessel



% of conform vs non conform subsurface part by vessel

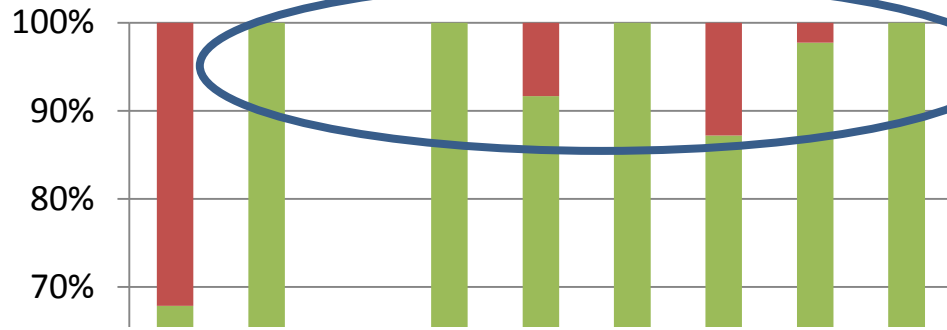


- Use of FADs with a mostly ring or partial ring is from 65% to 100% per vessel;
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5. Preliminary results (Atlantic Ocean)

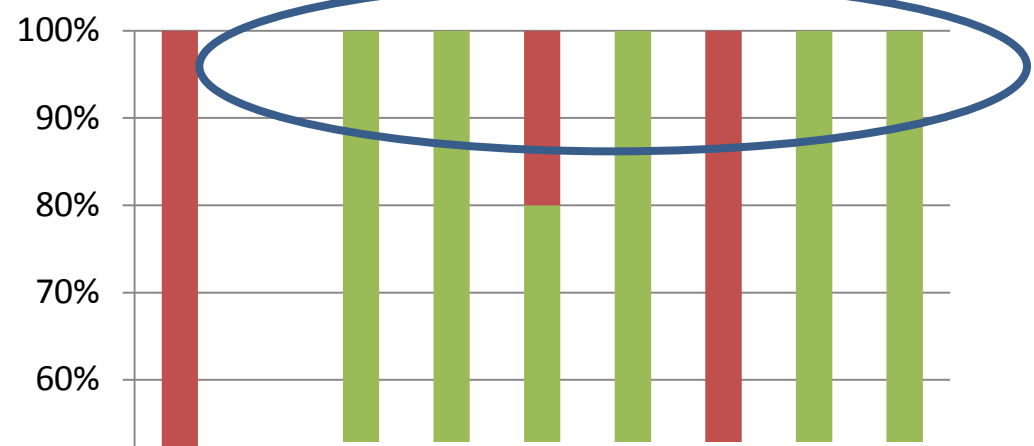
- Shark releases



Most sharks released manually from deck



- Ray/manta releases



Most rays released directly with brailer

nc
c

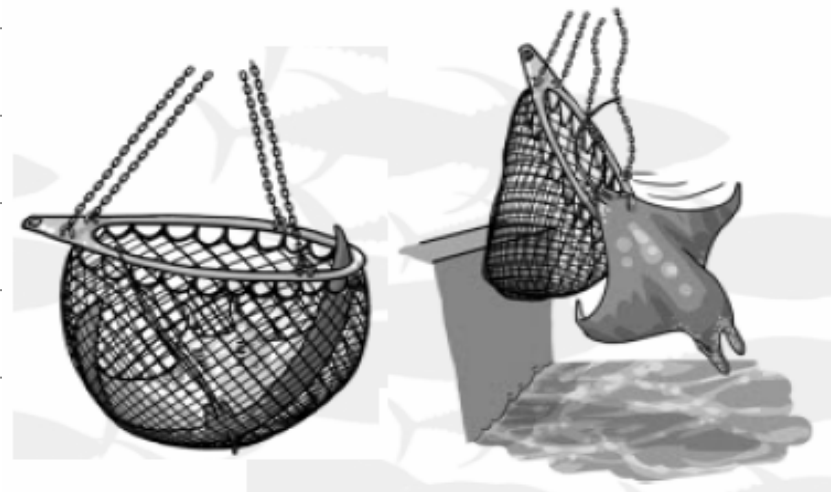


Illustration: Poisson et al., 2012.

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5. Preliminary results (Atlantic Ocean)

- Turtle releases: 100% for all boats



Most turtles released manually from deck



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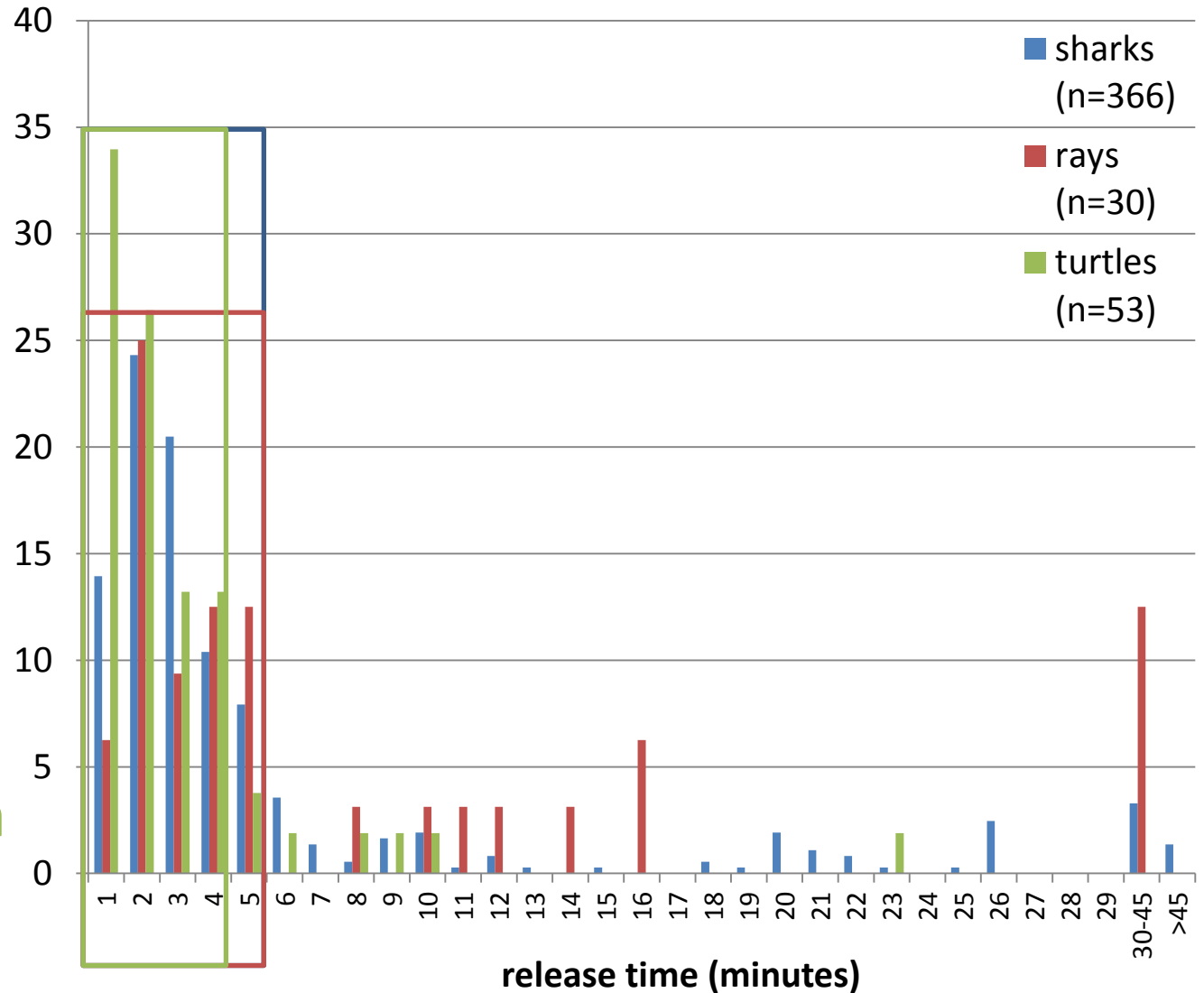
5. Preliminary results (Atlantic Ocean)

- Quick releases

77% of sharks released in the first 5 minutes after detection (59% in first 3 minutes)

>65% of mantas released in the first 5 minutes

87% of turtles released in the first 4 minutes (34% in the first minute)



6. Conclusive notes

- Voluntary initiative by ANABAC and OPAGAC and investment to improve the sustainability of PS FAD fishery
- Validation by AZTI to certify compliance of good practices commitment
- First results encouraging
- Need to reinforce regional observer programs (Atlantic and Indian Ocean) for a better coordination and information flow.

Thank you for your attention
Merci pour votre attention
Gracias por su atención



More details in document [SCRS/2015/061](#)