

# Secretariat Report of Activities

(February 2015 – May 2017)



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# Outline

- The Partnership
- FIRMS membership
- Review of Annex 2 to FIRMS partnership arrangement
- Intersessional activities
  - Marine Resource module
  - Fishery module
  - Database content
  - Website improvements and new applications
- Web trends
- Trainings
- Promotional activities
- Secretariat resources in support of FIRMS
- Difficulties encountered
- Report of Technical Working Group 5
- FIRMS Information Management Policy (IMP)
- Planned activities

# Agenda item 3 – the Partnership

## How FIRMS can match Partners objectives

Seeking new suggestions and guidance from partners, on the continued development of the partnership and the future direction, including by providing feedback on topics of the meeting agenda.

- Example - The WECAFC-FIRMS and CLME+ projects<sup>1</sup>

(Doc. FIRMS FSC10/2017/4a)

*Supporting regional needs in strengthening data collection for management and Decision Support System.*

<sup>1</sup> **WECAFC**: Western Central Atlantic Fishery Commission;

**CLME+**: Catalysing implementation of the Strategic Action Programme for the sustainable management of shared Living Marine Resources in the Caribbean and North Brazil Shelf Large Marine Ecosystems (CLME+ region).

# Agenda item 4 - FIRMS membership

- Progress on the development of FIRMS Partnership  
*GFCM, RECOFI, CECAF/[FCWC], WECAFC/[CRFM and OSPESCA], SWIOFC/[WIOFish]*
- Review of new perspective Partners  
*E.g. How BCC, SPRFMO could join FIRMS.*

## Agenda item 5 – Review of Annex 2

- Proposed information contributions of new Partner(s)
- Proposed modifications by existing Partners

*> No Annex 2 modifications were submitted during the intersessional period <*

## **Agenda item 6 – Intersessional activities**

### **Review of FIRMS activities during the intersession (February 2015 – May 2017)**

(Doc. FIRMS FSC10/2017/2a)

# Agenda item 6 – Intersessional activities

## Marine Resource module

### Developments on inventories and fact sheets (February 2015 – May 2017)

Beyond the regular workflow and dissemination activity by FIRMS partners and Secretariat:

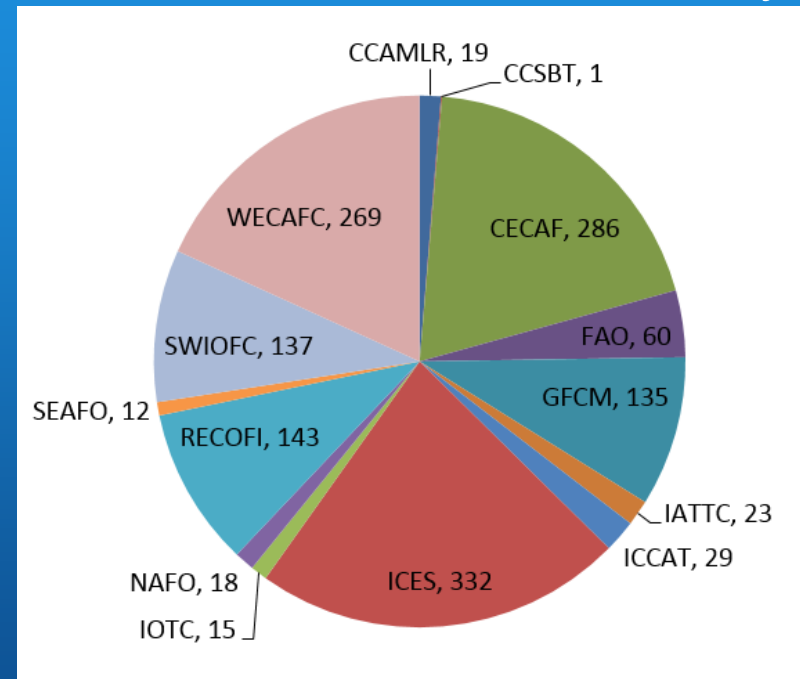
CCAMLR, GFCM, IOTC, WECAFC:  
enriched inventory and new fact sheets

CECAF, ICES: enriched inventory, fact sheets are in progress

RECOFI: enriched inventory

SWIOFC: a FIRMS focal point was identified during the SWIOFC SC7 meeting (Moroni, Dec. 2016)

### Marine Resources inventory



Total number: 1479

# Agenda item 6 – Intersessional activities

## Fishery module

### Developments on inventories and fact sheets (February 2015 – May 2017)

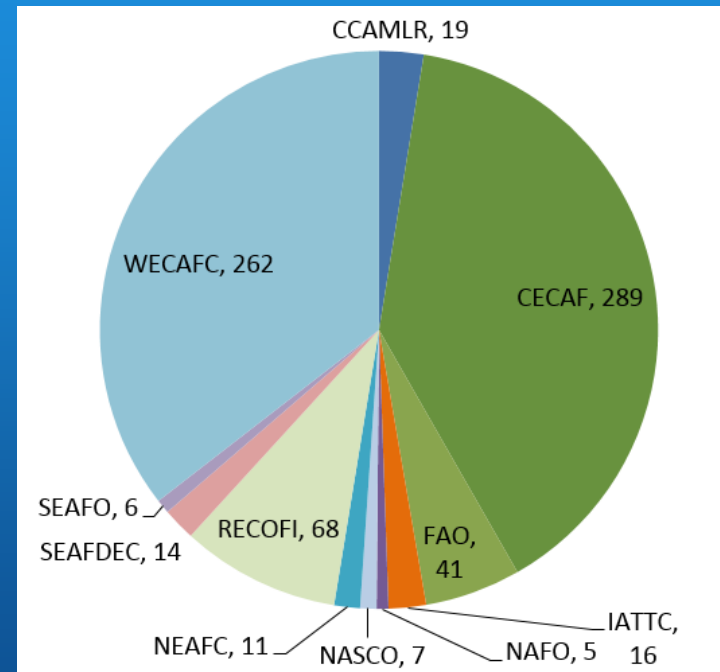
CCAMLR: enriched inventory and new fact sheets

FAO: enriched inventory and new fact sheets on bottom fisheries in the high seas

NEAFC, SEAFO: new fact sheets are in progress

WECAFC: 12 new fisheries were included in the inventory. A total of 20 national fisheries were published along the WECAFC-FIRMS collaboration.

### Fisheries inventory



Total number: 738



# Agenda item 6 – Intersessional activities

## Database content

Partner	Inventoried units	Reference Observations		Fact Sheets by Reporting Year										
		Resources	Fisheries	≤ 2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 2017
CCAMLR	19	19				2		1		15				19
	19		19			7			18					19
CCSBT	1	1												1
FAO	60	22		4					18					
	41		41				41							
CECAF	286	286		94	17	8	7			6				
	289		198						77		4			
RECOFI	143													
	68		68							68				
SWIOFC	137	137						117						
WECAFC	269	243		44		1	2	1				1		
	262		34											20
GFCM	135	80		21	5	10	9	1	24	1		5	31	
IATTC	23	37												8
	16		1											1
ICCAT	29	29		1	1	2	6	1	4	3	4	5	3	6
ICES	332	284		147	52	3	171			83				
IOTC	15	15		4			3							15
NAFO	18	18		27	7	8	9	11	12	4	11	8	7	3
	5		5				1	2	3	4	5	2	1	
NASCO	7		1								1			1
NEAFC	11		11				8							1
SEAFDEC	14		14	8										
SEAFO	12	12					12					5	2	
	6		1							1				
Total	2217	1183	393	350	82	41	269	134	156	185	25	26	44	94
		1576		1406										

Table 1. Number of FIRMS Marine Resources and Fisheries inventoried units, Reference Observations and of fact sheets. (Updated June 2017)

# Agenda item 6 – Intersessional activities

## Database content

Partner	Inventoried units	Reference Observations		%Fact sheets/RefObs										
		Resources	Fisheries	≤ 2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
CCAMLR	19	19				11		5		79				100
	19	0	19			37			95					100
CCSBT	1	1												100
FAO	60	22		18					82					
	41		41				100							
CECAF	286	286		33	6	3	2			2				
	289		198						39		2			
RECOFI	143													
	68		68							100				
SWIOFC	137	137						85						
WECAFC	269	243		18			1							
	262		34											59
GFCM	135	80		26	6	13	11	1	30	1		6	39	
IATTC	23	37												22
	16		1											100
ICCAT	29	29		3	3	7	21	3	14	10	14	17	10	21
ICES	332	284		52	18	1	60			29				
IOTC	15	15		27			20							100
NAFO	18	18		150	39	44	50	61	67	22	61	44	39	17
	5		5				20	40	60	80	100	40	20	
NASCO	7		1								100			100
NEAFC	11		11				73							9
SEAFDEC	14		14	57										
SEAFO	12	12					100					42	17	
	6		1							100				

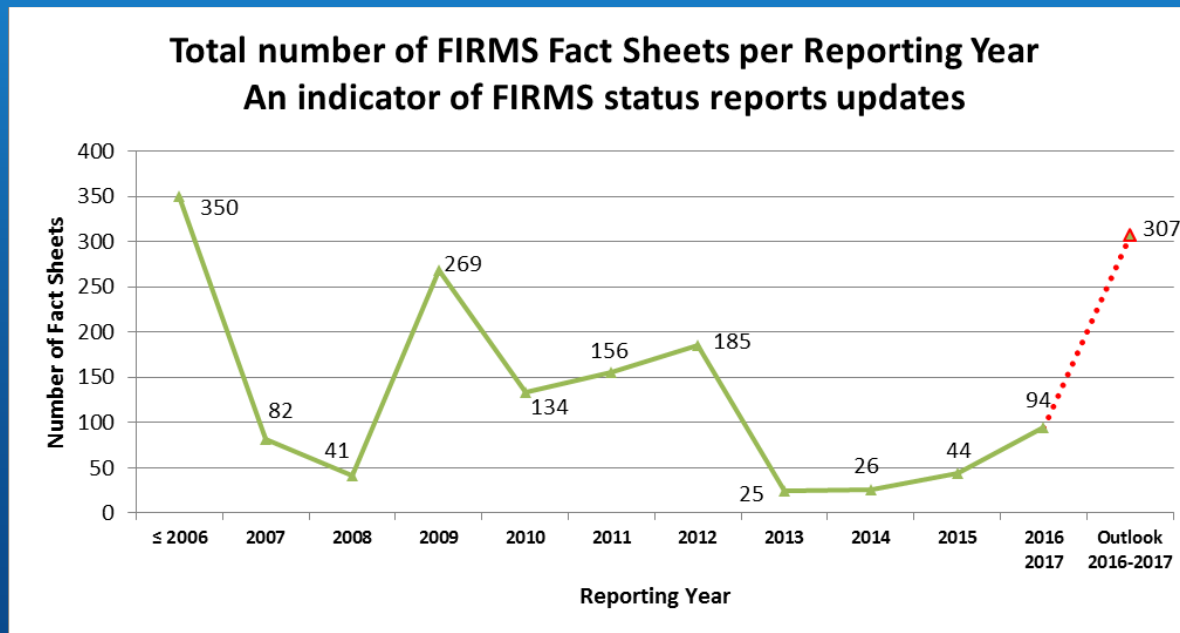
Table 2. Fact sheets update turn-over (expressed in percentage as ratio of fact sheets number on Reference Observation total number (RefObs) (Updated June 2017)

# Agenda item 6 – Intersessional activities

## Database content

Table 3, Figure 1. Outlook of 2017 updates based on the current work of the Partners developing new fact sheets in collaboration with the FIRMS Secretariat.

Partner	Marine Resource fact sheet	Fishery fact sheets
ICES	~187	
CECAF	99	
NEAFC		8
SEAFO	~12	1
<b>Total</b>	<b>298</b>	<b>9</b>



# Agenda item 6 – Intersessional activities

## Database content

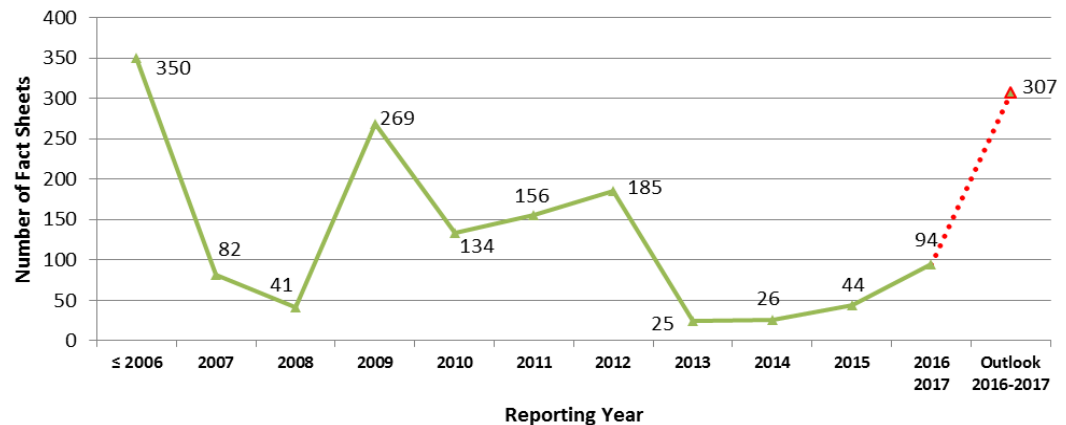
### Fact sheets production

Per partner  
and module:

	Marine Resources	Fisheries
CCAMLR	37	44
CCSBT	1	
FAO	22	41
CECAF	132	81
RECOFI	0	68
SWIOFC	117	
WECAFC	49	20
GFCM	107	
IATTC	8	1
ICCAT	36	
ICES	456	
IOTC	22	
NAFO	107	18
NASCO		2
NEAFC		9
SEAFDEC		8
SEAFO	19	1
<b>Total</b>	<b>1113</b>	<b>293</b>

Per reporting year:

**Total number of FIRMS Fact Sheets per Reporting Year**  
An indicator of FIRMS status reports updates



# Agenda item 6 – Intersessional activities

## Database content

### Fact sheets production (2)

Table 4. Number of available Marine Resources versus the FAO Major Fishing Areas (Updated June 2017). Green indicates areas where the number of fact sheets has increased compared to FSC8.

FAO Major Fishing Areas	Number of Marine Resources and Fisheries reported in FIRMS*
Area 18 (Arctic Sea)	6
Area 21 (Atlantic, Northwest)	47
Area 27 (Atlantic, Northeast)	185
Area 31 (Atlantic, Western Central)	61
Area 34 (Atlantic, Eastern Central)	106
Area 37 (Mediterranean and Black Sea)	59
Area 41 (Atlantic, Southwest)	27
Area 47 (Atlantic, Southeast)	54
Area 48 (Atlantic, Antarctic)	32
Area 51 (Indian Ocean, Western)	175
Area 57 (Indian Ocean, Eastern)	30
Area 58 (Antarctic and Southern Indian Ocean)	36
Area 61 (Pacific, Northwest)	14
Area 67 (Pacific, Northeast)	15
Area 71 (Pacific, Western Central)	16
Area 77 (Pacific, Eastern Central)	13
Area 81 (Pacific, Southwest)	13
Area 87 (Pacific, Southeast)	12
Area 88 (Pacific, Antarctic)	23

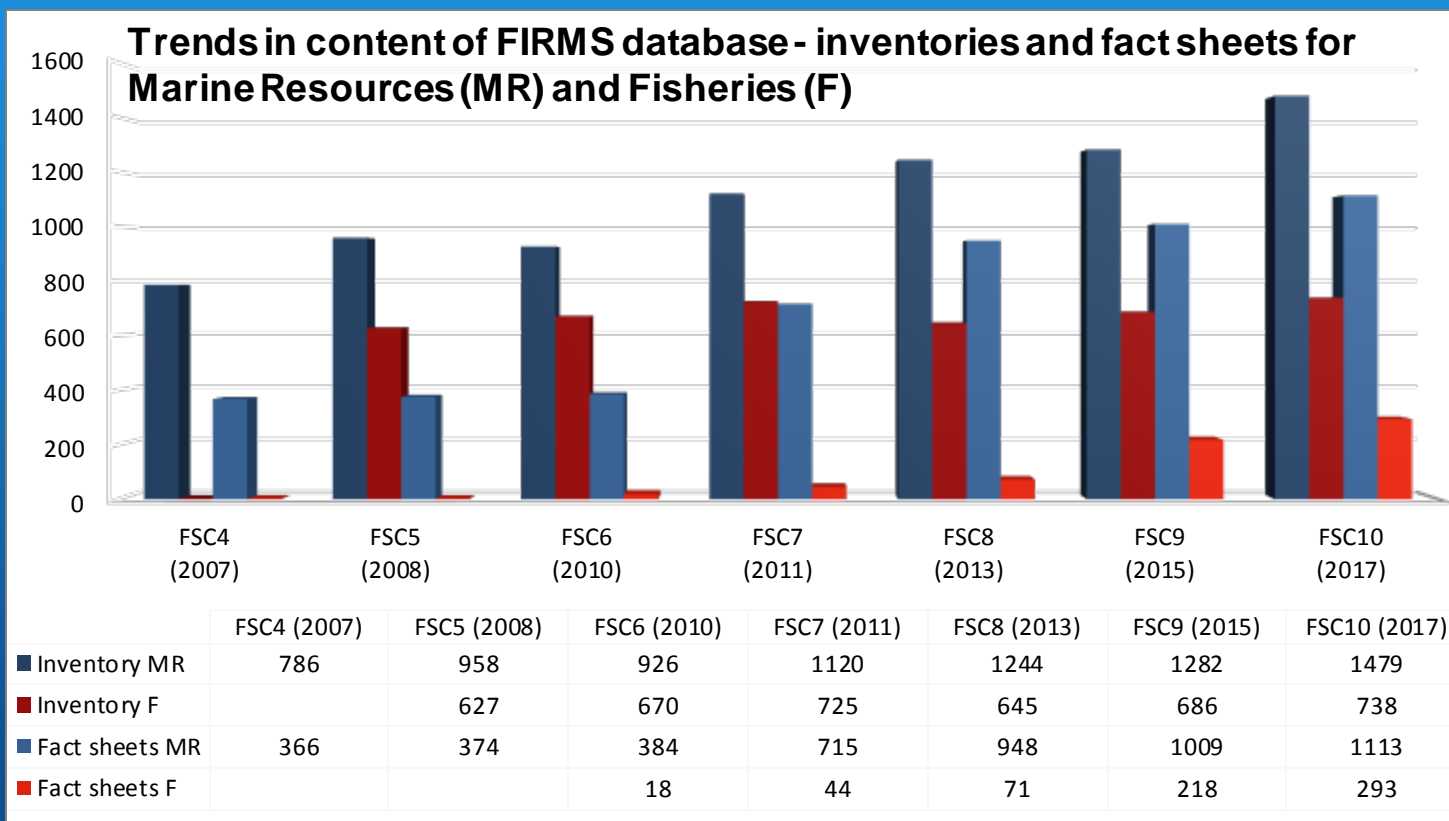
\*The same Marine Resource may occur in different FAO areas.

# Agenda item 6 – Intersessional activities

## Database content

# Inventories and Fact sheets production

## FSC4 – FSC10

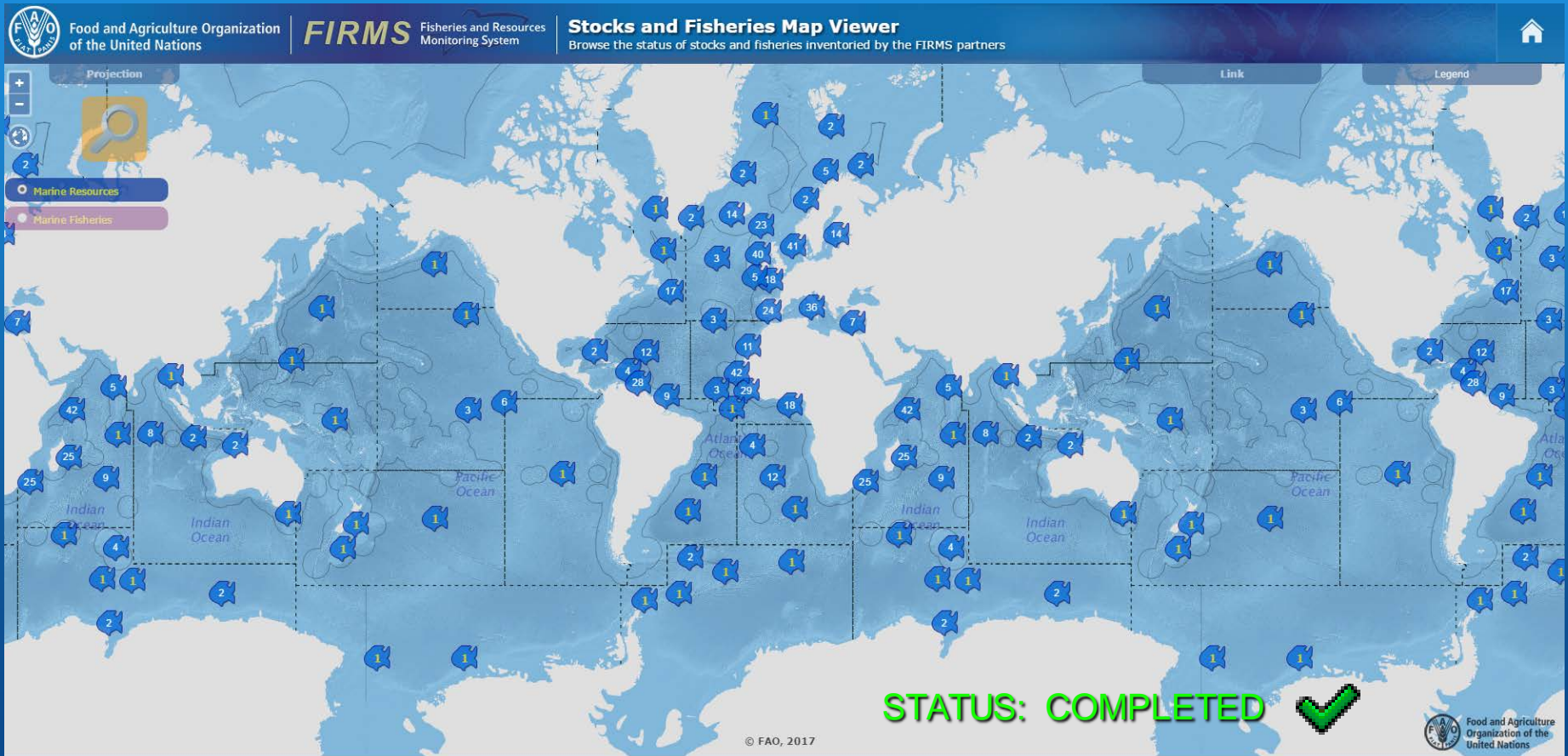


# Agenda item 6 – Intersessional activities

## FIRMS Website improvements (1)

# Publication of the FIRMS Stocks and Fisheries Map Viewer

<http://firms.fao.org/firms/stocks-fisheries-map-viewer>



## Agenda item 6 – Intersessional activities

### FIRMS Website improvements (2)

#### Services offered by the FIGIS infrastructure to the Partners

- Marine Resource or Fishery **fact sheets** can be returned in HTML, or in XML format.
- **State and Trend Summaries** can be **downloaded** as Excel files for further analysis
- Web-services are available enabling users, Partner's websites or systems to **query and retrieve** specific subsets of factsheets given an area or a species.
- **Geospatial** web services are also available for **embedding** maps in partners' websites including a customizable version of the new Stocks and Fisheries map viewer.

STATUS: COMPLETED





# Agenda item 6 – Intersessional activities

## FIRMS Website improvements (3)

- Web-services are available enabling users, Partner's websites or systems to query and retrieve specific subsets of factsheets given an area or a species.

### FIRMS Marine Resources

[Switch to Fisheries]

[XML | JSON | Excel]



Quick Filter

Advanced Filter

781 entries selected

Apply filter X

Collection ID	Inventory ID	Data Owner	FIRMS Title	Lang	XML	HTML	Reporting Year	Reference Year	Water Area(s)	Intersecting FAO Area(s)	Fishery Indicator(s)	Species Scientific Name(s)	Stock Name(s)	Exploitation Rate Free Value	Exploitation Rate FIRMS Standard Value	Abundance Level Free Value
17	MRKEN11	FAO	Mullet, Barracuda and Milkfish - Kenya	en	XML	Web	2010	2009	fao_sub_area:51.5	51		Mullidae; Sphyraenidae; Chanidae			Moderate fishing mortality, No or low fishing mortality	
7		ICES	Norway lobster - Noup	en	XML	Web	2009	2008	fao_div:27.4.a	27		Nephrops norvegicus	Undefined	Undefined	Uncertain/Not assessed	Undefined
17	MRCMR10	FAO	Longfin yellowtail - Comoros	fr	XML	Web	2010	2009	fao_sub_area:51.6	51		Seriola rivoliana			Moderate fishing mortality, No or low fishing mortality	
7		ICES	Harp Seals - Greenland	en	XML	Web	2009	2008	fao_sub_area:27.14	27		Phoca groenlandica	Undefined	Undefined	Uncertain/Not assessed	Undefined
17	MRSAE08	FAO	Blue shark - South Africa Eastern	en	XML	Web	2010	2009	fao_sub_area:51.8	51		Prionace glauca				
17	MRTAZ15	FAO	Small pelagics - Tanzania	en	XML	Web	2010	2009	fao_sub_area:51.5	51		Clupeidae; Polynemidae; Hemiramphidae; Gerreidae; Mugilidae; Chanidae			Moderate fishing mortality	
4	010:0095	GFCM	Anchovy - Northern Adriatic Sea	en	XML	Web	2014	2013	gfc_m_sub_area:17	37		Engraulis encrasicolus	Overexploitation (E/Eunique = 1.3*)	Not applicable	Overexploited (Biomass level is 10% of 30th percentile)	
7		ICES	Norway lobster - Botney Gut and Silver Pit	en	XML	Web	2009	2008	fao_div:27.4.b, fao_div:27.4.c	27		Nephrops norvegicus	Undefined	Undefined	Uncertain/Not assessed	Undefined
7		ICES	Shrimp - Skagerrak and Norwegian Deep	en	XML	Web	2009	2008	fao_div:27.3.a, fao_div:27.4.a	27		Pandalus borealis	Unknown	Unknown	Uncertain/Not assessed	Unknown
3		FAO	West African croakers - Senegal and	en	XML	Web	2007	2006	fao_sub_div:34.3.11, fao_sub_div:34.3.12	34		Pseudosciaenidae				

**STATUS: COMPLETED**



# Agenda item 6 – Interseasonal activities

## FIRMS Website improvements (4)

The Traffic light approach was activated for the published fact sheets of selected partners (i.e. IATTC, ICCAT, and NAFO).

### Biological State and Trend

State & Trend Descriptors			
	Partner	FIRMS	
Exploitation rate	None-Low Fishing Mortality	No or low fishing mortality	 [?]
Abundance level	Intermediate Stock Size	Intermediate abundance	

### Biological State and Trend

State & Trend Descriptors			
	Partner	FIRMS	
Exploitation rate	None-Low Fishing Mortality	No or low fishing mortality	 [?]
Abundance level	Depleted Stock Size	Depleted	

### Biological State and Trend

State & Trend Descriptors			
	Partner	FIRMS	
Exploitation rate	Unknown Mortality	Uncertain/Not assessed	 [?]
Abundance level	Small Stock Size	Low abundance	

STATUS: COMPLETED



# Agenda item 6 – Intersessional activities

## FIRMS Website improvements (5)

- Home page: New World map and links to the Stocks and Fisheries Map Viewer

### Fisheries and Resources Monitoring System

ESPAÑOL Français Site map Email us

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#### Home

- About FIRMS
- FIRMS Data coverage
- Concepts & Definitions
- Search Tools
  - Stocks and Fisheries map viewer
  - Resource inventory
  - Marine Resource fact sheets
  - State & Trend Summaries
  - Browse Fisheries
  - Fishery fact sheets
- Information
- Contacts
- Logon name
- Password
-

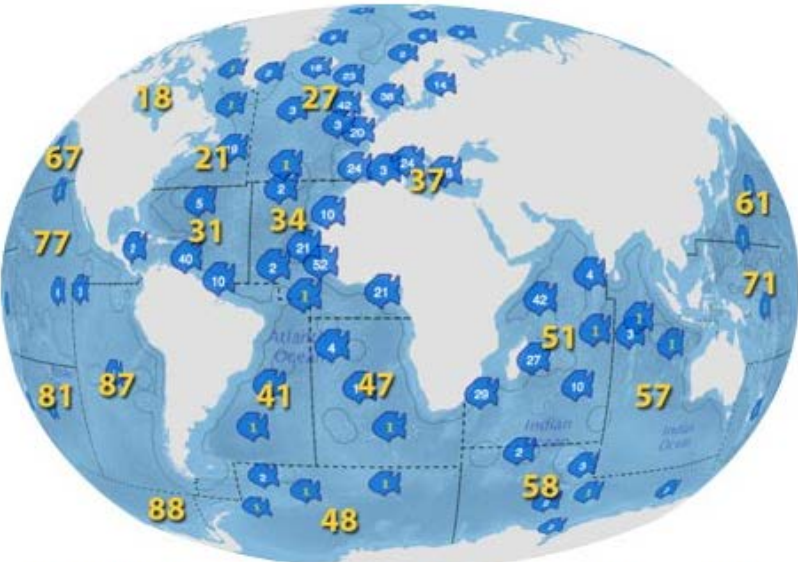
#### Fisheries and Resources Monitoring System (FIRMS)

**Our mission...**

The primary aim of the Fisheries and Resources Monitoring System (FIRMS) is to provide access to a wide range of high-quality information on the global monitoring and management of fishery marine resources.

**Our data ...**

**NEW** Launch the Stocks and Fisheries map viewer



Get Marine Resource and Fishery fact sheets by clicking a fishing area on the map

#### Highlights

- Review of the state of world marine fisheries resources
- FIRMS on deep sea (high seas) resources
- FIRMS on Tuna and Tuna fisheries

#### Related documents

- Report of the FIRMS Technical Working Group ...
- FIRMS Information Management Policy
- FIRMS Steering Committee Meeting, Ninth ...
- ...full list

#### Meetings & News

- FIRMS Steering Committee Meeting - 10th ...
- BlueBRIDGE External Advisory Board Meeting ...
- FIRMS Technical Working Group Meeting ...
- ...full list

**STATUS: COMPLETED**



# Agenda item 6 – Intersessional activities

## FIRMS Website improvements (6)

- FIRMS web site in Spanish

### Fisheries and Resources Monitoring System

English Français Mapa del sitio Email us

**Inicio**

- Acerca de FIRMS
  - Cobertura de datos de FIRMS
- Conceptos & definiciones
  - Herramientas de búsqueda
    - Visualizador de mapa de stocks y pesquerías
    - Inventario de Recursos marinos
    - Fichas descriptivas de recursos marinos
    - Resúmenes de estado y tendencias
    - Explora las pesquerías
    - Fichas descriptivas de pesquerías
- Información
- Contactos

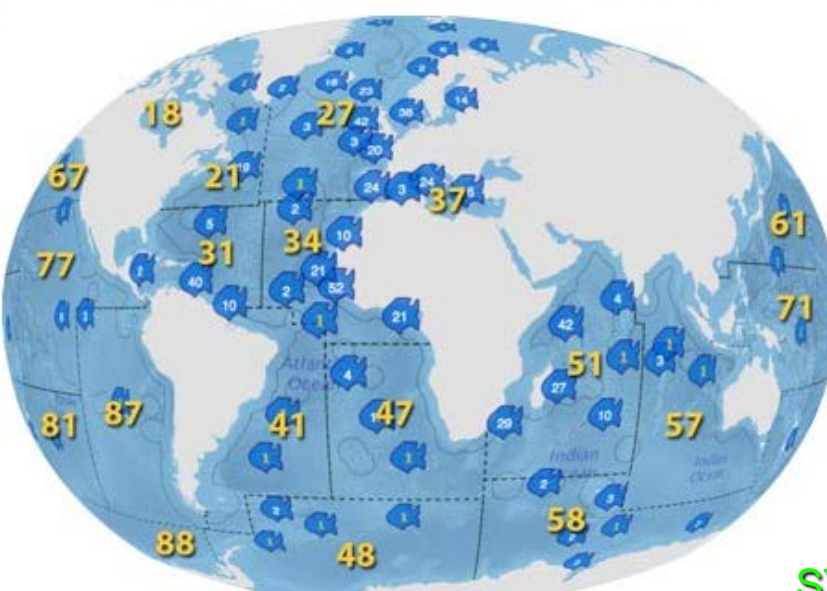
#### Sistema de Seguimiento de Pesquerías y Recursos (FIRMS)

**Nuestra misión...**

El objetivo principal del Sistema de Seguimiento de Pesquerías y Recursos (FIRMS) es proporcionar acceso a una amplia variedad de información de alta calidad sobre el seguimiento y la gestión de la pesca y los recursos marinos a nivel global.

**Nuestros datos...**

**NEW** Lanzar el visualizador de mapa de stocks y pequerías



**Hechos destacados**

- Review of the state of world marine fisheries resources
- FIRMS on deep sea (high seas) resources
- FIRMS on Tuna and Tuna fisheries

**Documentos relacionados**

- Report of the FIRMS Technical Working Group ...
- FIRMS Information Management Policy
- FIRMS Steering Committee Meeting, Ninth ...
- ...lista completa

**Reuniones y Noticias**

- FIRMS Steering Committee Meeting - 10th ...
- BlueBRIDGE External Advisory Board Meeting ...
- FIRMS Technical Working Group Meeting ...
- ...lista completa

**STATUS: COMPLETED**



# Agenda item 6 – Interseasonal activities

## FIRMS Website improvements (7)

### Completing FCS8/FSC9 decisions

- Indicator of data reliability - Fishery importance
- Partners' logo in the fact sheets
- Alternative layouts for:
  - No longer monitored marine resources (Monitoring period)
  - Closed fisheries (Fishery life cycle)

STATUS: IN PROGRESS 

# Agenda item 6 – Intersessional activities

## Development of applications

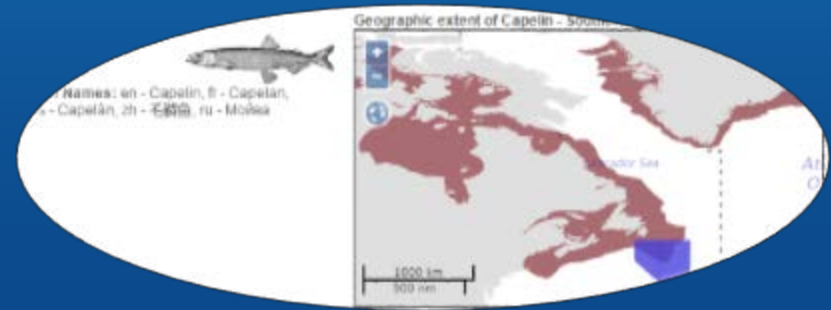
### 1. Word/Excel-to-XML converter tool (fact sheets production)

- further configured for the “minimum data requirement” approach and massively utilized to produce reference observations and fact sheets;
- Added support in both modules to handle time series data such as catch/landings or other indicators

### 2. Development of mapping application

- The recent work done on the FIGIS integrated mapping module gave positive side effects on FIRMS, specifically:
  - Faster map loading and display, and a better support for mobile and tablet devices;
  - Fisheries/marine resources data layer are regularly updated through a semi-automated data processing flow, also available at FAO GeoNetwork; and
  - Additional layers could be potentially exploited in the FIRMS Stocks & Fisheries map viewer.

Species	Catch or landing	Quantity	Description
AT001	COR15, COR16, COR17, COR18, COR19, COR20, COR21, COR22, COR23, COR24, COR25, COR26, COR27, COR28, COR29, COR30, COR31, COR32, COR33, COR34, COR35, COR36, COR37, COR38, COR39, COR40, COR41, COR42, COR43, COR44, COR45, COR46, COR47, COR48, COR49, COR50, COR51, COR52, COR53, COR54, COR55, COR56, COR57, COR58, COR59, COR60, COR61, COR62, COR63, COR64, COR65, COR66, COR67, COR68, COR69, COR70, COR71, COR72, COR73, COR74, COR75, COR76, COR77, COR78, COR79, COR80, COR81, COR82, COR83, COR84, COR85, COR86, COR87, COR88, COR89, COR90, COR91, COR92, COR93, COR94, COR95, COR96, COR97, COR98, COR99, COR100	1000	...



# Agenda item 6 – Intersessional activities

## Web Trends (1)

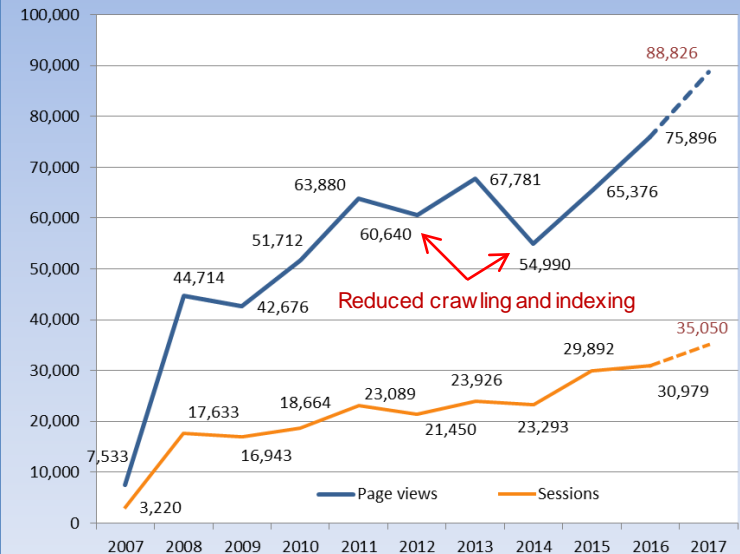
### Trends 2007– 2016 (and outlook for 2017)

With some negative fluctuations (including technical incidents) both number of visits and pages increased along the considered period.

The upward trend of 2015 and 2016, and the outlook for 2017 (based on 5 months data), shows an overall increase of the FIRMS usage, and reflects the success of the actions taken to repair the technical incidents of 2012 and 2014.

Combining these data with the considerations on the average sessions it may be concluded that fact sheets trigger interest when users manage to access them.

General trend (2007 - 2016) and outlook for 2017



Year	No. Sessions	No. Page views	No. Pages/Months	Pages/Session
2016	30,979	75,896	6,325	2.45
2015	29,892	65,376	5,448	2.19
2014	23,293	54,990	4,583	2.36
2013	23,926	67,781	5,648	2.83
2012	21,450	60,640	5,053	2.83
2011	23,089	63,880	5,323	2.77
2010	18,664	51,712	4,309	2.77
2009	16,943	42,676	3,556	2.52
2008	17,633	44,714	3,726	2.54
2007	3,220	7,533	628	2.34

# Agenda item 6 – Interseasonal activities

## Web Trends (2)

### Traffic sources

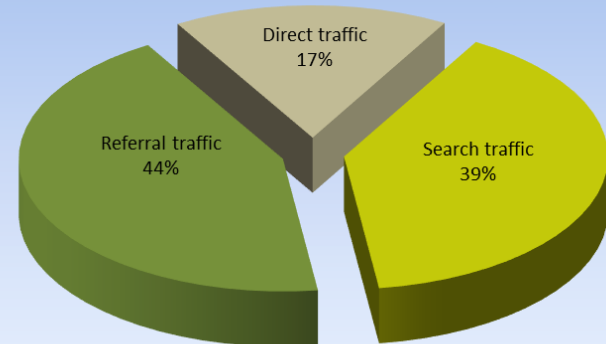
- about 44% reach FIRMS through referral sites
- 39% of visitors access FIRMS through search engines (mostly Google)
- 17% of visits is due to direct traffic

Google search engine and FAO referral site represents the majority of the whole sources of traffic.

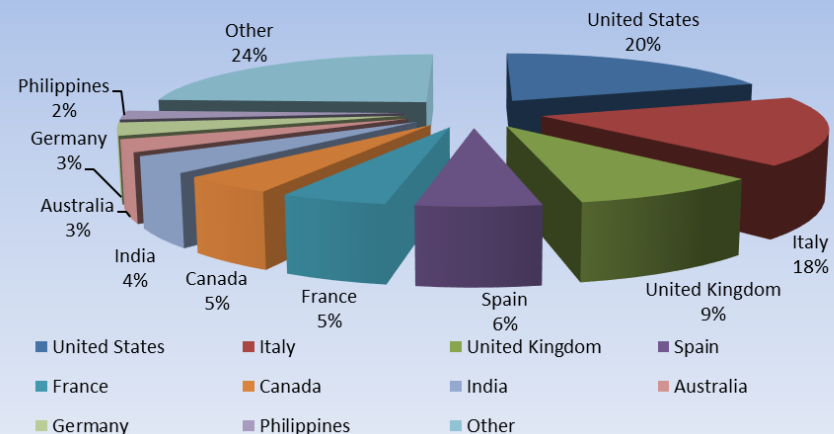
### Geographic location

Mostly North American, then European countries are the regions with the highest level of visits. Majority of the visits are made by English-based browsers.

Traffic sources (2007 - 2016)



Visits by geographic location (2007 - 2016)



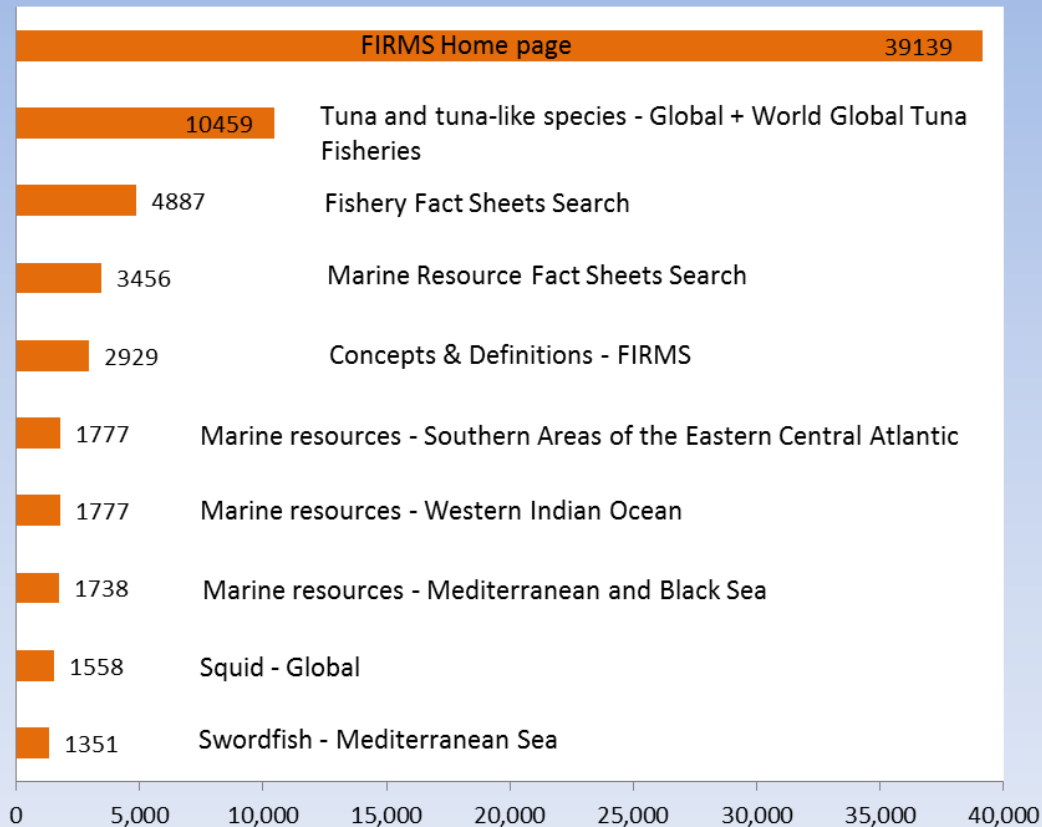


# Agenda item 6 – Intersessional activities

## Web Trends (3)

### Top landing pages

#### Top landing pages (2007 - 2016)

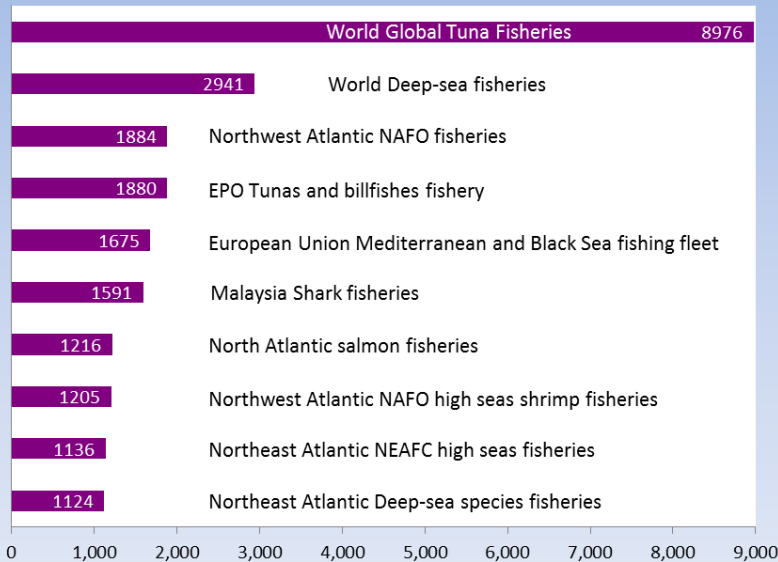


Among the top landing pages, there are the home page, the search interfaces and several fact sheets.

# Agenda item 6 – Intersessional activities

## Web Trends (4)

### Top ten Fishery fact sheets (2008 - 2016)



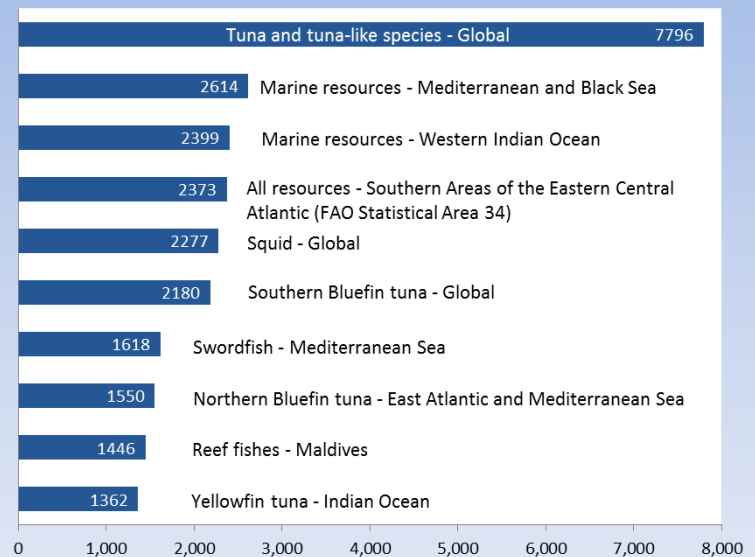
### Top Fishery fact sheets

Global information on Tuna is considerably more requested. Atlantic fisheries previously absent from the list, such as salmon, shrimp and deep-sea species, are particularly visited compared to previous years.

### Top Marine Resource fact sheets

Information on Tuna is considerably more requested. Trends in the more recent years remain the same. The Mediterranean Sea Swordfish and Reef fish in the Maldives are new to this list.

### Top ten Marine Resource fact sheets (2007 - 2016)



# Agenda item 6 – Intersessional activities

## Web Trends (5)

### Devices

An analysis for the period 2014-2016 indicated a growth of **mobiles** and **tablets** vs. desktop, respectively about 9% and 3% of the total sessions.

### Keywords

- According to KW there is a **different ranking** of FIRMS pages within the Google search results.
- For well-known species names FIRMS is highly ranked only if the key word is accompanied by other keywords, i.e. the geographic location.
- On the contrary, less popular key words place FIRMS among the first results.

### Considerations

- Users show growing **interest** in authoritative sources of information on the state of resources.
- The positive trends for 2014, 2015 and 2016 give **positive outlook for 2017** and the FIRMS Stocks and Fisheries map viewer is expected to further contribute.
- Need of an improved **compatibility** of FIRMS website for **mobile devices** so as to be better ranked by Google.
- Efforts should be allocated for the **search engine optimization**.
- FAO domain pages are often **ranked** higher than FIRMS. The possible migration of FIRMS under FAO.org should result in an increase of the overall web trends.
- Although global/regional syntheses respond to users' interest the developed **thematic pages** did not grow as expected.
- Also upon considerations for the **referral traffic**, generally a need to proceed with a strong **communication plan** agreed upon and supported by all FIRMS partners.

## Agenda item 6 – Intersessional activities Trainings

- WECAFC-FIRMS Data Workshop on Marine Resources and Fisheries Inventories (Barbados, Christchurch January 2016)  
- supported by EU
- South West Indian Ocean (SWIO) region: Data policy workshop (Rome, Italy September 2015)  
- supported by SmartFish project
- *The FIRMS Secretariat ensured a continuing remote technical support to partners in their information contributions to FIRMS, or in the development of their inventories or reporting templates.*

# Agenda item 6 – Intersessional activities

## Promotional activities

### Promotional and direct outreach interventions of FIRMS Secretariat

Organization / place of meeting	Description	Date
Data policy workshop, Rome	To address data sharing policy issues with focus on SWIO region, including towards an agreement for the long term maintenance of the Chimaera portal	September 2015
CECAF SC7, Tenerife	To present the status of information available in FIRMS concerning the CECAF region, to re-engage CECAF experts, and to present the current FIRMS developments (Stock & Fisheries map viewer, state and trend traffic light approach, minimum data requirement for streamlined workflow, global record of stocks and fisheries).	October 2015
WECAFC-FIRMS Data Workshop, Barbados	FIRMS Secretariat organized an ad hoc workshop to validate existing inventories in WECAFC context and formalizing a workflow including also CRFM and OSPESCA contribution.	January 2016
GFCM SAC18, Cyprus	To present the status of information available in FIRMS concerning the GFCM region, and to re-engage GFCM and its experts in actively contributing to FIRMS timely reports on state of Marine resources and fisheries.	March 2016
WECAFC 16 <sup>th</sup> Commission, Guadeloupe	FIRMS chair presented the progress achieved by the WECAFC-FIRMS project. The Commission endorsed the establishment of the WECAFC Statistics and data Working Group.	June 2016
SWIOFC SC7, Comoros	To present the status of information available in FIRMS concerning the SWIO region, and to re-engage SWIOFC and its experts in actively contributing to FIRMS timely reports on state of marine resources and fisheries.	December 2016
RECOFI WGFM10, Qatar	To present the status of information available in FIRMS concerning the RECOFI region, and to develop FIRMS Marine Resources for the RECOFI region focusing on the Spanish mackerel and shrimps as priority species.	December 2016
RECOFI commission meeting, Kuwait	to support the Statistics and data agenda including support to the RECOFI Catch and Effort minimum requirements regional database, and RECOFI in FIRMS	May 2017

## Agenda item 6 – Interseasonal activities Secretariat resources in support of FIRMS

- 13 persons – 1.54 man year    \$ 128 000 →
  - Software development    33% ↗
  - Management and marketing    6% →
  - Data update / training    61% ↘
  
- Travels - Regular Programme    \$ 14 000
- **Annual total resources**    \$ 142 000
  
- **EBF** (over 28 months) EU funds    \$ 70 000

# Agenda item 6 – Intersessional activities

## Difficulties encountered

- **Budgetary:** no real budgetary constraints.  
Normal maintenance of the FIRMS programme has remained a priority area for the Fisheries and aquaculture Department and has become part of the FAO Strategic Objective 2 “Sustainable use of natural resources”.
- **Human resources:** There has been a substantial **turn-over** within the team members which has weakened during the first part of the intersessional period the Secretariat capacity.
- **Software maintenance/development:** New corporate policies on IT and communication entailed substantial **delays** for the deliverables.
- **Scheduling:** The difficulties of scheduling nature reported by the Secretariat at FSC9 were less acute, and a good rate of updates to inventories was obtained. The **minimum data requirement** approach made a faster workflow and a lighter workload while focusing on key information.  
**Webservices** for semi-automatic procedures (i.e. ICES) is also well promising in case of massive updates of information.

# Agenda item 7 – Report of Technical Working Group 5 (1)

## TWG Meetings:

e-TWG 5.1 (29 July 2015)

e-TWG 5.2 (1 December 2015)

TWG 5 (29 February-1 March 2016)

e-TWG 5.3 (27 October 2016)

[\(Doc. FIRMS FSC10/2017/3\)](#)

## Main themes discussed:

Future perspectives for the FIRMS partnership

Inventories minimum data requirement

Traffic light approach for the FIRMS State & Trend standard descriptors

FIRMS Stocks & Fisheries map viewer

BlueBridge project and Global record of Stocks and Fisheries (GRSF)

Updating the FIRMS brochure

Introducing the notion of “Assessment Unit” in the FIRMS data model



# Agenda item 7 – Report of Technical Working Group 5 (2)

## TWG5 Recommendations

### Future perspectives for the FIRMS partnership

- Address main challenges: **timelier reporting** of partners' contributions, expand reporting coverage, respond to target audience needs.
- Contact “**dormant partners**” to re-engage them in FIRMS activities.

### Inventories minimum data requirement

- Identify the minimum information requirement for **global level reporting** for simplified partner contributions.
- Include links to **source** reports.
- Evaluate proposed identified **inventory fields** as minimum data requirements.

### Traffic light approach

- For future considerations: 1) Two icons to better render differences between exploitation rate and abundance level, 2) Matrix of lights (e.g. overall status, biological reference point, ecosystem approach, fishery management strategy/system)

# Agenda item 7 – Report of Technical Working Group 5 (3)

## TWG5 Recommendations

### FIRMS Stocks & Fisheries map viewer

- Continue maintaining and representing collective wisdom of multiple partners

#### \*From the survey (June 2017):

- Easier browsing and faster performance / Location of the fish tags could be improved
- More explanation on Legend, e.g. number specified for marine resources and fisheries
- Regular updates
- Capability to identify number of stock assessments that exist for a resource / species could be nice
- When scrolling over the areas, it may be helpful if the pop up also included governing RFMO of the area

### BlueBridge project and Global record of Stocks and Fisheries (GRSF)

#### \*See EAB TWG2 on GRSF report for full set of recommendations

- Consider nuances between recognized stocks and assessments areas
- Notion of environment for coastal fisheries
- Simple model for minimum data requirement
- Consider Uniform Resource Names (URN) for unique identifiers

### Introducing the notion of “Assessment Unit” in the FIRMS data model

#### \*See Doc. FIRMS FSC10/2017/4f

- Include distinction between the three concepts (“biological stock”, “assessment unit”, “management unit”) and introduce the descriptor “Assessment Unit”

# Agenda item 9 – FIRMS protocol and standards

## **FIRMS Information Management Policy (IMP)** ([Doc. FIRMS FSC10/2017/5](#))

Major changes from FSC9 (version 2.6) for review by FSC10

- ANNEX 2 - FIRMS DRAFT GUIDELINES  
Traffic light approach for the FIRMS State & Trend standard descriptors

# Agenda item 9 – FIRMS protocol and standards

## Proposal for updating FIRMS standards and protocols

(Doc. FIRMS FSC10/2017/4f)

# Agenda item 10 - Planned activities <sup>(1)</sup>

## Outline

1. Expanding FIRMS coverage and timeliness of reporting
2. Renewal of FIRMS user interface
3. Support SDG 14.4.1 requirements
4. Global Record of Stocks and Fisheries (GRSF)
5. FIRMS inventories
6. FIRMS Promotion

# Agenda item 10 - Planned activities (2)

- **Expanding FIRMS coverage and timeliness of reporting**
- The South Pacific Ocean represents a necessary area for expansion of data coverage.
- Specific efforts for the following RFBs to join FIRMS:
  - Tuna bodies: Western and Central Pacific Fisheries Commission (WCPFC) [and The Pacific Community (SPC)] is the only Tuna body not yet member of FIRMS. Tuna bodies member of FIRMS should invite WCPFC to join.
  - Deep Sea bodies: South Pacific Regional Fisheries Management Organisation (SPRFMO), South Indian Ocean Fisheries Agreement (SIOFA) and North Pacific Fisheries Commission (NPFC) should be invited to join.
  - Other bodies: the Pacific Salmon Commission (PSC) expressed an interest to join during the last RSN 2016 meeting; the Permanent Commission for the South Pacific (CPPS) had formerly expressed their interest.

# Agenda item 10- Planned activities (3)

- **Expanding FIRMS coverage and timeliness of reporting**
- The EBF resources for the next intersessional period in support to regional uptake of FIRMS in BOBLME, WECAFC, and FCWC are promising in terms of FIRMS coverage expansion.
- Additional EBF resources and/or partnerships will be necessary to support GRSF and SDGs.

# Agenda item 10 - Planned activities (4)

- Expanding FIRMS coverage and timeliness of reporting

To improve timeliness and reduce workload

- new technologies (i.e. ICES webservices)
- new strategies (i.e. minimum data requirement approach)

To find new arrangements for new partners willing to contribute to FIRMS

- Doc. FIRMS FSC10/2017/4b “Review of the FIRMS Partnership Arrangement and proposals for amendments”



# Agenda item 10 - Planned activities (5)

- **Renewal of FIRMS user interface**

Doc. FIRMS FSC10/2017/4e “Design proposals for the new FIRMS Website under FAO.org”

\*From FSC9

- FIRMS Website (new “local” tools, design improvements) => **new website proposal**
- New user interface (Stocks & Fisheries explorer) => **FIRMS Stocks and Fisheries map viewer**
- Federate search engine harvesting the FIRMS database and other external sources => **GRSF**

# Agenda item 10 - Planned activities (6)

- Renewal of FIRMS user interface

Finalize/update the communicational material together with the release of the new website



# Agenda item 10 - Planned activities (7)

- Support requirements for Sustainable Development Goals – Indicator 14.4.1

“Proportion of fish stocks within biologically sustainable levels”

Doc. FIRMS FSC10/2017/4d “A role for FIRMS in support to SDG14.4.1 “Percentage of fish stocks within biologically sustainable levels”

# Agenda item 10 - Planned activities (8)

- **Towards the release of the Global Record of Stocks and Fisheries (GRSF)**
- In about one year time (March 2018) the EU BlueBRIDGE project will conclude, and the GRSF will be released in its final project version.
- FIRMS representatives were involved in two TWG meetings and in various other occasions (e.g. FIRMS eTWG meetings) for discussing the detailed requirements of the GRSF.
- Standards were compiled for the fields of the GRSF record and for the assignment of global unique identifiers; logic were identified to assess the conditions for sharing and federating stocks and fisheries records among various sources, and to define the services which the global record should provide.
- After the release of the GRSF, its maintenance and extension will be the new challenges for which FIRMS partners are invited to propose viable business models.

# Agenda item 10 - Planned activities (9)

- **FIRMS inventories**

- Publish the FIRMS inventories which are still in Excel format
- Make available to the public the overall amount of stocks and fisheries records inventoried by FIRMS

# Agenda item 10 - Planned activities (10)

**FIRMS Promotion : implementation of a communications plan**

**This is business of all FIRMS partners !!**

- to seek participation of more RFBs;
- to adopt a communication plan shared by FIRMS Partners;
- to promote links to the FIRMS website from national agencies websites;
- to increase the dissemination of FIRMS fact sheets from Partners' website;
- to communicate broadly on FIRMS synoptic views on status and trends;
- to communicate on FIRMS progress at Partners' meetings;
- to report on FIRMS progress at COFI and to organize a side event for raising awareness of the ongoing activities.

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Merci

Thank You

Благодарю

¡Muchas Gracias!





