



INTERNATIONAL HYDROGRAPHIC ORGANIZATION
MESO AMERICAN & CARIBBEAN SEA
HYDROGRAPHIC COMMISSION



MACHC Letter 05/2019

April 19, 2019

To: All MACHC Members

Subject: Draft MACHC Report to IRCC for review

Dear Colleagues,

As MACHC Chair, I will be representing our Commission at the upcoming IHO Inter-Regional Coordination Committee (IRCC) -11 meeting from June 3-5, 2019. One of my responsibilities is to provide the MACHC report to the IRCC. In preparation for the IRCC meeting, a draft has been developed and is attached, along with the IRCC agenda for reference.

I would be very grateful if you would review the draft report and provide any comments or additional information on MACHC activities you deem important and/or of significant interest to IRCC. This provides an excellent opportunity for MACHC Members to demonstrate the achievements of our Commission, and our challenges, in progressing the goals of the IHO in our region.

Also attached is a Maritime Safety Information (MSI) status assessment matrix indicating the level of MSI activity of the countries in the MACHC region. This matrix, developed by the IHO World Wide Navigational Warning Service Sub-committee Chair, represents an initial assessment only. Thus, you are kindly asked to look at the entry for your country and validate and/or update the information so that it can be accurately reported to the IRCC.

In order to collate all comments into this report, as well as update the MSI status matrix, I would appreciate a response by May 3, 2019. Please send your response to MACHC.Chair@noaa.gov and do not hesitate to contact me with any questions or concerns. I look forward to hearing from you.

Sincerely,

Kathryn L. Ries
Deputy Director, Office of Coast Survey, U.S. National Oceanic and Atmospheric Administration
Chair, MesoAmerican and Caribbean Sea Hydrographic Commission



INTERNATIONAL HYDROGRAPHIC ORGANIZATION
MESO AMERICAN & CARIBBEAN SEA
HYDROGRAPHIC COMMISSION



MACHC Carta 05/2019

19 de Abril, 2019

A: Todos los miembros de la MACHC

Asunto: Borrador del Informe MACHC a IRCC para revisar

Estimados Colegas,

Como Presidenta de la MACHC, estaré representando a nuestra Comisión en la próxima reunión del Comité de Coordinación Interregional (IRCC) de la Organización Hidrográfica Internacional (OHI)–reunión 11 del 3 al 5 de junio de 2019. Una de mis responsabilidades es la de proporcionar el informe de la MACHC al IRCC. En preparación para la reunión del IRCC, se ha desarrollado un borrador el cual se adjunta a esta carta, junto con la agenda del IRCC como referencia.

Les agradecería mucho que revisen el borrador del informe y proporcionen comentarios o información adicional sobre las actividades de la MACHC que consideren importantes y / o de gran interés para el IRCC. Esto brinda una excelente oportunidad para que los Miembros de la MACHC demuestren los logros de nuestra Comisión y nuestros retos en el progreso de los objetivos de la Organización Hidrográfica Internacional (OHI) en nuestra región.

También se adjunta una matriz de evaluación del estado de la Información de Seguridad Marítima (MSI) indicando el nivel de actividad de la MSI de los países en la región MACHC. Esta matriz, desarrollada por el Presidente del Subcomité del Servicio Mundial de Alerta de Navegación de la OHI, representa solo una evaluación inicial. Por lo tanto, les pido que presten atención a la información compilada de su país y que validen y / o actualicen dicha información para que pueda reportarse con precisión al IRCC.

Para recopilar todos los comentarios en este informe, así como para actualizar el estado de la matriz de la MSI, agradecería recibir una respuesta vuestra antes del 3 de mayo de 2019. Envíen por favor su respuesta a MACHC.Chair@noaa.gov y no vacilen en comunicarse conmigo en cualquier duda o inquietud que tengan. Esperando escuchar de ustedes.

Sinceramente,

Kathryn L. Ries
Sub Directora, Oficina de Levantamientos Hidrográficos Costeros, Administración Atmosférica y Oceánica
Nacional de los Estados Unidos
Presidenta, Comisión Hidrográfica MesoAmericana y del Mar Caribe

**11th MEETING OF THE IHO INTER-REGIONAL COORDINATING COMMITTEE
IHO-IRCC11
Genoa, Italy, 3-5 June 2019**



**MESOAMERICAN AND CARIBBEAN SEA
HYDROGRAPHIC COMMISSION
Report to IRCC11**

1. Chair: Kathryn Ries, USA, March 2019

Vice-Chair: Vice Admiral Antonio Fernando Garcez Faria, Brazil, March 2019

2. Membership

Members: Brazil, Cuba, Colombia, France, Guatemala, Jamaica, Mexico, Netherlands, Suriname, Trinidad and Tobago, UK, USA, Venezuela

Associate Members: Antigua y Barbuda, Belize, Costa Rica, Dominican Republic, El Salvador, Grenada, Guyana, Honduras, Panama, St. Vincent and the Grenadines

Observer Countries: Anguilla, Bermuda, Monserrat, Spain

Observer Organizations: IALA, COCATRAM, THSOA, University of the West Indies, IOCARIBE INVEMAR/CMA, AMEXID, Caribe EWS, RedGolfo, Map Action

Observer Companies: HYPACK, Fugro USA, IIC Technologies, Ocean Wise Ltd, Kongsberg, CARIS Teledyne, ACYS Technologies, TCarta

3. Meetings:

19th Meeting—Cartagena de Indias, Colombia (26 November-1 December 2018)

The 20th Meeting of the MACHC will be held in Santo Domingo, Dominican Republic (December 2-6, 2019)

4. Current MACHC Working Groups:

- a) MACHC Integrated Charting Coordination Working Group (MICC)
- b) MACHC Capacity Building Committee (CBC)
- c) MACHC Marine Spatial Data Infrastructure Working Group (MMSDI)

5. Status of IRCC actions (relevant for the MACHC):

3	to submit draft IHO Resolution 2/1997 as amended (Annex C) to the RHC Members for comments and report back to IRCC (6.2)\	RHC Chairs	MACHC submitted comments to IRCC Chair on 12/20/18
8	to report the status of MSI in coastal States to the next IRCC meeting (7b)	WWNWS-SC Chair	MACHC is assessing the status of MSI and will be posting it to its working website (under development) for tracking purposes

6. Agenda Items:

Item 7: WEND –WG Update

The MICC, as part of its workplan, will consider the request of the WEND WG 9/12 for ENC producers to provide their extracted bathymetric data from ENCs as a contribution to both Seabed 2030 and MSDI.

Agenda item 10. Data Gathering and Management. Maximizing the use of Hydrographic Data

Given the expanding interest in MSDI information within the region, the MACHC determined that its previous Maritime Economic Infrastructure WG should become a MSDI WG to recognize this expanded role. The new terms of reference and participation are established (see Section 8.1 below).

The 2018 Seminar on Hydrographic Governance prior to the MACHC included a workshop on dealing with maritime disasters. It produced a draft Disaster Response Plan Framework that the MACHC will elaborate into a more detailed plan with preparation, response and communication actions. Sharing best practices from other RHCs in developing a viable plan would be very useful as many components are likely to be quite similar.

7. MACHC cooperation with stakeholders (organizations, industry, etc.):

The MACHC is expanding its partnerships with other regional organizations to collaborate and leverage resources for capacity building. These include IOCARIBE, the Intergovernmental Coordination Group for the Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE EWS), the Central American Marine Transportation Commission (COCATRAM) and neighboring RHCs (SEPRHC, SWAtHC).

For example, all of these entities are co-sponsors of a proposed CB training on Tides and Water Levels for Spanish speakers, in support of more accurate hydrographic surveys and improved regional early warning systems.

The Caribbean Marine Atlas organization attended the last MACHC meeting and will be engaged in the activities of the MMSDI Working Group, which will be looking at how to make key chart data layers available for non-navigation uses, such a regional risk assessment for maritime accidents and management of marine protected areas.

The MACHC initiated collaboration with the Seabed 2030 Regional Data Center for the Atlantic (a representative attended the 19th MACHC meeting) and the International Bathymetric Chart for the Caribbean to increase regional contributions to this international initiative.

8. Conclusions:

Key achievements (see Section 9 below).

Challenges Faced:

- 1) For the newly established MACHC MSDI WG to determine how best to deliver regional MSDI data offerings. There is clearly a regional demand for data layers derived from ENCs for non-navigation purposes, to support activities such as the management of a regional marine protected area network, a regional risk assessment for maritime accidents (a project supported by the MACHC) and maritime disaster response. These efforts require common chart data layers such Bathymetry, Shoreline, Maritime Boundaries; Ports Facilities (i.e. piers); Aids to Navigation that are not readily available.
- 2) While contact has been established with the Head of Seabed 2030 Atlantic/ Indian Oceans Regional Data Center, the International Bathymetric Chart for the Caribbean and the MACHC, a

challenge is how to increase the regional contributions of existing data and to catalyse collaboration to fill gaps. A gap analysis is being developed for the MACHC as a tool to help generate that momentum.

- 3) To develop a Disaster Response Plan with the appropriate level of detail, including ideally a GIS-based layer, that can most effectively support coordination and communication efforts before and after a maritime disaster event.

Lessons learned:

- 1) The value of increased collaboration across RHCs and regional partnerships for capacity building training requires concerted effort to identify the specific activities of common interest. The MACHC is doing this through development of a calendar of training opportunities to include offerings from both member states, regional organization and private sector partners. This will allow the MACHC to better coordinate and leverage resources and target capacity building efforts for mutual benefit. An example is the proposed in the Tides and Water Levels training course indicated in Section 7.

9. Achievements (below) and lessons learned (above):

Establishment of MMSDI WG.

MICC Achievements: Charting collaboration processes work well in the MACHC, very few overlaps exist (two currently, reduced from three last year); have increased large scale ENC coverage (12) of major cruise ship ports; 914 ENCs available; the Orinoco River in Venezuela has completed its Band 4 coverage including three ports identified in the cruise ship port analysis.

Capacity Building Achievements 2017-19

Training Courses:

- Seminar on Raising Awareness of Hydrography, including a workshop on Dealing with Maritime Disasters
- MBES Processing
- Although not MACHC-specific, MSI Training was hosted in Brazil that included participants from the SWAtHC, SEPHC & MACHC (89 students from 33 countries)

Technical Visits:

- Guatemala (Mar 2019)
- Dominican Republic (Jan 2018)
- El Salvador (Dec 2017)

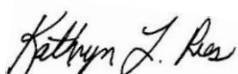
10. Actions required of IRCC:

The IRCC is invited to:

- a. Endorse this report
- b. Note specifically the challenges faced in Section 8 which are common to many RHCs
- c. Consider providing either common guidance and/or lessons learned and best practices on these topics to be shared across RHCs.

Name and Signature of the RHC Chair

Kathryn L. Ries
Chair, MesoAmerican and Caribbean Sea Hydrographic Commission



11th MEETING OF THE IHO INTER-REGIONAL COORDINATION COMMITTEE
IHO-IRCC11
Genoa, Italy, 3-5 June 2019

DRAFT AGENDA AND TIMETABLE

Note: Presenters of papers in parentheses ()

Time	Sunday 2 June	Action
08h00	Arrivals	All
19h00	Ice Breaking Cocktail at Hotel Savoia	Host
Time	DAY ONE OF IRCC11 – Monday 3 June	Action
08h00	Registration	All
09h00	<p>1. a. Opening Remarks Opening of the meeting and welcome. Chair will give the opening remarks and then invite the Italian Navy High Representative (TBD)/Italian National Hydrographer, RAdm Luigi Sinapi and the IHO Secretary-General / Director to address the audience.</p> <p>b. Introductions Participants will be invited to introduce themselves.</p> <p>c. Administrative Arrangements <i>Docs: IRCC11-01A List of Documents (Secretariat)</i> <i>IRCC11-01B List of Participants (Secretariat)</i> <i>IRCC11-01C List of IRCC Members (Secretariat)</i></p> <p>Logistic guidance and information. Documents are presented and updated as necessary.</p>	<p>Chair/Host/ Rep. of IHO Secretariat</p> <p style="text-align: center;">All</p> <p>Chair/Host/ Secretariat</p>
09h30	<p>2. Approval of Agenda <i>Doc: IRCC11-02 Agenda and Timetable (Secretariat)</i></p> <p>Participants are invited to comment on the agenda and timetable in case updates are necessary. Agenda is adopted.</p>	Chair
09h45	<p>3. Matters arising from Minutes of IRCC10 Meeting <i>Docs: IRCC11-03A Minutes of IRCC10 (Secretariat)</i> <i>IRCC11-03B Status of Action List from IRCC10 (Secretariat)</i> <i>IRCC11-03C IRCC WP 2018-2019 (Secretariat)</i></p> <p>Approval of the IRCC10 Minutes. List of Actions from IRCC10 and IRCC WP 2018-2019 are reviewed and updated.</p>	Chair / Secretariat
10h15	<p>4. Review of Terms of Reference and Rules of Procedure <i>Doc: IRCC11-04 IRCC TOR-ROP (Secretariat)</i></p> <p>Meeting will review the IRCC Terms of Reference (ToR) and Rules of Procedure (RoP).</p>	Chair / Secretariat
10h30	Coffee Break	Host
11h00	<p>5. Report by the Chair and the Secretariat <i>Docs: IRCC11-05A IRCC Annual Report (Chair)</i> <i>IRCC11-05B IHO Secretariat Report (Secretariat)</i></p> <p>Highlights from the activity reports are delivered by the Chair and the Secretariat.</p>	Chair / Secretariat
11h30	<p>6. Regional Hydrographic Commissions (RHCs) 6.1 RHC Reports <i>Docs: IRCC11-06.1A Nordic HC (NHC Chair)</i> <i>IRCC11-06.1B North Sea HC (NSHC Chair)</i></p>	

	<p><i>IRCC11-06.1C East Asia HC (EAHC Chair)</i> <i>IRCC11-06.1D US/Canada HC (USCHC Chair)</i> <i>IRCC11-06.1E Mediterranean and Black Seas HC (MBSHC Chair)</i> <i>IRCC11-06.1F Baltic Sea HC (BSHC Chair)</i> <i>IRCC11-06.1G Eastern Atlantic HC (EAHC Chair)</i> <i>IRCC11-06.1H South-East Pacific Regional HC (SEPRHC Chair)</i> <i>IRCC11-06.1I South-West Pacific HC (SWPRHC Chair)</i> <i>IRCC11-06.1J Meso American - Caribbean Sea HC (MACHC Chair)</i> <i>IRCC11-06.1K Southern Africa and Islands HC (SAIHC Chair)</i> <i>IRCC11-06.1L North Indian Ocean HC (NIOHC Chair)</i> <i>IRCC11-06.1M ROPME Sea Area HC (RSAHC Chair)</i> <i>IRCC11-06.1N South West Atlantic HC (SWAtHC Chair)</i> <i>IRCC11-06.1O Arctic Regional HC (ARHC Chair)</i></p> <p>RHC Chairs are invited to summarize their report briefly and present the key achievements, the challenges faced and lessons learned in each Region (maximum 10 minutes each).</p> <p>The Committee will be invited to note the key achievements and discuss how to overcome some of the common challenges faced by the RHCs.</p>	RHC Chairs
12h30	Group Photo followed by Lunch Break	Host
14h00	6.1 RHC Reports (continued) Continuation of item 6.1	RHC Chairs
15h30	Coffee Break	Host
16h00	6.1 RHC Reports (continued) Continuation of item 6.1	RHC Chairs
17h00	6.2 Revision of IHO Resolution 2/1997 Establishment of RHC <i>Docs: IRCC11-06.2 Draft revised IHO Resolution 2/1997 (USA)</i> Meeting will be invited to review the new draft revision of the IHO Resolution 2/1997 as amended (in detailed version).	Chair
17h00	END OF DAY ONE	Chair
17h30	Visit to the "Lanterna" Lighthouse – Bus transfer from Hotel Savoia	Chair
Time	DAY TWO OF IRCC11 – Tuesday 4 June	Action
09h00	<p>7. Reports from IRCC Subordinate Bodies</p> <p><i>Docs: IRCC11-07A Hydrographic Commission on Antarctica (HCA Chair)</i> <i>IRCC11-07B World-Wide Navigational Warning Service Sub-Committee (WWNWS-SC Chair)</i> <i>IRCC11-07C Capacity Building Sub-Committee (CBSC Chair)</i> <i>IRCC11-07D WEND Working Group (WENDWG Chair)</i> <i>IRCC11-07E MSDI Working Group (MSDIWG Chair)</i> <i>IRCC11-07F IHO-EU Network Working Group (IENWG Chair)</i> <i>IRCC11-07G CSB Working Group (CSBWG Chair)</i> <i>IRCC11-07H FIG-IHO-ICA IBSC (IBSC Chair)</i> <i>IRCC11-07I IHO-IOC GEBCO Guiding Committee (GGC Chair)</i> <i>IRCC11-07J UN-GGIM Shared Guiding Principles for Geospatial Information Management (PPT)</i></p> <p>Chairs of the IRCC bodies will present the main achievements, challenges faced, lessons learned and work programs in the IRCC bodies, including the Project Team on the UN-GGIM Shared Guiding Principles for Geospatial Information Management (PPT) (maximum 10 minutes each). The Committee is invited to consider the inputs and to provide guidance of each body's work programme.</p>	Chairs of the IRCC subordinate bodies
10h30	Coffee Break	Host

11h00	7. Reports from IRCC Bodies (continued) Continuation of item 7.	Chairs of subordinate bodies
12h30	Lunch Break	Host
14h00	7. Reports from IRCC Bodies (continued) Continuation of item 7.	Chairs of subordinate bodies
15h00	8. Outcomes of the 2st Meeting of the IHO Council (C-2) <i>Docs: IRCC11-08A List of Decisions and Actions of C-2 (Secretariat)</i> <i>IRCC11-08B Draft Revised IHO Resolution 2/2007(Secretariat)</i> <i>IRCC11-08C Draft Revised IHO Resolution 1/2005 (EAHC)</i> <i>IRCC11-08D Other documents (to be determined)</i> The Committee will consider the outcomes of the 2 nd Meeting of the IHO Council, including the decisions and actions related to the IRCC activities, as well as revision of IHO Resolution 2/2007 (Action C2/13 refers). The meeting will also consider the progress on Draft Revised IHO Resolution 1/2005 to be presented by EAHC.	Chair / Secretariat
15h30	Coffee Break	Host
16h00	8. Outcomes of the 2st Meeting of the IHO Council (continued) Continuation of item 8.	Chair
17h30	END OF DAY TWO	Chair
19h30	Dinner on board an Italian Navy Ship (TBC) or at another heritage location in Genoa - Bus transfer from Hotel Savoia for all guests at 19h00	Chair
Time	DAY THREE OF IRCC11 – Wednesday 5 June	Action
09h00	9. Inputs from Member States and other bodies affecting IRCC <i>Docs: IRCC11-09A Input from HSSC11 (HSSC Chair)</i> <i>IRCC11-09B Relations with IGOs, NGOs and IHO Stakeholders (Secretariat)</i> Highlights from the recent HSSC reports and how they impact the RHCs and the IRCC bodies. Representation of the IHO at international and regional events will be discussed and evaluated.	Chair / Secretariat
09h30	10. Data gathering and Management, Maximizing the use of Hydrographic Data <i>Docs: IRCC11-10A Update on Data Gathering and Management, Maximizing the use of Hydrographic Data (Secretariat)</i> Update on data gathering and management, crowd-sourced bathymetry, Satellite Derived Bathymetry, and maximizing the use of hydrographic data will be considered. IRCC will discuss the necessary actions to improve data gathering and also MSDI/NSDI at national and regional levels. Participants are invited to comment and contribute (papers / inputs are expected from the Member States and participants).	Chair / Secretariat
10h30	Coffee Break	Host
11h00	11. Developments on the Infrastructure of the IHO Secretariat <i>Doc: IRCC11-11 Infrastructure of the IHO Secretariat (Secretariat)</i> Presentation of the developments on the IHO GIS, databases, online registration system and how they impact the RHCs and the Member States' activities. Participants are invited to comment and contribute.	Chair / Secretariat

11h30	12. Other information papers Relevant information papers from the IRCC Members, Observers and invited Organizations will be provided, if any.	Chair
12h00	13. Next IRCC Meetings (Venue and Date) Definition of the dates and venue for IRCC12 and confirmation of the dates and venue for IRCC13 and IRCC14. Participants are expected to offer to host IRCC15. The current status is: IRCC12: May / June 2020 – Poland (exact venue to be decided) IRCC13: May / June 2021 – Ecuador (exact venue to be decided) IRCC14: May / June 2022 – Japan (exact venue to be decided)	Chair
12h15	14. Any other business Participants are invited to present other business items (if any).	All
12h30	Lunch	Host
14h00	15. IRCC Administration (Draft Report from the IRCC to the C-3) Review the highlights of the draft IRCC report and proposals (if any) to the 3 rd Council Meeting.	Chair / Secretariat / All
14h30	16. Review of the Actions and Decisions <i>Docs: IRCC11-16A Draft List of Actions from IRCC11 (Secretariat)</i> <i>IRCC11-16B Draft List of Decisions from IRCC11 (Secretariat)</i> <i>IRCC11-16C Draft List of Recommendations to RHCs(Secretariat)</i> Review of the actions, decisions and recommendations agreed during the meeting. Documents <i>IRCC11-16A</i> , <i>IRCC11-16B</i> and <i>IRCC11-16C</i> will be drafted during the meeting.	Chair / Secretariat / All
15h30	17. IRCC Work Programme Management <i>Docs: IRCC11-17A IHO Work Programme for 2018-2020 (Secretariat)</i> <i>IRCC11-17B Draft IRCC Work Programme (Secretariat)</i> Discussion to build the IRCC Work Programme for 2019-2020 considering the impact of the IHO Work Programme for 2018-2020. Document <i>IRCC11-17B</i> will be drafted during the meeting.	Chair / Secretariat / All
16h00	17. Closure Chair ends the meeting.	Chair
16h15	END OF THE MEETING	Chair

	Country / Territory	PHASE I: MSI STATUS Color coded (legend below)	MSI 2017
1	Anguilla		0
2	Antigua & Barbuda		0
3	Bahamas		0
4	Barbados		3
5	Belize		0
6	Bermuda (NAVTEX Station)		
7	Brazil (NAVAREA V)		
8	Cayman Islands		0
9	Colombia		289
10	Costa Rica		0
11	Cuba		12
12	Dominica		0
13	Dominican Republic		0
14	El Salvador		0
15	Clipperton (France)		0
16	Guadalupe (France)		0
17	Guyane (France)		38
18	Martinique (France)		0
19	Saint-Barthélemy (France)		0
20	Saint-Martin (France)		41
21	Grenada		
22	Guatemala		1
23	Guyana		28
24	Haiti		6
25	Honduras		0
26	Jamaica		2
27	Mexico		200
28	Aruba (Netherlands)		0
29	Bonaire (Netherlands)		0
30	Curaçao (Netherlands) (NAVTEX Stn)		
31	Saba (Netherlands)		0
32	Sint Eustatius (Netherlands)		0
33	Sint Maarten (Netherlands)		0
34	Nicaragua		0
35	Panama		39
36	St. Kitts & Nevis		1
37	St. Lucia		0
38	St. Vincent & Grenadines		1
39	Suriname		17
40	Trinidad & Tobago		92
41	Turks and Caicos		0
42	UK - Anguilla (UK)		0

43	UK - Bermuda (UK) (NAVTEX Stn)		
44	UK - British Virgin (UK)		0
45	UK - Cayman (UK)		0
46	UK - Montserrat (UK)		0
47	UK - Turks & Caicos (UK)		0
48	USA		
49	Navassa (USA)		0
50	Puerto Rico (USA)		
51	US Virgin Is. (USA)		0
52	Venezuela		50

MSI STATUS COLOR CODING

Clear--No training, not providing MSI

Red--Received training, not providing MSI

Yellow--Received training, providing moderate MSI

Green--Fulfilling all obligations



MSI 2018	MSI 2019	Training Date	Training Date	Training Date	Training Date
1	0	mai-2007	juil-2016		
0	0	mai-2007	avr-2011	avr-2013	juil-2016
0	0				
2	1	mai-2007	juil-2016	juin-2017	
4	3	juil-2016			
		juil-2016			
		avr-2011	oct-2018		
0	0	mai-2007			
291	87	mai-2007	avr-2011	oct-2018	
1	0	avr-2013	juil-2016	juin-2017	
5	2	juin-2017			
3	0	avr-2013			
9	3	juil-2016			
0	0	avr-2013	juin-2017	oct-2018	
0	0				
0	1				
47	18				
0	0				
0	0				
38	2				
		avr-2013	juil-2016	juin-2017	
2	0	mai-2007	avr-2013	juil-2016	juin-2017
24	16	avr-2013	juin-2017	oct-2018	
10	0	juil-2016			
1	1	avr-2013	juin-2017		
9	3	mai-2007	avr-2013	juil-2016	
195	42	juil-2016			
0	0				
0	0				
0	0				
0	0				
0	0				
1	0	juin-2017			
8	6	mai-2007	avr-2013	juil-2016	
5	0	avr-2013	juil-2016		
0	0	juil-2016			
5	0	mai-2007	avr-2013	juil-2016	
19	4	févr-2008	avr-2011	juil-2016	
87	44	mai-2007	avr-2013		
0	0	mai-2007			
0	0	juil-2012			

0	0	mai-2007	avr-2011	mai-2017	
0	0				
0	0	mai-2007			
0	0				
0	0				
0	0				
55	6	oct-2018			

