

AIG REGIONAL COOPERATION MECHANISM (ARCM) OF SOUTH AMERICA

THIRD MEETING OF AIG AUTHORITIES

(Lima, Peru, 07 to 09 March 2016)

Agenda item 10: Other issues

- Proposal of the ARCM Webpage

(Working paper presented by the ARCM Technical Committee)

Summary

This working paper presents to the Third Meeting of AIG Authorities information about the proposal of the webpage created for the AIG Regional Cooperation Mechanism (ARCM) of South America.

References

- Report of the Second Meeting of AIG Authorities of the SAM Region (AIG-SAM/2), Buenos Aires, Argentina, 09 to 11 June 2015.
- AIG Regulations of the ARCM
- Annex 13 – Aircraft accident and incident investigation.
- Doc 9946 – Manual on Regional Accident and Incident Investigation Organization (RAIO).

1. Introduction

1.1. The AIG Regional Cooperation Mechanism (ARCM) of South America was established in the Second Meeting of AIG Authorities of the SAM Region, held in Buenos Aires, Argentina, 09 to 11 June 2015, to support States upon request in aspects related to the aircraft accident and incident investigation in a regional cooperation environment that allows the improvement of the effective implementation of the AIG area and the contribution in the aircraft accident and incident reduction rate of the SAM Region below the global rate in all aviation segments.

1.2. In this regard, the Meeting emphasized that the creation of an ARCM in South America would significantly contribute to start AIG cooperation activities between the States that would benefit the States that have greater difficulty in establishing an efficient and effective AIG system.

2. Information system distributed by Internet

2.1 The World Wide Web service is an information system distributed by Internet based on technology that provides a common interface to the different data formats (text, graphics, video, audio, etc.) and to the existing internet services. All this results in the Web service being the most used service in the Internet.

2.2 The Web documents, also called Webpages, can be located in different internet sites; these sites are called Web servers. So, a www document can have links to other documents in the same Web server or in other Web servers, thus creating a global net of information.

2.3 The web environment is complex, as well as dynamic, which complicates the assessment of the developed products for this application domain.

2.4 The quality model needed to be developed in a Webpage should possess the following attributes:

- a) functionality: ability to provide functions that meet the needs of the page when it is being used;
- b) reliability: ability to keep an appropriate level of performance within the requirements recommended in the page;
- c) usability: ability to be understood, learned, worked and attractive to the user when it is used under the stated conditions;
- d) efficiency: ability to show appropriate performance relative to the amount of resources used under stated conditions;
- e) maintenance ability: ability to allow changes for corrections, improvements as well as adjustments; and
- f) portability: ability to be carried from one site to another.

2.5 Likewise, the fact that it must be evaluated in Web applications will include the use of technology and the content presented, considering the evaluation of the following requirements: visibility, intelligibility, credibility, attractiveness and differentiation.

2.6 Visibility is related to the fact that the site is easy to find or access and it is easy to *download*. Intelligibility is associated with the users' skills to assimilate and understand the *website* content.

2.7 The credibility attribute determines that a *website* must acquire the users' reliability and have precise and correct content. Regarding attractiveness, this is measured by the ability to attract the visitor's attention. Differentiation is the measurement whereby the site presents the organization's superiority in relation to the body's image and brand.

3. ARCM Webpage

3.1 The importance of implementing the ARCM Webpage is mainly to create an official communication channel among all the States for the Exchange of information, providing seriousness and reliability to the ARCM:

3.2 Likewise, it must provide the basic services of a website such as electronic mail, news, schedule and specific services: access to the SDCPS, technical support and documentation.

3.3 The hosting of the page will be independent from any State such as outsourced services and the owner of the webpage will be the president of the ARCM Executive Committee that will appoint a technical manager with the power of managing the site.

3.4 Domain

a) The registration of the ARCM domain (arcm-sam.org) meets the following requirements:

- ✓ International registration
- ✓ Transferable ownership
- ✓ SSL security protocol (https)
- ✓ Annual renewal
- ✓ Technical manager
- ✓ Administrative manager
- ✓ Owner

b) Independent hosting, high availability.

3.5 Access

a) the website must have different levels of access (public and confidential);

b) recording the access attempts; and

c) allowing the change of password

3.6 Content

a) clear and easy-surfing user interface (UI);

b) availability of Spanish/English languages, including menus, drop-down lists, help, support, and all site-related documentation;

c) RWD (Responsive Web Design) integral design for multi-platform access;

d) ARCM Technical Committee's reports publication platform;

e) links to the AIG organizations of the SAM States;

f) terms and conditions for the browsing of the site;

- g) ARCM institutional information; and
- h) Site's map.

3.7 Services

- a) connection to the SDCPS;
- b) webmail for ARCM members;
- c) platform to upload documents, activities from the schedule and news edition; and
- d) support and enquiries.

3.8 Therefore, **Appendix A** of this working paper presents the proposal for the ARCM webpage to the Meeting.

4. Suggested actions

4.1 AIG Authorities of the SAM Region are invited to:

- a) note and comment about the information provided in this working paper and **Appendix A**; and
- b) approve the proposal of the ARCM webpage.

Appendix A

AIG Regional Cooperation Mechanism (ARCM) of South America

South American ARCM Web Page

Content

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Definitions

Antivirus	Software that detects and removes viruses on a computer.
Antispam	Method to prevent junk email. There are various techniques for that.
Domain	Unique name that identifies a web site.
E5Web	ADREP/ECCAIRS web interface, used for the SDCPS.
Hosting	Service of hosting web documents, associated to a specific domain.
https	Hiper text transfer protocol secure
IMAP	Internet Message Access Protocol, electronic mail management protocol.
Pc	Personal computer
POP	Post Office Protocol, electronic mail management protocol.
RWD	Responsive web design
SDCPS	ARCM Safety Data Collection and Processing System
Smartphone	Mobile phone device with internet access.
ssl	Secure socket layer
www	World wide web

ARCM Web Site Implementation

Introduction

An organization needs to communicate its mission, strategies and services to the development environment and the community in general; at the moment the standard is World Wide Web. Therefore, the *arcm-sam.org* web platform was developed.

Web Site Project

Stages

Stage 1 – Survey and planning

In this stage all the information and current standards of design and provisions of web services were gathered by the ARCM.

Members of the Technical Committee were interviewed to identify solutions to the requirements.

Stage 2 – Design and layout

Functional demos and layouts adaptable to mobile devices were created.

Stage 3 – Registration and implementation

The domain international registration was made, the hosting was configured and the finished design was stored.

Considerations and characteristics

Domain

A website domain is the unique identification name where the DNS (*Domain Name Server*) translates the IP addresses (numerical) of every website in the world to memorable terms and easy to find. This abstraction makes it possible for a website to move from a geographical place to another one on the Internet, even when the change implies a different IP address.

Therefore the name “arcm-sam” was implemented, since it is easy to remember and it was available. Regarding the extension, there is a big list of extensions that must be applied according to the mission and function of the organization; there follow some explanatory examples:

.com (commercial)

.org (organizational)

.net (sites organized in nets)

For arcm-sam, the extension “.org” was selected because it appropriately adapts to the ARCM activities and functionalities; the domain is eventually the following:

www.arcm-sam.org

Note: Since the ARCM is an international mechanism, the domain registration was done internationally so that there were no extensions from a specific country (.ar, .py, .pe, .uy, .br, etc.).

Regarding ownership, the arcm-sam.org domain has the following people in charge:

Owner: President of the ARCM Executive Committee

Administrative Manager: Member of the Technical Committee

Technical Manager: Site Manager

The ownership and responsibilities are transferable.

“Hosting”

The web documents have to be hosted in a high availability (24x7) server, with uninterrupted power supply (UPS/Generator) and 50 GB data storage capacity and monthly transference of at least 300 GB/month. Additionally, it is advisable to have the antivirus and antispam service and an automatic backup system.

Due to the fact that the ARCM does not have the infrastructure necessary for the implementation of a web server with the aforementioned characteristics, a hosting service that meets the requirement was hired.

Note: the payment is every three months, and transferable.

Design

One of the main challenges for the success of the project was creating a design appropriate to the organization it represents; in this sense the design guidelines are simple and minimalist. A clear colour palette (*green, grey and white*) and basic font (*arial*) were chosen, focusing users' attention on ARCM relevant points such as the schedule of activities, meetings, working papers and the SDSCP.

Figure Nº 1 - Homepage (Spanish)



Another important point of this diagram is that it has RWD (*responsive web design*) that adapts the web page look to the device being used (*tablets, smartphones, desktop, etc.*), which it provides adaptability and facilitates access to the website information.

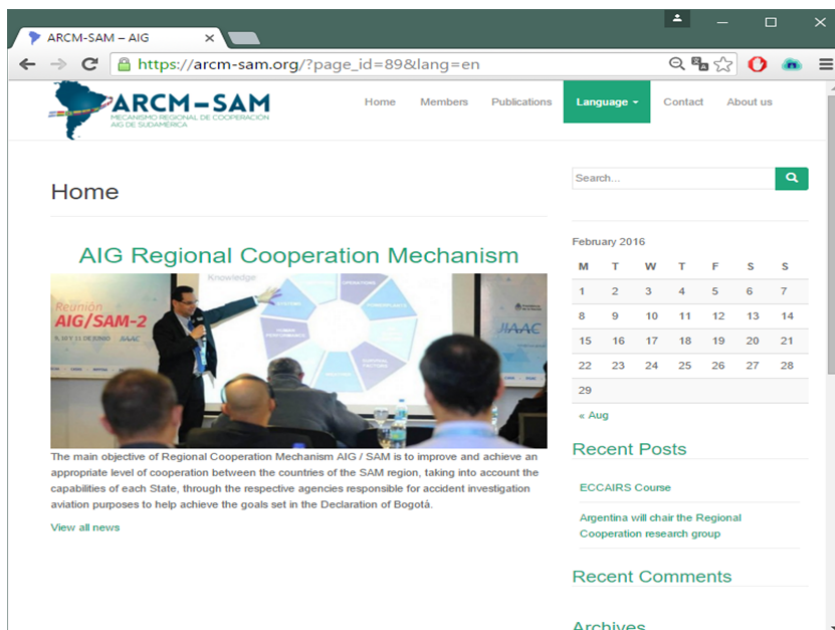
Figure Nº 2 - ARCM web (Smartphone)



Functionality

Regarding functionality, a website’s goal is to be useful. Therefore, information is precise, menus are clear and access to all information can happen in less than 5 clicks, besides the fact that all the content is in Spanish/English.

Figure Nº 3 – Home (English)



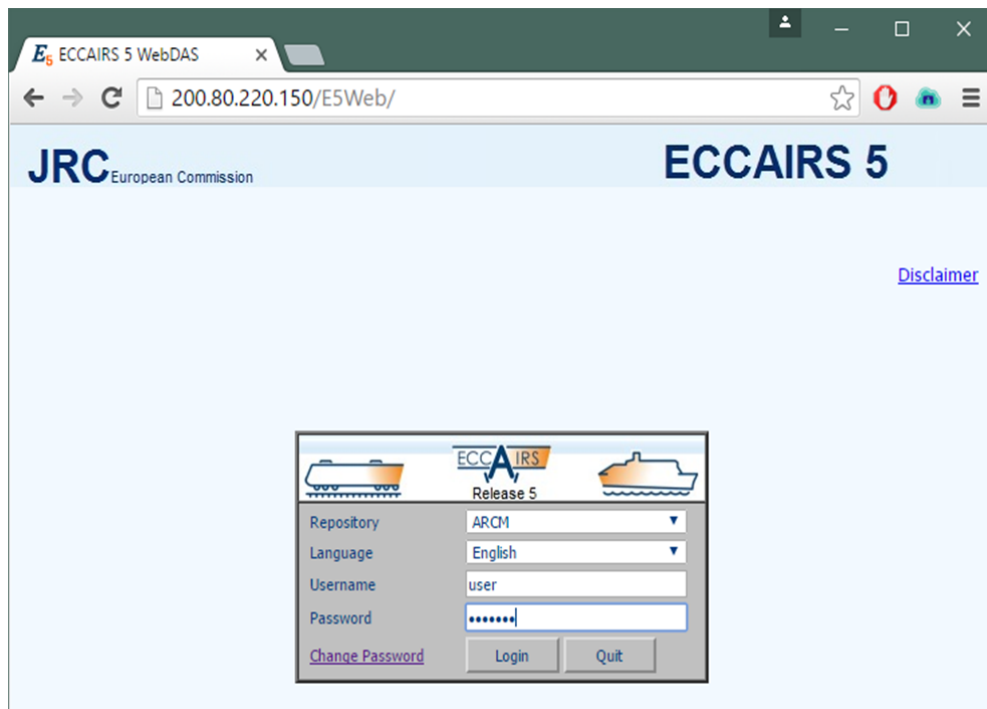
Main functions

Access to the SDCPS

Users can access the system (it requires authentication) with all the functionalities of the desktop platform, make notifications, analyse the information, graphics, etc., reported to the ARCM from any device connected to the Internet, entering the following:

<https://www.arcm-sam.org/eccairs>

Figure N° 4 – Access to the SDCPS of the ARCM (ECCAIRS)



ARCM Documentation

All the ARCM official documentation must be available in the site in PDF format, public as well as confidential information (it requires authentication).

Schedule of activities

Every activity of the ARCM will be written on the schedule of the homepage.

Confidential news

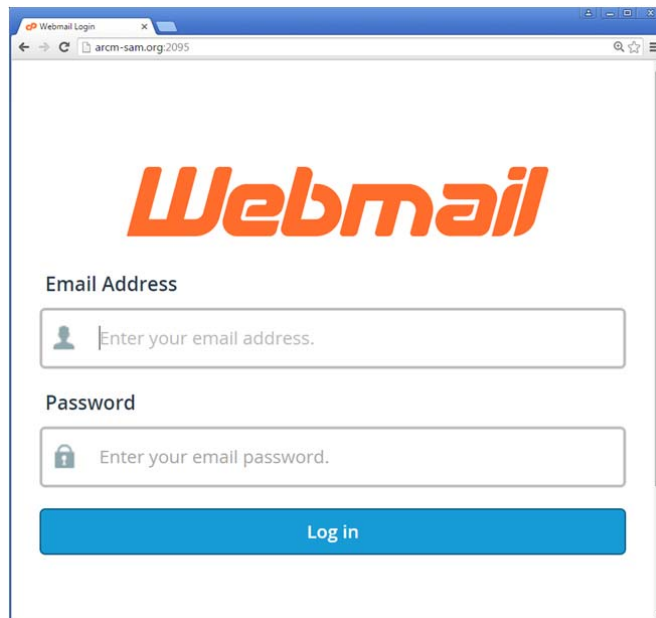
News is a publication that can have multimedia content, documents, links, working papers, etc. Confidential news is only visible to authorized and registered users allowing them making comments similar to the ones in debate forums.

Webmail

The ARCM institutional webmail (*user@arcm-sam.org*) can be configured for email clients chosen by the user (Outlook, thunderbird, etc.) in multiple devices with POP or IMAP settings. However, they can access the institutional email entering the following address:

<https://arcm-sam.org/webmail>

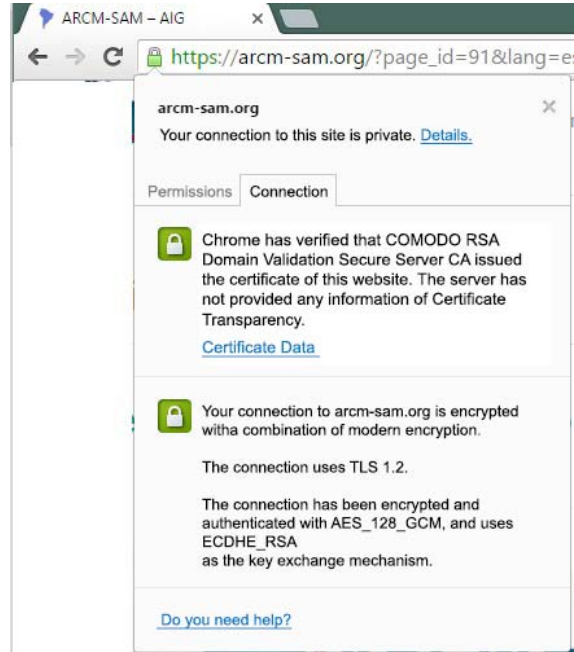
Figure Nº 5 – Webmail



Security

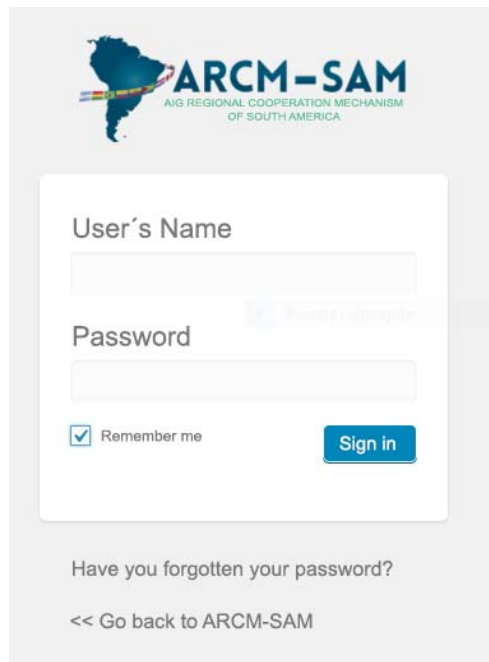
Information security is the most important subject in the development of a web platform. The ARCM website has a SSL security certificate (https / green lock) indicating that the information provided is reliable; it is a required protocol for many services offered in the webpage.

Figure Nº 6 – Security Certificate (SSL)



The registered users can recover their access codes with the registered email.

Figure Nº 7 – Users' Access



Bibliography

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- Joint Research Centre <http://eccairsportal.jrc.ec.europa.eu> (ECCAIRS).