



CIVL 2020 PLENARY – ANNEXE 18

SOFTWARE WORKING GROUP REPORT

*By Igor Erzen, Mitch Shipley
and Elena Filonova*

General development during 2019

AMS

In 2018 FAI represented by cooperation of 2 Air sports commissions CIVL and CIAM (Aeromodelling) has launched an IT project to create Application Management System to be used for Sanctioning of mainly FAI Category 2 events. The project was carried out by FAI IT partner Noosphera a development company from Ukraine. From FAI side the work was supervised by Antonis Papadopoulos CIAM President, Elena Filonova CIVL Competition coordinator, and Visa-Matti Leinikki FAI IT Manager.

In Summer of 2019 AMS was finally launched in full operation.

AMS allows the organisers:

- to submit applications online,
- to effectively manage all necessary approvals and payments,
- to speed up events publication on FAI calendar,
- to automate some routine actions as invoicing and PayPal payments.
- to proceed with the application in shorter period.

AMS allows the NAC officials

- to be notified about the cat 2 application
- to get all contacts of the organizers
- to approve or to reject the event.

Up to now 76 applications were made via AMS, of which 3 are just created, 8 submitted waiting for NAC approval, and 8 approved by NAC but missing payment, 57 were confirmed and published, 1 was late, 1 was rejected by NAC.

Totally in 2019, 61 applications were made via AMS.

CIVL Competition coordinator worked personally with NAC officials to connect them and give proper user permissions.

Narrow point is the payment check and publication. Due to work overload of FAI finance manager sometimes there are 1-2 weeks delay with publications of events.

EMS

CIVL Plenary 2018 approved the creation of CIVL Event management system and task CIVL Administrator and Competitions Coordinator to collect the requirements and work out technical brief to get quotation from development companies.

CIVL Plenary 2019 approved the budget and system aims with basic description:

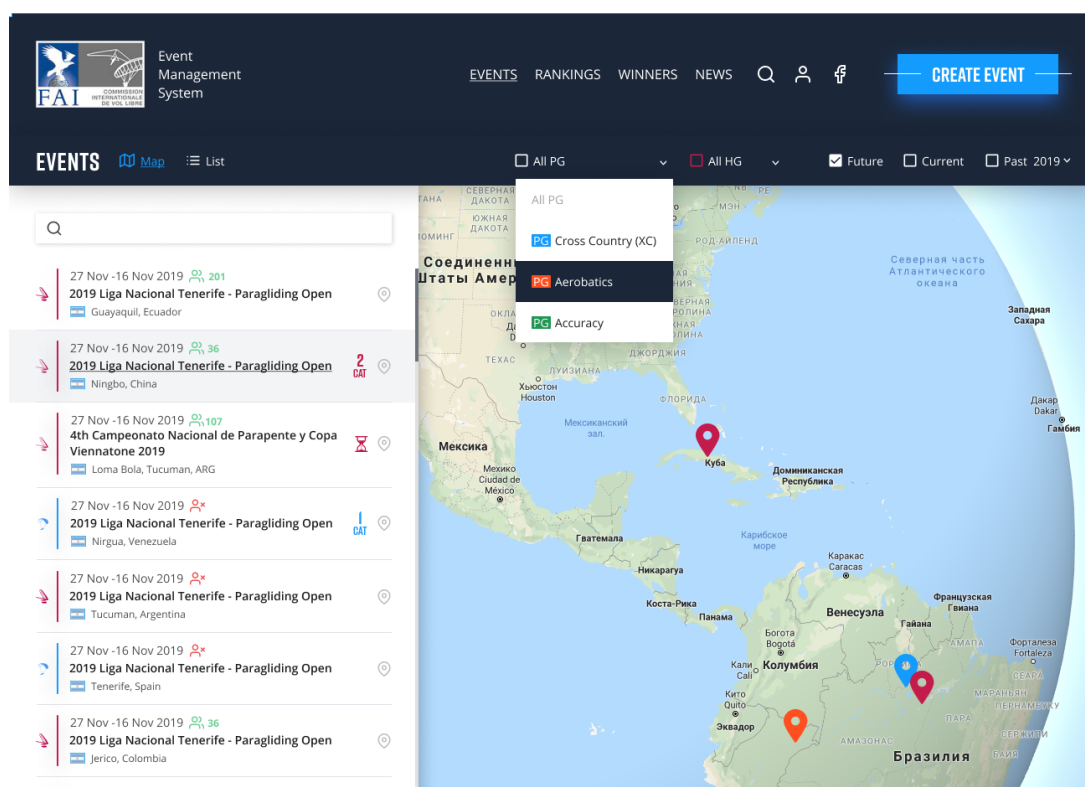
CIVL EMS is an integrated web service that will combine event hosting, online participants' registration, event blogs and ranking. The system will also have API connection to FAI AMS system and SL DB to show exactly the sanctioning status of the event. It will also keep records of working professionals. It will also provide automation of processes to export data into Live tracking and Scoring services.

In 2019 CIVL Software manager Mitch Shipley and CIVL Administrator Elena Filonova worked on a contract with Noosphera to create the system. In September 2019 the contract was finalised and signed by FAI and Noosphera and active development began.

At this moment we have the following elements of the system implemented on a test server:

- WPRS DB migration
- EMS Login / User registration
- Events list/map
- Event general info page

Screen example:



Other units are under development.

CIVL Scoring Programs

The contract between Flytec/Volirium and CIVL/FAI will be terminated at the end of the year. Joerg is willing to keep working for CIVL.

CIVL FS has served us well. It should be developed and maintained as long as there is no reliable replacement.

Naviter See You development has stopped for now.

PWCA CompCheck is reliable but designed, updated and owned by an individual. This makes it difficult to be chosen as a CIVL software.

AirScore has been developed by Antonio Golfari and Steward McIntosh. It looks promising and seems to fit the needs of CIVL (open source, appropriate technology, online use allowed).

Joerg agrees to follow FS and WPRS maintenance and development as long as needed. He presents a budget to the Bureau. The Bureau agrees to finance FS and WPRS as presented by Joerg.

AirScore

The project was started by Geoff Wong and continued by Antonio Golfary and Stuart Macintosh.

Website: <https://airscore.legapiloti.it/>

Antonio Golfary agrees to lead the project of transforming the current AirScore in a full CIVL-approved software.

A specific AirScore Basecamp Project was implemented. Mitch Shipley and Igor Erzen represent the CIVL Bureau. The Project will define what exactly needs to be done to transform AirScore in a full CIVL-approved software.

January 2019 AirScore Project Status:

- In October we started recoding PHP part to Flask, at the moment we have a working flask frontend, admin backend still to implement
- We are working to add requested features, mainly strict application of FAI GAP and Airspace infringement check
- What is working at the moment:
 - Precise optimized route calculation using recurring algorithm
 - FAI GAP (ver. 2016/2018) both in PG and HG competitions;
 - FTV calculation, using validity or winner points;
 - Task, Track and Airspaces visualization on map;
- What is still work in progress:
 - Airspace checking and automatic penalties calculation;
 - New Flask framework based web application Frontend;
 - New Flask framework based web application Admin backend.

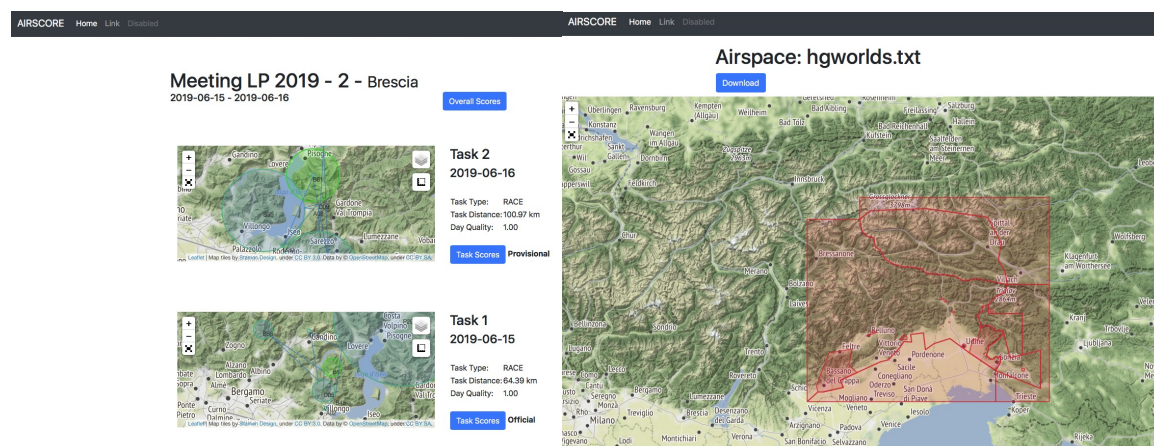
Estimated time to completion 6 months

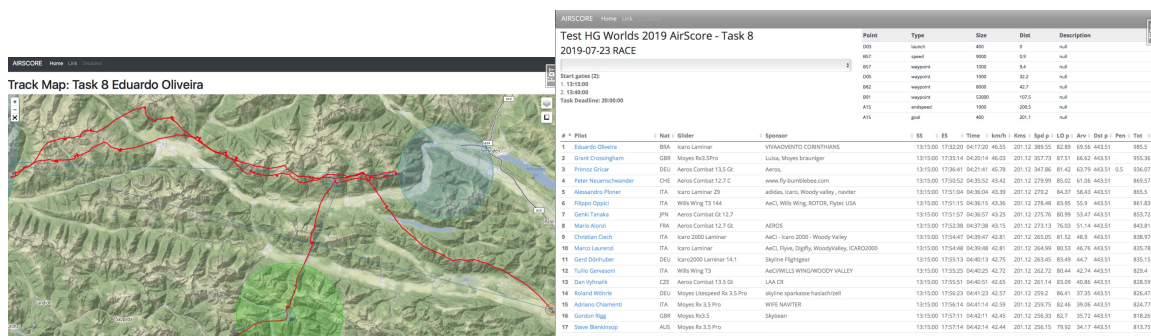
Workforce: 2 programmers (Python, Flask, PHP, MySQL)

Technical needs: productive MySQL server.

Deadlines and budget will be proposed by Antonio Golfary.

New version of Airscore on Flask





Scoring Formulas

Software working group discussed the necessary changes of GAP

1. Remove final glide decelerators
2. No more prescribed turnpoint direction (including start)
3. Goals will always be cylinders from 2021
4. Clarify task distance calculation
5. Clarify rule for restarts for races with multiple start gates and for elapsed time tasks
6. Use a constant leading weight for paragliding
7. Task results are given with one decimal point, only round once when calculating competition results
8. Adopt the PWCA's leading points calculation for paragliding
9. Adopt the PWCA's time points calculation for paragliding
10. No more minimum time for stopped tasks
11. Stopped tasks: Redistribute removed time points as distance points
12. FTV: Use best score for FTV validity

That result of the discussion is presented in the proposal to the Plenary of the number of changes in GAP.

https://www.fai.org/sites/default/files/documents/annexe_30a_proposal_changes_to_section_7f_2_formatted.pdf

https://www.fai.org/sites/default/files/documents/annexe_30b_-_proposal_section_7f_-_xc_scoring.pdf

WPRS

The 2018 plenary adopted a Brazilian proposal in these terms: ‘Task CIVL to ... find a solution to reduce disadvantage for non-European competitions points in WPRS, with perhaps the idea of taking the top 25% to 33% pilots as the reference of the event’s points instead of the top 50% pilots as it’s today.’

We have looked into things but it is just not so simple to change WPRS. It just can not be done. There are some many things that effect WPRS, so I single change will not bring any benefit. Daniel Dimov and someone else, did some simulations, but none seems to be either effective or practical in reality.

Long term perspective

A necessity for a new (media oriented) scoring formula

XC Competition scoring has become impossible to understand for most of the pilots and public. There is something basically wrong when the first group of pilots reaching the goal have no idea for sure of who will win the task, or when additional software are needed to help understand the consequences of the used formula.

Despite its failings, GAP is considered as our XC bible and alternative scoring formulas have a hard time being developed, tested, implemented.

The CIVL Bureau believe that it is time to help the development of alternative formulas that anybody – pilots, public, media – can understand. The aim is to change XC competition from a full-of-passion but confidential sport to one that can have mediatic hence commercial impact.

The CIVL Bureau will share its vision with the plenary and will propose to organise a one- or two-day seminar that will examine all alternatives scoring systems and decide on the way forward.

CIVL Category 1 Accepted Instruments

During the year of 2017 3 more instruments were reviewed by the work group and added to the list of accepted by CIVL.

The workgroup includes: Brian Harris, Daniel Dimov, Gordon Rigg, Igor Erzen, John Stevenson, Mitch Shipley, Oyvind Ellefsen, Richard Bungay.

The current list is on CIVL website:

<https://www.fai.org/page/civl-xc-instrument-accepted>