**CIVL 2019 PLENARY – ANNEXE 18**
**SOFTWARE OFFICERS REPORT**

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## Scoring Systems

Continued progress was throughout the year on the evolution of approved CIVL Cross Country scoring systems. FS, our legacy system, had several upgrades that included the ability to either score using distance calculations for control points by the FAI sphere (FS 2016R1.7 used for hang gliding) or WGS 84 ellipsoid (used in paragliding). Defining a single required distance calculation for Cat 1 competitions allowed the testing of reducing the turnpoint error tolerance to 0.2 percent (down from 0.5 percent) of the turnpoint radius. The results from that testing indicated that a reduction to 0.1 percent is achievable, which would further reduce the size of the turnpoint error band for large (~ 30–50 km) turnpoint radii and improve fairness for all pilots.

Progress was made on the testing of Naviter SeeYou software as the future replacement application to run CIVL approved scoring scripts for cross country competitions. This move was decided on based on the significant history of SeeYou being used as a scoring system software and the agreement of Naviter to continue the support/updates of the software to support our competitions.

## 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 (AMS) to be used for sanctioning of mainly FAI Category 2 events. The project was carried out by FAI IT partner Noosphere a development company from Ukraine. Work group consisted of Antonis Papadopulos CIAM President, Elena Filonova CIVL Competition coordinator, Kyrylo Lester Noosphere project manager and Visa-Matti Leinikki FAI IT Manager. They have worked in close contact to develop the system.

AMS will allow 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 a shorter period.

Currently the system is in the final stage of development: user tests and fine-tuning. The system will be put into action early in 2019

Example of web interfaces:

## 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.

For FAI CIVL as a sport controlling organisation, the key activity scope is to provide fair and equal conditions to all sports professionals – both organisers and pilots. To ensure this, it is necessary to control that all pilots results are correctly calculated for rankings and that all organisers have access to the necessary IT facilities.

**Current problems:**

1. The organisers have to build their websites which they abandon and the history of sports is lost. They have to use various third-party services that are not always suitable.
2. If they do not have the budget for a web building, communication almost does not exist. Many category 2 events still not have any (!) website and online registration. It is a shame to conduct registration in 2018 by email.
3. The organisers have to spend much time checking pilots' documents and licences which they do not do in a proper way. As a result, we get a lot of confusion, with pilots who have Sporting Licences marked as not having it and vice versa.
4. Pilots are wrongly ranked due to registration confusion (same as above).

5.  Also due to lack of technology, all is based on faith and trust that is misused by some organisers: they do not declare correct entry fee to save on sanction payments.
6.  Many organisers forget (!) to send results for rankings. As a result pilots lose points.
7.  No specific sports information centre. Information is provided by 3d party services as PG Forum, Airtribune, Livetrack 24, etc.
8.  Social virality of the pilot's achievements (rank) is next to poverty.
9.  CIVL do not have a unified list of officials working on Cat 2 events worldwide. We should have a proper history of the work of our sports professionals.

**What is CIVL EMS:**

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 and will keep records of working professionals. It will also provide automation of processes to export data into Live tracking and Scoring services.

Benefits for organisers

- Saving investment on the competition website and online registration.
- Saving on workforce and time (automated procedures, easy control of registrants).
- Event promotion tool.
- Unified calendar of all HG PG events
- The system will allow all organisers to use it, not only cat 2.
- DB of HG PG Sports professionals


Benefits for pilots

- Easy registration.
- Removal of duplicates.
- True information about event status (Cat 2 or not)
- Fast result processing
- Correct ranking
- Social sharing of results.


Benefits for FAI CIVL

- Control over sports professionals worldwide (meet directors, judges, etc.).
- Centralised communication to sports community.


After inquiries on the subject where to get best development work force at the lowest price level 3 companies from Macedonia, Ukraine and Portugal were selected. In the meantime, CIVL Administrator prepared technical description of the project – a 58-page document that included system objects hierarchy with detailed description of their attributes and their interaction and web interfaces with UX processes listing.

The selected companies received the technical documentation. It took them about 1 month to study the requirements after which they suggested their budgets which were varied in 10K price range. The lowest price was suggested by Ukrainian company Noosphere which actually won the tender with 40K of estimate. The other pro-factor of selecting Noosphere was the fact that they work on FAI AMS system and FAI DB and it will be easier for them to create connections and interactions of all 3 elements.

The CIVL EMS will be created with the propriety of code belonging to CIVL and CIVL Administrator will follow the matter to ensure that all the systems will be duly documented and reserve-copied.
In this work CIVL Administrator will be supported by CIVL IT Partners and the discussion the 3 CEOs – Joerg Ewald (Volirium), Cristiano Pereira (Flymaster) and Andrej Kolar (Flytech-Naviter) – have confirmed they will be ready to help and provide their programming experience, expertise and consultations to implement this project.

In December 2018 the project is still under the approval of CIVL Bureau and FAI EB. The works are scheduled to begin in January 2018 and will optimistically take 4–6 months.

## CIVL Category 1 Accepted Instruments

During the year of 2017 Software working group was engaged to develop the requirement for CIVL Approved loggers for Category 1 events. It resulted in a specification document approved by CIVL Plenary 2018.

The work group agreed on the guidelines to the organiser to add the instrument on the list. Both the guidelines and the specification are published on FAI CIVL website:
https://www.fai.org/page/civl-xc-instrument-accepted

The first CIVL Accepted Instruments list was published on the website on July 10, 2018. Since that time more manufacturers have submitted the Conformity declarations. The working group have reviewed them, some of them were asked to send additionally IGC files. The updated list of instruments approved for the use at FAI Category 1 events will be published on the website before the Plenary 2019.