The least we can say is that the last few years CIVL has been struggling with its software strategy, decisions and implementation. The Software Working Group was not very active, individual proposition got voted but not carried out...

In February 2016, Brian Harris agreed to help the Bureau ‘see the light’. At the same time, we signed a contract with Flytec and its Boss, Joerg Ewald, who had played a central role in our software program along the years. Due to Flytec economic difficulties, the scheme did not work as well as expected. Still, progress has been made in defining our goals, some of them fitting hopefully in the global FAI IT projects.

On the side, Chris Trow and Claudia Mejia worked on a ‘CIVL Competititon Timeline’ calendar, almost ready at the time this report is written. Thanks to Chris and Claudia. And thanks to Brian for his help. His report follows.

### 1. WPRS

Changes to the WPRS to comply with the May 2016 version of S7 were implemented for all competitions finishing after the 1st May. These were minimum pilot numbers required for Cat 2 competitions and minimum number of tasks required to validate HG and PG Accuracy (reduced to 1). In addition, to support these changes the Task devaluation parameter in the WPRS formula was brought in line with PG XC for HG and PG Accuracy. The Td value is now 3 tasks = 1.0, 2 tasks = 0.8 and 1 task = 0.5.

### 2. FS

FS 2015 release 4 was released in August 2016. This contained various bug fixes and the implementation of barometric altitude checking. The scorer can now set the QNH of the day for the task. The default value for ‘jump the gun’ was also changed to reflect the value published in S7 2016.

There remain some changes to the scoring formula that were approved by the 2016 Plenary, that have not yet been implemented due to the constraints on the developer’s time as outlined in the introduction. These concerned changes to leading points and the time points distribution, relevant only to PG XC.

The complexity and the state of the current code of FS has led the developer to conclude that further enhancement and maintenance of FS will be very difficult and that the CIVL should consider either a major rewrite of the code (probably prohibitively expensive) or replacement with another system (this will be reported elsewhere).

### 3. Event Management

Following a meeting in early March we produced an outline document (vision) of the direction that CIVL would like to see our software develop so that we have an integrated event management system. A summary of the main points is below.

**Background:**
At present, every Cat 1 event organiser creates his own website for an event, or uses a 3rd party website (i.e. Air Tribune or Livetrack 24). Every organiser creating his own website then has to create an online pilot/team registration system, competition information area, media area, results display facility etc. When using a 3rd party website, there are advantages (some features such as registration, results display are built in) and limitations (limited blog/competition info facilities, administration access for databases, changes etc). Also, standards are very variable, FAI branding is generally limited.

CIVL has considered for many years that a common, freely available, standard ‘front end’ pilot/team registration system would be of significant benefit to Cat 1 organisers. It was on the ‘wish list’ of the CIVL Software Working Group for many years. A more encompassing Event Management System is now part of the CIVL ‘vision’.

**Summary description:**
A flexible, maintainable, adaptable platform on which to ‘plug and play’ functional modules in order to create a flexible, integrated, front to back, web-based system to support CIVL’s Championships, test events and possibly also Cat 2 competitions. The system should be designed such that it can be easily modified to accommodate rule changes. It should be sufficiently ‘open’ to allow easy integration of 3rd party modules (such as discipline-specific scoring/display, live tracking etc). It should be proprietary to FAI/CIVL and not reliant on any single vendor/single source products.

The ‘deliverable’ could be:
- a template system that an organiser can take and use, in its entirety, in order to create the championship website, hosted on his own server or on FAI server (with administrator access)
- a configurable module or set of functional modules that an organiser can plug into his own website or which can be accessed from his own website but hosted by FAI.

**Features should include:**
- Secure online pilot and team registration system. Ideally, pilot information fields (name, dob, nationality, WPRS ranking, email etc) are automatically populated from CIVL database via CIVL ID/WPRS.
- A linked team/NAC registration/verification facility is very important (not supported by 3rd party websites and often forgotten by organisers).
- A status table (qualification/eligibility, NAC approval, payment etc).
- Database creation & support:
  - Organiser access to a compiled database for mailing purposes, complete with queries to create a range of specific mailing lists (pilots, NACs, team leaders etc).
  - Organiser access to database for competition forms (such as entry list, launch order lists etc). Also for scoring set up, and other functions (to be specified later).
  - Interfacing potential for easy connection and data transfer to/from:
    - Cross Country Live Tracking (supporting whatever systems/units used) for live displays during task, automatic task upload to units, task visualisation, Live Leaderboard, etc. (aka LiveTrack24, Air Tribune).
    - Scoring systems for automatic (live or delayed) results upload per task/run; updating overall results, team results etc.
    - For Accuracy/Aerobatics instant scoring/results updates, video feed (possibly), pilot profiles etc.
  - Automatic upload of final results to CIVL website for WPRS.
  - To be further specified, but could include a facility for instant updates as results are uploaded.
The WPRS has the potential of becoming a lively feature that will attract many pilots often to visit the site (more FAI visibility and website traffic). It may even create advertisement or sponsorship opportunities, and consequently further income for CIVL.

- Facilities for organiser to load competition specific information
  Programme, Location & HQ, Local Regulations; news & daily blog; media & photos/videos; results pages (historic and live updates); sponsor logos and info; links to partner sites.

4. Competition Calendar:
CIVL would like its own calendar, separate from the FAI calendar. It should be more intuitive to use, and support events planned at least 3 years ahead (Cat 1s are typically approved 3 years ahead. Organisers should be able to register their planned competition on the calendar themselves.
The system should have the facility to display a dateline: that is the ability to see, for example, all competitions planned to run over a particular period of time. This will help organisers avoid clashes. A colour coding field system would denote whether Cat 2 sanctioning is planned – or not –, in progress, or completed.
Such a calendar system is already in use by IGC, commissioned from a 3rd party company, Output 42. A version of this would probably suit CIVL’s needs.

5. FAI and Event Management
The FAI is now working with various external agencies to produce a comprehensive event management system. A workshop was arranged in Lausanne to allow all the commissions to present their requirements, and identify problems and challenges with their current software and event management systems. The workshop was moderated by Cassini an external consultancy agency. The workshop gave time for each commission to present, and then the opportunity to identify both common and individual requirements for a universal event management system. Also present were part of the team from CupNavigator which is the system the FAI has chosen to provide Event management for the 2017 World Games. They presented version 2 of their software and also took on board a list of requirements from the Commissions. They will focus on getting the software ready to be used by the four Commissions which taking part in the World Games. It is unlikely that the system will be ready to be used by the CIVL prior to the World Games. A report by Cassini following the workshop is currently being produced.