



# International Amateur Radio Union Region 1 Interim Meeting – Vienna Austria 27-28 April 2019



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## The IARU Region1 Contest Robot

### 1 Introduction

This document is written as background to discussions that will take place in Committee C5 at the Vienna Interim Meeting concerning the future direction for the contest robot. It is based on discussions with those more closely involved in the robot's history and development.

### 2 Background

Contests form an important part of amateur radio activities. Appealing to a wide range of amateurs, and increasingly the young, contests create activity on the band and build a community of common interest in amateur radio. A healthy and well managed contesting activity in IARU is therefore important for the future of our hobby.

### 3 IARU VHF+ Contests

IARU Region 1 sponsors a small number of VHF+ contests each year. These are:

- The 50/70 MHz contest, run on the third Saturday of June and the next day
- The 145 MHz contest, run on the first Saturday of September and the next day
- The UHF/Microwaves contest, run on the first Saturday of October and the next day

Many Member Societies in Region 1 have domestic contests running at the same time as the above (possibly with differing entrant categories). For larger societies particularly, the IARU contests are of less significance than the corresponding national contest. But for smaller countries, perhaps where there is no national contest running in parallel, the IARU contest is a significant event.

In the past, the IARU Region 1 VHF+ contests have been adjudicated on a shared basis by member societies. This had mixed success and the administration was variable and did not present the IARU contest management in a good light. It was therefore decided to develop the robot to the point where it could handle the IARU contests each year in a suitably modern manner.

More recently there has been a high level of interchange between the C5 Committee Chairman and the CWG Chairman about the Contest Server and in particular about budgetary provision. Before the organisation of the CWG there was no clear view who paid for this application although from 2014-16, IARU Region 1 paid a total of CHF 9750 for “improvements” to the robot. When the CWG was created in 2017, no further budget provision was discussed for the future development of contest-related software. Since then, requests have been made for spend amounting to nearly CHF 8,700. The EC decided that it could not fund this for reasons set out below.

For the urgent work, funding was kindly arranged by OE1MCU and DARC. However, this simply allowed the contest robot software to handle contests under adjudication for 2018 and did not include the full range of enhancements requested.

#### **4 What the robot does**

The robot exists to adjudicate the limited set of contests in (3) above (+Marconi contest), run on an IARU Region1-wide basis.

The parallel running of national and Regional contests adds a little complexity to the way entry logs are handled. The Robot can therefore accept logs either directly from the entrant or from identified Member Society contest managers who have a “bulk upload” facility. For those countries where the Contest Manager does not upload all logs received for the national contest, it is up to the entrant whether to enter for the IARU contest.

The current robot software has been developed by Indiware, a small software house in Austria. IARU users generally feel that the software, whilst performing the basic log checking routines, has poor user interface and limited functionality. Furthermore, even the smallest change to the software or entry screens, attracts an invoice from Indiware.

It is not entirely clear what IARU’s rights are to the Indiware software. Specifically, does IARU hold a copy of the source code and the documentation for the software, should Indiware cease trading? The Indiware website contains the following statement: *“The source code remains your property and makes your solution sustainably available and future-proof”* which suggests that IARU has rights to the source code. It is not clear where the source code is securely held in IARU.

The EC's reluctance to fund further spend on the robot in 2018 was a result of:

- The lack of 2018 budgetary provision
- A concern that there might be other, better, alternatives to satisfying the Region's software needs for contest adjudication in the longer term
- The lack of evidence of any audit or strategic plan about the development of the software. It is also unclear whether there is a full design specification for the original software.
- The response from Member Societies which were generally opposed to further spend when asked

The EC also questioned whether there was logic in continuing long term with a number of separate software packages in MS essentially to do the same thing and asked whether there was scope for synergy and savings. MS will be under serious financial pressures over the next decade and any opportunity to improve efficiency and reduce ongoing cost would seem to be to their advantage.

The CWG's focus seems to have been on getting the Robot to a more satisfactory state of functionality. It is not clear the degree to which it has taken a longer-term view about the strategy for adjudication in Region 1.

Since then, the difference in perspective between the EC and the CWG has not been resolved.

The current state of the robot is that it is capable of adjudicating foreseen contests, but its user-friendliness is not optimum and some of the more advanced features of log checking are not included in its functionality. There are also remaining issues under GDPR (see later)

## **5 GDPR and data security**

More recently, issues of data security have come into focus, with the requirements of GDPR. Currently it is understood that when submitting logs to IARU, contest entrants have to agree to the logs being shared amongst log-checking societies. However, when a bulk upload of logs from a MS Contest Manager takes place, there is no guarantee that the same agreement has been obtained from the entrant.

Advice from a data security/GDPR consultant can be summarised as follows.

- Log data which includes any of name, address, phone number, callsign, QRA is personal data comes within the scope of the data security arrangements set out in GDPR

- Logs may **only** be accepted by IARU after entrant acceptance of the data processing agreement and an associated privacy statement.
- Logs coming in bulk or singly from a Member Society can **only** be accepted if the member society confirms, and IARU has checked, that the log has been submitted to it in a similar manner to the above – with agreement from the entrant to data processing and a related privacy statement. IARU must be satisfied that this in fact the case.
- Those involved in the processing and adjudication of the logs must have training on their responsibilities for data security
- The logs and the data they contain must be destroyed once the purpose for which they were submitted has been achieved. Statistical data, not involving personal data can be retained.

Work is needed here to implement these requirements.

## 6 The Way Ahead

Region 1 needs to reach a conclusion on the strategy for software support to contest adjudication. The way ahead must achieve a solution that is both cost-effective and provides the right functionality and “future-proofing” in the software, with no issues about the long-term maintainability of the software.

The first problem is the question: do we need a dedicated contest robot for organizing 3 contests, given that some Member Societies already have their own contest robot? Why is the IARU Robot so essential?

Secondly, if IARU is to invest in a robot, what additional value does this spend give our MS when compared to other options open to us ?

Another issue is the collection of logs. If a Member Society wishes to evaluate its own contests, they ideally need logs from whole Europe (and beyond). Since 2007 this has been provided by a Polish server, which cannot adjudicate the contest. But this can be done by the IARU robot. Should this be put in to operation?

An independent audit of the Indiware software seems sensible, to assess whether it will be “fit for purpose” and provide a sound basis for further investment. There may be a few people in, or known to, IARU who can do this.

Then starting with the current functional specification, a statement of “end-state” functionality should be prepared, if it does not exist already, to define the “must have” elements of the final software package. This should be developed by the CWG in conjunction with someone who understands how to write functional specifications.

Related to the above work, there could be four ways ahead:

- Continued investment in Indiware
- Identification of an existing MS software package that, with minimum effort, could provide the necessary functionality. It seems that there are at least two MS which have good software. There may be a need to pay an “honorarium” to the developer to make the necessary changes to the software
- Identification of a software house which can build a program to the necessary level of functionality, although this is probably the most expensive option
- Reversion to the adjudication of IARU contests by MS on a shared basis.

There is then a question of whether the funding for future work comes from IARU Region 1 or from those Member Societies who wish to see the robot developed (there seems to be a difference in view about the robot’s value between member societies).

If work is to continue with Indiware, then it is essential to have written agreements with Indiware on source code ownership, SLA’s, privacy matters, etc.

It should be noted that if it were possible to harmonise the entry categories of the national MS contests, the process of data processing would be simplified and there would be much greater scope for sharing the technology platform. Longer term, is there a need to formalise the relationship between national contests and Regional contests in the interest of building more activity on the bands?

## **7 Summary**

It is proposed that the issues around the Contest Robot be discussed at Vienna interim meeting to agree a framework for a future work programme and suggest funding for consideration by the EC. We seem to have a window of opportunity now, whereby the robot is able to handle the 2019 contests and we should use this time to map out the way ahead based on sound research and objective assessment.

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