5 ELECTRONIC CONTEST LOG EXCHANGE

5.1 Introduction

At its meeting in Vienna 1998 the VHF/UHF/Microwaves Committee has recommended the use of the Electronic Contest Log distribution format for the exchange of log information concerning IARU Region 1 Contests. This recommendation has been endorsed by the IARU R1 EC at its 1998 meeting.

The aim of the common file format is to make contest log programmers able to deliver a standard output file from their programs, to enable contest managers to receive logs via data transfer system (e.g. diskettes, Internet) introduce electronic log processing and ease submission for participants.

What media to use is not specified, and is up to the contest manager. If Internet is a reliable medium it is a good choice, however, that does not solve yet the legal issue with the responsible operators signature yet required for IARU Region 1 contests.

When a contest manager invites to a contest she/he should state if electronic log submission is possible, in what way (e.g. INTERNET) and where (managers E-mail address), just like own mailing address. Contest managers must have a validation program to make a complete validation including cross checking etc. Contest participants can use the electronic data file format to submit their logs to the contest manager in time. To be able to do this, participants must use a contest program capable of generating a REG1TEST file.
Note: Many logging programmes do not yet accept a non-numeric character for the T part of the report. Users shall check this according to the recommendation in section **Fout! Verwijzingsbron niet gevonden.**

5.2 Logbook programs supporting EDI

- http://www.rudius.net/oz2m/taclog/
- http://www.ucxlog.org/
- http://www.win-test.com/
- http://lea.hamradio.si/~s52aa/vhfctest4win/
- http://saigacontest.gmxhome.de/
- http://www.n1mm.com/
- http://www.uba.be/sites/default/files/uploads/downloads/WinOnContest.zip

5.3 Standard format for Electronic Contest Log Exchange (Vienna 1998)

Electronic Data Interchange - EDI-file format for contests in Region 1 above 30 MHz. This document is the specification for the Region 1 above 30 MHz contest file formats. Examples for commonly known contests are shown in the appendix.

The aim is to make contest-log programmers able to deliver a standard (file) format from their programs, to enable contest managers to receive log data through various types of digital communication systems e.g. diskettes, e-mail, etc; for electronic evaluation purposes. (Prepared by: Bo Hansen, OZ1FDJ, Søren Pedersen, OZ1FTU)

5.3.1 Format

[REG1TEST;1]File identifier; file version
TName=	Contest name
TDate=	Beginning;ending date of contest
PCall=	Callsign used
PWWLo=	WWL used
PExch=	Exchange used
PAdr1=	Address line 1 from where the contest took place
PAdr2=	Address line 2 from where the contest took place
PSect=	Section in which station participates
PBand=	Band used during the contest
PClub=	Club station where points can be accumulated
RName=	Name of responsible operator
RCall=	Callsign of responsible operator
RAdr1=	Address line 1 of responsible operator
RAdr2=	Address line 2 of responsible operator
RPoCo=	Postal code of responsible operator
RCity=	City of responsible operator
RCoun=	Country of responsible operator
RPhon=	Phone number of responsible operator
RHBBS=	Home BBS of responsible operator
MOpe1=	Multi operator line 1
MOpe2=	Multi operator line 2
STXEq=	TX equipment
SPowe=	TX power [W]
SRXEq=	RX equipment
SAnte=	Antenna
SAntH=	Antenna height above ground level [m];height above sea level [m]
CQSOs=	Claimed number of valid QSOs;Band multiplier
CQSOP=	Claimed number of QSO-points
CWWLs=	Claimed number of WWLs;Bonus per each new WWL;WWL multiplier
CWWLB=	Claimed number of WWL bonus points
CExcs=	Claimed number of Exchanges;Bonus per each new Exchange;Exchange multiplier
CExcB=	Claimed number of Exchange bonus points
CDXCs=	Claimed number of DXCCs;Bonus per each new DXCC;DXCC multiplier
CDXCB=	Claimed number DXCC bonus
CToSc=	Claimed total score
CODXC=	Call;WWL;distanceBest DX contact

[Remarks]Remarks identifier
Remarks lines

[QSORecords;Number of QSO records following]QSO records identifier;number of QSO records following Date;Time;Call;Mode code;Sent-RST;Sent QSO number;Received-RST;Received QSO number; Received exchange;Received-WWL;QSO-Points;New-Exchange-(N);New-WWL-(N);New-DXCC-(N);Duplicate-QSO-(D)

5.3.2   Explanation of keywords in header

Keywords are defined as the word in front of the actual argument. The keyword is separated from the argument with an equal sign (=).

[REG1TEST;1]
REG1TEST;1 is the file identifier and the file version. It serves as indicator for which format and version is being used and where data begins.

TName
Argument describes the name of the contest in which the station participated.

TDate
Arguments describe the beginning and ending dates of the contest. Arguments are separated with a semicolon (;). Arguments are written as YYYYMMDD.

PCall
Argument describes the callsign used during the contest.

PWWLo
Argument describes own World Wide Locator (WWL, Maidenhead, Universal Locator) used during the contest. Maximum length is six characters.

PExch
Argument describes own Exchange during the contest. This can be any type of information, e.g. Province, DOK, County, State, Power, Name. Maximum length is six characters.

PAdr1
Argument describes the address of the QTH used during the contest, line 1.

PAdr2
Argument describes the address of the QTH used during the contest, line 2.

PSect
Argument describes in which section the station is participating. Synonyms to the meaning Asection@ are: class, category, group etc.

Section	*PSection*
SINGLE	SO, SINGLE, SINGLE-OP
MULTI	MO, MULTI, MULTI-OP
6 HOURS SINGLE	SO-6H, SINGLE-OP-6H
6 HOURS MULTI	MO-6H, MULTI-OP-6H
SINGLE with MGM	SO-MGM, SINGLE-OP-MGM
MULTI with MGM	MO-MGM, MULTI-OP-MGM

PBand
Argument describe which band was used during the contest. Please note the bands and which frequency range they represent in the table below:

Frequency	*PBand*
50 - 54 MHz	50 MHz
70 - 70,5 MHz	70 MHz
144 - 148 MHz	145 MHz
430 - 440 MHz	435 MHz
1240 - 1300 MHz	1,3 GHz
2300 - 2450 MHz	2,3 GHz

3400 - 3600 MHz	3,4 GHz
5650 - 5850 MHz	5,7 GHz
10,0 - 10,5 GHz	10 GHz
24,0 - 24,25 GHz	24 GHz
47,0 - 47,2 GHz	47 GHz
75,5 - 81 GHz	76 GHz
120 - 120 GHz	120 GHz
142 - 148 GHz	144 GHz
241 - 250 GHz	248 GHz

PClub
Argument describes the callsign of the radio club where operator(s) are member. Can be used if points are accumulated to the club etc.

RName
Argument describes the given- and surname of the responsible operator.

RCall
Argument describes the callsign of the responsible operator.

Adr1
Argument describes the address of the responsible operator, line 1.

RAdr2
Argument describes the address of the responsible operator, line 2.

RPoCo
Argument describes the postal code of the responsible operator.

RCity
Argument describes the city of the responsible operator.

RCoun
Argument describes the country of the responsible operator.

RPhon
Argument describes the telephone number of the responsible operator.

RHBBS
Argument describes the Bulletin Board System or electronic mail address of the responsible operator.

MOpe1
Arguments describe the operators participating in the contest, line 1. All arguments separated with a semicolon (;). Responsible operator is not needed in this argument.

MOpe2
Arguments describe the operators participating in the contest, line 2. All arguments are separated with a semicolon (;).Responsible operator is not needed in this argument.

STXEq
Argument describes the transmitting equipment used during the contest.

SPowe
Argument describes the transmitting power used during the contest, unit is Watt.

SRXEq
Argument describes the receiving equipment used during the contest.

SAnte
Argument describes the antenna system used during the contest.

SAntH
Arguments describe the antenna height above ground level and sea level, unit is meter. All arguments separated with a semicolon (;).

CQSOs
Arguments describe the claimed number of valid QSOs and the band multiplier. All arguments are separated with a semicolon (;).

CQSOP
Argument describes the claimed total number of QSO-points. The format does not specify that QSO-points can only be based upon distances.

CWWLs
Arguments describe the claimed number of WWLs worked, the number of bonus points claimed for each new WWL and the WWL multiplier. All arguments are separated with a semicolon (;).
If no bonus points are claimed then bonus points per each new WWL are set to zero (0). If no multiplication is used for each new WWL the multiplier is set to one (1).

CWWLB
Argument describes the claimed total number of WWL bonus points.

CExcs
Arguments describe the claimed number of Exchanges worked, the number of bonus points claimed for each new Exchange and the Exchange multiplier. All arguments are separated with a semicolon (;).
If no bonus points are claimed then bonus points per each new Exchange are set to zero (0). If no multiplication is used for each new Exchange the multiplier is set to one (1).

CExcB
Argument describes the claimed total number of Exchange bonus points.

CDXCs
Arguments describe the claimed number of DXCCs worked, the number of bonus points claimed for each new DXCC and the DXCC multiplier. All arguments are separated with a semicolon (;).
If no bonus points are claimed then bonus points per each new DXCC are set to zero (0). If no multiplication is used for each new DXCC the multiplier is set to one (1).

CDXCB
Argument describes the claimed total number of DXCC bonus points.

CToSc
Argument describes the total claimed score. The format does not specify how the total score is calculated.

CODXC
Arguments describe the claimed ODX contact call, WWL and distance. All arguments are separated with a semicolon (;).

[Remarks]

The [Remarks] identifier is used to mark where the Remarks begins. All lines following, until [QSORecords;Number of QSO records following], are remarks. If no remarks are written identifier must still be present.

Remarks lines

Remarks lines are where the station may write comments to the test. The number of lines is variable. All lines in between [Remarks] and [QSORecords;Number of QSO records following] are remarks.

[QSORecords;Number of QSO records following]

The [QSORecords;Number of QSO records following] is the QSO record identifier used to mark where QSO records begins, and how many consecutive QSO records to follow.

5.3.3   QSO record definition

Date;Time;Call;Mode code;Sent-RST;Sent QSO number;Received RST;Received QSO number;Received Exchange;Received-WWL;QSO-Points;New-Exchange-(N);New-WWL-(N);New-DXCC-(N);Duplicate-QSO-(D) All arguments are separated with a semicolon (;).All fields in the QSO record is written on the same line, and ending with ASCII characters 13 and 10 (CR LF).

Field	Content	Maximum
Date	YYMMDD, 6 characters	6
Time	UTC, 4 characters, with leading zeros	4
Call	3 to 14 characters	14
Mode code	0 or 1 character	1
Sent-RST	0 or 2 or 3 characters	3
Sent QSO number	0 or 3 or 4 characters, with leading zeros	4
Received-RST	0 or 2 or 3 characters	3
Received QSO number	0 or 3 or 4 characters, with leading zeros	4
Received Exchange	0 or 1 to 6 characters (see also PExch)	6
Received WWL	0 or 4 or 6 characters, World Wide Locator	6
QSO points	1 to 6 characters, including bandmultiplier	6
New-Exchange	0 or 1 character, "N" if QSO is a new exchange	1
New-WWL	0 or 1 character, "N" if QSO is a new WWL	1
New-DXCC	0 or 1 character, "N" if QSO is a new DXCCL	1
Duplicate-QSO	0 or 1 character, "D" if contact is a duplicate QSO	1
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$$\underline{+ \text{ field separators, 14}} = 75$$

Mode code

The mode code is used to show which modes were used for the QSO. Below is a list of the code with corresponding modes.

Mode code	TX mode	RX mode
0	none of below none of below	
1	SSB	SSB
2	CW	CW
3	SSB	CW
4	CW	SSB
5	AM	AM
6	FM	FM
7	RTTY - MGM	RTTY – MGM (Varna 2014)
8	SSTV	SSTV
9	ATV	ATV

If the mode is not important it can be left blank, i.e. not stated in rules/invitation.

Characters
Used characters are in accordance with the 7-bit ASCII alphabet and only characters with the following decimal number are allowed 10, 13, 32-127.

Line length
If line length is already specified it must not be exceeded, other lines must not exceed a length of 75 characters. Length is limited due to Packet Radio transferral.

All lines, in the format description, with the "F" denote that entry is a *free format*. This means that any of the above characters in the 7-bit ASCII alphabet can be used.

All other entries are *forced format* and characters, as above, are in capital. All numbers in forced format are positive integers and non-exponential notation and entry cannot be left empty, i.e. 0 (zero) or greater. All forced formats must be in accordance with SI-units (Système International).

Separator (;)
This separator semicolon (;) is written to separate multiple information on same line.
If the format is used for a contest which does not use some of the QSO exchanges, i.e. QSO no., WWL and Exchange, these fields are left blank. Proper interpretation must be ensured by manager program.

Faulty QSOs
A duplicate QSO is marked with a "D" in the Duplicate-QSO field, and the QSO-points field is set to 0 (zero). The format does not define when a QSO is a duplicate.
An incomplete QSO is written with the information received, and the QSO-points field is set to zero (0). In case of a mistake, an error mark must be inserted in the Callsign field to keep a correct flow in the number of QSOs records. The error mark must be an "ERROR" and the other fields except Time and Sent QSO no., if used, can be left empty. In case the empty field is accumulated, e.g. QSO-points, it is set to 0 (zero).

QSO numbers
The format does not define in what order the QSO numbers must be listed. It is possible to use the format to submit logs for contests requiring consecutive numbers for all QSOs, even if they are on different bands.

Missing information
If a contest log program cannot fill in all the information, the missing information can be left blank, except if information is needed for claiming/calculating scores, e.g. log program cannot identify WWLs, DXCCs etc. If the information is required for the scores this log program cannot be used for this particular contest anyway.

The following section describes different EDI-files for various commonly known contest types.

5.3.4 Example: Region 1 Contest, standard type

[REG1TEST;1]
TName=IARU Region 1, March contest VHF
TDate=19950304;19950305
PCall=OZ1FDJ
PWWLo=JO65FR
PExch=
PAdr1=Herlevgaardsvej 32 A, st. tv., DK-2730 Herlev
PAdr2=
PSect=Multi operator
PBand=144 MHz
PClub=OZ2AGR
RName=Bo Hansen
RCall=OZ1FDJ
RAdr1=Herlevgaardsvej 32 A, st. tv.
RAdr2=
RPoCo=DK-2730
RCity=Herlev
RCoun=DENMARK
RPhon=(+45) 42 91 53 98
RHBBS=OZ6BBS
MOpe1=OZ1FTU
MOpe2=
STXEq=FT-225RD+MRF247
SPowe=90
SRXEq=FT-225RD+MuTek+BF981 1,5 dB NF
SAnte=9 elements OZ5HF
SAntH=14;41
CQSOs=24;1
CQSOP=11579
CWWLs=19;0;1
CWWLB=0
CExcs=0;0;1
CExcB=0
CDXCs=7;0;1
CDXCB=0
CToSc=11579
CODXC=OY9JD;IP62OA;1302
[Remarks]
Nice with the Aurora, made it possible to work more than usual
in a 24 h contest. Nice to hear Jon (OY9JD) again, but, many
stations calling so no time for chat.
Besides the Aurora there was only little activity, as usual, in Scandinavia.
[QSORecords;26]
950304;1445;OZ9SIG;1;59;001;59;006;;JO65ER;6;;N;N;
950304;1446;DL5BBF;1;54;002;59;023;;JO42LT;396;;N;N;
950304;1449;OZ1HLB/P;1;59;003;59;015;;JO55US;48;;N;;
950304;1450;DL6FBL;1;53;004;51;092;;JO40XL;608;;N;;
950304;1454;DF0TAU;1;54;005;59;084;;JO40QO;606;;;;
950304;1508;DJ3QP;1;55;006;59;095;;JO42FB;485;;;;
950304;1510;DG5TR;1;53;007;53;006;;JO53QP;242;;N;;
950304;1519;DL0WU;1;55;008;53;108;;JO31OF;609;;N;;
950304;1528;DL3LAB;1;59;009;59;046;;JO44XS;191;;N;;
950304;1532;DL5XV;1;56;010;59;033;;JO53AO;283;;;;
950304;1544;OZ8RY/A;1;56;011;57;010;;JO66HB;39;;N;;
950304;1553;OZ1AOO;1;59;012;59;001;;JO65FR;1;;;;
950304;1603;ERROR;;;013;;;;;0;;;;
950304;1618;DL0WX;1;53;014;52;174;;JO30FQ;688;;N;;
950304;1626;SM4HFI;2;53A;015;54A;019;;JP70TO;573;;N;N;
950304;1631;GM4YXI;2;57A;016;55A;015;;IO87WI;911;;N;N;
950304;1636;OH2AAQ;2;52A;017;59A;015;;KO29FX;851;;N;N;
950304;1640;OH2BNH;2;55A;018;57A;024;;KP20LG;891;;N;;
950304;1641;LA2AB;1;59A;019;57A;027;;JO59FV;479;;N;N;
950304;1646;SM5BSZ;2;55A;020;57A;029;;JO89IJ;480;;N;;
950304;1700;SK5BN;2;51A;021;55A;026;;JP80UE;585;;N;;
950304;1720;DL9LBA;2;529;022;559;056;;JO44UP;213;;;;
950304;1730;SK6NP;2;559;023;539;029;;JO68MB;262;;N;;
950304;1736;OH1MDR;2;52A;024;57A;023;;KP01VJ;830;;N;;
950304;1739;OY9JD;2;51A;025;52A;011;;IP62OA;1302;;N;N;
950304;1826;OZ9SIG;1;59;026;59;006;;JO65ER;0;;;;D

5.3.5 Example : AGCW DL VHF Contest (contest manager: DJ2QZ)

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[REG1TEST;1]
TName=AGCW contest 2 m
TDate=19950318;19950318
PCall=OZ1FDJ
PWWLo=JO65FR
PExch=C
PAdr1=Herlevgaardsvej 32 A, st. tv., DK-2730 Herlev
PAdr2=
PSect=C
PBand=144 MHz
PClub=OZ2AGR
RName=Bo Hansen
RCall=OZ1FDJ
RAdr1=Herlevgaardsvej 32 A, st. tv.
RAdr2=
RPoCo=DK-2730
RCity=Herlev
RCoun=DENMARK
RPhon=(+45) 42 91 53 98
RHBBS=OZ6BBS
MOpe1=
MOpe2=
STXEq=FT-225RD+MRF247
SPowe=90
SRXEq=FT-225RD+MuTek+BF981 1,5 dB NF
SAnte=9 elements OZ5HF
SAntH=14;41
CQSOs=24;1
CQSOP=11579
CWWLs=19;500;1
CWWLB=9500
CExcs=3;0;1
CExcB=0
CDXCs=7;0;1
CDXCB=0
CToSc=11579
CODXC=OY9JD;IP62OA;1302
[Remarks]
Nice with the Aurora, made it possible to work more than usual.
Nice to hear Jon (OY9JD) again, but, many stations calling so no time for chat.
Besides the Aurora there was only little activity, as usual, in Scandinavia.
[QSORecords;26]
950318;1600;OZ9SIG;2;599;001;599;006;B;JO65ER;6;N;N;N;
950318;1602;DL5BBF;2;549;002;599;023;C;JO42LT;396;N;N;N;
950318;1607;OZ1HLB/P;2;599;003;599;015;C;JO55US;48;;N;;
950318;1609;DL6FBL;2;539;004;519;092;C;JO40XL;608;;N;;
950318;1614;DF0TAU;2;549;005;599;084;B;JO40QO;606;;;;;
950318;1618;DJ3QP;2;559;006;599;095;C;JO42FB;485;;;;;
950318;1625;DG5TR;2;539;007;539;006;A;JO53QP;242;N;N;;
950318;1628;DL0WU;2;559;008;539;108;C;JO31OF;609;;N;;
950318;1630;DL3LAB;2;599;009;599;046;C;JO44XS;191;;N;;
950318;1632;DL5XV;2;569;010;599;033;C;JO53AO;283;;;;;
950318;1644;OZ8RY/A;2;569;011;579;010;A;JO66HB;39;;N;;
950318;1653;OZ1AOO;2;599;012;599;001;A;JO65FR;1;;;;;
950318;1703;ERROR;;;013;;;;;;0;;;;
950318;1718;DL0WX;2;539;014;529;174;C;JO30FQ;688;;N;;
950318;1726;SM4HFI;2;53A;015;54A;019;C;JP70TO;573;;N;N;
950318;1731;GM4YXI;2;57A;016;55A;015;C;IO87WI;911;;N;N;
950318;1736;OH2AAQ;2;52A;017;59A;015;C;KO29FX;851;;N;N;
950318;1740;OH2BNH;2;55A;018;57A;024;C;KP20LG;891;;N;;
950318;1741;LA2AB;2;59A;019;57A;027;C;JO59FV;479;;N;N;
950318;1746;SM5BSZ;2;55A;020;57A;029;C;JO89IJ;480;;N;;
950318;1800;SK5BN;2;51A;021;55A;026;C;JP80UE;585;;N;;
950318;1820;DL9LBA;2;529;022;559;056;C;JO44UP;213;;;;;
950318;1830;SK6NP;2;559;023;539;029;B;JO68MB;262;;N;;
950318;1836;OH1MDR;2;52A;024;57A;023;C;KP01VJ;830;;N;;
950318;1839;OY9JD;2;51A;025;52A;011;C;IP62OA;1302;;N;N;
950318;1846;OZ9SIG;2;599;026;599;006;B;JO65ER;0;;;;D
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6 AUTOMIC CONTEST ADJUCTION SOFTWARE

In this section we will explain the working of the contest robot and give guidelines for other member societies who want to make their own contest robot. (Vienna 2016)