



International Amateur Radio Union Region 1 2011 Regional Conference – Sun City, South Africa 12 to 19 August 2011



Subject	QSO Definition		
Society	NRRL	Country:	Norway
Committee:	C4	Paper number:	SC11_C4_14
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Also Document SC11_C5_24

Formation of a joint ad-hoc working group from C4 and C5 to report back to C4 and C5

Summary

It is recommended that a general definition of a QSO (meaning communication; 2-way contact) is included in the HF Manager's Handbook. The ideal situation would be if the general definition of a QSO were the same in both the HF and the VHF Managers' Handbooks. NRRL offers a proposal for a general definition of a QSO, as a starting point for a discussion of a universal QSO definition. Requirements that are more detailed may of course be specified in addition for specialized types of QSOs (like VHF meteor scatter, moon bounce, and others).

Conclusion / recommendation

NRRL wishes to attain a general definition of the requirements for a QSO, both across the IARU Regions and across frequencies (i.e. both below and above 30 MHz). More detailed requirements may of course be specified in addition for specialized types of QSOs.

1. It is recommended that a QSO (meaning communication; 2-way contact) between two radio station operators is complete, when the following exchange has been completed via radio, without outside help by others:

- a. both radio station operators have comprehended each other's call signs; plus**
- b. some other information (commonly a report, for instance RST) has been exchanged; plus**
- c. confirmations have been exchanged that the other operator has received the above (call sign and some other information).**

2. This recommendation should be included in the HF- and the VHF Manager's Handbook.

Introduction

NRRL raised the QSO definition question at the IARU Region 1 Conference in Cavtat 2008 for the C4 and C5 committees, in order to reach a universal definition for what is a QSO.

The question was unfortunately treated in the two committees separately, instead of

being treated by a joint C4 and C5 ad-hoc committee. The result was that C5 kept their own previous definition of a QSO in the VHF Manager's Handbook, while C4 does not have a definition of a QSO in the HF Manager's Handbook.

This question was again raised at the IARU Region 1 Interim Meeting in Vienna 2010. It was not time to discuss this matter at that meeting, hence C4 asked NRRL to raise the question again at the IARU Region 1 Conference in 2011.

One may say that contest rules and award rules specify what constitutes a valid QSO. However, the rules are different for different contests and awards; hence, there is no definition in the HF world within IARU Region 1 for what are the necessities of a QSO, outside specific contests and specific award hunting.

NRRL thinks that the HF Manager's Handbook should contain a general definition of a QSO, listing the minimum requirements for what is a QSO. The fundamental and general definition should ideally be the same below and above 30 MHz within the IARU.

Background

The following (slightly modified) was submitted by NRRL to the IARU Region 1 Conference in Cavtat 2008:

2-way contacts, communication, which in the old Q-signals Code is designated **QSO**, is the fundamental activity within amateur radio (HF Manager's Handbook Chapter 10.8). This fundamental activity is the basis for claiming points in contests, and for claiming QSL cards and awards.

Yet the requirements necessary for defining a QSO is *not* included in the HF Manager's Handbook (hereafter called "HF MH").

In the HF MH, in Chapter 7.3 under "Lists and nets," paragraph 4, is described [LO = List Operator]:

A valid QSO requires some minimum of two-way exchange of information. As stations are usually addressed by call sign this information has already been imparted to the DX station, nevertheless the LO should seek to avoid passing the whole call sign if possible.

Convention has established that the exchange need only be a correctly received RS report by both parties. It is therefore the responsibility of the LO at all times to ensure that this is accomplished fairly, accurately and without assistance. Whilst repeats are in order, if necessary, verification of partly received reports is not.

Our proposed QSO definition is in harmony with this procedure, in that the call signs should be perceived by the station operators, and that some minimum information should be exchanged via radio without outside help by other stations. However, the QSO definition should be stated as a separate chapter, not only to be valid during list operations.

In the VHF Manager's Handbook (VHF MH), in Chapter 6.1, under "Minimum re-

quirements for a valid QSO" (Vienna 2007), is described:

6 OPERATING PROCEDURES

6.1 Minimum Requirement for a valid QSO (Vienna 2007)

A definition for a valid QSO on VHF and on higher bands is:-

A valid contact is one where both operators during the contact have

(1) mutually identified each other

(2) received a report, and

(3) received a confirmation of the successful identification and the reception of the report.

It is emphasized that the responsibility always lies with the operator for the integrity of the contact.

This definition is manifested in the procedures for QSOs via meteor scatter, here from VHF MH Chapter 6.3:

6.3.9 VALID CONTACTS

A valid contact is one where both operators have copied both callsigns, the report and an unambiguous confirmation. However no recourse should be made during the contact to obtain the required information, change of frequency, antenna direction, etc. via other methods such as the DX Cluster, talk-back on another band, etc. Such secondary methods invalidate the meteor scatter contact. In essence: if anything concerning the ongoing QSO attempt is agreed through other means than the QSO attempt frequency a new start is required.

A number of contests (especially among American contests) follows the recommendation that *some information* should be exchanged in addition to the call signs, and they don't require the exchange of signal reports like RS(T) [= Readability, Strength, Tone]. For instance, the ARRL VHF and UHF contest rules require the exchange of the grid square, while rule that the exchange of RS(T) is optional.

Here is an example from the rules of the ARRL Field Day [from www.arrl.org]:

Stations in ARRL / RAC sections will exchange their Field Day operating Class and ARRL / RAC section. Example: a three transmitter class A station in Connecticut which also has a Novice/Tech station and one VHF station would send "3A CT" on CW or "3 Alpha Connecticut" on phone. Foreign stations send RS(T) and QTH.

To see an example of a "different" contest exchange, here is an example from the ARRL Sweepstakes Contest rules with no RS(T) required [from www.arrl.org]:

WA4QQN would respond to W1AW's call by sending: W1AW 123 B WA4QQN 71 NC which indicates QSO number 123, B for Single Op High Power, WA4QQN, first licensed in 1971, and in the North Carolina section.

W3ZZ discusses "What is a contact?" in QST March 2006, and concludes:

"How the QSO is arranged temporally and the nature of the signal report can vary, but identification and exchange of information are absolute requirements." ...

"You must copy information, and know that you've copied it, before you can truthfully send the R R R R R that will conclude the QSO. To this day we still follow the same general outline* but with a few changes. Exchange of signal reports has come to mean exchange of at least one specific piece of information beyond the other stations call sign. This can be an actual signal report in one of several formats, an abbreviation for a signal report like OOO [in an EME QSO], which means full copy but at a very weak signal level, a grid locator or whatever. In addition, once the contact sequence has begun, there can be no communication between the participants by some other means like the telephone, the internet or some other amateur frequency, HF or VHF. If you communicate during the contact, you have to start all over again from the beginning."

* with reference to Edward P. Tilton (W1HDQ) 1957

Literature:

HF Managers Handbook, V 6.1, IARU Region 1, 2007:
<http://www.iaru-r1.org/HFM%20Handbook%20V6.1.pdf>, 149 pp.

Segalstad, Tom V. (LA4LN), 2007:
Hva er en QSO? [What is a QSO?] Amatørradio [NRRL], Vol. 72, No. 3, page 8.

Tilton, Edward P. (W1HDQ), 1957:
The world above 50 Mc: What is a contact? QST, March 1957, page 55.

VHF Managers Handbook, V 5.21, IARU Region 1, 2006 (with 2007 updates):
http://www.iaru-r1.org/VHF_Handbook_V5_21.pdf, 172 pp.

Zimmermann, Eugene (W3ZZ), 2006:
The world above 50 MHz: What is a contact? QST, March 2006, page 79.

25 March 2011

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Note:

Newer issues of the Managers Handbooks have been issued since the original proposal was made for the Cavtat IARU Region 1 Conference in 2008; the reason why these two references are now outdated in the list of literature above.