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SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-70112; File No. SR-C2-2013-029)

August 5, 2013

Self-Regulatory Organizations; C2 Options Exchange, Incorporated; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change Relating to the Technical Disconnect Functionality

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the “Act”),<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that, on July 29, 2013, C2 Options Exchange, Incorporated (the “Exchange” or “C2”) filed with the Securities and Exchange Commission (the “Commission”) the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change

The Exchange is proposing to amend its rules to codify the Technical Disconnect Mechanism. The text of the proposed rule change is available on the Exchange’s website (<http://www.c2exchange.com/Legal/>), at the Exchange’s Office of the Secretary, and at the Commission’s Public Reference Room.

II. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the

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<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4. The Commission notes that the Exchange filed the proposed rule change pursuant to Section 19(b)(3)(A)(ii) of the Act (15 U.S.C. 78s(b)(3)(A)(ii)) and Rule 19b-4(f)(5) thereunder (17 CFR 240.19b-4(f)(5)), which renders the proposal effective upon filing with the Commission.

purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange is proposing to amend C2 Rules to codify a Technical Disconnect functionality which is designed to assist C2 Permit Holders ("Permit Holders") in the event that they lose communication with a CBOE Application Server ("CAS") due to a loss of connectivity between their designated C2 Client Application and a CAS.

By way of background, C2 Permit Holders currently enter quotes and orders into a CAS via Client Applications. For purposes of this discussion, a "Client Application" is the system component, such as a Permit Holder's custom trading application, through which a Permit Holder communicates its quotes and/or orders to a CAS,<sup>3</sup> which sits between the Client Application and CBOE Command. Messages are passed between a Client Application and a CAS. The quotes a Market-Maker enters on the Exchange may be sent by a Market-Maker from one or more Client Applications. Similarly, the orders a Permit Holder enters on the Exchange may be sent by the Permit Holders from one or more Client Applications. When a CAS loses communication with a Client Application such that the CAS does not receive an appropriate response to a Heartbeat Request within "x" period of time ("Heartbeat Response Time"), the Technical Disconnect Mechanism will automatically logoff the Permit Holder's affected Client Application and, if applicable, will

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<sup>3</sup> C2 currently has numerous CASs serving Permit Holders.

automatically cancel any Market-Maker quotes posted through the affected Client Application. For purposes of this rule, a “Heartbeat Request” refers to a message from a CAS to a Client Application to check connectivity and which requires a response from the Client Application in order to avoid logoff. The Heartbeat Request acts as a virtual pulse between a CAS and a Client Application and allows a CAS to continually monitor its connection with a Client Application. Failure to receive a response to a Heartbeat Request within the Heartbeat Response Time is indicative of a technical or system issue. This function of automatically logging off a Client Application, and if applicable automatically cancelling Market-Maker quotes posted through the affected Client Application, when there is no response to a Heartbeat Request within the Heartbeat Response Time is intended to help to mitigate the potential risks associated with a loss of communication with a Client Application (e.g., erroneous or unintended executions due to stale quotes that remained in the C2 Book). This serves to assist a Permit Holder when such a technical or system issue occurs, and also assist the Exchange in maintaining a fair and orderly market generally.

A CAS will generate a Heartbeat Request to a Client Application after a specified interval (“Heartbeat Interval” or “‘n’ period of time”). Additionally as noted above, a CAS will disconnect a Client Application, and if applicable cancel any Market-Maker quotes posted through the affect Client Application, after a specified period of time if it does not receive an appropriate response to a Heartbeat Request (Heartbeat Response Time or “‘x’ period of time”). The Exchange notes that the Heartbeat Interval and the Heartbeat Response Time depend upon the Application Programming Interface

(“API”) a Permit Holder is using.<sup>4</sup> Currently, the Exchange offers two APIs: CBOE Market Interface (“CMi”) API and Financial Information eXchange (“FIX”) Protocol. CMi currently has only one version available: CMi 2. A Permit Holder may determine which of the available APIs, and if applicable, which version, it would like to use.

First, a CAS on the CMi 2 API will generate a Heartbeat Request to a Client Application (i) after the CAS does not receive any messages from a particular Client Application for “n” period of time or (ii) after every “n” period of time. A Permit Holder using CMi 2 will determine whether Heartbeat Requests are generated every “n” period of time or only if no messages are received for “n” period of time. A Permit Holder using the CMi 2 API will also determine the value of “n” at logon. In no event shall “n” be less than three (3) seconds or exceed twenty (20) seconds. If a CAS generates a Heartbeat Request only after it does not receive any messages from a particular Client Application for “n” period of time, the value of “x” (Heartbeat Response Time) will be set at a half (.5) second. If a CAS generates a Heartbeat Request every “n” period of time, the value of “x” shall be equal to the value of “n.” For example, if a Permit Holder using CMi 2 chooses to receive a Heartbeat Request every “n” period of time and sets the value of “n” to 6 seconds, then the Permit Holder’s Client Application must respond to a Heartbeat Request within 6 seconds or the Client Application will be disconnected.

A CAS on the FIX API will generate a Heartbeat Message to a Client Application after the CAS does not receive any messages from a particular Client Application for “n” period of time. If the CAS does not receive a response to the “Heartbeat Message” from

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<sup>4</sup> An API is a computer interface that allows market participants with authorized access to interface electronically with the Exchange. Multiple versions of each API may exist and other APIs may be supported from time-to-time.

the Client Application for “n” period of time, the CAS shall generate a Heartbeat Request to the Client Application. For purposes of this rule, a “Heartbeat Message” refers to a message from a CAS to a Client Application to check connectivity. Failure to respond to a Heartbeat Message within “n” period of time will trigger the generation of a Heartbeat Request. A Permit Holder using the FIX API will determine the value of “n” at logon. In no event shall “n” be less than five (5) seconds. The value of “x” (Heartbeat Response Time) will be set equal to the value of “n.” For example, if a Permit Holder using FIX sets the value of “n” to 6 seconds, then the Permit Holder’s Client Application must respond to a Heartbeat Request within 6 seconds or the Client Application will be disconnected.

The following example illustrates the manner in which the Technical Disconnect Mechanism functions on CMi 2 when a Permit Holder chooses to have the CAS generate a Heartbeat Request every “n” period of time. For purposes of this example only, the Permit Holder will be a non-Market-Maker and “n” will be set by the Permit Holder at 5 seconds:

- 1) 10:00:00 – Heartbeat Request sent to Client Application after logon  
10:00:020 – CAS receives a message from Client Application  
10:00:050 – Heartbeat Request sent to Client Application  
10:00:100 – No response to Heartbeat Request received by CAS within  
5 seconds  
– Client Application automatically logged off and pending  
orders previously entered from the Client Application remain  
in the System

The following examples illustrate the manner in which the Technical Disconnect Mechanism functions on CMi 2 when a Permit Holder chooses to have the CAS generate a Heartbeat Request only when the CAS does not receive any messages from the Client Application for “n” period of time. For purposes of these examples only, the Permit Holder will be a Market-Maker and “n” will be set by the Permit Holder at 5 seconds:

- 1) 10:00:00 – Heartbeat Request sent to Client Application after logon  
10:00:020 – CAS receives a message from Client Application  
– Counter re-starts  
10:00:070 – No messages received from Client Application within 5 seconds  
– CAS generates Heartbeat Request  
10:00:073 – CAS receives a message from Client Application  
– Counter restarts
- 2) 10:00:000 – Heartbeat Request sent to Client Application within login  
10:00:020 – CAS receives a message from Client Application  
– Counter re-starts  
10:00:070 – No messages received from Client Application within 5 seconds  
– CAS generates Heartbeat Request  
10:00:075 – No messages received from Client Application within a .5 second

- Client Application automatically logged off and pending Market-Maker quotes previously entered from the Client Application automatically canceled

Lastly, the following example illustrates the manner in which the Technical Disconnect Mechanism functions on FIX. For purposes of this example only, the Permit Holder will be a Market-Maker and “n” will be set by the Permit Holder at 5 seconds:

- 1) 10:00:00 – Heartbeat Request sent to Client Application after logon
- 10:00:020 – CAS receives a message from Client Application
  - Counter restarts
- 10:00:070 – No messages received from Client Application within 5 seconds
  - CAS generates Heartbeat Message
- 10:00:120 – No messages received from Client Application within 5 seconds
  - CAS generates Heartbeat Request
- 10:00:170 – No messages received from Client Application within 5 seconds
  - Client Application automatically logged off and pending Market-Maker quotes previously entered from the Client Application automatically canceled

As demonstrated above, a Heartbeat Request may be generated (i) every “n” period of time or (ii) when the CAS does not receive any messages from a Client Application for a specified period of time (“n” period of time) depending upon the API

being used. Regardless of the API being used however, if an appropriate response message to a Heartbeat Request is not received by the CAS from the Client Application within a specified period of time (“x” period of time or Heartbeat Response Time), the Technical Disconnect Mechanism is triggered and the Client Application is automatically logged off and, if applicable, a Market-Maker’s quotes through that Client Application are automatically canceled.

The Exchange notes that any non-connectivity is event- and Client Application-specific. Therefore, the cancellation of a Market-Maker’s quotes entered into a CAS via a particular Client Application will neither impact nor determine the treatment of the quotes of the same or other Market-Makers entered into a CAS via a separate and distinct Client Application. The Technical Disconnect Mechanism will not impact or determine the treatment of orders previously entered into a CAS. As discussed above, the function of automatically cancelling a Market-Maker’s quotes posted through an affected Client Application is intended to help to mitigate the potential risks associated with a loss of communication with a Client Application. For example, in today’s market, Market-Makers’ quotes are rapidly changing and can have a lifespan of only milliseconds. Additionally, under the System, trades are automatically affected against the Market-Maker’s then current quote. Therefore, if a Permit Holder’s Client Application is disconnected for any period of time, it is very possible that any quotes posted through that Client Application would be stale by the time the Permit Holder reestablished connectivity. Consequently, any resulting execution of such quotes is more likely to be erroneous or unintended. Conversely, the Exchange notes that orders tend to be static in nature and often rest in the book. Indeed, certain order types, such as Market-on-Close

orders, are intended to rest in the book for a period of time. As such, there is a lower risk of erroneous or unintended executions resulting from orders that remained in the System during and after an affected Client Application was logged off.

The Exchange next notes that the CAS will send a logout message to an affected Client Application that confirms that the Client Application connection has been terminated. Once connectivity to the Client Application is reestablished, a Market-Maker affected by the mechanism is able to send messages to the CAS to reestablish the Market-Maker's quotes. Any Market-Maker affected by the Technical Disconnect Mechanism is not relieved of its obligation to provide continuous electronic quotes in accordance with the Exchange rules.<sup>5</sup> The Exchange finally notes that the Technical Disconnect Mechanism is enabled for all Permit Holders and may not be disabled by Permit Holders.

The Exchange believes that while information relating to connectivity and the Technical Disconnect Mechanism are already available to Permit Holders via technical specifications, codifying this information within the rule text will provide additional transparency and further reduce potential confusion.

## 2. Statutory Basis

The Exchange believes the proposed rule change is consistent with the Securities Exchange Act of 1934 (the "Act") and the rules and regulations thereunder applicable to the Exchange and, in particular, the requirements of Section 6(b) of the Act.<sup>6</sup> Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)<sup>7</sup> requirements that the rules of an exchange be designed to prevent

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<sup>5</sup> See C2 Rule 8.5, C2 Rule 8.13 and C2 Rule 8.17.

<sup>6</sup> 15 U.S.C. 78f(b).

<sup>7</sup> 15 U.S.C. 78f(b)(5).

fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest. Additionally, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)<sup>8</sup> requirement that the rules of an exchange not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers. In particular, the Exchange believes that codifying in the rules how the Technical Disconnect Mechanism works provides additional transparency in the rules and provides an additional avenue to easily understand C2's system and processes. The Exchange believes this will also reduce any potential confusion, thereby removing a potential impediment to and perfecting the mechanism for a free and open market and a national market system, and, in general, protecting investors and the public interest. Additionally, the Technical Disconnect Mechanism is a valuable tool that is designed to help maintain a fair and orderly market. The Exchange believes that the Technical Disconnect Mechanism assists with the maintenance of fair and orderly markets by helping to mitigate the potential risks associated with a loss in communication with a Client Application, especially risk associated with a loss in communication with a Client Application of Market-Maker that is providing quotes across a multitude of series and classes. The Exchange also believes that the proposed rule change is designed to not permit unfair discrimination among market participants. The Exchange notes that the Technical Disconnect Mechanism

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<sup>8</sup> Id.

automatic logoff function is applicable to all Permit Holders and may not be disabled by any Permit Holder. The Exchange believes that the Technical Disconnect Mechanism benefits the marketplace because it is designed to help alert a Permit Holder to a potential technical or system issue and automatically logoff a Permit Holder's Client Application within certain prescribed parameters. With respect to the Technical Disconnect Mechanism's automatic cancellation of Market-Maker quotes, the Exchange also believes it is not unfair to cancel only Market-Maker quotes and not orders. Particularly, the automatic cancellation of Market-Maker quotes benefits the marketplace because it is designed to help reduce the risk of stale quotes remaining on the C2 Book in the event that a CAS loses connectivity with a Client Application (e.g., potentially resulting in erroneous or unintended executions). Furthermore, the functionality provides for the protection of Market-Makers, who must bear the burden of market risk for stale quotes well as for the protection of investors and the efficiency and fairness of the markets as a whole. Conversely, because orders tend to be static in nature and often rest in the book, the Exchange believes there is a lower risk of erroneous and unintended executions resulting from orders that remain in the System during and after an affected Client Application is logged off. The Exchange believes this functionality enhances the overall market quality for options traded on C2.

B. Self-Regulatory Organization's Statement on Burden on Competition

C2 does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. Specifically, the Exchange does not believe the proposed rule change will cause any burden on intramarket competition because it applies to all Permit Holders. Even though

the functionality treats Market-Makers' quotes differently than orders, the Exchange notes again that it believes that the Technical Disconnect Mechanism benefits all market participants because it reduces the risk of stale quotes on the C2 Book, which can result in erroneous or unintended trades. Further, the Exchange does not believe that such change will impose any burden on intermarket competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange notes that, should the proposed changes make C2 more attractive for trading, market participants trading on other exchanges are welcome to become Permit Holders and trade at C2 if they determine that this proposed rule change has made C2 more attractive or favorable.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

The Exchange neither solicited nor received comments on the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A) of the Act<sup>9</sup> and paragraph (f) of Rule 19b-4<sup>10</sup> thereunder. At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission will institute proceedings to determine whether the proposed rule change should be approved or disapproved.

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<sup>9</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>10</sup> 17 CFR 240.19b-4(f).

#### IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

##### Electronic Comments:

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an e-mail to [rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include File Number SR-C2-2013-029 on the subject line.

##### Paper Comments:

- Send paper comments in triplicate to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Number SR-C2-2013-029. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website

(<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, DC 20549, on official business days between the hours of 10:00 a.m.

and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-C2-2013-029 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>11</sup>

Kevin M. O'Neill  
Deputy Secretary

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<sup>11</sup> 17 CFR 200.30-3(a)(12).