August 24, 2006

Mark Baumgardner  
Vice President, Business Development  
The Options Clearing Corporation  
One North Wacker Drive, Suite 500  
Chicago IL 60606

Re: Options Symbology Implementation Plan

Dear Mr. Baumgardner:

The Financial Information Forum (FIF) welcomes the opportunity to comment on the proposed changes to Options Symbology. FIF (www.fif.com) was formed in 1996 to provide a centralized source of information regarding events and issues that affect the securities processing and market data communities. Through topic-oriented working groups, FIF participants focus on critical issues and productive solutions to technology developments, regulatory initiatives, and other industry changes.

The FIF Service Bureau Committee was formed to address the implementation of industry changes from a multi-client perspective. Given that many U.S. broker/dealer firms are using service bureaus for back office processing and order routing services, it is important to consider these entities when designing and implementing rules or processes that impact these functions. FIF's roster of U.S. securities processing vendors includes Automatic Data Processing (ADP), ADP/SIS, Computer Research Inc. (CRI), Comprehensive Software Systems (CSS), GL Americas, SunGard Trading Systems/BRASS, SunGard Securities Processing/Phase 3, and Thomson Transaction Services. Given the complexity and magnitude of a new OCC Symbology implementation, FIF Service Bureau Committee formed the OCC Symbology Working Group consisting of service bureaus and market data vendors\(^1\) to understand the implications of migration and areas where additional clarification is required.

**Comments on Proposed Symbology**

As OCC seeks to modernize options symbology to meet current and expected market requirements, FIF recommends that OCC look to minimize the message length without sacrificing the benefits of an expanded symbol. We believe that it is possible to reduce the proposed message size without significantly reducing readability or processing requirements to decode the symbol. To this end, FIF recommendations on fields and field sizes are outlined in the following table:

Reducing the message length as indicated below, would have the following advantages:

- Many processing systems have limitations of 16 character fields. For those systems, increasing the field size beyond 16 bytes will significantly increase both the cost and complexity of implementing a new symbology, especially for legacy back office systems.

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\(^1\) In addition to the service bureaus listed, representatives of the working group include: Bloomberg, Fidelity, Interactive Data, Reuters, Telekurs, and Thomson Financial.
• While display systems will still require modification even with the reduced FIF-proposed message size, there is a better chance that all the stakeholders could accommodate the symbol.
• Use of denominator indicator accommodates higher strike prices and to whatever extent possible expected innovation in options products
• Reducing the message size would reduce bandwidth requirements

<table>
<thead>
<tr>
<th>Proposed Fields (Not in Sequence)</th>
<th>OCC Proposal</th>
<th>FIF Recommendation</th>
<th>Comments/Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symbol</td>
<td>6 bytes</td>
<td>5 bytes</td>
<td>4 byte symbol code and use a # to indicate corporate actions status. Since Nasdaq is eliminating the 5th character, 6 bytes is not needed.</td>
</tr>
<tr>
<td>Year</td>
<td>2 bytes</td>
<td>1 byte</td>
<td>Could this be 1 byte, given that currently no options are listed 10 years out?</td>
</tr>
<tr>
<td>Month</td>
<td>2 bytes</td>
<td>1 byte</td>
<td>Currently A – L is used for calls over the year and M- X for puts. Couldn’t OCC continue to combine call/put indicator and month?</td>
</tr>
<tr>
<td>Call/Put indicator</td>
<td>1 byte</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day</td>
<td>2 bytes</td>
<td>2 bytes</td>
<td>No Change.</td>
</tr>
<tr>
<td>Strike Dollar</td>
<td>5 bytes</td>
<td>3 to 6 bytes (variable)</td>
<td>Combine the strike dollar and decimal to a variable length field. Since most options require less than 5 digits and there is a potential for more than 5 being required in the future, a variable length allows for this without requiring additional coding.</td>
</tr>
<tr>
<td>Strike Decimal</td>
<td>3 bytes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denominator Indicator (FIF Addition)</td>
<td>N/A</td>
<td>1 byte</td>
<td>Use a single character to indicate decimal places required. This will work for fractional strike prices and sub-penny prices if necessary.</td>
</tr>
<tr>
<td>Total</td>
<td>21 bytes</td>
<td>13 - 16 bytes</td>
<td></td>
</tr>
</tbody>
</table>

**Impact on Back Office Processing & Market Data Systems**

In addition to reviewing the symbol structure, the FIF OCC Symbology Working Group also discussed the impact of modifying options symbols from a development and operational perspective. Almost every system that includes data relating to options from market data through securities processing will require development work to accommodate the symbology change. Functional components that will change include:

• Display terminals (especially 3270 screens) including market data, order management and securities processing screens
• Historical databases
• Compliance reporting including blue sheets
• File transfers – every file transfer between systems and entities that currently uses the OPRA code
• Stock records
• Corporate actions processing
• Security master files
• Customer statements
• Tax reporting
• Order management and order entry systems

Additionally, the group identified the following questions related to system impact:
• What are the bandwidth implications on real-time data feeds?
• What impact will the OCC Symbology change have on OPRA data? Will OPRA’s 5 letter code be eliminated?
• The new symbology should be standard across the industry for the complete options trade lifecycle. What steps will the OCC take so that the new symbology becomes a uniformly adopted across the trade lifecycle?
• Option trades are reported on blue sheets today using OPRA codes. Should we expect some record layout changes from the Intermarket Surveillance Group (ISG)?
• Please clarify how historical data will be converted. What changes will be required for historical data processing?
• How will order messaging interfaces change? Will updates be made to CMS and FIX specifications?
• Could you further elaborate on how corporate actions will be handled? For example, please explain how the following contracts would be designated at each phase of the scenario outlined:

Stock ABCD pays a spin-off dividend of stock XYZ on June 1, 2006. The deliverable per contract becomes 100 ABCD and 100 XYZ. Immediately after the spinoff, new options begin trading on both ABCD and XYZ. On September 1, 2006 stock ABCD pays a cash dividend of $5 per share. Since the cash dividend represents more than 10% of the value of the ABCD, the deliverable per contract of ABCD becomes 100 ABCD and $500. The deliverable of the original ABCD options (pre-spinoff) becomes 100 ABCD, 100 XYZ and $500. Also immediately after the cash dividend payment, new options are listed in ABCD that represent 100 ABCD. At this point, there three different option contract on ABCD that have the following deliverables: 1)100 ABCD, 2) 100 ABCD + $500 and 3) 100 ABCD + 100 XYZ +$500.

How would these three contracts be designated? Would it be ADCD, ABCD1 and ABCD2?

**Implementation Resources Required**

From an order of magnitude perspective, FIF members believe this effort will exceed the move to decimalization and Y2K because it affects so many systems and processes. This change represents a huge development cost without any offsetting revenue for vendors or broker dealers. It is important to note that in addition to the symbology conversion effort, the move to decimal strike prices will also require significant resources.

At this stage, FIF vendors are starting to form user groups and expect to perform intensive analysis to truly assess the resource requirements of implementing the OCC Symbology change. As more detailed information is provided, initial estimates of development time and cost may be altered dramatically. Without evaluating technical specifications from the exchanges it is not possible to prepare a meaningful project plan to address OCC Symbology implementation.
We would expect the OCC to prepare cost analysis estimates for the industry to use in determining the financial impact of this project.

**Migration/Implementation Planning Considerations**

FIF members look forward to understanding the OCC strategy of a phased conversion plan extending to 2009. We have identified the following questions/considerations for your review:

- What will be the phase-in approach (i.e., by product; alpha, etc.)?
- How does the implementation of decimal strike prices take place as part of the symbology conversion?
- How will OCC coordinate the implementation of the new symbology with other industry participants such as the options markets (for order processing and execution reporting), market data vendors (for data dissemination)?
- Each market participant must analyze OCC's requirements and subsequently publish their requirements for downstream users such as service bureaus, trading systems, broker dealers and market data vendors of option market information. How will conversion deadlines take into account this sequential process?
- What is the fallback/recovery strategy if problems arise with the conversion?
- How will open order reconciliation work during the conversion?
- How will reporting of option trades pre-conversion and post conversion be handled? Will we have to maintain two formats to report option trade pre-conversion and those post-conversion?

The FIF Service Bureau Committee’s OCC Symbology Working Group appreciates the importance and magnitude of the OCC Symbology effort. We look forward to working with you to ensure a smooth implementation of a new options symbology methodology.

Sincerely,

Bob Linville, ADP/SIS  Deborah Mittelman, SunGard
Service Bureau Committee Co-Chair  Service Bureau Committee Co-Chair