NOTICE: The XBRL US Data Quality Committee meets periodically with the staff of the SEC to discuss issues relating to the use of XBRL data. The purpose of the following highlights is to summarize the issues discussed at the meetings. These highlights do not represent official positions of the XBRL US Data Quality Committee.

In addition, these highlights are not authoritative positions or interpretations issued by the SEC or its staff. The highlights were not transcribed by the SEC and have not been considered or acted upon by the SEC or its staff. Accordingly, these highlights do not constitute an official statement of the views of the Commission or of the staff of the Commission.

Highlights of joint meetings of the XBRL US Data Quality Committee and the SEC staff are not updated for the subsequent issuance of positions taken by the SEC staff, nor are they deleted when they are superseded by the issuance of subsequent highlights or guidance. As a result, the information, commentary or guidance contained herein may not be current or accurate and the XBRL US Data Quality Committee is under no obligation to update such information. Readers are therefore urged to refer to current authoritative or source material.

Attendance

<table>
<thead>
<tr>
<th>Data Quality Committee</th>
<th>Securities and Exchange Commission</th>
<th>Observers and Guests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lou Rohman, Chair</td>
<td><strong>Division of Corporation Finance</strong></td>
<td>Louis Matherne, FASB</td>
</tr>
<tr>
<td>Emil Efthimides</td>
<td>Mike Stehlik, Disclosure Standards Office</td>
<td>Ami Beers, AICPA</td>
</tr>
<tr>
<td>Pranav Ghai</td>
<td><strong>Division of Economic Risk and Analysis</strong></td>
<td>David Tauriello, XBRL US</td>
</tr>
<tr>
<td>Steve Soter</td>
<td>Scott Bauguess, Deputy Director</td>
<td>Marc Ward, XBRL US</td>
</tr>
<tr>
<td>Campbell Pryde</td>
<td>Chris Arnold, Office of Structured Disclosure</td>
<td>Izabela Ruta, IASB*</td>
</tr>
<tr>
<td>Chase Bongirno</td>
<td>Mike Willis, Office of Structured Disclosure</td>
<td></td>
</tr>
<tr>
<td>Craig Lewis*</td>
<td>Kimberly Earle, Office of Structured Disclosure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Walter Hamscher, Office of Structured Disclosure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emily Gonzalez, Office of Structured Disclosure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Brian Hankin, Office of Structured Disclosure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Julie Marlowe, Office of Structured Disclosure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Matthew Slavin, Office of Structured Disclosure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hermine Wong, Office of Structured Disclosure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Robert Luby, Office of Structured Disclosure</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Division of Investment Management</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Matthew DeLesDernier, Senior Consel</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Division of the Office of the Chief Accountant</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jane Poulin, Associate Chief Accountant</td>
<td></td>
</tr>
</tbody>
</table>

*joined by phone
Introductions
Mike Willis opened the meeting with introductions of the participants.

Guiding Principles for Element Selection
- Lou Rohman explained that the DQC has updated its Guiding Principles and has developed a one page document that includes four principles.
- The Guiding Principles were approved by DQC and will be published on XBRL US Website.
- The four principles include:
  - The primary consideration for element selection must be based on the reporting requirements prescribed by the SEC for public companies and, where applicable, widely-recognized common disclosures.
  - The data modeling for reporting requirements must be standardized with a bias for enhancing utility.
  - Extensions, when allowed, must be linked to an element in an SEC approved taxonomy.
  - Element selection must be based on the same materiality judgments as was used when preparing the financial statement disclosure.
- These principles will provide a foundation to be used to guide development of DQC rules and guidance and may be updated by the DQC as necessary.
- Campbell Pryde explained that the principles were used to develop the DQC’s guidance for tagging the statement of cashflows. He provided an example from the cashflow guidance for tagging interest paid from operating activities. The DQC’s first principle requires tag selection to be based on reporting requirements. Therefore, the guidance was based on the requirements in the Codification.
- Steve Soter provided a preparers perspective and stated that the principles will be helpful and preparers are supportive of guiding principles; however, there is still a need for prescriptive guidance.
- Lou Rohman stated that the DQC welcomes comments from SEC on the Guiding Principles.

DQC Focus on Guidance for Topical Areas
- Campbell Pryde explained that the data consumers on the DQC were asked to prioritize which topics the DQC would address. Statement of Cashflows was first on the list.
- The DQC developed guidance that focuses on tagging errors on the statement of cashflows. Rules were also developed to address specific issues that relate to tagging errors that will result with not complying with the guidance on tagging the statement of cashflows.
- The guidance is based on the new Accounting Standards Update (ASU) that will become effective January 2018.
- There was a question as to whether certain industries were looked at when developing guidance. The statement of cashflows is required for all companies; however, as the DQC starts to develop guidance on certain topics there may be certain industries that will be impacted more than others.
There was a question as to how the rules detect whether information is tagged incorrectly. Some rules detect errors when a wrong tag is used. Rules can detect inappropriate extensions or possibly when information is not reported.

Data quality for the DQC’s purpose means compliance with reporting requirements.

There was a question as to whether the rules can identify errors in the accounting statements themselves. The SEC Staff would be interested to know if XBRL can provide benefits that it was not originally intended for (such as, detecting accounting errors). This has not been a focus of the DQC; rules are not written specifically to detect whether filers have not complied with GAAP. However, certain rules may detect these instances.

Steve Soter commented that many companies have separate processes for the preparation of the financial statements and the preparation of the XBRL files. There was a question as to whether inline XBRL would change these processes. It is not expected that the processes would change with inline XBRL. However, as software vendors incorporate the inline XBRL viewer into their tools, errors will become more visible.

A question was asked how many vendors have incorporated the inline XBRL viewer into their tools. The software vendors on the DQC estimated under 50%, and probably about 33%, of the vendors have incorporated the SEC’s inline XBRL viewer into their tools. Many are waiting for the final SEC inline XBRL rule.

Next topic for the DQC to address will be stock based compensation. There was an ASU released on stock based compensation and the DQC guidance will follow the requirements.

EDGAR Incorporation of DQC Rules

Lou Rohman stated that the DQC has approved 5 sets of rules.

Rules are published in written form and a reference code is provided with test cases for implementation. Most software vendors have implemented the rules into their own software applications.

Campbell Pryde explained that during the development process, the DQC uses an Arelle plug-in to develop the impact analysis on all filings for each rule over 2 years of filings.

Once the rules are published, if the DQC is notified of false positive results the rule is revised to allow exceptions and a new version of the rule is published. All changes to existing rules go through the DQC approval process.

There was a question about how the rules are being used. Service providers run rules for clients. A large percentage of market share of vendors have rules incorporated into software applications. There has been a 66% reduction in errors on rules; however, errors remain in the filings.

Preparers do not perceive that the SEC has a focus on enforcement of errors in filings.

DQC recommends that the SEC incorporate the DQC rules into the EDGAR system. Members of the DQC believe that data quality would improve and errors would be greatly reduced if filers see rules when running test files on the EDGAR system.

The Staff asked about what could be done with the rules. Members of the DQC suggested that they could be used to inform comment letters, Dear CFO letters, notifications, and other communications to filers that have errors in filings.
Another option mentioned was that whenever a registrant submits a filing or a test filing, the registrant has a voluntary option in the SEC EDGAR filings engine to run the DQC rules.

Impact of Data Quality on Use of XBRL Data
- Emil Efthimides explained that data quality is important for users. Information cannot be used if it is wrong or inaccurate. Financial statement information needs to go through checks. XBRL promised a faster distribution and XBRL does allow this speed in other markets where there is a straight through process (e.g., South Korea, China, Japan, Israel have straight through processing). In the US, although XBRL has improved over the years, consistency and accuracy are not adequate to push the information directly to clients. Therefore, users support the DQC rules for improved accuracy.
- There was a question what can be done if the rules are not run on the EDGAR system. There was a suggestion that the results of the rules should be made publically available. However, members of the DQC do not believe that there will be further improvement in accuracy without SEC enforcement of the rules.

Status of Validation Rules
- Campbell Pryde presented results of running the DQC rules for all filers for rules sets 1, 2, and 3 on a quarterly basis over the past few years. Results showed reduction in errors for all rules.
- There was a request to provide errors broken down for each software vendor.
- Chase Bongirno stated that filers have started to incorporate the DQC rules into their checklists and are getting interested in data quality.
- The DQC approved rules set 4 and 5 which will become effective January 1, 2018.

IFRS Taxonomy
- Lou Rohman explained that the DQC rules developed to date are for the US GAAP taxonomy. Rules can be developed for the IFRS taxonomy using the IFRS Formula Linkbase as a starting point. The timing of this work would not start until IFRS filings are submitted in 2018.
- There was a question on what quality is expected for the IFRS filings. Members of the DQC stated that the quality of the IFRS filings will be good because the companies are large filers and the market is more mature than the initial US GAAP filers.
- However, members noted that there is a lack of guidance for filing with IFRS taxonomy.
- The DQC asked if it should consider incorporating IFRS taxonomy elements into DQC rules.
- SEC staff was interested in the DQC’s work on developing DQC rules for the IFRS taxonomy, but is unable to directly provide that as a recommendation to the DQC.

FASB Efficiency and Effectiveness Study of US GAAP Taxonomy
- Lou Rohman explained that the DQC submitted a letter in response to the FASB Invitation to Comment on the Efficiency and Effectiveness of the taxonomy and
participated in the FASB Roundtable discussion in July 2017. The main recommendations from the DQC were:

- Align changes in the taxonomy with the development of accounting standards.
- Emphasize importance of references and improve references in the taxonomy. (The SEC made a change to the EFM rule to prioritize the references. The DQC members stated that they were pleased with this change.)
- Eliminate multiple ways to tag information. The DQC guidance will address this; however, there needs to be consistency in the taxonomy.

- Louis Matherne explained that the FASB is in final stages of drafting a response to SEC. The response will cover the main ideas of the DQC recommendations. The recommendations will include benefits to the end user and will recommend anchoring extensions and dealing with inappropriate extensions. It will also cover benefits for the preparer that will include prioritizing the correction of references in the taxonomy and replacing the sixty day comment period for the taxonomy to coincide with the ASU development process.

**Anchoring Extensions**

- Louis Matherne explained that the XBRL International Entity Specific Disclosure Task Force (Task Force) is drafting a paper to be submitted to the XBRL International Best Practice Committee for approval. The Committee will then expose the paper to the public.
- The paper provides recommendations for global market regulators:
  - Recommend use of the calculation relationship to link extension elements to the base taxonomy. There will be specific recommendations for improvements to calculation linkbase.
  - Use of inline XBRL provides mechanism to capture information that is not easy to anchor.
- Members of the DQC believe that the Task Force’s recommendation will be very general since it must apply to all regulators worldwide. Therefore, the DQC can further this work and develop specific recommendations to anchor extensions for SEC filings based on feedback from data users. This may result in recommendations for changes in SEC or EFM rules.
- DQC believes that usability will increase by enabling automatic processing of extensions.