

April 5, 2004

**Slide 1: XBRL in the New Call Reporting Process**

**Slide 2: What is the CDR?**

CDR = Central Data Repository ~ a storage facility

- Share data rather than copy data

Uses Internet-based business reporting language

- Standard language for expressing content

Supports a real-time data dissemination process

Leverages existing resources

- Internal – meta-data
- External – technologies and industry standards

**Slide 3: CDR Objectives**

Increase the efficiency of collecting Call Report data from respondents and releasing the data to users (FFIEC, other government entities, and the public)

Enhance the FFIEC's ability to quickly incorporate new business requirements into the Call Report process

Adopt a collaborative, interagency approach to collecting, validating, processing, and distributing Call Report data

Enhance Call Report data integrity, accuracy, and consistency

**Slide 4: Why use XBRL?**

Provides a database-like structure, using text files

Defines a collection of financial facts for a specific report, industry, and jurisdiction (taxonomy)

Facilitates the data exchange between proprietary systems

Promotes the re-use of data with far less effort

**Slide 5: Why use XBRL for Call Reports?**

Call Report data is a key input for bank oversight and industry analysis

Call Report data structures are well-documented and broadly used

- More than 8,400 institutions report quarterly
  - Currently collect 2,000 data fields
  - Nearly 400 pages of instructions
  - 1,500 edit formulas to promote data quality
- Used for bank supervision, deposit insurance assessments, industry analysis, and other purposes

XBRL promotes effective data exchanges across legacy systems without significant re-programming

### **Slide 6: Benefits for Bankers and Vendors**

XBRL can help lower long-term costs

- Little or no impact on bank legacy systems
- Improved data quality and timeliness
- Vendor products easier to maintain and leverage

XBRL frameworks are “extensible”

- Developing additional frameworks can be simplified when data requirements are shared

Many institutions report similar data items to federal, state, and local governments

- Potential to consolidate efforts in the future

### **Slide 7: XBRL in the New Call Report Process**

Publish business rules (meta-data) electronically through the CDR

- XBRL taxonomies for content, instructions, edits, etc.
- Open standard facilitates use by disparate Call Report preparation software products
- Historical data to support data validation available from CDR

### **Slide 8: Call Report Meta-Data**

The set of documents that describe a Call Report

- Report Instructions
- Concept Definitions
- Business Rules
- Validation Criteria

Agencies will use XBRL to describe the same information

Federal Reserve System Micro Data Reference Manual (MDRM) and Customer Information

1. Validation, Report Instructions, Business Rules, and 131/041 Forms
  - a. Call Report

### **Slide 9: Meta-Data Repository**

I. Meta Data

- Dictionaries XBRL Schemas
- System Specifications
- Concept Definitions and Presentation
- Data Access Rules
- Reporting Instructions

- Business Rules
- Quality Assurance

### **Slide 10: Dictionaries**

Standard data naming convention

- FRS's Micro Data Reference Manual
- Standard used for all data series

Standard customer information

- FRS's National Information Center

Standard customer ID

- FRS's ID\_RSSD

Begin and End dates ~ version control

### **Slide 11: Concepts**

Call Report represents one of 60+ data series collected from financial entities by the agencies

Current Call Report series

- FFIEC 031 ~ banks with domestic & foreign offices
- FFIEC 041 ~ banks with domestic offices only

Content

- Unique data name
- Line number
- Line description
- Begin and End dates ~ version control

### **Slide 12: Reporting Instructions**

General Instructions

Schedule Instructions

Line-by-line instructions

- Include
- Exclude

Begin and End dates ~ version control

Currently PDF

### **Slide 13: Quality Assurance**

Technical ~ format

Accuracy ~ mathematical

Business ~ comparisons & relationships

Consumes meta data

Provides standard

- Error messages
- Exceptions, classifications, and remarks

Begin and End dates ~ version control

#### **Slide 14: Business Rules**

Reporting basis

Averaging techniques

Growth rates

Annualization rates

Income derivation

Merger adjustments

Tax-equivalency adjustment

#### **Slide 15: XBRL Components/Terminology**

XBRL-Specification: Rules to govern creation of XBRL-compliant files and conformance to the specification

XBRL – Taxonomy: A collection of financial facts for a certain period of time for a reporting entity. By purpose, industry, and jurisdiction

Schema and Linkbases: Schema is a dictionary of terms. Linkbases are a set of links to manage references, labels and relationships

XBRL – Instance: ‘Output’ from tagging data using one or more taxonomies

XSL – Style Sheet: Presentation or transformation of tagged data

1 or more taxonomies = Framework

#### **Slide 16: XBRL Global Taxonomy Structure**

Global Common Document

1. GAAP (USA)
  - a. Financial Reporting
    - i. US GAAP CI
    - ii. Insurance
    - iii. Banks and Savings
  - b. Tax/KPI Reporting
2. IAS (International)
  - a. EDAP and PFS
    - i. Nation A  
-CI

- ii. Nation B  
-CI

### **Slide 17: What Is a Taxonomy?**

Definition: a division into ordered groups or categories

An XBRL taxonomy is a description and classification system for the contents of financial statements and other business reporting documents

Taxonomies represent up to hundreds of individual business reporting concepts, mathematical and definitional relationships.

For Example:

Football - Touchdowns, Field goals, Rushing yards, Passing yards

Baseball - Homeruns, Stolen bases, Runs, Strikeouts

### **Slide 18: North American XBRL GAAP Framework and US Bank Regulatory Framework**

Global Common Document

- Document and Entity

NAFR General Concepts

- General Concepts

Assets

Liabilities

Equity

Owner Contributions

Owner Distribution

Comprehensive Income

Income

Expenses

NAFR Primary Terms

- Primary Terms

Cash

Held to Maturity Securities

Trading Securities

Trade Secrets

Goodwill

Other Assets

Minority Interest

Equity

Common Stock

Net Income

Extraordinary Items

Bank and Savings Institutions

U.S. Bank Regulatory Framework

### **Slide 19: US Financial Reporting (USFR) Taxonomy Framework**

1. -General Concepts (usfr-gc)

-Primary Terms (usfr-pt)

-Global Common Document (int-gcd)

- Accountants Reports (int-ar)
- Notes and Management Discussion and Analysis (usfr-namda)
- Management Report (usfr-mr)
- SEC Certification (usfr-sec-cert)
- US GAAP C&I (us-gaap-ci)
- Company Extension and/or Instance Document

1. -Financial Services Terms (usfr-fst)
  - Global Common Document (int-gcd)
  - Accountants Reports (int-ar)
  - Notes and Management Discussion and Analysis (usfr-namda)
  - Management Report (usfr-mr)
  - SEC Certification (usfr-sec-cert)
  - US GAAP BASI (us-gaap-basi)
  - Company Extension and/or Instance Document

### Slide 20: XBRL Concepts

XBRL is an extension of XML

For Call Report use it will be defined as a set of files referred to as an XBRL framework

For Example:

- Validation Criteria
- Report Instructions
- Business Rules
- FFIEC 031 and 041 Presentation
- FRB Micro Data Reference Manual

Consists of XML files and XSD files

Utilizes the concept of linkbases which provides the ability to link XML files together

### Slide 21: XBRL Detail Concepts

XBRL Taxonomies

- Defines a set of business report concepts that can be used in the exchange of financial information. The concept types are further defined in an XSD file.

MDRM:

<XBRLTags>

```

  <Tag name="Name">
  <Tag name="Address">
  <Tag name="Revenue">
  <Tag name="Expense">
  <Tag name="SubmissionPeriod">

```

</XBRLTags>

### Slide 22: XBRL Detail Concepts

Instructions

- Instructions can be associated with each XBRL tag element that is defined.

<Instructions>

```

  <Instruction tag="Name">
    Enter the business name
  </Instruction>

```

```

    <Instruction tag="Revenue">
        Enter the revenue for the current period
    </Instruction>
    <Instruction tag="Expense">
        Enter the expense for the current period
    </Instruction>
</Instructions>

```

### Slide 23: XBRL Detail Concepts

#### Business Rules

-Business Rules can be defined for business reports and forms by using a syntax language that refers to XBRL tags and predefined functions. Examples of functions, validations, or edits could be:

```

Expense > 0
Revenue > PREVIOUS(Revenue)

```

#### <Calculations>

```

<Calculation tag="Name" function="MustExist(Name)"
    error="Name must exist"/>
<Calculation tag="Revenue" function="PREV(Revenue) < Revenue"
    error="Revenue must increase"/>
<Calculation tag="Expense" function="Expense > 0"
    error="Expense must be greater than zero"/>

```

#### </Calculations>

### Slide 24: XBRL Detail Concepts

#### Instance files

-Instance files contain data for a business form or report.

#### <InstanceData>

```

<Data tag="Name" value="First Union Bank" />
<Data tag="Period" value="2002-03-31" />
<Data tag="Revenue" value="13893288" />
<Data tag="Expense" value="293388" />

```

#### </InstanceData>

### Slide 25: XBRL Detail Concepts

#### Putting it all together:

-The files can be linked together to create the complete picture of a business report or form.

#### Meta-data:

#### <XBRL Tags>

```

<Tag name = "Name"\>
<Tag name = "Address"\>
<Tag name = "Revenue"\>
<Tag name = "Expense"\>
<Tag name = "Submission Period"\>

```

#### </XBRL Tags>

#### <Instructions>

```

<Instruction tag = "Name">

```

```

    Enter the business name.
</Instruction>
<Instruction tag = "Revenue">
    Enter the revenue for the current period.
</Instruction>
<Instruction tag = "Expense">
    Enter the expense for the current period
</Instruction>
</Instructions>

<Calculations>
  <Calculation tag="Name" function="MustExist(Name)"
    error="Name must exist"/>
  <Calculation tag="Revenue" function="PREV(Revenue)<Revenue"
    error="Revenue must increase"/>
  <Calculation tag="Expense" function="Expense >0"
    error="Expense must be greater than zero"/>
</Calculations>

Data:
<Instance Data>
  <Data tag ="Name" value="First Union Bank"/>
  <Data tag ="Period" value="2002-03-31"/>
  <Data tag ="Revenue" value="13893288"/>
  <Data tag ="Expense" value="293388"/>

```

## Slide 26: Transport Mechanism

Web Services

- SOAP
- WSDL

Security

- WS-I
- SSL

Connectivity requirements

- Adequate bandwidth with Internet connectivity