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

April 5, 2004
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
Slide 10: Dictionaries
Standard data naming convention
- 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
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


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

1. General Concepts (usfr-gc)
   - Primary Terms (usfr-pt)
     - Global Common Document (int-gcd)
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>

</Instructions>
Enter the revenue for the current period
</Instruction>

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.

<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"/>
</Instance Data>

Slide 26: Transport Mechanism
Web Services
- SOAP
- WSDL
Security
- WS-I
- SSL
Connectivity requirements
- Adequate bandwidth with Internet connectivity