Ontologies are getting a thumbs up to serve as the basis for the Office of Financial Research’s Instruments database. Last week, the Data & Technology Subcommittee of the OFR Financial Research Advisory Committee (FRAC) recommended that the OFR “adopt the goal of developing and validating a comprehensive ontology for financial instruments as part of its overall effort to meet its statutory requirement to ‘prepare and publish’ a financial instrument reference database.”

The Instruments database will define the official meaning of financial instruments for the financial system — derivatives, securities, and so on. The recommendation by the subcommittee is that the OFR conduct its own evaluation of private sector initiatives in this area, including the Financial Industry Business Ontology (FIBO), to assess whether and how ontology can support transparency and financial stability analysis.

FIBO, which The Semantic Web Blog discussed in detail most recently here, is designed to improve visibility to the financial industry and the regulatory community by standardizing the language used to precisely define the terms, conditions, and characteristics of financial instruments; the legal and relationship structure of business entities; the content and time dimensions of market data; and more. The effort is spearheaded by the Object Management Group and the Enterprise Data Management (EDM) Council.

“The Data & Technology Subcommittee looked at the requirements for Financial Stability Oversight Council (FSOC) members (comparability, data validation, linked risk analysis, complex queries, transitive exposure analysis etc.), and came to the conclusion that ontology was the best pathway for the industry,” says Michael Atkin, Managing Director, EDM Council, and chair of the Data & Technology Subcommittee, who explains that many reps on that subcommittee are from the industry and understand the challenge. “When they saw that FIBO was underway, they recognized the promise as being achievable and appropriate. The rest of FRAC
was quick to understand the value proposition and its application to understanding complex relationships in networked environments. It was a unanimous approval with alacrity.”

The OFR’s evaluation of the FRAC recommendation will focus on ensuring that it is appropriate and can be implemented, and Atkin says it’s working with some of the other FSOC members to evaluate capability in real world environments. A proof-of-concept most likely will be conducted in the derivatives area, he says. The OFR also is considering a workshop to subject the issue of ontology, semantic processing, and classification to additional scrutiny “We have already presented FIBO to the OFR and other regulatory participants and will continue to support a full-scale evaluation,” he says. “Remember – FRAC is just an advisory committee. We do not have any additional influence over what the Office does as a result of our recommendations.

FRAC members include prominent names and companies in the financial sector: chairman Lew Alexander, Chief Economist at Nomura; Peter Cherasia, former JP Morgan Managing Director, Global Head of Market Strategies; and Peter Serenita, HSBC Chief Data Officer. “No question that both regulators and industry are taking ontology seriously,” says Atkin. He points as an additional example to the Bank of England/PRA as an on-the-record advocate of common financial language. Wells Fargo Bank also has a leadership role with its Senior Vice President and Strategic Planning Manager of Enterprise Architecture, David Newman, serving as chair of the EDM Council’s Semantics Program.

“The challenge of harmonizing data from multiple repositories across lots of business processes across many financial institutions around the world requires a common reference point. And once you have that common language (Rosetta stone) implemented in the Web Ontology Language (OWL) it can be leveraged for semantic (inference-based) processing,” Atkin says. “If OFR publishes an instrument database as an ontology, it will become the common reference point for harmonization of data from a variety of sources. This will ensure that there is no confusion about what these instruments are and how they work, regardless of how they are labeled and classified. The facts about the instrument define it.”

The financials sector is not the only industry that will see further reason to take seriously ontologies, whether to fulfill their own statutory obligations or for other ends. The use of ontologies is becoming standard practice in many information intensive industries, he says, from health care, to pharmaceuticals, to supply chain management, to telecommunications and government. “There is no question in my mind that this will be the next breakthrough in the overall development in knowledge representation across all industries,” says Atkin.