

December 12, 2011

International Integrated Reporting Committee

Delivered by electronic mail: dpresponses@theiirc.org

Dear IIRC Members:

Thank you for the opportunity to comment on the discussion paper, "<IR>: Towards Integrated Reporting, Communicating Value in the 21st Century." The report was fascinating and timely, and I especially enjoyed the introductory sentence ("Theworld has changed—reporting must too"). Without a doubt that is true, but at the same time, it would be good to accompany that change with avoidance of known problems in reporting and information technology (IT) change over the decades. IT-dependent institutions have learned much since the introduction of computing to the needs of reporting.

My response to the discussion paper centers on four major issues:

- Avoidance of the "N+1" problem should trump all other considerations. The "one ring to rule them all" approach to solving portability and interoperability (integration) issues never works; while engineers always wish to replace *N* different approaches (methodologies, protocols, API's, networks, etc.) with just one, the introduction of the "one new integration approach" *never* replaces all the preceding ones; instead it makes the problem just a little bit harder, with support for *N+I* approaches now necessary. Old systems never die; they never even fade away. The real costs of IT systems integration must take that into account, by recognizing that whatever approach to integrated reporting is chosen, the long-term (possibly permanent) continued existence of existing systems must be understood.
- High-level ("abstract") modeling is the best way to offer integration in the face of constant change and constant change is, in the words of the old saw, the only constant. A U.S. Chairman of the Joint Chiefs of Staff, General Shinseki, once said, "If you don't like change, you're going to like irrelevance less." Modeling approaches to integration recognize not only constant change, but the constancy of solutions a trade is a trade, regardless of the new shades of meaning added by new derivatives, methodologies

for risk mitigation, or pricing strategies. Federation is the only solution to multiple databases, multiple countries and multiple corporations sharing and reporting data, and high level models not only allow a way for business people to share design and solutions with technical people, but also represent the best way to control complexity and solve the "N+1" problem. Abstract modeling starts with *data* modeling, in which the way information is shared is clearly agreed in an unambiguous way; for example, a person's birth date is composed of a year, month and day. This allows different people to understand information in the same way; more importantly, it allows multiple *automated systems* (computers) to interpret information in the same way. High-level modeling has been shown to save up to 70% of the cost of systems development and maintenance.

- The integrated reporting problem is *not* just a problem to solve, or an opportunity to keep pace; it's a major new business opportunity. Not only does increased transparency offer more efficient markets, but *integrated* transparent reporting means that information can be correlated in new and different ways. We don't yet know what those opportunities are, but several important start-up companies and NGO projects have already seized the opportunity. My favorite example is the United Nations *Global Pulse* project, which is using correlated and integrated emergency reporting data from United Nations agencies (food supplies, government stability, disease outbreaks, military dispositions, etc.) to synthesize warning data for U.N. leadership, so they have more time to react to major international emergencies from wars to famines. Integrated reporting will represent huge new opportunities.
- Standards are the greatest force for innovation in the world today, and innovation is what we enable with integrated reporting. Standards are often (and incorrectly) seen as "freezing" innovation and disallowing opportunistic use of information; nothing could be further from the truth. Rather, standards allow new ways of looking at data, new ways of integrating information and new business models to be built on top of a consistent, standardized platform. The most obvious example would be the World Wide Web and the Internet; the consistent, standardized TCP/IP and HTTP/HTML platform enabled tens of thousands of new businesses to offer new and unforeseen services to billions of people in an amazingly short time span. We are at that opportunistic precipice again with the advent of integrated reporting.

Taken together, these four simple ideas – that a standardized, abstract modeling approach, not attempting to replace all previous approaches, focused on new business opportunities – will result in huge bottom-line savings and new revenue opportunities, many of which cannot be foreseen.

In the attached PDF booklet, I have responded to the specific questions from the report, keeping in mind the four principles outlined above. I look forward to participating in future discussions on this topic.

Sincerely,

Richard Mark Soley, Ph.D.

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Chairman and Chief Executive Officer