

A crisis of identity, part two

It has taken a long time to build support for a system of legal entity identifiers – but now progress is being made, it is important to get the system right, argues David Rowe

It was almost 10 years ago that I devoted this column to the disturbing lack of clarity concerning the specific reference entities underlying credit default swaps (*Risk* July 2002, page 37, www.risk.net/1497414). The wheels of progress turn slowly but, at long last, there is some movement.

The Office of Financial Research within the US Treasury has been spearheading an effort to establish a standard legal entity identifier (LEI), and at its summit last November the Group of 20 (G-20) nations called for the Financial Stability Board (FSB) to draw up a global LEI (*Risk* April 2012, pages 51–53, www.risk.net/2163214).

Clive Davidson, a *Risk* contributor, once quipped that standards are tremendously valuable – which is why we have so many of them. His point was that multiple competing standards are only slightly better than no standards at all and, despite the G-20's support for a global effort, I fear we are in danger of falling into this trap relative to LEIs.

One contributing factor is the demand by the US Commodity Futures Trading Commission (CFTC) for LEIs to be used for over-the-counter derivatives reporting as early as July this year – the agency has already published a final rule on the standard to be used. This clearly will precede the establishment of a global standard for such identifiers – the FSB has committed to producing a report for the G-20 to review at its June summit – and could disrupt the eventual formulation of such a standard. I am not arguing for delay in the CFTC requirement, but I believe care is required to avoid compromising the longer-term goal.

Some key long-term priorities should be front and centre in this discussion. These include: the ability to issue new LEIs rapidly in response to dynamic business needs; ironclad assurance that new LEIs will be globally unique; provision of ready electronic access to LEI information while avoiding any single point of failure in the system; flexibility to accommodate widely varied rules, regulations, customs, languages and practices across all global sovereign states and jurisdictions; and flexibility to meet all reasonably foreseeable future needs.

Jefferson Braswell, a risk and technology adviser, has put forward a sensible and workable proposal that would allow the CFTC to pursue rapid implementation without hampering the longer-term effort to establish a consistent global standard that meets the above criteria.¹

The essential feature of this proposal is that LEIs be issued by what Braswell calls authorised federated

registrars. A single global issuer would inevitably become entangled in bureaucratic complexity that would compromise the first priority. Multiple issuers would assure responsiveness to business needs.

Assuring global uniqueness could be done by maintaining a global database with real-time updates and 24/7 access to vet any newly issued code. Unfortunately, this would introduce a single point of failure into a systemically important global system. Far better, argues Braswell, to partition the LEI into a registrar ID section and a registrar assigned ID section. This would assure global uniqueness provided only that each registrar maintains uniqueness within its own issued IDs.

The obvious means of satisfying the third priority is to maintain the global IDs on distributed databases replicated via the internet. Harnessing the robust infrastructure of the internet would provide automatic failsafe backup and assured availability even if access to one or more local copies should fail.

Flexibility to accommodate the wide variety of regional requirements clearly implies that the identifier itself should have no embedded information content. It should be purely a unique character string associated with a given legal entity. Partitioning the LEI to include the registrar ID does not represent information about the underlying entity. Embedding the registrar ID is merely a necessary means of guaranteeing uniqueness. All identifying information for the underlying legal entity should be stored in an associated SQL database for which the LEI is a primary table key. This would provide maximum flexibility to accommodate different requirements in different jurisdictions.

My first thought was to be concerned about the potential number of LEIs that a fixed code length could accommodate. In recent years, we have seen phone companies running out of numbers, the number of potential internet protocol addresses starting to look inadequate in the foreseeable future and the US starting to worry about running short of social security numbers. Braswell points out, however, that his proposal calls for an alphanumeric string rather than just using the ten digits from zero to nine. Consider an 18-character string partitioned into six characters for the registrar code and 12 characters for the registrar assigned IDs. This would allow for more than 2 billion registrars capable of issuing 4.7 quintillion (10^{18}) assigned ID codes each. In total, that combination would support over 10 octillion (10^{27}) LEIs. If global population grew to 100 billion, that would allow 47 million LEIs per person. Even I have to concede that this is likely to be sufficient even for the unforeseeable future. ■

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¹ Braswell J, April 6, 2012, *Recommendation for LEI issuance via authorized federated LEI registrars*, <http://tahoeblog.files.wordpress.com/2012/04/recommendation-for-lei-issuance-via-federated-lei-registrars-using-registrar-ids2.pdf>

