



## The “S” Word—Standards

**W**ith [ILMF 2014](#) and [ASPRS 2014](#) (American Society of Photogrammetry and Remote Sensing) in the books attention now turns to [SPAR 2014](#) which takes place April 14–17 in Colorado Springs. [LiDAR Magazine](#) will be distributed at this important industry event, assuming I can get this editorial finished on time, so let's get on it.

I just had an interesting conversation with a long time friend who is a highly successful AEC software industry veteran and an instinctive observer of the BIG picture. We were discussing a number of recent announcements from the business press about 3D industry start-ups and acquisitions like Facebook buying the virtual reality hardware company [Oculus Rift](#) for \$2 billion. Even Zuckerberg positioned this as a calculated risk saying, “Oculus has the chance to create the most social platform ever, and change the way we work, play and communicate.” The operative word here is “chance”.

If you're Facebook, or any of the other major players such as Google then you can afford to take these chances. In fact it is imperative that you do or you end up losing out on the next trend as Microsoft has done on a number of occasions.

We also discussed the challenges being faced by the Google Glass project, noting that Google recently [announced](#) a partnership with the world's leading eyeglass manufacturer Luxottica, the maker of Ray-Ban sunglasses. Why, because the average consumer, especially women do not want something like that on their face. You can argue all you want that this does not make sense from a logical point of view, but this is about emotion not logic. Google may find a technical market for Glass, but it will never be a consumer success. I have the scars to prove it.

After going back and forth for a while I commented to my friend that I would not want to be in the 3D sensor start-up space. Things are moving too fast. As Ken Smerz pointed out in a recent [LiDAR News](#) webinar you want to position your firm just behind the cutting edge, not on it. Launching a 3D sensor start-up or investing in one today is not the cutting edge; it's the bleeding edge particularly if you are not in Silicon Valley, as my friend pointed out. (For an inside look at the early days of the PC start-ups in Silicon Valley [Accidental Empires](#) is a must read.)

Not only do you have to compete with these well funded start-ups you are also competing with academia where the business rules are quite a bit different. Software might be one thing, especially if it is hardware agnostic, but there is just too much risk in hardware right now for my money particularly since there are no standards.

Ah yes, the “S” word, the real subject of this editorial - standards. Reminds me of an article I wrote nearly 20 years ago while working

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for Blue Marble Geographics entitled, “The R Word—Raster.” At that time GIS was all vector and although everyone liked imagery most GIS people did not know how to handle it. In fact at that time Esri had their partner Erdas supply all of the software to support raster data. Arc/Info was vector only.

Now if your first reaction is to think, why are standards important?, I will use my old standby example—the music industry. Can you imagine what it would be like if every DVD manufacturer used a different format? Can you see how valuable it has been to the music industry to have seamless data interoperability? Every once in a while there are some format battles like when Beta competed with VHS as the VCR was first coming on the market, but those are soon resolved in favor of making money.

Railroads are another good example. The ASTM (American Society of Testing Materials) was founded in the late 1800’s in part because the various stakeholders could not agree on standards for the steel to manufacture the rails. That was back in the days of the Wild West. Unfortunately that is not unlike what we are seeing today in the 3D industry.

As some of you know I have been involved with the [ASTM E57 3D Imaging Systems](#) standards committee since 2006. We have made some progress that includes the E57 data interoperability standard which is being widely supported by hardware and software vendors, but over the past couple of years the progress has been very slow. For those who would like to learn more about E57 there will be a session on Thursday at SPAR that will discuss the current activities of the committee.

I think it is encouraging to note that there are a number of articles in this issue that include references to standards and guidelines such as the [TRB Mobile LiDAR](#) report which Chris Siebern highlights in his article. John Russo, the founder of the USIBD (U. S. Institute of Building Documentation) has also been a strong proponent of the needs for standards as can be seen in his article on specifying the level of accuracy. The following are some additional thoughts from John that I wanted to share.

### The Need for Standards

The building documentation industry is evolving rapidly. New technologies and processes are being developed at an incredible pace. Issues like specifying level of accuracy are becoming ever more important. So where can we turn to find solutions that help us specify and meet required levels of accuracy while reducing risk for all the stakeholders?

In 2012 a group of national service providers, surveyors, engineers, architects, contractors and owners recognized this and banded together to form the [U.S. Institute of Building Documentation](#) (USIBD) [www.usibd.org](#). Since its inception, the USIBD has been working tirelessly to develop and introduce guidelines and standards that can be used by all stakeholders with an interest in building documentation.

The USIBD has announced that it intends to release a draft of its version 1 Level of Accuracy (LOA) specification for public review in April of 2014 prior to the SPAR International Conference in Colorado Springs, CO. The public review period will be open for a period of one month and will provide an opportunity for anyone to contribute

feedback to its development. The standard will be published later this year. In addition, for those who are attending SPAR, on Monday, April 14th, 2014 the USIBD will be hosting a free series of workshops which touch on many of the USIBD Standards Committee initiatives including its LOA Specification.

If you are interested in participating more directly in the development of the USIBD’s LOA specification or other guidelines and standards please contact the USIBD Standards Committee Chairman, [Carlos Velazquez](#). The USIBD is actively seeking new members who want to contribute to the advancement of the building documentation industry.

Thanks John, the USIBD is doing great work, but all of us involved as volunteers in these efforts can tell you there is a severe lack of support from the industry. Until standards are made a priority by proactively supporting organizations like the ASTM E57 and USIBD the industry will be held back and all of the stakeholders will suffer. It’s tough to hear, but it has to be said.

On a closing note I would like to circle back to the earlier comment about the *LiDAR News* webinar. We recently completed the first in what will be a series of highly educational and practical 3D webinars. If you have an interest in a topic or would like to have your firm sponsor an event please let me know. These will be designed to create immediate value for everyone involved.

Regards,



Gene Roe, LS, PE, PhD  
Managing Editor & Co-Founder  
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