

Moe! *Tony*
Want to schedule
with Moe.

Joe Speicher
Glenn Foster
Tony Nevada

**DRAFT OUTLINE OF KEY CHANGES IN REQUIREMENTS THAT IMPACT
 THE COMPLIANCE ASSESSMENT PROCESS**

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I. KEY TECHNOLOGY-BASED CHANGES IN REQUIREMENTS

LSS/LSN Rule	Licensing Support System (Old)	Proposed Licensing Support Network (New)	Technology-Based Issues to Consider
2.1003	Centralized full text search (FTS) capability operated and managed on entire document repository.	Distributed search capability -- FTS operated and managed by individual participants on their own repositories.	Distributed FTS will make searching the entire document universe more difficult; e.g., a search will have to be conducted for each participant's website to retrieve all documents relevant to the search criteria, and even then the search results will not be prioritized. Subsequent searching within a subset of these documents (from different participant's repositories) may be impractical. It will be difficult to automate audit compliance of FTS indices with the source documents.
2.1008	Participant compliance required for access to LSS.	Section 2.1008 removed in LSN Rule. Participant has access by default.	The technologies that can be used to enforce compliance in the distributed LSN architecture are unclear. Consider establishing a LSN-specific, LSNA-controlled Domain Name Service (DNS) space to mediate access to participant's web sites.
2.1011	Participant maintains audit trail of documents submitted to LSS.	Participant maintains audit trail of documents prepared for its individual website/LSN.	Consider requiring that participants' use a revision control system (RCS) during the document preparation and/or check-in procedure.

LSS/LSN Rule	Licensing Support System (Old)	Proposed Licensing Support Network (New)	Technology-Based Issues to Consider
2.1009(3)	Participant must train staff in procedures for LSS documentary material preparation and submission.	Participant must train staff in preparation and tracking of documents for websites. Participants must train staff in operating and maintenance of their web server and networking facilities.	Significantly more technical knowledge will be required of staff to ensure that document presentation, indexing, and compliance tracking procedures are acceptable. Server maintenance requires significantly different skill sets than document preparation, and implies different skill sets.
2.1011	Participant must submit periodic reports	Same	Consider requiring publication of status reports on the web server itself.
2.1003	Participant provides own computing facilities for document preparation and viewing/retrieval.	Participant provide own computing facilities for document preparation and viewing/retrieval. Additionally, participant must provide web server and communications facilities.	Consider standardizing minimum web server requirements by hardware and software, since performance-based requirements may be difficult to define due to the fact that use of the Internet implies performance parameters that may be out of the control of individual participants.
2.1011	LSSA will "flag" duplicates in LSS for review by participants.	Concept of checking for duplicates in distributed LSN system is unclear. Participants should police their own websites to avoid duplicates.	Apparent duplicates on a website may have different hyper-links pointing to or within them. Thus, eliminating the "duplicate" could lead to hyper-links that point to nothing.
2.1003	Participant completes required bibliographic header fields for each unit of LSS documentary material. Header info can be submitted in non-electronic form. Some header info completed by LSSA QA Facility.	Same, except that header information must be submitted in electronic format and the document's (i.e. authenticated copy) physical location must be noted. LSNA does not supply any header info; header is completed by participant.	Should bibliographic headers be maintained within the document, as a separate database, or presented as "meta" information by the participant's web server? Will the LSNA maintain its own database of header information for compliance assessment purposes? How will (or will) the ability to search across participants' repositories be provided? Mechanisms for ensuring the integrity of the headers (as well as the integrity of the source documents) must be enforced since they will be maintained at participants' sites.

LSS/LSN Rule	Licensing Support System (Old)	Proposed Licensing Support Network (New)	Technology-Based Issues to Consider
2.1003	LSSA augments submitted bibliographic headers to create full electronic headers.	No longer a requirement, since full bibliographic headers will be provided by each participant.	<p>Should bibliographic headers be maintained within the document, as a separate database, or presented as "meta" information by the participant's web server?</p> <p>Will the LSNA maintain its own database of header information for compliance assessment purposes?</p> <p>How will (or will) the ability to search across participants' repositories be provided?</p> <p>Mechanisms for ensuring the integrity of the headers (as well as the integrity of the source documents) must be enforced since they will be maintained at participants' sites.</p>
2.1003	Participant submits images of its LSS material for entry into LSS (centralized database operated and managed by NRC).	Participant provides Internet access to their document images using standard (or approved) formats. Dedicated LSN web sites are operated and managed by participants in licensing process.	<p>Allowable data formats need to be identified and approved. quality standards for documents (e.g. image quality) must relate to appropriate technical metrics.</p> <p>LSN web site management requires significant technical expertise.</p>
2.1003	Some participants may submit hard copy. LSS indexes all material.	<p>All "submissions" are to be in electronic format as implied by web publication.</p> <p>Web documents "hyper-linked" to each other and/or master documents/tables of content/ indices.</p> <p>Participant indexes own material.</p>	<p>Response to comment on the proposed Rule indicated that small participants may submit hardcopy materials to NRC for processing and maintenance on special website. This would require an NRC capture facility.</p> <p>Narrows the range of acceptable document production facilities (must be able to publish to web-standard formats).</p> <p>Standards for hyper-linking of documents</p> <p>Indexing methodologies must be compatible across participants if overall query capability is necessary.</p> <p>Standard programmatic interface to indexes very desirable.</p>

LSS/LSN Rule	Licensing Support System (Old)	Proposed Licensing Support Network (New)	Technology-Based Issues to Consider
2.1003	Participant assembles standard Technical Data Packages (paper or electronic).	Participant publishes sets of documents on website.	What is a "Technical Data Package" in the web environment? Should it be maintained as a differentiated unit within a participant website, perhaps with a website page dedicated to Technical Data Packages?
2.1004	Participant will review own material after entry into LSS.	Requirement for review by participant eliminated in new Rule. Participant publishes its own material. Review is implied.	Measures must be developed to allow participants' revision of material after their official publication. What signifies that the final version of a document is on the web? Should documents be "signed" per the digital signature standard (DSS) and these records be maintained by the LSNA? If so, measures for revision of this information must be available. Consider requiring secure web technology (HTTPS).
2.1011	Participant maintains a material submission plan.	Same	Should this plan be on the web site, perhaps as part of the index?
2.1003	Participant submits batches of material for LSSA review.	Participant publishes material on web site. LSNA reviews through normal web access procedures.	How will participant notify LSNA as new material becomes available? How will this material be differentiated from existing, already-reviewed, material?
2.1011	LSSA makes available to the LSSA QC Facility all participant-submitted LSS documentary material for the purpose of evaluating participant compliance.	LSNA (or its contractor) maintains an independent database of header fields and other identifying document characteristics to conduct remote auditing and evaluate participant compliance. Checksums or digital signatures used to verify document integrity.	Document description must be strict, e.g. line ends must be specified in addition to "ASCII" to ensure that checksums/DSS can be relied upon. Documents can be modified by third-parties during transmit - cannot do remote compliance assurance using standard web browsers.

LSS/LSN Rule	Licensing Support System (Old)	Proposed Licensing Support Network (New)	Technology-Based Issues to Consider
General	Timeliness/ availability controlled by LSS specifications and standards.	Timeliness/availability not centrally controlled.	Timeliness/Availability - Web sites can become unavailable to some users. Internet is a diverse system involving entities that affect timeliness, but are not associated with LSN. Slow Internet response may not be overcome. Need definition of availability.
General	LSS Rule defined what participants would be providing for entry - header, image, text, etc.	New Rule does not define specifics of what will be presented on participant websites.	"Electronic file" is not defined in New Rule.
General	Compliance Assessment Program (through LSS Participant Commitments) established standards for preparation and submission of participant documentary materials to standalone LSS system.	Distributed Internet-based system requires both content and operability/inter-operability standards.	Compliance to a computing standard does not ensure inter-operability. For example, presuming that it is necessary to perform document searches across all participants' repositories, it may not be sufficient for the participants to be in full technical compliance. They must be held to an inter-operability standard as well.
General	LSSA monitoring of participant compliance tied to standalone LSS system, LSSA QA Facility and LSSA audit program.	LSNA monitoring of participant compliance intended to be primarily achieved through remote QA activities.	<p>What will be the nature of the system(s) maintained by the LSNA? What functions will it perform?</p> <p>Will it contain identifying information about all documents in the LSN including cryptographic checksums to aid in automatic compliance assessment?</p> <p>Will it provide a "home page" with links to participants' web sites and a central facility for across-participant document queries and public comment?</p> <p>Will the electronic docket (evidentiary material) be a separate system or integrated with the LSN? Will the docket contain some information already in the LSN?</p>

LSS/LSN Rule	Licensing Support System (Old)	Proposed Licensing Support Network (New)	Technology-Based Issues to Consider
2.1013	Official Docket is a file within the LSS.	Docket may be separate from LSN.	It appears that the docket will not change significantly from the LSS. However, it doesn't seem reasonable that document publication in the LSN is sufficient for evidentiary purposes without significant assurances of document integrity when transmitted over public media. This implies heavy use of encryption technology during transmission and digital signatures on documents.
2.1013	List of exhibits	Same	Will documents in the electronic docket be considered official records?
2.1013	Proof of service	Same	Electronic delivery receipts cannot be relied upon in a heterogenous e-mail environment.

II. KEY ADMINISTRATION/MANAGEMENT DRIVEN CHANGES IN REQUIREMENTS

	Licensing Support System (Old)	Proposed Licensing Support Network (New)	Management Issues to Consider
2.1007	Public access to database limited during the pre-license application period.	Uncontrolled access to websites - open access to participant and public.	Possibility of "hacker" activity much greater. Possibility of participants interfering with other's sites. Question on how to handle interest/questions from the public at-large?
2.1008	Participant petitions the PAPO for access to the LSS and complies with orders of the PAPO as a condition to retaining access to the LSS.	Section 2.1008 removed in New Rule. Access is implied by default.	How will the LSNA ensure compliance without the "stick" of denied access? Will participant's websites be taken "off-the-air"?
2.1011	Participant maintains an accurate audit trail of its document processing activities.	Participant maintains an accurate audit trail of its documents prepared for the LSN..	On-site auditing by LSNA may still be necessary.
2.1007	Participant pays for its own LSS computer facility and telephone connect charges.	Participant pays for development and maintenance of its own web site(s), including Internet connect charges.	Specification of facilities necessary.
2.1011	Participant does not interfere with other LSS users or otherwise purposefully place unnecessary burden on system.	Uncontrolled access to web sites - open access to participant and public.	Multiple levels of Internet access - If timeliness/availability become an issue, consider a website for the public and another website for participants (on same server). This is one method for handling the "priority access" issue.
2.1011	LSSA identifies and flags duplicates that occur within and among participant document submissions.	No LSNA involvement in duplicate checking.	With distributed system, is duplicate checking feasible or cost-effective?
2.1009	Participant establishes procedures (written) for document processing operations.	Participant establishes procedures (written) for document processing operations and website development and maintenance.	Will LSNA review and approval of written procedures be required under LSN approach?