EnvisionWare Vote and Comments on SIP 3.0 Draft
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After a thorough review of the SIP 3.0 Draft and for reasons set forth more explicitly below, EnvisionWare has decided to vote that the revision is not yet ready for publication. There are too many grammatical mistakes, inconsistently used terms and phrases, and technical questions that should be discussed further by the industry representatives who served on the SIP 3.0 committee. Where indicated below, we have used question format for points on which the context makes it unclear what the intended effect is of certain language or provisions. These open questions, in our mind, require more clarification. Further, in light of our own recent legal experiences, we feel strongly that 3M should clarify its position with respect to any protected intellectual property incorporated into this protocol.

General Issues

- The term "self service" is sometimes used with a hyphen and sometimes without. Further, sometimes it is capitalized and sometimes it is not. The use should be consistent throughout the document. A grammar check suggests the correct use includes a hyphen.
- The terms "Automated Circulation System (ACS)," "Library Management System (LMS)," "Library System," and "circulation system" are used interchangeably throughout the document. Additionally, "Library System" is inconsistently capitalized when it is used. One term should be chosen and used consistently.
- Use of "#" as shorthand for "number" should be eliminated and the word "number" should be used instead.
- The explanations of the individual messages (beginning on p.10) are not structured consistently. In some cases, the explanation indicates that Unsupported Request Message is a valid response, but in others, only the expected response is given. Sometimes, the responder is described as the "responding application," while at others it is the "library system" (inconsistently capitalized as mentioned above).
- The tables listing the valid fields in each message have elements that are inconsistently capitalized. For example, on p.12, the name for the OP field is "override requestor Password" where the "P" is the only term capitalized in this column of the entire table.
- We suggest that the DD field ("nb due date") be titled simply "due date". Further, we suggest that the new DD field may not be necessary; the AH field should suffice for both the due date field in a response and the due date field in a request. (See p.43.)

Specific Issues

- p.5, 2nd paragraph in Introduction – "libraries" should be "library's".

- p.6, in Definitions – "LMS" is defined to be "Library Automation System" rather than "Library Management System." Further, the need to define "LMS" is subject to an item mentioned in General Issues, above.
- p.6, in Document Conventions – "depreciated" should be "deprecated".
- p.8, in explanation of no block field – "Checkin (09) can Checkout (11) messages" should be "Checkin (09) and Checkout (11)". Also, the second mention of "offline checkin (07)" should be "offline checkout (07)".
- p.8 – "Checksum and Sequence Number" heading should be bold.
- p.8, in Checksum and Sequence Number – "this is not longer required" should be "this is no longer required" in the final clause of the final sentence.
- p.9, in Patron Item Detail (27/28) – In the first sentence, "that provide detail patron records" should be "that provide detailed patron records" or "that provide details of [or about] the patron records". Also, the wording in the second sentence is confusing and should probably be rephrased. Additionally, the comma following "list of data" should be either a period or a semi-colon. Finally, "the data is provides" should be "the data it provides".
- p.9, in Create Patron (33/34) – "a patron to enter their" should be "a patron to enter his or her" because "a patron" is singular and "their" is plural.
- p.10 – "Unsupported Message Response (00)" heading should be bold.
- p.10, in Unsupported Message Response (00) – the final sentence is confusing and should be rephrased.
- p.12, in Valid Responses for Checkin (09) – "Checkout Response (12)" should be "Checkin Response (10)".
- p.13, in Create Patron (33) – Is there a need for additional name parts (other than first and last)? Where does one put name suffixes (Sr, Jr, III, etc.) or family designations (like "von" or "de la")? What about those who use three (or more) names? The same comment applies to the Update Patron (31) request described on p.22.
- p.13, in Create Patron (33) – "Birth date" is inconsistently capitalized when compared to the other fields in the table.
- p.13, in Create Patron (33) – What is the purpose of "visible user id" and is this something the requesting system will know?
- p.13, in End Patron Session (35) – "their" should be "his or her".
- p.14, in Fee Paid (37) – "collected from the collected from the patron" should be "collected from the patron".
- p.14, in Fee Paid (37) – "The Library System should update their records" should be "The Library System should update its records".
- p.15, in Valid Responses for Hold (15) – "Hold Response (18)" should be "Hold Response (16)".
- p.15 – What kinds of Item Status Updates are possible? There is only one field (CH – Item Properties) that can be sent with the request. What sort of data is being considered for inclusion in that field?
- p.16, in Login (93) – "that support use of" should be "that support the use of" and "when required by Library System" should be "when required by the Library System" (or whatever term for the Library System is used to maintain consistency).
- p.16 – "OfflineCheckin (05)" heading should be "Offline Checkin (05)".
- p.16, in Offline Checkin (05) – "a checkin transaction of a transaction" should be "a checkin of a transaction". Further, "prior the generation" should be "prior to the generation".
- p.16, in Offline Checkin (05) – "responding application" should be "responding application)" (if the parenthetical qualifier is needed at all; once consistency between "responding application" and "library system" [and possibly other variants] is achieved, the qualifier may be unnecessary).

- p.17 – "OfflineCheckout (07)" heading should be "Offline Checkout (07)".
- p.18, in Patron Enable (25) – "by a self service to re-enable patrons" should be "by a self service application to re-enable patrons". Further, as has been mentioned above, a decision should be made about the use of "self-service" or "self service" (as well as consistent capitalization).
- p.18, in Patron Item Detail (27) – the "terminal password" field in the fields table is missing the field code (AC).
- p.19, in Patron Information (63) – the BP and BQ fields should include the same qualifiers in the notes field as those used in the Patron Item Detail (27) fields table.
- p.19, in Renew (29) – Should the business logic to determine whether a third party is allowed to renew an item be vested in the self-service circulation terminal, or should that decision be made in the ILS?
- p.23, in Update Patron Request (31) – The notes for BF (Phone Number) and UT (User Txt Msg Address) should be either removed or extended.
- p.25, in Checkin Response (10) – Should DA (Hold Patron Name) be deprecated since new fields (HA, HB) for patron name information have been added? UA and UB are also available to carry patron name data.
- p.28 – "Hold Response (38)" heading should be "Hold Response (16)".
- p.28, in Hold Response (38) – the Hold Response message needs the fee information carried in BH, BT, and BV since the Hold request allows the BO (Fee Acknowledged) field.
- p.30, in Patron Information Response (64) – "Personal name" in the name column for the AE field is inconsistently capitalized.
- p.34, in Renew Response (30) – The examples given for the desensitize field being set to N are for situations where the renewal request would is likely to fail, and the self-service circulation terminal should know not to desensitize an item when the corresponding transaction was not successful. What are some legitimate cases where the transaction is successful but the item should not be desensitized? Should any consideration be given to the type of desensitization being used? For example, a video tape secured with EM strips should not be desensitized, but the same video tape CAN be "desensitized" when using RFID for security. Are there cases where an item should not be made insecure regardless of the type of security being used?
- p.35 – "Renew All Response (30)" should be "Renew All Response (66)".
- p.35, in Renew All Response (30) – The note for the BK (Transaction Reference Id) says the field may be repeated. Should there be a way to associate a particular item id to each transaction id? (In other words, does a generic bundle of transaction ids provide any meaningful value to the self-service circulation terminal?)
- p.38, in the explanation for the cancel (BI) field in Field Descriptions – "DEPRECIATED FIELD" should be "DEPRECATED FIELD".
- p.38, in the explanation for the card retained (CX) field in Field Descriptions – Why is CX highlighted in gray?
- p.39, in the explanation for the circulation status field in Field Descriptions – A tab is needed between "Value" and "Status".
- p.39, in the explanation for the currency type field in Field Descriptions – A tab is needed between "Value" and "Definition".
- p.40 – "Error Code" is inconsistently capitalized.
- p.40 – "Electronic resource address" is inconsistently capitalized.
- p.41, in the explanation for fee type (BT) field in Field Descriptions – A tab is needed between "Value" and "Fee Type" headings.

- p.41 – Are the "hold patron first name (HA)" and "hold patron last name (HB)" redundant? Could the UA and UB fields be used instead?
- p.41 – Is the "hold patron name (DA)" redundant? Could the HA and HB or UA and UB fields be used instead?
- p.41 – "Hold pickup location" is inconsistently capitalized.
- p.42 – "Hold request date" is inconsistently capitalized.
- p.43 – A newline is needed after "article bar code)." in the explanation for item identifier (AB) so that the item properties (CH) field is properly aligned.
- p.44 – "Patron PIN" is inconsistently capitalized.
- p.46 – "Secondary Patron Id" is inconsistently capitalized.
- p.46, in the explanation for the security marker field in Field Descriptions – A tab is needed between "Value" and "Security Marker Type" headings. Also, should RFID be added to the list of security markers? Should RFID EAS, RFID AFI, and RFID Database be separate markers?
- p.47 – "Supported messages" is inconsistently capitalized.
- p.47, in the explanation for the status code field in Field Descriptions – A tab is needed between "Value" and "Definition" headings.
- p.47, in the explanation for the summary field in Field Descriptions – The "Position" and "Definition" headings do not line up properly.
- p.47, in the explanation for the supported messages in Field Descriptions – The "Position" and "Definition" headings do not line up properly. Also, there should be a closing ")" following "(value = 'N'".
- p.48 – "Title language" is inconsistently capitalized.
- p.48 – "transaction Reference id" is inconsistently capitalized.
- p.49 – "Visible user id" is inconsistently capitalized.

Concerns over Rights to Use and Protected Intellectual Property

The protocol needs to be much more explicit about what, exactly, 3M intends to be "provided **free of charge** to the library community" (emphasis added), as stated in the Terms of Use section on p.6. The SIP 2.0 protocol included a statement that read, "Permission is hereby granted to utilize this protocol in hardware and software products but no permission is granted to create derivative works or otherwise modify the protocol," yet 3M filed a lawsuit alleging patent infringement against EnvisionWare in June of 2009. In the lawsuit, 3M claims that features commonly referred to as "fines and fees" and "store and forward" are protected by one or more U.S. and international patents. However, both SIP 2.0 and this draft of SIP 3.0 include numerous messages that define mechanisms to support paying patron fines and fees from a self-service circulation terminal and for conducting transactions when the ILS is offline. 3M should not be promoting something as an open, royalty-free industry standard (which it does in both SIP 2.0 and this draft of SIP 3.0) if it intends to later claim a right to royalties or to enforce patent rights that would foreclose others from full use of the SIP protocol. Doing so would be inequitable and an example of unfair competition. 3M has not stated clearly its intention with regard to promotion of the SIP protocol. We suggest that, as with the NCIP discussions that are being conducted by NISO, before promulgating SIP 3.0 as a new standard, 3M should be required to state its intention with regard to any intellectual property rights that it believes are implicated by others' adoption or implementation of SIP 3.0.

The following list provides specific examples of features and functionality defined in SIP 3.0 (many of which are also present in SIP 2.0) that may overlap claims made in 3M's U.S. patents 6,857,568 and 6,549,141:

- p.6, in History of SIP – "In 1997 version 2.0 was released, and provided additional messages to support Checkin, **fines and fees payment**, **off-line transactions**, renewals, and **chargeable loans**" (emphasis added).
- p.6, in History of SIP – "In 2005, 3M published extensions to Version 2.0 to include patron authorization for PC Management systems and **payment systems**" (emphasis added).
- p.7, in What's New in Version 3.0 – "Added **Off line Checkout** and **Offline Checkin** messages **to support offline processing**" (emphasis added).
- p.8, in the explanation for no block in Deprecated Fields – "This field is used in Checkin (09) can [sic] Checkout (11) messages to identify **off line transactions**" (emphasis added). Further, "**[t]o perform off line transactions, developers should utilize the new messages Offline Checkin (05) and Offline Checkin [sic] (07)**" (emphasis added).
- p.8, in the explanation for nb due date in Deprecated Fields – "This field is now utilized in the new message **Offline Checkout (05)**" (emphasis added).
- p.9, in Offline Checkin (05/06) in New Messages – "This message should be used for all **checkin requests that have occurred in the past**…. **Developers should no longer utilize the no block field to request the circulation system perform offline transactions**" (emphasis added).
- p.9, in Patron Item Detail (27/28) in New Messages – "This new message was developed to provide a way to get list data such as patron holds, **fees**, recall items, etc [sic] that provide detail patron records" (emphasis added).
- The Checkout (11), Offline Checkout (07), Renew (29), Renew All (65), and Hold (15) messages contain a "fee acknowledged" field to indicate that a user has agreed to have a fee assessed against his or her record in return for borrowing or requesting an item. Fee information is carried in the corresponding response messages.
- The Fee Paid (37) and Fee Paid Response (38) messages provide a well-defined mechanism for notifying the ILS of payments received from patrons from self-service circulation terminals. The explanation of Fee Paid on p.14 states, "This message can be used to notify the Library System that **currency has been collected from the patron**" (emphasis added). Further, a note in the notes column for the CG (fee identifier) field describes this field as an "[i]dentifier for specific **fee being paid**" (emphasis added).
- p.16, in Offline Checkin (05) – "This message is used by a self service application **in offline mode** to request the responding application **to perform a checkin transaction of a transaction that has occurred offline and has not been recorded in the circulation system at the time of the request**" (emphasis added). Further, the explanation reads "**'Offline mode' indicates that the transaction is not taking place 'in real time'** but has taken place prior [to] the generation of the message **when the application did not have access to patron or item data**" (emphasis added).
- p.17, in Offline Checkout (07) – "This message is used by a self service application **in offline mode** to request a Library System **to perform a checkout transaction**" (emphasis added). Further, the explanation reads "**'Offline mode' indicates that the transaction is not taking place 'in real time'** but has taken place prior to the generation of the message **when the application did not have access to patron or item data**" (emphasis added).
- p.24, in ACS Status (98) – This message includes a field called "off-line ok" that permits the ILS to tell the self-service circulation terminal whether off-line transactions are allowed.
- p.30, in Patron Information Response (64) – Various fields for fine and fee information are included with this message, presumably so that the self-service circulation terminal may display this information to the user and potentially accept payments. The same is true of the deprecated Patron Status Response (24) message defined on pp.33-34.

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- p.31, in Patron Item Detail Response (28) – This new message provides an entire section of fields related to patron fees. Again, it must be assumed that this information is provided so that a self-service circulation terminal may display to the user details about his or her fines and fees and potentially accept payments.
- No less than 10 fields exist to convey fine and fee related information in various messages. (See pp.40-41.)
- p.43, in the explanation for nb due date in Field Descriptions – "This is the no block due date that articles were given **during off-line (store and forward) operation**" (emphasis added).
- p.43, in the explanation for no block in Field Descriptions – "**Recommended use of Offline Checkin & Offline Checkout messages**" (emphasis added). Also, "This field notifies the ACS that **the article was already check in or out while the ACS was not on-line**" (emphasis added) and "**[t]he SC can perform transactions while the ACS is off-line. These transactions are stored and will be sent to the ACS when it comes back on-line**" (emphasis added).
- p.44, in the explanation for off-line ok in Field Descriptions – "This field should be Y **if the ACS supports the off-line operation feature of the SC. The ACS must also support the no block charge requests from the SC when it comes back on-line**" (emphasis added).
- p.45, in the explanation for patron status in Field Descriptions – The table lists numerous patron status which the self-service circulation terminal would potentially use to allow or disallow a patron who wants to check out an item.
- p.45, in the explanation for payment accepted in Field Descriptions – "A Y indicates that **the ACS has accepted the payment from the patron** and the patron's account will be adjusted accordingly" (emphasis added).
- p.45, in the explanation for payment type in Field Descriptions – The table lists numerous forms of payment that a patron might use to pay a fine.
- p.47, in the explanation for summary in Field Descriptions – In addition to information about holds, overdues, and charges (items checked out), the table provides a mechanism for obtaining information about fines and fees.

In addition to being more clear about whether implementers are free to use the functions defined by SIP listed above but which may be considered protected intellectual property, the protocol should be more clear about who owns the intellectual property associated with protocol extensions submitted to 3M for possible inclusion in future revisions. On page 56, the protocol invites those who "extend the protocol for the purpose of communicating to a device other than a 3M system … to send documentation of [the] extensions to 3M. In an effort to make this protocol a general purpose standard, 3M will try to incorporate into the 3M Standard Interchange Protocol those extensions that are deemed to be general purpose…." The document remains silent as to 3M's position on who, if anyone, retains the ownership of, the right to use, and possibly the right to allow or disallow others to use the functionality defined by the extension.

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