



Checklist

Industry Requirements for E-Bonding Solutions

Based on Surety Association of Canada Vendor Guidelines

Version date: January 7, 2010

Technology Assessed:

Bond Issuance and Maintenance System

Electronic/Digital Signature System

Xenex Enterprises Inc.

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The Surety Association of Canada provides this checklist as a service only, as guidance to e-bonding providers and users. The Surety Association of Canada accepts no liability that may result from its Guidelines or from partially and fully completed Checklists.

Overall Observations:

Xenex's Bond Issuance and Maintenance System is a comprehensive bond management application designed to allow surety stakeholders the ability to have full management and administration control for all bond types (bid, performance, labour and materials payment, commercial bonds, etc.). This system can be used to electronically prepare bonds for either traditional paper signature and seal process or for electronic signature and seal. A separate Electronic/Digital Signature system by Xenex fully integrates with the Bond Issuance System and can be provided as a separate application. This assessment has been completed based on the two applications operating together.

The Xenex systems assessed are base applications which are customized to a client's business rules and process workflows. The capability of each of the requirements noted as being met has been demonstrated. However, they are only possible through the supportive alignment of business rules and workflows as determined by the purchaser.

Although the base system is targeted to support sureties for bond development, the application is also customizable for any stakeholder, including obligees and principals, to manage their surety bond portfolio.

The Surety Association of Canada recommends that users of this application employ business rules and workflows in alliance to meet the standard requirements noted herein.

1. Developing the Bond:

| M | HR | R | Requirement: | Intent of Requirement: | Meets | Meets in part | Does not meet |
|---|----|---|--|--|-------|---------------|---------------|
| * | | | a) Assurance of clarity. | Is the format used to identify dollars or time frames clear and unquestionable as to their intended values? Has consideration been given to removing simple and obvious opportunities that enable an ease of fraudulence activity, such as a '3' being changed to an '8'. Has consideration been given to obvious clarities, such as 'Canadian' dollars versus 'U.S. dollars'? | ✓ | | |
| | | * | b) Assurance of language options. | Has the consideration been given to language options (French and English) for the development of the bond and/or for the instructions of the technology? | ✓ | | |
| | | * | c) Convenience to use bond templates. | Can bond templates be loaded into the application? If a change to a template has been made, can the change be easily identified and reviewed? | ✓ | | |
| * | | | d) Assurance of ability to change. | Can the bond be easily altered and changed to correct and adjust language prior to signature application? | ✓ | | |
| * | | | e) Assurance of integrity of content. | Can the bond be protected from modifications if required prior to signature? | ✓ | | |
| | * | | f) Process to incorporate legal offer of bond. | Does the process workflow demonstrate the legal offer of surety to the principal? (E.g. by ensuring the surety is the first party to sign and seal the bond). | ✓ | | |

1. Developing the Bond (continued):

| M | HR | R | Requirement: | Intent of Requirement: | Meets | Meets in part | Does not meet |
|---|----|---|---|--|-------|---------------|---------------|
| * | | | g) Ability to add Rider to Bond. | Can a Rider be developed in the same manner the bond was developed? (For example, if the bond was developed on-line, can a rider also be developed on-line?). Is there a reference connector to attach the rider to the bond? | ✓ | | |
| * | | | h) Ability to add a Co-Surety. | When two sureties are involved in the bond transaction, will requirements be met for both sureties re signature, sealing, retrieving, etc.? Is it noted which surety has the administration power to develop the bond on-line? | ✓ | | |
| * | | | i) Ability to develop bonds for Canadian clients doing business in U.S. | Will Canadian sureties (brokers) have the ability to demonstrate authorization authority, such as the opportunity to load attachments, such as powers of attorney, to meet U.S. bond needs? Can reference be made to a resident surety agent re contact information? | ✓ | | |

Comments:

System provides for Administrator Users to set up authorization levels for bonds, identification of authorized signatories, roles and privileges, exposure limits, etc. for end users: employees, brokers, principals, obligees.

All bond templates and bond clauses go through an approval process (two authorization levels) prior to being made available for underwriting purposes.

CCDC bond templates can be incorporated. The bond developer is responsible for tracking the CCDC bond use for compliance with the terms of copy write privileges.

Authorized signatories are warned of new bond wordings, other than those already pre-approved by the administrator, prior to authorization.

System allows for use of all bond types inclusive of various contract bonds, commercial bonds inclusive of fidelity bonds.

Full audit trail for all activities and all user types are displayed and included in operational screens.

Individual and aggregate levels of authority, accounts and risk exposure are viewable at company level, principal level, underwriter level, obligee level, broker level, etc.

The system allows for international and national fronting securities.

The system provides rating tables for pricing and billing which may be modified with audit trails. Also allows additional fees be added, e.g. Fronting fees.

The system offers the capability of a comprehensive bond requisition application.

2. Signing the Bond:

| M | HR | R | Requirement: | Intent of Requirement: | Sureties | | Principal | |
|---|----|---|--|---|----------|---------------|-----------|---------------|
| | | | | | Meets | Does not meet | Meets | Does not meet |
| * | | | a) Assurance that the signature represents an actual person. | Is it discernable as to 'who' signed the bond, i.e. first and last name? | Meets | Does not meet | Meets | Does not meet |
| * | | | b) Assurance that the signature belongs to that actual person. | Does the signature belong to the person providing the electronic signature? Are checks and balances in place to prove the signature does belong to the individual identified as the signatory? | Meets | Does not meet | Meets | Does not meet |
| * | | | c) Assurance of intent. | Are there password protections and other checks and balances in place to prove the individual providing the signature on the bond did in fact intend to sign the bond? | Meets | Does not meet | Meets | Does not meet |
| * | | | d) Assurance of authority of the signatory. | Are there checks and balances in place to verify the authority of the individual to commit the surety or principal, i.e. evidence of power of authority agreements, or on-line power applications, if required? | Meets | Does not meet | Meets | Does not meet |
| | | | e) Accommodation of business practices surrounding authority. | Is it convenient for sureties or principals to continue with business rules requiring two authorized signatories, should they require it? | Meets | Does not meet | Meets | Does not meet |
| * | | | f) Assurance of integrity of content. | Can the bond be protected from any modification or fraudulent change once the bond has been signed by a party and before the party affixes their seal? | Meets | Does not meet | Meets | Does not meet |

Comments (Signing the Bond):

The ratings speak to requirements for the surety industry and the surety industry's preference relative to the principal's environment regarding the signature requirements on a bond.

The authority of the individual signing on behalf of the principal is typically deemed to be unquestionable by the surety and is dependent on the principal's environment for its own business rules.

A designated administrator within the surety identifies the authorized signatories within the Bond Issuance application and uploads the actual personal signatures into the Signature application. Audit trails are in place to identify the administrator's actions as well as the actions of the authorized signatories. An authorized signatory must use their username and password to enter the Signature system and for bonds they have been identified as being authorized to sign, then they may place their signature onto the bond using a personal "PIN" number. Upon the correct PIN application, the visual signature of the authorized signatory is placed on the signature line of the bond. This application is capable to track blanket power of attorneys as well as individual power of attorneys provided at a project/contract level.

The visual application of the signature along with a typed version to identify the signatory both visually appear on the bond document.

This application requires the surety and the principal to pre-arrange and/or coordinate the bond signature process for the principal. This has the potential to offer further protection and audit trail tracking for the principal signature process.

3. Sealing the Bond:

| M | HR | R | Requirement: | Intent of Requirement: | Sureties | | Principal | |
|---|----|---|---|---|----------|---------------|-----------|---------------|
| | | | | | Meets | Does not meet | Meets | Does not meet |
| * | | | a) Assurance of corporate seal (an identifiable corporate commitment). Note: Not required for bonds falling under legislation of the province of Quebec. | Is the application of corporate seals a separate application from the signatory application? Does the corporate seal of the surety and principal appear in some visual form on the electronic form of bond? | Meets | Does not meet | Meets | Does not meet |
| * | | | b) Assurance of corporate seal ownership. | Are there checks and balances to prove this visual assurance of corporate seal is provided by the surety (or principal) and/or its parent and/or a subsidiary? For example, does the individual authorizing the sealing application have authorization to do so on behalf of the organization? | Meets | Does not meet | Meets | Does not meet |
| * | | | c) Assurance of intent. | Are there checks and balances in place to prove the surety was unmistakable in their intent to apply their corporate commitment indicator? Is there an unequivocal and recorded act showing that the surety intended to seal the bond? For example, "by clicking yes, you are sealing this bond". | Meets | Does not meet | Meets | Does not meet |
| * | | | d) Assurance of integrity. | Can the bond be protected from any modification or fraudulent change once the bond has been signed and sealed? | Meets | Does not meet | Meets | Does not meet |
| * | | | e) Assurance of verification. | Can the authenticity of the signed and sealed bond be confirmed or verified? | Meets | Does not meet | Meets | Does not meet |

Comments:

A visual electronic seal is available to represent the authorized commitment of the surety. The process incorporates assurances of corporate ownership, identification, intent, integrity and verification.

4. Delivery of the Bond:

| M | HR | R | Requirement: | Intent of Requirement: | Meets | Meets in part | Does not meet |
|---|----|---|---------------------------------------|---|-------|---------------|---------------|
| * | * | | a) Assurance of connecting reference. | Will the delivered bond be assuredly connected to the rest of the tender package if required? Is there a possibility for a tender to be rejected due to a bond thought to be missing, but rather the bond could have been delivered via a different electronic avenue? Will the connecting reference create an operational inconvenience to the entity opening tenders? | ✓ | ✓ | |
| * | | | b) Assurance of receipt. | Is there confirmation of receipt once the bond has been delivered electronically? | ✓ | ✓ | |
| * | | | c) Assurance of encryption security. | Is the bond protected from fraudulent changes during the delivery process? For example, if web enabled, is an encrypted site used and can the site be verified (i.e. Https:)? If transmitting a bond with digital signatures, is a secure messaging technology being used? (i.e. 128 bit encryption). | ✓ | | |
| * | | | d) Authenticity warning. | Is there a signal to advise the parties of the bond if a bond does become fraudulently modified? | ✓ | | |
| | | | e) Verification acceptance. | Is the verification process completed by a third party who is able to prove the original bond? Or, is the owner prepared to accept the provided verification mechanism? | ✓ | | |
| * | | | f) Assurance of responsibility. | Does the application enable the principal to maintain control of and assume ultimate responsibility for delivery of the final signed, sealed bond to the obligee? | ✓ | | |

Comments (Delivery of the Bond):

The Bond Issuance System offers a variety of bond delivery options. Parties may 'pick up' the digital bond held by a chosen third party. Or the bond may be uploaded as a pdf into various e-bidding programs.

The assurance of the connecting reference is completely dependent on the principal's choice of delivery system to the owner. However, audit trails exist relative to the bond being 'picked up' by either the principal or the owner party to retrieve the bond as well as audit trails to demonstrate the bond was sent externally from the application. The bond can easily be uploaded into various e-bidding technologies as per the principal or owner's preferences. The flexibility afforded is beneficial to the principal and dependent on their option to complete the delivery process. The confirmation of receipt is also dependent of the principal's choice of delivery. However, if the bond is 'picked up' by the owner (versus delivered) the assurance of receipt is accomplished with audit trails. The owners email server acknowledgement message is recorded to confirm successful electronic delivery.

The verification process is a very strong feature of bonds created digitally within the Xenex application.

Once delivered, the owner is easily able to conduct the verification process online. Regardless of how the bond was delivered, the owner may click on any signature on the bond to confirm the signatory and the date and time they signed the bond. By clicking on the seal, the owner will be able to verify the seal's authenticity, and by submitting the bond for verification, the owner will be able to know whether any adjustments were made to the content of the bond. If any adjustment was made, a warning will be provided. The verification process within the Xenex environment is protected by 512 bit encryption security algorithm. Hence, there is considerably less chance for the verification process to be breached given the superior secured environment as compared to current standards of 128 bit encryption environments.

5. Retrieval of Final Bond:

| M | HR | R | Requirement: | Intent of Requirement: | Meets | Meets in part | Does not meet |
|---|----|---|--|--|-------|---------------|---------------|
| * | | | a) Assurance of the existence of bond. | Does it clearly establish which version would be treated as the 'true original' bond? | ✓ | | |
| | * | | b) Assurance to locate. | Does it clearly determine where this 'true original' version is stored? Is there reference to the verification process? | ✓ | | |
| * | | | c) Assurance of integrity of content. | Is it possible for the bond to have a printable adjustment made to the content, with or without saving the adjustment? (Answer should be no, however this cannot be guaranteed 100%). Has protection been taken to ensure the bond cannot be printable with an adjustment made after the surety has approved it? | ✓ | | |
| * | | | d) Assurance of verification. | Does a verification process exist to support the bond throughout the entire retention period? | ✓ | | |
| | * | | e) Assurance of accessibility. | Can the bond be stored and retrieved freely by all authorized parties? | ✓ | | |
| * | | | f) Assurance of retention commitment. | Is the bond stored in a secure environment? Is there a commitment with regard to the length of time the bond will be stored? Does it clearly establish what the terms and commitments are for electronic retention/storage of the bond? | ✓ | | |

Comments:

Bonds and all history are systematically retained for 25 years for verification process. Although a third party to host and store the information is recommended to ensure objectivity among the parties of the bond.

All of the history regarding attachments, authorizations, surety notes, and progress reports are also stored in the bond file and easily retrieved.

Enabling accessibility to the bond for external parties, i.e. principals and obligees, is customizable based on the required business processes and business rules.

6. Overall:

| M | HR | R | Requirement: | Intent of Requirement: | Meets | Meets in part | Does not meet |
|---|----|---|--|---|-------|---------------|---------------|
| * | | | a) Assurance that all existing legal relationships are maintained. | Does the technology override any of the responsibilities that a party to a bond holds? (Answer should be no). | ✓ | | |
| * | | | b) Assurance that audit trails are in place. | Are clear, easy to track, and reliable audit trails in place? | ✓ | | |
| | * | | c) Convenience to use with other systems and processes. | Is it easy to integrate with other systems that may be necessary to complete the e-bonding process? Are accord standards being used? | ✓ | | |
| | * | | d) Assurance of authority of the surety. | Are there checks, balances and/or attempts in place to disallow unlicensed or fraudulent sureties or principals access to the application? | ✓ | | |
| * | | | e) Assurance to allow third party audit requests. | Will the service provider allow requests for third party audits, particularly to verify and assess the secure protection and integrity of the bond? How user friendly is the technology to conduct such an assessment? | ✓ | | |
| | * | | f) Overall efficiency and ease of use. | Is the new process easy to use? Easy to access? Is it easy to obtain help during transaction? | ✓ | | |

Comments:

Currently Xenex is only marketing the application to licensed Sureties. Regarding prevention of access to a deployed version of the application - authorizations and authentications can be tailored to mitigate this risk.

The verification process is superior and includes bond content, signatures and seal.

Efforts upon the purchaser will be required to identify business rules and customized workflows required in order to implement.

E-Bonding Checklist – Quick Reference Chart

| | Develop | Sign | Seal | Deliver | Retrieve | Overall |
|---------------------------|---|---|---|---|--|---|
| <i>Mandatory</i> | Assurance of clarity. Assurance of ability to change. Assurance of integrity. | Assurance that the signature represents an actual person. Assurance that the signature belongs to that actual person. Assurance of intent. Assurance of authority of the signatory. Assurance of integrity. | Assurance of corporate seal. Assurance of corporate seal ownership. Assurance of intent. Assurance of integrity. Assurance of verification. | Assurance of receipt. Assurance of encryption security. Authenticity warning. Assurance of responsibility. | Assurance of the existence. Assurance of integrity. Assurance of verification. Assurance of retention commitment. | Assurance that all legal relationships are maintained. Assurance that audit trails are in place. Assurance to allow third party audit requests. |
| <i>Highly Recommended</i> | Process to incorporate legal offer of bond. Ability to add rider to bond. Ability to add a co-surety. Ability to develop bonds for Canadian clients doing business in U.S. | Accommodation of business practices surrounding authority. | | Assurance of connecting reference. Verification acceptance. | Assurance to locate. Assurance of accessibility. | Convenience to use with other systems and processes. Assurance of authority of the surety. Overall efficiency and use. |
| <i>Recommended</i> | Assurance of language options. Convenience to use bond templates. | | | | | |

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