

**Functional & Non-Functional Requirements for  
Single Window System  
for Export Cargo Processing**



## 1.0 Functional / Non Functional Requirements for the Single Window System

The following functional and non-functional requirements single window system has been identified below. Please ensure the instructions stated below when completing the document. Please confirm you have complied with the Instructions for Completion by updating the relevant column within the ‘Confirmation of Compliance’.

Instructions for Completion and Special Obligations of the Single Window Operator:

Instructions for Completion	Confirmation of Compliance	
	Yes	No
1. All digital certificates referred to within this document are digital certificates issued by the Lanka Government Network (LGN) Certification Authority.		
2. If the specific functionality <b>is currently available</b> within your system – please respond as ‘Yes’		
3. If the specific functionality <b>is not currently available</b> within your system please respond as ‘No’.		
4. If you are planning to provide a functional/non-functional requirement <b>which is currently not available</b> , please mention ‘No’ as your response and also mention how and when the particular requirement can be met, in the remarks column.		
<b>Special Obligations of the Single Window Operator</b>		
1. The information to be received by the Single Window (whether specified or not) will always have to be received either through Web Services or the Web Interface of the Single Window. Communication must make use of authenticated secure communication channels (HTTPS, WS-Security), including upload of scanned documents.		
2. The information to be transferred by the Single Window (whether specified or not) will always have to be provided using Web Services. WS-Security must be used to ensure all communications are authenticated, over a secure communication channel, and where applicable message content is encrypted.		
3. Agreement to permit other stakeholders to audit the system to ensure compliance with the agreed requirements including a standard security audit.		
4. Agreement to maintain the audit trails and furnish to any user the required information related to any specific message upon request.		
5. To represent any stakeholder in a court of law to confirm the authenticity of the information and/or the documents that were routed through the SWin System		
6. To support and facilitate any stakeholder system to be integrated with SWin System using Web Services.		
7. Agreement to train all stakeholders to use the SWin System.		
8. To provide a help desk for the stakeholders to log any queries and issues with the Swin System.		
9. To ensure the specified service standards are monitored and maintained and reported regularly to the stakeholders.		



<b>Functional/Non-Functional Requirement</b>	<b>Yes</b>	<b>No</b>	<b>Remarks</b> <b>(in case the function is currently not available, please mention how and when it will be provided)</b>
<b>A1. Registration of the Exporting Entity</b>			
1. Accept information relating to all stakeholders (i.e., all Regulatory Authorities, Customs, BOI, Shipping Lines, SLPA and Airport Authority and Single Window) when exporter requests to register with the Single Window.			
2. To accept scanned copies of documents required by any of the stakeholders within the System and transfer them electronically to the relevant stakeholder.			
3. To utilize authenticated secure communication channel for data as well as scanned documents received.			
4. To validate the information received for completeness and accuracy (based on validation rules) and inform the exporter of any inconsistencies.			
5. To inform the exporter in the event the an authentication attempt is failed or a secure channel establishment failed due to an issue with the digital certificate.			
6. To forward the validated information to the Regulatory Authorities as may be required by them and based on the products identified by the exporter to be exported (including scanned documentation required by the Regulatory Authority).			
7. To electronically follow-up with the regulatory authorities until the registration information is received.			
8. On receipt of the confirmation of the registration – the Swin System should be able to accept the Registration Information and any conditions specified by the Regulatory Authorities.			
9. The SWin System should be able to match the response received from the regulatory authority with the application made by the exporter.			



Functional/Non-Functional Requirement	Yes	No	Remarks (in case the function is currently not available, please mention how and when it will be provided)
10. The SWin System should communicate the response and registration information with the exporter with confirmation of the information received from the specific Regulatory Authority.			
11. Upon receiving confirmation of registration from all relevant regulatory authorities the SWin should forward the information and any scanned documents required to the other stakeholders (i.e., Customs, BOI, SPLA, etc.) through an authenticated secure communication channel.			
12. The SWin System should be able to match the response received from the other stakeholders with the application made by the exporter.			
13. The SWin System should communicate the response and registration information with the exporter received from the other stakeholders with confirmation of the information has being received from the specific stakeholder.			
14. The SWin System upon receipt of the required registration information from all stakeholders – will inform the exporter that he could use the SWin System to submit the required export documentation.			
15. The SWin System should permit the adding of new products to be exported (to the existing portfolio) together with the supporting data and scanned documents (as may be required by a regulatory authority) – which should be forwarded to the relevant Regulatory Authorities and confirmation of registration obtained. <b>(Note: (a)</b> As per the method specified in steps 2 -12. <b>(b)</b> The new products may have to registered with existing or new regulatory authorities).			



Functional/Non-Functional Requirement	Yes	No	Remarks (in case the function is <u>currently not available</u> , please mention how and when it will be provided)
<b>A2. Receive Export Documentation, Approvals and Collect Payments</b>			
16. Ability to receive Export Information (i.e., all information required by the relevant Regulatory Authorities, Customs, BOI, Shipping Lines, SLPA and other stakeholders) with scanned documents through a secure <b>web service</b> from the exporter system.			
17. Ability to receive Export Information (i.e., all information required by the relevant Regulatory Authorities, Customs, BOI, Shipping Lines, SLPA and other stakeholders) with scanned documents through a <b>web interface</b> using a authenticated secure communication channel (HTTPS) provided by the SWin System.			
18. To validate the information received and inform the exporter of any discrepancies.			
19. Upon validation of the information to forward the relevant export information to the relevant Regulatory Authority (including scanned documents) together with the confirmation of the exporter details generated through the SWin from a secure <b>web service</b> exposed to the Regulatory Authority			
20. Upon validation of the information to forward the relevant export information to the relevant Regulatory authority (including scanned documents) together with the confirmation of the exporter details generated through the SWin as a secure <b>valid message</b> (email) which could be acted upon by the Regulatory Authority.			
21. To generate an intimation message and reminder messages to the relevant officers within the Regulatory Authorities of the non-receipt of the approvals. ( <b>Note:</b> The SWin System will maintain the information related to the Officer Responsible for approving the export information).			
22. The exporter to effect on-line payments through the SWin to the Regulatory Authority using the Lanka Gate Infrastructure. ( <b>Note:</b> The payment could be through Credit Card payments or Bank Transfers or Direct Debit).			



Functional/Non-Functional Requirement	Yes	No	Remarks (in case the function is currently not available, please mention how and when it will be provided)
23. To receive the Official Receipt issued by the Regulatory Authority through a Web Service or from a Web Interface and to transfer the information to the exporter in a secure manner.			
24. Ability to receive Confirmation of Approval of export (i.e., all information required to confirm the approval, including registration number and/or conditions of approval etc.) by the regulatory authority through a secure <b>web service</b> or <b>authenticated email message</b> from the Regulatory Authority system.			
25. The exporter to effect on-line payments through the SWin to the Customs using the Lanka Gate Infrastructure. ( <b>Note:</b> The payment could be through Credit Card payments or Bank Transfers or Direct Debit).			
26. To receive the Official Receipt issued by the Customs through a secure Web Service or a Web Interface via a secure communication channel (HTTPS).			
27. To forward the information to the exporter through a secure communication channel or an email message with a confirmation generated through SWin confirming the information was received from the Customs.			
28. The validated information is forward as required (i.e., this may include a combination of Information Supplied by the exporter and regulatory authority including scanned documents) to the Customs/BOI with confirmation from the SWin System stating the originator of the relevant information through an authenticated secure communication channel.			
29. To forward the confirmation with the specified conditions to the exporter and the SLPA with a confirmation generated by the SWin stating the originator of the information through a secure communication channel or an email message.			



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<b>A3. Authorization of the CUSDEC for Export</b>			
30. To forward the information confirming the 'goods ready for inspection' to the Regulatory Authorities and the Customs/BOI with confirmation the information was received from the specific exporter generated through the SWin System through a secure <b>Web Service</b> .			
31. To forward the information confirming the 'goods ready for inspection' to the Regulatory Authorities and the Customs/BOI with confirmation the information was received from the specific exporter generated through the SWin System as a <b>Authenticated Message (email or SMS alert?)</b> .			
32. The validated information should be passed onto the exporter with a confirmation from the SWin confirming the originator of the information.			
33. The exporter to effect on-line payments through the SWin to the Customs for the Panel Inspection using the Lanka Gate Infrastructure. ( <b>Note:</b> The payment could be through Credit Card payments or Bank Transfers or Direct Debit).			
34. To receive the Official Receipt issued by the Customs through a secure Web Service or a Web Interface through a secure communication channel (HTTPS) with an email message and to transfer the information to the exporter with the confirmation the information was received from the Customs through a secure communication channel.			
35. To receive inspection confirmation and conditions (if any) with details of the inspection and inspectors from the Customs from a secure web service, this is validated by the SWin and accepted or rejected. ( <b>Note:</b> Rejections should be communicated with the			



<b>Functional/Non-Functional Requirement</b>	<b>Yes</b>	<b>No</b>	<b>Remarks (in case the function is currently not available, please mention how and when it will be provided)</b>
exporter).			
36. The ability to prepare the inspection schedule for the inspectors as well as Inspection Report formats with the details on the exports with the required bar code.			
37. To receive the authorization or rejection confirmation for the export from the Regulatory Authority through a secure communication channel, which is validated by the SWin and accepted or rejected.			
38. To inform the exporter of the authorization or rejection of the export by Regulatory Authority with the confirmation the information was received from the Regulatory Authority .			
39. To inform the Customs and SLPA of the authorization or rejection of the export by Regulatory Authority with the confirmation the information was received from the Regulatory Authority.			
40. To accept the confirmation from Customs of Authorization or Rejection of the CUSDEC with an authorization bar code.			
41. To transfer the CUSDEC authorization/rejection information received from the customs to the exporter and SLPA with the confirmation the information was received from the Customs.			





Functional/Non-Functional Requirement	Yes	No	Remarks (in case the function is currently not available, please mention how and when it will be provided)
<b>A4. Transfer of Goods to Port</b>			
42. Swin will transfer the Shipping Note information to the Shipping Agent or Freight Forwarder with the confirmation the information was received from the specific exporter.			
43. To receive conformation of 'Space Booking' from the Shipping Agent or Freight Forwarder from a secure Web Service and Web Interface over a secure communication channel (HTTPS) together with any other supporting documents (e.g., Container Release Note).			
44. Space Booking confirmation is forwarded to the Exporter with the confirmation generated by the SWin that the information was received from the Shipping Line.			
45. The Space Booking information received from the Shipping Line is retained at the SWin System until the exporter requests the SLPA for the payment details.			
46. To transfer the Space Booking with the confirmation the information was received from the Shipping Line.			
47. Upon receipt of the request from the exporter the SWin will match with the confirmation received from the Shipping Line and forward the relevant information to the SLPA to determine the SLPA Charges with the confirmation the information was received from the specific source ( <b>Note:</b> Multiple Source Information).			
48. To receive confirmation from the SLPA on the charges and to communicate the authenticated information with the confirmation the information was received from the SLPA.			
49. The exporter to effect on-line payments through the SWin to the SLPA for the SLPA Charges using the Lanka Gate Infrastructure. ( <b>Note:</b> The payment could be through Credit Card payments or Bank Transfers or Direct Debit).			
50. To receive the Receipt details for the payment made by the exporter via a secure communication channel. All rejected information is informed to the source.			



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51. To transfer the Receipt details received from the SLPA to the relevant exporter with the confirmation the receipt details were received from the SLPA.			
52. Upon payment of the SLPA Charges the exporter is permitted to update the CDN details on the SWin System. <b>(Note: (a)</b> The SWin System may have to call on many approved CUSDECS for preparing the CDN in the case where cargo is consolidated into a single container. <b>(b)</b> The exporter should be permitted to update the CDN only after the approval of the CUSDEC).			
53. SWin will validate the authenticity of the shipper and forward the CDN details to SLPA with the confirmation the information was received from the shipper through secure communication channel.			
54. The SWin will receive confirmation of acceptance/rejection (with details) of the CDN from SLPA.			
55. The SWin System will validate the authenticity of the accepted/rejected CDN and forward the information to the exporter with the confirmation the information was received from the SLPA.			
56. The SWin will permit the printing of the authorized CDN and Shipping Note by the exporter with the authorization bar code.			
57. The Customs will update the Boat Notes passed on the SWin via a secure mechanism.			
58. The SWin will ensure the authenticity, and pass the information to the SLPA and the Exporter with the confirmation that the information was received from the Customs.			



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<b>A5. Post Shipment Confirmations</b>			
59. The SLPA/Shipping Agent to update the SWin with confirmation of the loading of the cargo (or the shut-out of the cargo) onto the vessel through a secure communication channel. ( <b>Note:</b> The information will be accepted through a secure web service or through a web interface over HTTPS).			
60. The SWin will ensure the authenticity of the information and pass it to the exporter and the Regulatory Authorities with the confirmation the information was received from the SLPA/Shipper.			
61. The SWin System will permit the exporter to print the 'Confirmation of Loading' through the SWin System.			
<b>General Requirements</b>			
62. The System should be available for all of the above transaction 24/7 basis.			
63. Ability for the SWin System to generate email and SMS messages as reminders based on a given frequency to generate the reminders.			
64. The Single Window operator should be able to maintain an audit trail of all the information passed through the single window.			
65. In the event of a dispute the Single Window operator should be able confirm the authenticity of the information transferred based on the digital certificate, email traces, and other logs & audit trails and defend their position in a court of law.			

