

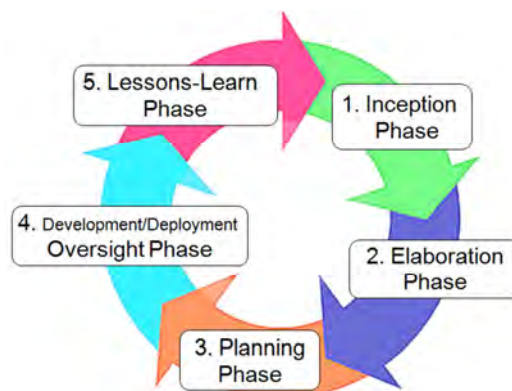
4. Single Window Project Management

The objective of this section is to propose an overall Single Window project management process with five recommended phases to assist the policy managers in the policy formulation, planning and overseeing of the electronic Single Window projects. This stepwise process consists of five phases and their associated deliverables. In each phase, the 10 key components as described in the Single Window Development Framework (Section 3) will be revisited and further refined iteratively.

Because of the iterative nature of Single Window development, Figure 4.1 recommends a stepwise project-management approach to assist policy managers in how to manage the analysis and design, how to formulate a high-level Single Window project master plan, and how to monitor and oversee the implementation of a Single Window project.

Referring to Figure 4.1, a preliminary study (inception in Phase 1) and then a more detailed feasibility analysis (elaboration in Phase 2) are recommended. After these two phases of analysis, a high-level master plan (planning in Phase 3) for Single Window implementation could be confidently formulated in the third phase to define clear paths for development and deployment of the target Single Window. The oversight phase for the execution of the Single Window project development plan is to be conducted in the fourth phase (development/deployment oversight in Phase 4). The fifth phase addresses the issues about lessons learned and feedback for possible future improvement (lessons-learned and feedback for future improvement in Phase 5).

Figure 4.1 - SW Project Management Process in Five Phases



A **preliminary study**, the so-called **Inception Phase** (described in section 4.1), is recommended to be conducted as an initial preparation when an economy starts to think about the possible implementation of a Single Window or its further improvement. A concept paper is developed to facilitate initial discussion on the National Single Window among key stakeholders and sponsors, and to obtain approval for an in-depth study on the need for, approach to and feasibility of a Single Window.

This initial concept paper is not intended to seek agreement for the implementation of a Single Window. Based on the concept paper, a meeting or more should be conducted among high-level key Government representatives, relevant business associations and potential sponsors to discuss the Single Window concept.

In the following **Elaboration Phase** (described in section 4.2), a more detailed Single Window feasibility study is developed and a Project Management Group set up comprising senior representatives of the key agencies who will be directly involved in implementing and utilizing the Single Window is established.

In the **Planning Phase** (described in section 4.3) a high-level Single Window master plan is developed that describes the objectives of the Single Window project, their key performance indicators and the strategies and outputs for developing the Single Window components.

The **Deployment Oversight Phase** (described in section 4.4) focuses on the oversight of the implementation of the system components.

During the **Lessons Learned and Feedback Phase** (described in section 4.5) the project participants review their experiences and discuss opportunities for improvement for the next phase of the SW development.

4.1 Phase 1: Inception for Developing the Initial Concept Paper³⁶

An inception phase (preliminary study) should be conducted as an initial preparation at least for two occasions, i.e. when an economy starts to think about initiating an electronic trade facilitation and Single Window project, and when an economy thinks about the possible extensions of the existing Single Window.

The inception phase often starts with the preparation of a concept or briefing paper, based on some initial research. This work is usually undertaken by the lead Governmental authority or agency, consultants, private organization or a special task force, likely to be heavily involved in the eventual implementation of the project.

³⁶ This part is adapted from UN/CEFACT Recommendation No. 33 (2005), but also includes references to the SW development cycle of section 3.3.

Such a paper usually describes the overall objectives and potential benefits of a Single Window. It would present a general overview, an initial vision and scope of what would be involved in the implementation. The paper typically focuses on the practical issues involved and would avoid excessive technical jargon or in-depth discussion of technical concepts.

Figure 4.2 - During the inception phase, several components related to SW implementation will be analysed but with light depths of coverage as illustrated graphically.



As illustrated in Figure 4.2, the preliminary study of the inception phase normally covers the analysis of several components of the Single Window on a rather high level. Stakeholder requirements, value proposition, possible collaboration among stakeholders, analysis of some key business processes and documents handling, and expected benefits of a Single Window are among the topics that need to be addressed in the concept paper. The other components as shown in Figure 4.2 should also be analysed but normally at even higher levels of perspective.

To be able to suggest any reasonable vision and scope, an initial analysis should be conducted to understand the current environment concerning few but strategically important import/export, transit and transport processes and documentation requirements by a designated task force. This is an attempt to identify bottlenecks in some trade and transport procedures, delays and any complicated documentation, and looking particularly for areas of possible improvement.

The policy managers and concerned stakeholders within the task force can compare the current trade environment of the target economy with some best practices—for example, by comparing the key performance indicators of the national economy with the performance indicators of other countries as explained in section 1 or the current evolution stage of the national Single Window with a roadmap as explained in section 2.

Following the preparation of the concept paper, a meeting would typically be organized for high-level representatives from all relevant trade-related organizations, and Governmental authorities and agencies to discuss the Single Window concept on the basis of the concept paper. The objective of such a meeting is to obtain agreement on the project concept and to launch a detailed feasibility study that would include more detailed needs analysis and a technological assessment.

The political will to support the implementation of a Single Window is a prerequisite for its success. Presuming that a positive decision is reached to proceed with the feasibility study, the meeting should establish a **Project Management Group** made up of senior representatives of the key agencies who will be directly involved in implementing and utilizing the Single Window.

This Group should have the power to commit funds to the project, make resource allocation decisions and commit their organizations to participating in the project. A draft text of “Objectives, Responsibilities and Terms of Reference” should be drawn up for the Project Management Group ahead of time, and agreed upon at the meeting.

One of the recommended techniques to convince the high-level policy decision makers is **to align the vision**, scope and benefits of the implementation project with the national economic and social development goals.

A good strategy to propose a convincing vision to the high-level policy decision makers is to provide some quantitative indicators and goals along with some compelling reasons why electronic Single Window projects should be supported, mainly as a vision-enabling solution. Best practices and good case examples of many economies could be used, and then the feasibility study could be conducted for the specific context within the economy.

An example of the vision is following.

The national economic development goals for the electronic National Single Window Project:

25% Better, Faster, and Cheaper in Trading Across Border Indicators within 5 years
(indicators as collected by World Bank’s Doing Business Survey).

*25% better means more effective and efficient in security, control and compliance
25% faster means fewer days, and fewer steps - simplification in
export/import/transit-related procedures and documentation,
25% cheaper means fewer trade and transport transactions, and operation costs*

For example, a quantitative target of reducing the number of days for exporting a standardized cargo (referencing to the World Bank's Trading Across Border indicators) to reduce from 24 to 15 days within 5 years, was mandated by the Cabinet of Thailand in 2005, and the trade transaction cost reduction target proposed was 0.5 per cent of GDP³⁷.

Noticeably, at the initial and early level of conceptualization, the vision and scope of the national Single Window project are just a rough approximation. More clear vision, goals and scope needs to be further examined. A detailed feasibility study can be conducted and then the working team revisits and readjusts the vision and its quantitative goals, this time with more supporting evidence.

In conclusion, **the objective of the inception phase** is to develop a conceptual paper and to facilitate initial discussion on the topic and obtain approval for a more in-depth feasibility study into the need for, approach to and feasibility of a Single Window. Several key components need to be studied and described at least at the high-level perspective, e.g. including the current and future business processes, document requirements, legal infrastructure, initial application architecture, as well as some management and technical issues.

4.2 Phase 2: Elaboration phase for Conducting the Detailed Feasibility Study

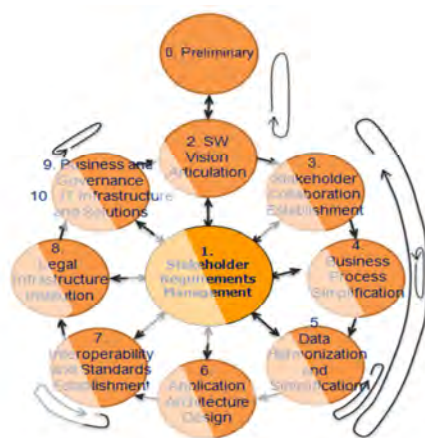
The detailed feasibility study is a key element of the overall Single Window analysis and development. It should determine the potential scope, the user needs, possible scenarios for implementation, potential for and nature of a pilot implementation, resources required (financial, human, technical, etc.), potential benefits and risks, a time frame, and an implementation and management strategy. It is strongly recommended that this study should be based on direct face-to-face interviews with key players in both Government and trade, complemented by questionnaires to collect information from a wider circle of potential participants and users.

The objective of the elaboration phase is to conduct a detailed feasibility study to provide decision-makers with an insight into the options available and their impact. The study should:

- provide advice on which option is preferable and feasible for the economy;
- point out how the implementation should take place (i.e. full or phased implementation)
- indicate the possible steps for a phased implementation;
- describe the nature and extent of an initial pilot implementation;
- present the potential for revenue collection (fees, duties, etc.);
- identify key deliverables;
- recommend a timetable for development and implementation.

³⁷ The target was reached by the year 2009 because of the paperless Customs and partial deployment of National Single Window, as also described in "The Single Window Implementation Framework (SWIF)," Markus Pikart (UNECE), Thayanan Phuaphanthong and Somnuk Keretho (Kasetsart University, Thailand), Wout Hofman (TNO), and Eveline van Stijn and Yao-Hua Tan (Vrije Universiteit Amsterdam), and ITAIDE deliverable 5.0.4b, 2010. <http://www.itaide.org/forms/document.asp?Q=14330>.

Figure 4.3 - During a detailed feasibility study in the elaboration phase, all components related to SW implementation will be analysed again but in greater detail than in the inception phase.



As illustrated in Figure 4.3, all key components suggested in the Single Window development methodology should be included in the detailed feasibility study. The topics of the study should include these 10 components. In particular, they should look into the current state of these components and provide a picture of how they need to be developed for implementing the project.

The findings of the feasibility study will have to be reviewed and approved by **the Project Management Group**. Sufficient time should be allowed for this process as it is essential to have the maximum input and agreement before the report is finalized.

After the study has been accepted by the Project Management Group, and a preferred Single Window option and the accompanying implementation option chosen, these decisions should be presented to the wider Government and trade community. A good approach is to organize a **national symposium** on establishing a Single Window, where the findings and the options are presented and discussed. Such an exercise will help to ensure that important areas were not missed in the analysis and that the option proposed, including proposed pilots and/or phased implementation, has the support of the user community, before the final decisions are taken.

Table 4.1 - Suggested key topics and contents within a feasibility study report

Key topics	Suggested contents
<p>Potential benefits of a Single Window</p>	<ul style="list-style-type: none"> • Examine existing requirements and procedures for submitting import, export and transit documents and information to Government to: <ul style="list-style-type: none"> - Identify key Governmental authorities and agencies that can potentially be involved in the system. - Determine the extent to which it is possible to harmonize and simplify these requirements, procedures, information flows and documents. In particular, explore possibilities for ensuring the single submission of documents and information. • Consider the potential of the Single Window for addressing trade security issues. • Identify the needs of potential users, especially regarding the design of the eventual services and associated interfaces (either electronic or physical). • Consider “best practice” methods in existing Single Windows (e.g. as discussed in section 2 – the Single Window Reference Model). This may involve visits to operational Single Windows. • Consider the need for and approach to generating the required political support for the project.
<p>Organizational aspects and collaborative platform</p>	<ul style="list-style-type: none"> • Examine the overall organizational aspects of the proposed Single Window to determine: <ul style="list-style-type: none"> - Which Governmental authorities and agencies should be involved • Which Governmental authority/agency, or private organization should lead the running of the Single Window project - Government, private owner under Government contract or completely privately-owned by business (service provider) <ul style="list-style-type: none"> - Should the Single Window be centralized or decentralized? - Should it be an active or passive program? - Should it include a payment system? - Should participation be voluntary or mandatory? - Should common risk profiles/compliance assessments be part of the system and should they be developed and/or shared? - If something goes wrong, who bears the risk? - Should implementation be phased?

Key topics	Suggested contents
Human resources and training	<ul style="list-style-type: none"> Review and document existing human resources within the relevant Governmental authorities and agencies for the project development, implementation, and operation, and consider training additional staffing and management requirements related to the implementation of the Single Window
Legal infrastructure	<ul style="list-style-type: none"> Review the legal issues, privacy legislation and data-protection laws associated with implementing a Single Window, including the submission of electronic information by traders, the exchange of information between Governmental authorities and agencies, and issues related to the use of electronic signatures . <p>Note: Exchange of information between Governmental authorities or agencies requires an appropriate statutory gateway. Exchange of information between Governmental authorities or agencies is often restricted to trader consent, disclosure by order of a court, or in the public interest. Also, data protection legislation may affect the obtaining, use and disclosure of personal data.</p>
Technical aspects	<ul style="list-style-type: none"> Review existing technical systems for receiving, storing and exchanging the above information Determine the overall technical requirements, including specific requirements for additional systems development, interfaces, outlets and the possible development of interface systems to existing legacy systems for the proposed scenarios. Determine if existing systems will be able to handle increases in the volume and flow of data. Examine issues related to the verification and authentication of data. <p>Note: Creating a Single Window presents an ideal opportunity to consider the benefit of implementing related changes in the collection of information, such as those related to web-based technology</p>

Key topics	Suggested contents
<p>Information and documentation</p>	<ul style="list-style-type: none"> • Review the existing set of trade documents in use and determine whether these need to be aligned, harmonized and/or simplified (preferably according to the UN Layout Key³⁸). Determine what data will be required; how the data will be submitted; and in what format (electronic (EDI, XML or other) or paper) • Determine who can submit the data or documents (importers/exporters, Customs brokers, agents) • Determine how the data should be shared amongst participating Governmental authorities and agencies and where it should be stored, etc. • Consider how the data could be exchanged with administrations in other economies • Consider how the data could be used for risk analysis and other related purposes • Quantify the potential benefits of making better use of data held in commercial systems and records in meeting Government requirements and helping to reduce business compliance costs in the transmission of information <p>Note: A minimum data set must be agreed upon among all parties, including the format, data fields and data elements. These should be in conformity with international standards (e.g. UNECE/ISO UNTDED and the World Customs Organization data model)³⁹.</p>
<p>Impact assessment</p>	<ul style="list-style-type: none"> • Examine the potential impact of the project on existing systems, procedures, employment, job descriptions, etc. • Consider potential social and cultural issues that may arise in connection with creating the Single Window • Consider the potential response of groups or organizations that may perceive the Single Window as a threat (groups or organizations that may have a vested interest in maintaining the status quo) • Consider the possible impact of the Single Window on reducing corruption and the effect this may have • Recommend an appropriate change management strategy for the project

³⁸ UNNExT *Guide for the Design of Aligned Trade Forms for Paperless Trade*, UNNExT Publication, December 2011.

³⁹ UNNExT *Data Harmonization and Data Modeling Guide*, UNNExT Publication, 2012.

Key topics	Suggested contents
<p>Implementation options</p>	<ul style="list-style-type: none"> • Develop implementation options, specifying proposed operational models, relevant Governmental authorities and agencies that would be involved, suggested lead Governmental authority or agency, or private organization, services to be provided, potential costs and benefits, and time frames for implementation • Suggest whether a full or partial implementation process should be undertaken. Factors to be considered relate to the availability (or lack thereof) of resources for full project implementation (financial, human, technical, etc), different levels of need of the relevant Governmental authorities and agencies and the significant difference in time and or resources required by different agencies to: <ul style="list-style-type: none"> - Achieve the required legislative changes to operate a Single Window - Develop, or modify existing legacy systems - Generate the required level of commitment for project implementation • Make recommendations regarding a pilot implementation for the project. <p>Note: In some cases, it may be worthwhile to opt for “staggered” implementation, with short-term enhancements that still deliver adequate benefits to make the project attractive to the trade, while moving closer to the desired (electronic) Government/trade system in the longer term. However, when adopting an approach in stages, initial infrastructural changes must support the long-term solution identified in the needs analysis and feasibility study. Also, short- or medium-term solutions must be properly and financially evaluated and assessed against strategic criteria before any decision is taken regarding implementation.</p>
<p>Business model (more details are suggested in section 5)</p>	<ul style="list-style-type: none"> • Develop a business case for creating a Single Window under each proposed scenario, including an estimate of the initial and operating costs, value of the benefits, sustainability, possible mechanisms for revenue collection and sources of project financing • Determine the resources needed to complete the project from research to operation • Assess the extent to which resources from Governmental authorities and agencies, including central funding, would be required to develop a full project plan, the time scales needed to develop that plan and implement the project • Examine the potential for a public-private partnership approach to the implementation of the project, including revenue streams • Identify the key risks that the Single Window project may face; in particular, operational, legal, and infrastructural issues that could make it extremely difficult to deliver a solution at both a reasonable cost and a sufficiently attractive service level to encourage trade take-up.
<p>Promotion and communications</p>	<ul style="list-style-type: none"> • Recommend a promotion and communications strategy for developing and operating the Single Window. This is essential to keep all stakeholders informed and engaged throughout the project

Key topics	Suggested contents
Legal Infrastructure	<ul style="list-style-type: none"> • Review the legal issues, privacy legislation and data protection laws associated with the implementation of a Single Window, including the submission of electronic information by traders, the exchange of information between various Governmental authorities and agencies, and issues related to the use of electronic signatures <p>Note: Exchange of information between Governmental authorities or agencies requires an appropriate statutory gateway. Exchange of information between Governmental authorities or agencies is often restricted to trader consent, disclosure by order of a court, or in the public interest. Also, data protection legislation may affect the obtaining, use and disclosure of personal data</p>
Technical aspects	<ul style="list-style-type: none"> • Review existing technical systems for receiving, storing and exchanging the above information • Determine overall technical requirements, including specific requirements for additional systems development, interfaces, outlets and the possible development of interface systems to existing legacy systems for the proposed scenarios; Determine if existing systems will be able to handle (likely) increases in the volume and flow of data; Examine issues related to the verification and authentication of data <p>Note: The development of a Single Window presents an ideal opportunity to consider the benefit of implementing related changes in the collection of information, such as those related to web-based technology</p>

Key topics	Suggested contents
<p>Information and documentation</p>	<ul style="list-style-type: none"> • Review the existing set of trade documents in use and determine whether these need to be aligned, harmonized and/or simplified (preferably according to the UN Layout Key⁴⁰). Determine what data will be required; how it will be submitted; and in what format (electronic (EDI, XML or Other) or paper) • Determine who can submit the data or documents (importers/exporters, Customs brokers, agents) • Determine how the data should be shared among participating Governmental authorities and agencies and where it should be stored, etc. • Consider how the data could be exchanged with administrations in other economies • Consider how the data could be used for risk analysis and other related purposes • Quantify the potential benefits of making better use of data held in commercial systems and records in meeting Government requirements and helping to reduce business compliance costs in the transmission of information <p>Note: A minimum data set must be agreed upon amongst all parties, including the format, data fields and data elements. These should be in conformity with international standards (e.g. UNECE/ISO UNTDED and the World Customs Organization data model)⁴¹</p>
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⁴⁰ UNNExT Guide for the Design of Aligned Trade Forms for Paperless Trade, UNNExT Publication, December 2011.

⁴¹ UNNExT Data Harmonization and Data Modeling Guide, UNNExT Publication, 2012.

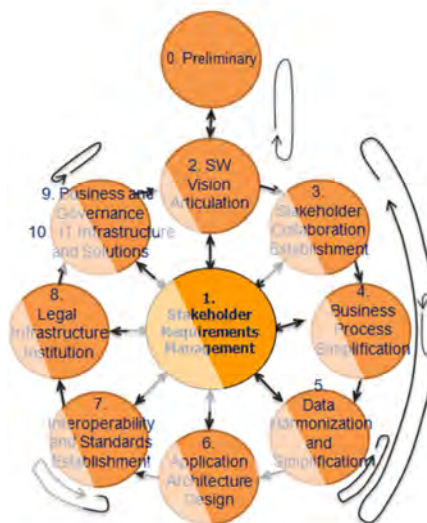
Key topics	Suggested contents
<p>Implementation Options</p>	<ul style="list-style-type: none"> • Develop implementation options, specifying proposed operational models, relevant Governmental authorities and agencies that would be involved, suggested lead Governmental authority or agency, or private organization, services to be provided, potential costs and benefits, and time frames • Suggest whether full or partial implementation should be undertaken. Factors to be considered relate to the availability of resources for full project implementation (financial, human, technical, etc), different levels of need of the relevant Governmental authorities and agencies and the significant difference in time and or resources required by different agencies to: <ul style="list-style-type: none"> - Achieve the required legislative changes to operate a Single Window - Develop, or modify where necessary, existing legacy systems - Generate the required level of commitment • Make recommendations regarding a pilot implementation for the project <p>Note: In some cases, it may be worthwhile to opt for ‘staggered’ implementation, with short-term enhancements that still deliver adequate benefits to make the project attractive to the trade, while moving closer to the desired (electronic) ‘joined up’ Government/trade system in the longer term. However, when implementing an approach in stages, it is essential that initial infrastructural changes support the long-term solution identified in the needs analysis and feasibility study. Also, short- or medium-term solutions must be properly and financially evaluated and assessed against strategic criteria before any decision is taken regarding implementation.</p>
<p>Business Model (more details are suggested in section 5)</p>	<ul style="list-style-type: none"> • Develop business case for establishing a Single Window under each proposed scenario, including an estimate of the initial and operating costs, value of the benefits, sustainability, possible mechanisms for collecting revenue and sources of project financing • Determine the resources needed to complete the project from research to operation • Assess the extent to which resources from Governmental authorities and agencies, including central funding, would be required to develop a full project plan, the timescales needed to develop that plan and to implement the project • Examine the potential for a public-private partnership approach to implementing the project, including revenue streams • Identify the key risks that the Single Window project may face. In particular, operational, legal, and infrastructural issues that could make it extremely difficult to deliver a solution at both a reasonable cost and a sufficiently attractive service level to encourage trade take-up should be identified
<p>Promotion and Communications</p>	<ul style="list-style-type: none"> • Recommend a promotion and communications strategy for developing and operating the Single Window. This is essential to keep all stakeholders informed and engaged throughout the project

4.3 Phase 3: Planning for formulating a Single Window high-level master plan

In the preliminary study and the detailed feasibility study, conducted in Phase 1 and 2. The Single Window vision, objectives, step, target states and associated issues have been commonly clarified and agreed. Thus, at the present phase the analysis of key Single Window components has already been conducted and some agreements about the desired functions and application architecture should be reached. We should now build on this agreements and common understanding and put them into sub-projects with tasks to define what to do and also with their appropriate schedules. A high-level or strategic master plan should be formulated to define clear paths for the development and deployment of the Single Window.

Over time, this master plan should be periodically aligned with changes in business objectives in order to remain as a strategic reference.

Figure 4.4 - During the SW high-level planning phase, all key components related to SW implementation will be revisited again but with perspectives of planning.



The Project Management Group should at this stage have already an approved feasibility study that provides a high-level implementation strategy for the architecture components. The high-level master plan builds on these components and provides a detailed plan and strategy on how to develop and implement these components.

The master plan is an important project management tool to plan, execute, monitor, evaluate, and adjust the project implementation. It should address the following:

- A clear statement of the project's scope, goals and objectives.
- A description of the architecture components to be developed and the deliverables, responsibility for delivery, time frame and milestones for completion.
- Definition of the roles and responsibilities of the various participants, including a clear agreement on who is in charge of the project (the project manager) and the level of authority of this manager.
- Specification of the management and monitoring responsibilities of the project manager and the line of authority and communication between the project manager, Project Management Group and the Task Force.
- A clear communication strategy for communicating with project stakeholders and potential users on a regular basis throughout the implementation, including an agreement on what information needs to be communicated with what groups and in what manner and at what frequency.
- A clear and agreed project budget, including financial and human resources; it is essential that the necessary funds and personnel be allocated to the project from the outset.
- A clear statement of the project risks (such as a cutback in budget, delay in required legal reforms, etc.) and an agreed response plan (to the best extent possible) to manage these risks, including contingency plans for high-level risks.
- Agreement on the criteria for measuring the project success.
- An agreed project review and feedback mechanism to provide on-going monitoring of the project process and to deal with any changes in the implementation that may be required.

As with the needs analysis and feasibility study, a decision on planning activities will have to be taken as to whether the work will be carried out by internal or external resources.

For external contracts, the tendering process will have to comply with existing governmental regulations, which vary from economy to economy. However, it is suggested that the process should be open, should have clear evaluation criteria agreed by the Project Management Group before the tender is issued (and included in the actual tender documentation), and the tender committee should include representatives of all key organizations involved in the project.

Suggested topics for the high-level master plan

Normally, a high-level master plan should cover the following:

- Analysis (as already covered in section 4.1 and 4.2)
 - Inception delivering a preliminary Analysis
 - Elaboration, delivering detailed and agreed feasibility study
- Development
 - Vision and objectives
 - Mapping business objectives and business processes to the environment
 - Data architecture
 - Application architecture
 - Technology solutions
 - Legal infrastructure
- Deployment
 - Change management

The analysis phase consisting of the preliminary study and the feasibility analysis are already discussed in some detail in the previous project management phases. At the time the high-level master plan is developed, the Single Window vision, key objectives, the high-level architecture and other related conditions have already been agreed upon. It will be sufficient to reconfirm and include them into the high-level master plan. Therefore the master plan will focus on the subprojects, tasks and schedules related to the development and deployment and the operational work.

Development includes formal design of strategy elements such as business objectives, process mappings to the current environments and the future environments, technical architecture and architectural principles. Especially, important elements of the strategy are the establishment of Single Window facilities, information and data exchange, new business procedures and electronic service functions. The master plan has to be formally specified for those mentioned topics.

Deployment includes organization commitment and change management to make this SW vision and its plan becomes reality. That includes production roll up, user training and adoption of the Single Window facilities.

Sample table of contents of a high-level Single Window master plan

The following list is a sample for a table of contents of a high-level Single Window Master Plan:

1. Executive Summary
2. Overview of the Single Window
 - 2.1. Scope and objectives of the Single Window project
 - 2.2. Expected benefits
 - 2.3. Major components of the Single Window
 - 2.4. Participating agencies
3. Implementation Strategies
 - 3.1. Incremental development
 - 3.2. Use of international best practices, recommendations, and standards
 - 3.3. Business process improvement
 - 3.4. Harmonization of data requirements
 - 3.5. Provision of legal infrastructure
 - 3.6. Stakeholder coordination
4. Stocktaking of Single-Window-related development so far
 - 4.1. Single Window exchange systems
 - 4.2. Business process analysis and simplification
 - 4.3. Business model
 - 4.4. Harmonization of data requirements
5. Institutional arrangements for project implementation, management and governance
 - 5.1. Implementation
 - 5.2. Management
 - 5.3. Governance
6. Project schedule and budgets

The master plan can be drafted by a team of consultants or a designated task force, but should be reviewed and refined by stakeholders through several rounds of communication and discussions. The final version should be commonly understood by all relevant stakeholders, and then agreed by the senior-level project management group. It should be approved and funded by the government authorities or those high-level policy decision makers who have the resources and can grant sponsorship to the project.

4.4 Phase 4: Development and deployment oversight

In Phase 4 of the project management process, we suggest some approaches and tips on how to monitor and oversee the progress being made so that if there are any significant deviations from the project plan, corrective action could be taken. Within this *Guide*, we cover the discussion only from the perspective of policy managers.

After the master plan has been officially approved and funded, several levels of project management offices (PMOs) must be established and mandated to coordinate, manage and/or implement the different levels of the programmes and sub-projects to ensure long-term institutional support and operations. For a normal national Single Window project, this *Guide* recommends creating project management offices on at least three major levels:

1. political
 2. strategic
 3. operational
1. **Political level.** In many cases, the national economic and social development agency, or an organization in charge of overall national development planning and coordination, normally acts as the PMO or as the secretariat office for the political level with the main tasks of collaboratively planning and overseeing the progress of the overall Single Window implementation. The PMO team at this level takes the important role of monitoring the progress of the key deliverables of the SW project, providing quality checks and feedbacks, and reporting back to the senior-level stakeholders.
 2. **Strategic level.** In many economies, the Customs Department (or other designated leading agency) is mandated to be the focal point at the strategic level. In this specific example, the Customs Department should establish a PMO team to manage and coordinate the various projects with other government agencies and business sectors. The master plan needs to be further refined and divided into several detailed plans led and coordinated by this strategic-level PMO. In this way, each participating government/agency will procure, implement and deploy its systems along with associated reforms that must align with the overall Single Window architecture.
 3. **Operational level.** Each agency in charge of any specific sub-projects needs to have its own PMO to manage its individual projects, including detailed planning, implementation, deployment and operations of those projects.

Best practice in project oversight

A few tips and techniques could be used to monitor and control the development and deployment project. Basically, the project's documented plan is the basis for (a) monitoring

activities, progress and their deliverables; (b) communicating the status of the project especially those significant deviations if any, and (c) taking corrective action as appropriate.

Progress is primarily determined by comparing the actual work products, tasks, cost and schedule with the planned ones at prescribed milestones within the project schedule or with the work breakdown structures in the project plan.

Appropriate visibility showing the actual progress comparing with the planned items enables timely corrective action to be taken when performance deviates significantly from the plan. Normally, a deviation is considered to be significant if, when left unsolved, it precludes the project from meeting its objective. If the actual progress of the project deviates significantly from what is expected or if any alarming concern arises, the necessary corrective action must be taken.

Possible choices of corrective action may include simply communicating and escalating the issues to the policy makers; or “re-planning”, which may involve agreeing on a new, revised plan including new schedules, establishing new agreements, and also preparing mitigation activities within this new current plan.

4.5 Phase 5: Lessons learned and feedback

The objective of Phase 5 is to collect the experiences and lessons learned of the project and to suggest improvements for the next part of the project. Since developing a Single Window environment is a long-term project, a concept of continuous improvement should be adopted using the experiences of the completed project phases.

4.6 Lessons learned: Advice from experienced Single Window project managers

The following contributions were made during United Nations workshops and seminars on Single Window, in particular the UNNExT workshops organized by UNECE and UNESCAP and the UN Global Conference on Single Window, which was organized by all five UN regional commissions.

We have summarized managerial experiences under three critical management issues. These issues often determine whether the project will succeed or fail, and also how fast or how effectively it will proceed.

Firstly, the national commitment or policy mandate is the most critical factor for the successful implementation of a Single Window.

Secondly, the policy mandate needs to be institutionalized. It is crucial that it be transformed into routine management mechanisms along with operational and financial support for those stakeholders involved in implementing and operating the Single Window.

Thirdly, an effective mechanism needs to be established for inter-agency collaboration and coordination among government agencies and private-sector stakeholders.

1. Securing the Single Window policy mandate

Political will related to the Single Window engagement and implementation must be created and mandated by the highest-level institution of the economy. This national commitment can be secured, if possible, by developing a national strategic plan related to national economic development, and obtaining endorsement by the highest political institution, e.g. the Prime Minister, the Cabinet, or the Head of State.

Another effective approach to gaining the interest and participation from the economy's leaders, high-ranking politicians and government officials, and also from key business leaders, is for the economy to access to regional, sub-regional or bi-lateral trade agreements and cooperation. For example, the signing of the Memorandum of Understanding (MOU) among the Heads of State to develop national Single Windows and a regional Single Window can secure the political commitment, necessary mandates, resources and funds at the national level.

The Single Window system should not only be embraced at the national level but also by regional organizations. For example, the 10 member nations of the Association of Southeast Asian Nations (ASEAN) have set an ambitious goal of establishing an ASEAN-wide Single Window. Plans call for integrating members' national Single Windows so that a single submission of data and information would suffice for the entire ASEAN region.

2. Institutionalization by transforming the political will into normal routine management

It is crucial to transform the policy mandates into normal routine management. Its practical implementation depends on the legal environment and institutional setting in a country. For example, the project management office at the political level may take a legal approach to institutionalize a national high-level committee or project management group for steering and overseeing the implementation. This institutionalization may be secured through the enforcement by the Cabinet's mandates and by laws. The national high-level committee may be supported by several working groups, government agencies, business sectors and academia. With the above national commitment and organizational mandates, the policy vision can be carried out and realized through the budgets to finance the project.

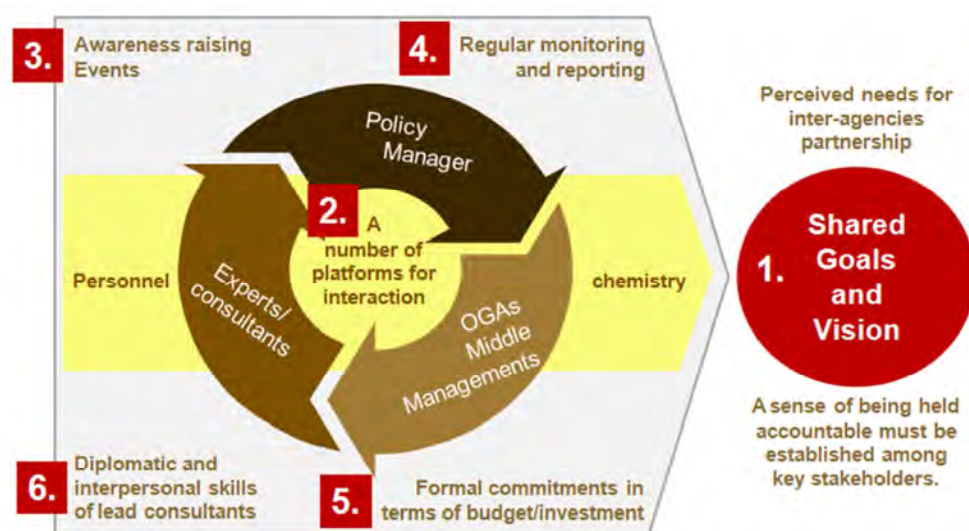
3. Establishing an effective inter-agency collaboration platform

Factors that are critical to ensuring the effectiveness of the interagency/stakeholder collaborative platform, as shown in Figure 4.5⁴², include

1. shared goals and vision
2. a number of platforms for interaction both formal communication and informal communication
3. awareness-raising events
4. regular monitoring and reporting
5. formal commitments in terms of budget and investment
6. diplomatic and interpersonal skills of lead consultants.

Only some of these factors will be briefly discussed below.

Figure 4.5 - Factors that influencing an effective inter-agency collaboration platform



Shared goals and vision

A sense of being held accountable must be established among key stakeholders. One of the most pertinent needs that may drive the motivation to participate are grounded in economic rationale and perceived threats in the international trade and potential benefits of the project

⁴² Source: Adapted from Suriyon T., NESDB, 2010, and “**Harnessing Interagency Collaboration in Inter-organizational Systems Development: Lessons Learned from an E-government Project for Trade and Transport Facilitation**,” authored by Thayanan Phuaphanthong, Tung Bui, and Somnuk Keretho, International Journal of Electronic Government Research (IJEGR), Vol. 6, No. 3, July-September 2010.

towards increasing national competitiveness. A statement regarding these issues should be repeatedly addressed on various occasions, particularly in awareness-raising seminars and conferences.

Official mandate and legitimacy

In the Single Window project, a formal interagency collaborative platform must be established. At the strategic level, high-level policymakers play the important role of conveners who use their authority to establish, legitimize, and guide the collaborative alliances. Mandate designation is used as a means to identify and induce stakeholders to collaborate. At the political level and strategic level, the establishment of the national high-level committee and the appointment of lead agencies are a critical requirement that can keep the formal collaboration working. At the operational level, the appointment of responsive working groups has a positive impact on maintaining collaborative activities and relationship.

Formal and Informal Aspects of Communication

Formal collaboration helps align expectations and solidify commitments. Through formal communication channels, stakeholders learn about mandate and benefits of the project. While the mandate can inform stakeholders about their roles and responsibilities in the project, the perceived benefits that the project would bring increases stakeholder motivation to participate. As we move along the project, the support from the high-level policymakers may not be as stable as project stakeholders would want. Sometimes the political situation in the economy may cause discontinuity of support from high-level policymakers without officially changing the commitment.

Informal communication often contributes to fine-tuning collaborative relationship, keeps stakeholders informed of the project progress, and secures cooperation at the operational level.

In summary, the national commitment is one of the most critical factors for the success of a Single Window. But this political will needs to be institutionalized, i.e. transforming the policy mandate into routine management mechanisms among those stakeholders involving in the implementation and operations of SW, and also thereby securing sustained human resources and funding. Inter-agency and stakeholder collaboration and coordination mechanism among governments and traders is also one of the most challenging issues. These three main issues above often determine whether the SW project will succeed or fail, and will also determine how fast or how effective the SW project will proceed.