Recommendation N°33: Recommendation and Guidelines on Establishing a Single Window

To Enhance the Efficient Exchange of International Trade Information Between trade and Government

Summary

The principle of Single Window was first developed by UN/CEFACT in the early 2000s and published as Recommendation N°33 in 2005 with the document number ECE/TRADE/352. It has since become a cornerstone of trade facilitation around the world and the content referenced, often without realizing that UN/CEFACT was the source. Many countries have implemented Single Windows and many international organizations advise to implement Single Windows. This revision removes some of the dated references and integrates further work within UN/CEFACT on the topic, such as the Technical Note on Single Window terminology (ECE/TRADE/C/CEFACT/2017/10). Conscious efforts were made to ensure that the document would be backwards compatible and not disrupt current implementations. The recommendation is accompanied by a repository of case studies which is constantly being updated. (see http://www.unece.org/cefact/single_window/welcome.html).

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I. Recommendation No. 33: Establishing a Single Window to enhance the efficient exchange of international trade information between trade and government

A. Introduction

1. In many countries, companies involved in international trade must prepare and submit large volumes of information and documents to governmental authorities to comply with import, export and transit-related regulatory requirements. Often, this information and documentation must be submitted to several different agencies, each with their own specific (manual or automated) systems and paper forms. These extensive requirements, together with their associated compliance costs, can constitute a serious burden to both Governments and the business community and represents a serious barrier to the development of international trade.

2. One approach to addressing this problem is the establishment of a Single Window federating all relevant government administrations whereby all trade related information and/or documents need only be submitted once at a single entry point. This can enhance the availability and handling of information, expedite and simplify information flows between trade and government and can result in greater harmonization and sharing of the relevant data across governmental systems, bringing meaningful gains to all parties involved in cross-border trade. The use of such a facility can result in the improved efficiency and effectiveness of official controls and can reduce costs for both Governments and traders due to better use of resources.

3. The Single Window is therefore a practical application of trade facilitation concepts meant to reduce non-tariff trade barriers and can deliver immediate benefits to all members of the trading community.

B. Scope

4. Within the context of this Recommendation, a Single Window is defined as a facility providing trade facilitation that allows parties involved in trade and transport to lodge standardized information and documents with a single entry point to fulfil all import, export, and transit-related regulatory requirements. Individual data elements should only be submitted once electronically.

5. In practical terms, the Single Window aims to expedite and simplify information flows between the private sector and the public sector and bring meaningful gains to all parties involved in cross-border trade. The Single Window is generally managed centrally by a lead agency, enabling the appropriate governmental authorities and agencies to receive or have access to the information relevant for their purpose. In addition, participating authorities and agencies should coordinate their controls. In some cases, the Single Window may provide facilities for payment of relevant duties, taxes and fees.

C. Benefits

6. The implementation of a Single Window has proven to be highly beneficial for both Governments and trade. For Governments it can bring better risk management, improved

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1 “Companies”, the “private sector” and “trade” include exporters and importers, freight forwarders, shipping agents, customs brokers, transporters, carriers and other parties directly involved in the movement of goods.
levels of security and increased revenue yields with enhanced trader compliance. Trading communities benefit from transparent and predictable interpretation and application of rules and better deployment of human and financial resources, resulting in appreciable gains in productivity and competitiveness. Any implementation of a Single Window should result in a visible reduction in the time and cost of doing trade.

7. The value of such a facility for Governments and traders has high importance in the current security environment with its emphasis on advance information and risk analysis. Such services as joint inspections and risk management can be enhanced and streamlined with the sharing of information through the Single Window facility.

D. Success factors

8. The introduction of a Single Window will require a feasibility study and a needs analysis to determine the following: the potential scope; the level and nature of demand, data and other information requirements; legal issues; options for implementation (including possible phases of implementation); the potential for and nature of a pilot implementation; the cost of implementation; what other resources are required (human, technical, etc); the potential benefits and risks; the time frame and the implementation and management strategy.

9. The most important prerequisites for the successful implementation of a Single Window facility are the political will of the Government, the participation of relevant governmental authorities and the full support and participation of the business community. The basic legal framework—including the introduction of privacy laws and rules providing privacy and security in the exchange of information—will also need to be assessed.

E. Recommendation

10. The United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT), at its twenty-sixth Plenary, being aware that the establishment of a Single Window facility as described in this document and the attached guidelines can harmonize and simplify the exchange of information between Government and trade, and considering that this will bring real benefits to both Governments and trade, recommends that Governments and those engaged in the international trade and movement of goods:

(a) Actively consider the implementation of a Single Window facility in their country that:

• allows parties involved in trade and transport to lodge standardized information and documents with a single entry point to fulfil all import, export, and transit-related regulatory requirements;
• allows relevant government agencies to share information related to international trade transactions through this single entry point, supported by a legal framework that provides privacy and security in the exchange of information and which allows for the appropriate coordination of controls of the various governmental authorities at the border; and
• uses clear, internationally recognized semantic standards.

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(b) Proceed with the setting up of a Single Window facility at the national level through a collaborative effort with all relevant governmental authorities and the business community.

(c) Once implemented, ensure the maintenance and pertinence of the Single Window facility, measuring against clear key performance indicators.

11. UN/CEFACT invites Governments to share and report, where appropriate, to the United Nations Economic Commission for Europe (UNECE) Secretariat experiences and activities leading to the implementation of a Single Window facility in their respective countries.

II. Guidelines for establishing a Single Window

A. Introduction

12. These Guidelines, which are complementary to UNECE Recommendation N°33 on the establishment of a Single Window (part I of this document), are designed to assist Governments and trade in planning and establishing a Single Window facility for international import, export and transit-related regulatory requirements. They provide an overview of the main issues that must be addressed, some of the tools available and the steps to be taken.

B. Single Window Definition

13. A Single Window is defined as a facility providing trade facilitation that allows parties involved in trade and transport to lodge standardized information and documents with a single entry point to fulfil all import, export, and transit-related regulatory requirements. Individual data elements should only be submitted once electronically.

14. This definition implies five key elements:

- Parties involved in trade and transport (both from the public and private sector);
- Standardized information and documents (use of internationally recognized standards for Single Window implementation is key for coordination between stakeholders and between countries);
- Single entry point (an entry point means the facility where all data concerning a transaction should be submitted electronically; an economic operator should only need to submit their data to one such entry point for their transaction);
- Fulfilling regulatory requirements (which implies that a Single Window fulfils a government function and as such, it has received a relevant mandate from the Government to perform these actions); and
- Single submission of individual data elements (individual data elements which have been submitted should not need to be submitted again; this does not mean that all

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3 In this definition, “facility” means the representation of the Single Window through which all data and documents are submitted once. This may be a physical or digital platform or a process to standardize the orchestration of this exchange.

4 The term “trade” in these guidelines is understood in its global sense, and encompasses trade, transport and logistics.
individual data elements must be sent at the same time in a single submission, data can be sent progressively).

15. It is important to emphasize that a Single Window is intended to be a trade facilitation mechanism. The objective is to streamline processes and make trading easier both for private-sector operators and government agencies. It is not meant to only dematerialize existing paper processes (as dematerialization alone does not optimize processes for greater efficiency). The establishment of an electronic system for a Single Window is a means to achieve trade facilitation; the goal is trade facilitation, not an ICT system.

16. The UNECE suite of recommendations clearly sets forth an ideal for the establishment of a National Single Window to handle all cross-border trade-related regulatory requirements. Therefore, the designation “National Single Window” would indicate that there is only one official Single Window and all government agencies should – either at the outset or progressively – participate within this framework based upon the guidance in this document and in UNECE Recommendations N°34 and N°35 in order to streamline processes and eliminate any redundancies. The National Single Window should also be mandated to represent the interests of the country in interoperability initiatives, notably those outlined in Recommendation N°36.

C. Single Window model

17. Although there are various approaches to establishing a Single Window, it is important to point out that:

- Many business and trade practices are common in most countries; however, each country will usually have additional requirements and conditions unique to their trading environment;
- A Single Window should represent close cooperation between all parties involved in cross-border transactions, including governmental authorities and agencies as well as the trading community; and
- Facilitation can be greatly enhanced if Governments identify and adopt relevant information and communication technology (ICT) for a Single Window.

18. The diagram below shows the basic model of a National Single Window as described above.

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5 “Individual data elements” implies that these have been aligned and that they have the same meaning in all instances of the transaction, which can be achieved through the procedure described in Recommendation N°34: Data Simplification and Standardization for International Trade (ECE/TRADE/400). Available as of January 2020 at: http://www.unece.org/fileadmin/DAM/trade/Publications/ECE-TRADE-400E_Rec34.pdf

6 The reuse of data by government agencies should be carefully considered, as outlined in Recommendation N°35 under the section “Authority to access and share data between government agencies”. (Ibid.)

7 Information and communication technology.
19. The National Single Window, through a single entry point, enables a trader to submit all trade declarations and all relevant information to the various authorities for processing and approval only once, and in a single data format. The single entry point may be operated by one of the participating government agencies; it may also be established as an independent body (public-private, public or private).

20. In other words, as shown in the diagram above, the trader is only required to submit their standardized information and documents to one entry point where the trader’s information is then distributed to relevant agencies that have an interest in the transaction. This can be done in the following ways:

1. Through an integrated system where the data is processed by the single entry point;
2. Through an interfaced system (decentralized) where the data is sent through the single entry point to each agency for processing; or
3. Through a combination of (1) and (2) where some agencies may use the single entry point to process the data and other agencies may process the data in their own system.

D. Single Window implementation

1. Legacy systems

21. Several government agencies may already have existing ICT systems in place in order to perform their required processes. These may coexist with the Single Window system for a certain period and be integrated progressively. During such transition phases, it is important to harmonize the data requirements and message exchange protocols as much as possible. Best efforts should be made to ensure that there are no disruptions in service. The Single Window system should build on the experiences of these legacy systems.
22. Some government agency legacy systems may remain completely outside of the National Single Window initiative as their number of relevant transactions remain negligible. Efforts should nonetheless be made to harmonize the data and message protocols to facilitate the operations of stakeholders.

23. The private sector may also have developed ICT solutions to facilitate cross-border procedures in the business-to-business environment. These systems have been defined within the UNECE as Single Submission Portals (SSP). Such SSPs could be positioned to provide business-to-government and government-to-business services to its stakeholders in the event that such services are not provided by the National Single Window—such as when the private sector is not (yet) familiar with the standards for electronic data exchange used by the Single Window facility and/or when reuse of such information in the business domain is beneficial to the SSP clients. The coexistence of a National Single Window with one or more SSPs could simplify the Single Window implementation and therefore provide benefits to the private and public sectors.

24. The operators of SSPs, and other solutions that the private sector host (or will develop) to facilitate access to National Single Window facility, should also be recognized and consulted as relevant stakeholders during implementation. Any changes to the regulatory system should take stakeholder views into account as unexpected changes may cause unexpected financial implications and delays. Changes should be announced well in advance in order to ensure that stakeholders have enough time to implement them. The Single Window system can learn from the experiences of these legacy systems.

25. The interface allowing such systems to submit information into the single entry point should be based on electronic data interchange, allowing for computer-to-computer transfer of information. A system that obliges stakeholders to key in data on a web interface can be prone to human error and will significantly slow down operations.

2. Getting participating agencies and other stakeholders on board

26. Though launching a Single Window project with all procedures concerning cross-border trade from the outset is ideal, it is not always possible (see Annexes II and III). Some procedures might have complex international legislation which may require a great deal of negotiation and preparation before it can be integrated into a National Single Window. For this reason, the following approaches may be used to involve all actors in a National Single Window project:

- The Single-Phase Approach which would be ideal, though very complex to coordinate. In this approach, absolutely all agencies and their corresponding procedures at the border would be considered in the data harmonization and documentary streamlining procedures as described in UNECE Recommendation N°34. In this approach, all individual requirements are considered on an equal footing, ensuring that all needs are covered adequately in the resulting Single Window. The launch of such a project would transition all requirements at the same time to the National Single Window.

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• **The Multi-Phased Approach** which is more realistic but does have a few negative aspects. In this approach, the National Single Window project would probably start off with key border operations, involving a small number of government agencies. These procedures and agencies would harmonize between each other and launch the National Single Window, obliging a certain number of operations to be performed outside of the National Single Window. This would likely allow the project to start quicker; however, the agencies and procedures that are not involved from the outset would likely need to align their procedures and data requirements into the existing framework, which may not consider their unique needs. When using a phased approach, the overall national trade facilitation strategy should be kept in mind throughout the process.

3. **Lead Agency**

3.1 **Implementation phase**

27. The appropriate agency to lead the establishment of a Single Window will vary from country to country depending on legal, political and organizational issues. The lead agency requires a clear governmental mandate (often through domestic legislation) that empowers this agency to orchestrate all cross-border agencies’ requirements for import, export and transit. It must be a very strong organization with the necessary vision, legal authority and political backing, such as a National Trade Facilitation Body\(^{10}\) or a dedicated Single Window coordination body. In some cases, customs or port authorities may be the agency best suited to lead a Single Window development and implementation because of their pivotal role, the information and documentation they receive and their key position at borders.

3.2 **Operational phase**

28. While the implementation phase tackles the political and organizational issues of Single Window development and coordinates the actions of the stakeholders, careful attention should be paid to the subsequent operational and technical issues. The most common situation that occurs is when the leading agency does not have the capacity to deal with emerging Single Window operational issues. In this case, the participation of a specially designated Single Window operator is recommended. A Single Window operator is a specialized organization, usually operating under a leading agency, which is directly involved in the creation and maintenance of information systems for the Single Window.

29. World practice shows that the Single Window operator may be a local private company or a company with partial state participation. In this case, the Single Window model is implemented in the form of a public-private partnership. The Government determines the authorized organization, which ensures the technical interaction of traders and the state through the single entry point. The Single Window operator may charge for transactions in the course of information exchange. At the same time, it is recommended that such a fee not exceed the actual costs incurred. A performance contract may assist the Government to closely monitor the benefits of the operator’s Single Window to the economy.

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\(^{10}\) See UNECE Recommendation No.4: National Trade Facilitation Body (ECE/TRADE/425). Available as of January 2020 at:

See also the World Trade Organization Trade Facilitation Agreement, article 23. Available as of January 2020 at:
https://www.wto.org/english/tratop_e/tradfa_e/tradfa_e.htm
4. Single Window Project Management Group

30. To ensure the success, sustainability, and future improvement of the Single Window facilities, the formation of a Single Window Project Management Group is highly recommended, with a membership that includes senior representatives of the key agencies directly involved in implementing and utilizing the Single Window. This Project Management Group should have the power to commit funds to the project, make resource allocation decisions and commit their relevant organizations to participating in the project (see Annex II). This may be related to the main role of this body is to provide input into the overall monitoring and evaluation of the systems throughout the phases of their development, including the initial setup and development, testing stages, pilot operation, rollouts, operational stage, periodic monitoring and evaluation phases, and maintenance and improvement stages. Such a group could be integrated into the National Trade Facilitation Body.\(^\text{11}\)

31. Participation of private sector stakeholders is important from the initial development of the Single Window project objectives, situational analysis and project design through to implementation (see Annex I for a non-exhaustive list). Such consultation\(^\text{12}\) can, among other things, assist in the identification of the various levels of complexity involved in implementing the existing protocols and procedures, and identification of duplication in the submission of information to the various authorities and agencies. After rollouts and launching, and especially at the operational stage, feedback from private sector stakeholders is important as their level of satisfaction is directly correlated to the speed of service and the degree of simplicity when using the Single Window facilities.

32. Throughout the development and operation of the Single Window, representation of the key concerned government authorities/agencies in the Single Window Project Management Group is necessary to assist in the coordinated creation of a streamlined border-crossing system\(^\text{13}\). This should lead to a modified national legal framework and optimized sequencing of import/export/transit processes to effectively and efficiently accommodate the collaborative work of the automated government authorities/agencies that are interlinked through the Single Window facility. The socio-economic areas of concern of these key stakeholders will differ from country to country in relation to the types of major imported/exported/transited commodities passing through their borders, but also in relation to their country’s socio-economic development goals and their policies for protecting national interests.

E. Services provided by a Single Window

33. A Single Window can provide a wide variety of services and facilities depending on its design and coverage. These can include services in the sphere of customs and tax services; tariff and non-tariff regulatory compliance (including duty/fee calculations and their e-payment or remittance control); technical regulatory compliance; application of sanitary, veterinary and sanitary-phytosanitary quarantine measures; safety/security; management of

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11 Ibid.
quota levels; intellectual property rights; submission of supporting documentation, among others. It can also provide user support services.

34. The Single Window should also provide services between government agencies. The exchange of information from declarations and government responses to those declarations between agencies constitutes one of the main services that are essential to the smooth functioning of a Single Window facility.

35. Where supporting documents are required, to maximize efficiency of the Single Window, they must be accepted as electronic submissions. Initial regulatory assessments should be undertaken using the electronically submitted and associated documentation.

F. Benefits of establishing a Single Window

36. A Single Window can simplify and facilitate, to a considerable extent, the process of providing and sharing the necessary information to fulfil trade-related regulatory requirements for both the public and private sectors. If implemented fully, the Single Window shall provide several benefits, including an increase in government revenue, enhanced compliance with rules, improved efficiency in resource allocation and better trade statistics. For the national economy, fewer opportunities for physical interactions should result in improved transparency and governance and reduced corruption.

1. Benefits for Government

37. A Single Window is a unique whole-of-government effort that leads to facilitated, more transparent interactions between the Government and the trading community. As traders can submit all required information and documents through the Single Window, quicker and more accurate validation and distribution of this information to all relevant government agencies can be achieved. This, in turn, leads to better coordination and cooperation between the governmental authorities involved in trade-related activities.

38. One characteristic benefit of a Single Window is the information sharing and dissemination among government agencies. All trade-related data is maintained in electronic format and shared with the appropriate agency when it is required.

39. Risk management techniques for control and enforcement purposes can also be enhanced through a Single Window facility that collects the data in a systematic way. The coordination resulting in part from the Single Window can reduce the proportion of physical inspections to a small percentage of total consignments—thus providing efficiency, economy and time savings to traders and government authorities. This can be further enhanced if a centralized risk management system is put in place.

40. The Single Window has a large volume of trade data and information within its data warehouse system. As a single storage mechanism for regulatory compliance, it provides a 360-degree view of all imports, exports and transit goods. The analysis of trade flow data and performance, and the preparation of analytical reports and statistical material, can be done quickly and easily since the Single Window is essentially the main source of the data.

41. Implementation of electronic payment of duties and other charges within the Single Window ensures rapid and accurate payments to government authorities and agencies. Integration of legal and procedural requirements in a timely manner will ensure improved trader compliance at all times.
Benefits for Government

- Provides a 360-degree view of every shipment/consignment entering, leaving and transiting through the country.
- More effective and efficient deployment of resources.
- Correct (and often increased) revenue yield.
- Improved trader compliance.
- Enhanced security.
- Increased integrity and transparency.

2. Benefits for trade

42. The main benefit for the trading community is that a Single Window can provide the trader with a single point for the one-time submission of all required information and documentation to all governmental agencies involved in export, import or transit procedures. The submission of all data to a single entry point—and only one time—minimizes potential data errors resulting from rekeying or reprocessing information into different systems. This can also result in a better user experience from the stakeholder point of view.

43. As the Single Window enables Governments to process submitted information, documents and fees both faster and more accurately, traders should benefit from faster clearance and release times, enabling them to speed up the supply chain. In addition, the improved transparency and increased predictability can further reduce the potential for corrupt behaviour from both the public and private sector.

44. As the Single Window applies the most updated information on current trade rules, regulations and compliance requirements, it will lower the administrative costs of trade transactions, encourage greater trader compliance and provide enhanced transparency on regulatory requirements.

Benefits for trade

- Tangible cost savings.
- Faster clearance and release.
- Predictable application and explanation of rules.
- More effective and efficient deployment of resources.
- Increased transparency.

G. Single Window in a regional context

45. The implementation of a Single Window at the national level involves the cooperation of many authorities, each with their respective procedures and systems. This complexity increases exponentially when trying to implement a Single Window at the regional level.

46. A Single Window in the regional context would be a mechanism that handles trade-related regulatory requirements within a given region. A Terminology Technical Note has
been published to describe, among other things, the notion of a “Regional Single Window”\(^{14}\). This would either be a collaborative system of National Single Windows (a network of networks) that provide additional levels of functionality (such as shared procedures between economies), or it may completely replace the National Single Windows. It could be a combination of the two, where a Regional Single Window would have jurisdiction over a certain number of procedures and others are coordinated through the various National Single Windows. No other Regional Single Window should exist for trade-related regulatory requirements.

47. Some points which need to be considered in the regional context are as follows:
   • Every member state of the region should establish a National Single Window;
   • Each National Single Window within the region should effectively be functioning on a comparable level and all should offer the same level of availability;
   • Application of national and regional legislations should be clearly distinguished;
   • Potential redundancies associated with the multiplication of information and procedures between member states of the region should be identified;
   • Procedures which can be handled by the Regional Single Window should be identified and transferred; and
   • Border agencies responsible for border crossings and transit should have assurance that sufficient information will be shared with them (to avoid delays at the border).

48. Collaboration of Single Windows within a region can take multiple forms and are described, in part, in UNECE Recommendation N°36. In cases where there is a higher level of economic integration in the region, the following guidance for Single Window interconnection is proposed:
   • The data sets of each National Single Window should be aligned to a common regional data set in order to facilitate the connection and exchange of information (harmonized entry point);
   • The exchanges of electronic information (containing relevant, standardized and harmonized data sets) should be sufficiently optimized to perform the export, import and transit operations among the National Single Windows;
   • Traders should be able to request services from member states other than those where the goods are physically located;
   • New member states within a region should be connected to a common infrastructure on equal terms in order to have equal access to information; and
   • Organized information exchange should exist within the functioning framework of the various National Single Windows in order to enable risk analysis (financial, security or other).

### H. Key Performance Indicators

49. The main justification for the implementation of a Single Window is to facilitate and foster trade and to reduce costs; therefore, early identification of the expected benefits is

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imperative as these will provide the baseline for the monitoring of outcomes. Positive impacts will result from getting an accurate balance between the facilitation indicators (improvement of transparency, time and cost reduction, reduction of red tape, improved user satisfaction and service coverage, etc.) and indicators related to controls (fraud reduction, revenue increase, etc.). These indicators are often difficult to measure due to the complexity of efficient data collection along the supply chain. Improvement is generally a consequence of a long process and is only measurable once the Single Window is fully operational and actively used by all stakeholders.

50. Unfortunately, many countries start the journey of Single Window implementation without clearly identifying SMART 15 Key Performance Indicators (KPIs). This is partly due to the difficulty in isolating the real impact of Single Window implementation, since it targets the same indicators as other reforms such as those mentioned in the World Trade Organization’s Trade Facilitation Agreement, which entered into force in 2017.

1. Facilitation indicators

51. Facilitation indicators can include:
   • Time for processing of procedures and documents;
   • Transit Time for goods at borders;
   • Costs related to procedures and document processing and collection (indirect and direct costs);
   • User satisfaction (satisfaction surveys);
   • Service Coverage, e.g.
     • Number of procedures implemented
     • Number of administrations connected
     • Number of documents processed
     • Number of borders covered
     • Etc.

2. Control indicators

52. Some suggestions on control indicators include:
   • Increase in revenue (global, per administration, etc.);
   • Number of control procedures implemented;
   • Coordination of agencies (application of common profiling/rules compared to pre-existing);
   • Fraud reduction (comparing cases detected).

3. Measuring results

53. To better measure the KPIs, it is recommended that Service Level Agreements be created between government agencies and all involved stakeholders. Frequent (weekly, monthly, quarterly) reports are good monitoring tools for the analysis of the performance of a Single Window. Many tools can be combined and used in the measurement of indicators:

15 Acronym for “specific, measurable, achievable, relevant and time bound”.

14
• Self-assessments of Single Window performance indicators;
• The Logistics performance Index (LPI) of the World Bank;
• The Doing Business Methodology of the World Bank;
• The Trade Competitiveness Diagnostic Toolkit of the World Bank;
• The Peer-review methodology of the African Alliance for eCommerce;
• The Time Release Study from the World Customs Organization;
• The Single Window Maturity model from the World Customs Organization;
• Business Process Analysis; and
• Satisfaction Surveys.

I. Risks to factor into Single Window implementation

54. The total or partial cessation of a Single Window as it is defined in this recommendation, can result in considerable losses in terms of international trade; this shows that such facilities are of systemic importance. Universal benchmarks to help design robust, safer and more efficient Single Window facilities are necessary. Clear and effective action plans should be created which outline specific interventions in times of disruption from one or several of the participating agencies.

55. These action plans should be of particular significance to Governments because of their efforts to improve and facilitate their foreign trade procedures in order to promote their position in the international market. Indeed, the establishment of a Single Window can improve the trade environment, making the country more attractive for trade flows and foreign investment. Single Windows may be subject to many risks, including:

• Compliance risk: Single Windows handle procedures that are governed by changing national and international regulations. Compliance risk occurs when an actor cannot comply due to an inability within the Single Window facility to apply a new regulation. This inability is often due to technical, conceptual and/or organizational constraints.

• Operational risk: the risk that operational factors, such as technical or infrastructure failures or operational errors, will cause or increase the risk of dysfunction.

• Risk of dysfunction: the risk that a government agency within the system is unable to offer all or part of a service in the context of its exchanges with the Single Window.

J. Key success factors in establishing a Single Window

56. The successful introduction and implementation of a Single Window depends, to a considerable extent, on certain preconditions and success factors that vary from country to country and from project to project. This final section of the Guidelines lists some of the success factors. The list of factors is not arranged in any particular order, as the practices in different countries and areas of operation can vary considerably. Although several of the points have already been mentioned in the Guidelines, they are repeated here for completeness and emphasis.
1. Political will

57. The existence of strong political will on the part of both Governments and business to implement a Single Window is one of the most critical factors for its successful introduction. Achieving this political will requires proper dissemination of clear and impartial information on objectives, implications, benefits and possible obstacles in the establishment of the Single Window. The availability of resources to establish a Single Window is often directly related to the level of political will and commitment to the project. Establishing the necessary political will is the foundation stone upon which all the other success factors rest.

2. Strong Lead Agency

58. Related to the need for political will is the requirement for a strong, resourceful and empowered lead organization—both to launch the project and see it through its various development stages. This organization must have the appropriate political support, legal authority, human and financial resources and links to the business community. In addition, it is essential to have a strong individual within the organization who will be the project Champion.

3. Legally-enabling environment\textsuperscript{16}

59. Establishing the necessary legal environment is a prerequisite for Single Window implementation. Related laws and legal restrictions must be identified and carefully analysed. For example, changes in legislation can sometimes be required in order to facilitate electronic data submission/exchange and/or an electronic signature system. Furthermore, restrictions concerning the sharing of information among authorities and agencies, as well as organizational arrangements for the operation of a Single Window, may need to be overcome. Also, the legal issues involved in delegating power and authority to a lead agency need to be examined.

4. Partnership between Government and trade

60. A Single Window is a practical model for cooperation between agencies within government and also between government and trade. It presents a good opportunity for a public-private partnership in the establishment and operation of the system. Consequently, representatives from all relevant public and private sector agencies should be invited to participate in the development of the system from the outset (see Annex I). This should include participation in all stages of the project—from the initial development of project objectives, situational analysis, and project design through to implementation. The ultimate success of the Single Window will depend critically on the involvement, commitment and readiness of these parties to ensure that the system becomes a regular feature of their business process.

5. Collaboration framework\textsuperscript{17}

61. This could be defined as a strategic mechanism, encompassing the whole Single Window deployment project, that helps to support transformation and efficient change management processes such as a trade facilitation outline. Such long-term, global and coordinated reform requires an organizational structure driven by the right framework in

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\textsuperscript{16} See UNECE Rec. N°35 on Establishing a legal framework for international Single Window (footnote 2)

\textsuperscript{17} As a cross-functional topic, collaboration framework is addressed in:
- UNECE Recommendation N°4 on National Trade Facilitation Bodies (footnote 10);
- UNECE Recommendation N°40 on Consultation Approaches (footnote 12);
- UNECE Guide to Drafting a National Trade Facilitation Roadmap (ECE/TRADE/420).
order to effectively implement comprehensive and reliable operations. An optimized collaboration strategy is important, even at early stage of a Single Window project, in order to make informed decisions, eliminate delays, reduce overlaps, and to avoid communication breakdowns, etc.

62. A collaboration framework plays an essential role in bringing stakeholders together to relentlessly carry out the change management strategy and to mitigate associated risks. Collaboration should be implemented as an organizational methodology by sharing information; providing training, awareness and empowering initiatives; and by identifying and prioritizing activities, parties’ responsibilities and involvement in deployment coordination and operations monitoring (by both the public and private sectors).

63. These framework mechanisms allow for adjustments to local contexts, thereby facilitating smooth transition in operations and preparing enforcement regulation, while explicitly allocating decision-making authority between the functions and the users to ensure the adoption of Single Window processes by all stakeholders.

6. Establishment of clear project boundaries and objectives

64. As with any project, establishing clearly defined goals and objectives for the Single Window at the outset will help guide the project through its various development stages (see Annex II). These should be based on a careful analysis of the needs, aspirations and resources of the key stakeholders, and on the existing infrastructure and current approaches to the submission of trade-related information to government. As stated previously, this analysis should involve all key stakeholders from both government and trade. A Single Window should generally be perceived as part of a country's overall strategy to improve trade facilitation.

7. User friendliness and accessibility

65. Accessibility and user friendliness are also key factors for the success of a Single Window project. Comprehensive operating instructions and guidelines should be created for users. Help Desk and user support services, including training, should be established—especially in the early implementation phase of the project. The Help Desk can be a useful means for collecting feedback information on areas of difficulty and bottlenecks in the system. This information can be a valuable tool in its further development. The need for and value of practical training courses for users cannot be overemphasized, especially in the early implementation phase of the project. It is also important to address the multilingual requirements of some countries.

66. It is essential that the design of the system be attuned to the real ICT capacities of the country or region in which it will operate. Keeping in mind the potential future technological developments in this area, the maximum number of users should be able to utilize the Single Window from the moment it is launched. In some cases, this may dictate the establishment of service centres due to the limited online access capacity of a given geographical area.

8. International standards and recommendations

67. The implementation of a Single Window generally entails the harmonization and alignment of the relevant and most recent trade documents and data sets. In order to ensure compatibility with other international systems and applications, these documents and data models must be based on international standards and recommendations.

68. Whenever electronic data interchange is involved, the harmonization, simplification and standardization of all data used in international trade is an essential requirement for smooth, automatic operation of the Single Window. The harmonization of data used by different participants in their legacy system can be one of the biggest challenges for
automated Single Window implementation. UNECE trade facilitation recommendations (such as UNECE Recommendations N°1 and N°18) contain valuable information on Single Window implementation, as do the UN/CEFACT data libraries and reference data models.

9. **Identification of possible obstacles**

69. It is possible that all players in government and/or trade may not welcome the implementation of a Single Window. In such cases, the specific concerns of opponents should be identified and addressed as early as possible in the project. Identified obstacles should be considered individually, taking into account the local situation and requirements. Clearly, cost can be a major obstacle, but this must be balanced against future benefits (as described in the “Benefits” section). However, it is important to be clear about the financial implications of the project so that a decision regarding single-phased or multi-phased implementation can be made. Legal issues also constitute a significant potential problem area.

10. **Funding and sustainability**

70. A decision on the financial model for the Single Window should be reached as early as possible in the project. This could range from a system totally financed by the Government to an entirely self-sustaining model. Also, possibilities for public-private partnerships should be explored, if this is deemed a preferred approach. Clarity on this point can significantly influence decisionmakers to support the implementation of the system.

11. **Training**

71. In order to avoid transformation pitfalls and delays during implementation, Single Window operators should drive change management by providing training and tools to all stakeholders. Project governance will bring training and capacity building to users and stakeholders so they can be ready to understand the challenges and to assess the best strategies and tools to bring the project to a successful result. Adequate preparation and capacity building are necessary to avoid risks and misunderstandings. The Single Window Champion must provide intensive training, constant support, access to best practices in project management and technical knowledge, and ongoing feedback and encouragement.

12. **Promotion and marketing**

72. Promotion and marketing of a Single Window is very important and should be carefully planned. The promotion campaign should involve representatives from all the key government and trade stakeholders in the system, as these parties can provide valuable information on the expectations of the user community and help to direct the promotion and marketing messages. A clear implementation timetable should be established and promoted at the earliest possible stage of a Single Window project, as this will assist in the marketing of the project and will help potential users to plan their related operations and investments according to this schedule. Marketing should clearly identify the benefits and cost savings as well as specific points relating to the increased efficiency derived from the implementation of the Single Window.

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18 See UNECE Recommendation N°43: Sustainable Procurement (ECE/TRADE/C/CEFACT/2019/7).
13. **Communications strategy**

73. Establishing a proper mechanism for keeping all stakeholders informed of project goals, objectives, targets, progress (and difficulties) creates trust and avoids the type of misunderstanding that can lead to the undoing of an otherwise good project. Within this context, it is extremely important to handle stakeholders’ expectations properly, and it is worth remembering the business adage of promising less and delivering more (rather than the other way around). It is also important to remember that stakeholders often do not expect miracles; solving simple, practical problems can generate significant goodwill to carry the project through difficult patches along the development path.

K. **Post implementation challenges**

74. When a Single Window is implemented, a number of challenges remain:

- **Having all the stakeholders and processes on board:** In the phased implementation strategy, only key stakeholders are considered. This may provide quick wins, but efforts to make a comprehensive Single Window facility covering all procedures country wide should not be minimized.

- **Meeting the KPIs:** If the initial KPIs are determined without the adequate rationale they can become either too easy or very hard to meet. Since KPIs are key to characterizing a Single Window as a successful initiative or not, it might make sense to readjust the KPI targets after one year of operation to reflect the new reality and to drive ongoing performance improvements.

- **Using international standards effectively:** Many standards and best practices are available on trade facilitation and Single Window implementation. It is essential for a Single Window to be aligned with international standards for the exchange of trade data and documents internationally. Many economic regions across the globe are building integrated markets; thus, a Single Window should simplify trade integration initiatives using globally standardized data and practices.

- **Dealing with technological changes and evolution:** While this recommendation remains neutral about technologies, it’s important to note that technologies related to data management are evolving so fast that ignoring the impact to Single Windows could reduce the opportunity to provide better performance. It therefore makes sense that Single Window initiatives assess the level of technology they are using and ensure that it meets the requirements for the problems they seek to solve.

- **Dealing with regulatory changes:** Compliance with international regulations concerning data will be increasingly difficult due to the number of countries with their own specific requirements. In principle, any National Single Window should be responsible for the domestic market they are operating, but it is very important for Governments, Single Window operators and stakeholders to consider the issue of the legal compliance of any shared or exchanged data or documents in the international community.
Annex I

Single Window Stakeholders

1. The following stakeholders will be engaged in information exchange within the Single Window on the part of state authorities:
   - customs authorities;
   - tax authorities;
   - border regulatory agencies;
   - licensing authorities (non-tariff regulation);
   - national statistics authorities;
   - state authorities carrying out transport control;
   - state authorities carrying out veterinary control;
   - state authorities carrying out phytosanitary control;
   - state authorities carrying out sanitary and quarantine control;
   - control (supervision) over compliance of technical regulations;
   - export, radiation, foreign exchange and other forms of state control;
   - governmental port authorities;
   - organizations authorized to issue permits, including chambers of commerce, certification bodies and testing laboratories (centres) performing the work in the field of assessment (confirmation) and compliance with technical regulations.

2. The following stakeholders will be engaged from the private sector:
   - exporters, importers, exporting companies, central purchasing companies and their representative associations;
   - carriers, Non-Vessel Operating Common Carriers (NVOCC), ship agents, Global Service and Sales Agent (GSSA), express carriers, handling agents, stevedores, and their respective representative associations;
   - logistics companies, freight forwarders, forwarding agents and their representative associations;
   - customs brokers, customs agents, customs carriers, owners of temporary storage warehouses, owners of customs warehouses, owners of free warehouses, owners of duty-free shops and their representative associations;
   - certification companies, Chambers of Commerce and Industry;
   - banks, second-tier banks (branches), non-banking credit and finance institutions, insurance companies, patent organizations (patent attorneys), postal operators and other organizations;
   - Single Submission Portal operators.¹

¹ See UNECE Recommendation N°37 on Single Submission Portals (footnote 8).
Annex II

Practical steps in planning the implementation of a Single Window

1. Implementing a Single Window is a significant undertaking, involving many stakeholders and requiring commitment from many players in both government and business. It is essential, therefore, that a systematic approach be adopted from the outset. Some of the key steps involved are discussed below.

I. Developing the Initial Concept for the Single Window

2. Serious work on the establishment of a Single Window in a country 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, or private organisation likely to be heavily involved in the eventual implementation of the project. Such a paper would usually describe the overall objectives and potential benefits of a Single Window, and would present a general overview of what would be involved in its implementation. The paper would typically focus on the practical issues involved and would avoid excessive technical jargon and in-depth discussion of technical concepts. It is important to understand that the objective of the concept paper is to facilitate initial discussion on the topic and obtain approval for a more in-depth study into the need for, approach to and feasibility of a Single Window. It is not intended at that stage to seek agreement for the implementation of a Single Window.

II. Making the Initial Decision to Examine the Feasibility of a Single Window

3. Following the preparation of the concept paper, and in the framework of an open partnership between government and trade, a meeting would typically be organised for high-level representatives from all relevant trade related organisations (see Annex I), and governmental authorities and agencies to discuss the Single Window concept (on the basis of the concept paper). The object of such a meeting is to get agreement on the project concept and to launch a feasibility study that would include a detailed needs analysis and a technological assessment. Significant “behind the scene” lobbying and project promotion work may be required before the meeting, in order to ensure that participants understand the concept and are positively predisposed towards the idea. As stated elsewhere in these Guidelines, the political will to support the implementation of a Single Window is one of the key pre-requisites for its success.

4. 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 utilising the Single Window. This Project Management Group should have the power to commit funds to the project, make resource allocation decisions and commit their relevant organisations to participating in the project. A draft ‘Objectives, Responsibilities and Terms of Reference’ text should be drawn up for the Project Management Group ahead of time, and agreed upon at the meeting.

5. The meeting should also set up a Task Force composed of appropriate technical and management representatives of key agencies, to take charge of the carrying out of the organisational and implementation work required for the project. Again, a draft ‘Objectives,
Responsibilities and Terms of Reference’ document should be drawn up for the Task Force ahead of time and agreed upon at the meeting.

### III. Undertaking the Feasibility Study

6. The feasibility study is a key element of the overall Single Window development. The study should determine the potential scope of the Single Window, the level and type of demand, 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 be based on direct face-to-face interviews with key players in both government and trade, complimented by relevant questionnaires to collect information from a wider circle of potential participants and users. Some of the key areas that should be covered in the feasibility study are presented in Annex III.

7. The objective of the feasibility study is to provide decision-makers with an insight into the options available and their consequences for each governmental authority. The study should provide advice in which option is preferable and feasible for the country, the manner in which the implementation should take place (i.e. single phase or multi-phased implementation), the possible steps for a multi-phased implementation, the nature and extent of an initial pilot implementation, the potential for revenue collection (for fees, duties, etc.), the identification of ‘key’ deliverables and a recommended timetable for development and implementation.

8. It is important to emphasise here that, when considering the technical requirements for a Single Window, the value of and investment in existing legacy systems should be respected. Although it may sometimes be necessary to replace such systems, a practical approach for sharing and exchanging information between agencies may well be the establishment of a central portal or gateway.

### A. Use of Consultants

9. A decision will have to be made as to whether the feasibility study should be undertaken in-house by the project Task Force itself or contracted out to a third party. The major advantage of hiring external consultants is that the report is more likely to have an independent focus; also, the consultants can perhaps put forward comments and recommendations that would be difficult for individual government agencies to suggest (for political or other reasons). Furthermore, the necessary skills, experience and required time may not be available in-house to undertake the analysis within the time frame required. However, the major disadvantage of undertaking the work through consultants is that the report may be seen as an external one not connected to the key players in the organisation (i.e. there may be little or no buy-in to the report). A third option is to hire consultants to assist the Task Force in undertaking the feasibility study, but clear lines of authority and responsibility would then have to be defined for this option. The actual approach adopted will generally be decided on the basis of available resources, the time frame for the report and also political considerations.

### IV. Consideration of the Feasibility Study Report

10. The findings of the feasibility study will have to be considered and approved by the Task Force and eventually submitted for consideration 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 finalised.

11. After the study has been accepted by the Task Force and 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 to this is the organisation of a national symposium on the establishment of a Single Window, where the Task Force (and/or consultants in the case where the work was contracted out to a third party) can present the research findings and preferred option for implementation. Apart from the obvious communications value, such an exercise will help to ensure that important areas have not been missed in the analysis and that the proposed Single Window option, including proposed pilots and/or multi-phased implementation, makes sense to and has the support of the relevant government agencies and the user community, before the final implementation decisions are made.

V. Implementation (Pilot, Multi-Phased and/or Single-Phased)

12. Irrespective of whether a pilot, multi-phased or single-phased implementation has been decided, it is essential that a clear project management approach be adopted throughout the project implementation. The project management plan, which must be formally agreed upon by both the Project Management Group and the Task Force, should contain a set of clearly defined interrelated tasks and event milestones that can assist the Task Force and the Project Management Group to plan, execute, monitor, evaluate, and adjust the project implementation. There are many well-established approaches to project management and several good software programmes available to assist in this process. The Project Management Plan should contain:

- A clear statement of the project's scope, goals and objectives;
- A statement on key 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 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 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;

1 A decision will have to be made as to whether the initial Project management Group and Task Force should continue “as is” or should be reconstituted (a recommendation in this regard will likely be contained in the feasibility study).
• Agreement on the criteria for measuring the project success;

• An agreed project review and feedback mechanism to provide ongoing monitoring of the project process and to deal with any changes in the implementation that may be required.

13. As with the needs analysis and feasibility study, a decision 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 obviously have to comply with existing governmental regulations, which vary from country to country. However, it is suggested that the process should be open, should have clear evaluation criteria (points) agreed by the Project Management Group before the tender is issued and included in the actual tender documentation), and the tender committee should have representatives from all key organisations involved in the project.
Annex III

Key components of the feasibility study

The feasibility study should cover the following areas:

I. Project Needs and Potential of a Single Window

• As outlined in UNECE Recommendation N°34 on Data Simplification and Standardization¹, examine existing requirements, procedures, and processes for the submission of import, export and transit documents and information to government to:
  • Identify key governmental authorities and agencies that can potentially be involved in the system;
  • Determine the extent to which it is possible to harmonise 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 to address trade security issues;
  • Identify the needs of potential users, especially regarding the design of the eventual service and associated interfaces (either electronic or physical);
  • Consider “best practice” methods in existing Single Windows. This may involve visits to operational Single Windows;
  • Consider the need for and approach to generating the required political support for the project.

II. Organisational Aspects

• Examine the overall organisational aspect of the proposed Single Window to determine:
  • Which governmental authorities and agencies should be involved;
  • Which governmental authority/agency, or private organisation should lead the running of the Single Window project - government, private owner under government contract or completely privately-owned by business (service provider);
  • Whether the Single Window should be centralized or decentralized;
  • Should it be an active or passive program;
  • Should a payment system be part of the Single Window 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;

¹ UNECE Recommendation N°34 on Data simplification and standardization for international trade (op.cit.).
• Who bears the risk if/when something goes wrong.

III. Human Resources and Training

• Review and document existing personnel 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.

IV. Legal

• As outlined in UNECE Recommendation N°35 on Establishing a legal framework for international trade Single Window\(^2\), review the legal issues, privacy legislation and data protection laws associated with the implementation of a Single Window, including the submission of information by traders, the exchange of information between various governmental authorities and agencies, and issues related to the use of electronic signatures.

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.

V. Technical aspects of a Single Window

• 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.

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.

VI. Information and Documentation

• Review the existing set of trade documents in use and determine whether these need to be aligned, harmonised and/or simplified (preferably according to UNECE

\(^2\) See UNECE Recommendation N°35 on Establishing a legal framework for international trade Single Window (op.cit.)
Recommendation 1 on the UN Layout Key\(^3\)). Determine what data will be required; how it will be submitted; and in which electronic format (EDI? XML? Other?)

- Determine who can submit the data (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 countries\(^4\);
- 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.

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. This is detailed in UNECE Recommendation N°34\(^5\).

VII. Impact assessment

- 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 the establishment of the Single Window;
- Consider the potential response of groups or organisations that may perceive the Single Window as a threat (groups or organisations 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.

VIII. Implementation Options

- Develop implementation options, specifying proposed operational models, relevant governmental authorities and agencies that would be involved, suggested lead governmental authority or agency, or private organisation, services to be provided, potential costs and benefits, and time frames for implementation;
- Suggest whether a single-phase or multiple-phased implementation process should be undertaken. Factors to be considered relate to the availability (or lack thereof) of resources for single-phased 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:
  - Achieve the required legislative changes to operate a Single Window;

\(^3\) See UNECE Recommendation N°1 on UN Layout Key for Trade Documents, 2017 (link as of July 2019): http://www.unece.org/fileadmin/DAM/trade/Publications/ECE_TRADE_432E_CF-Recl.pdf

\(^4\) See UNECE Recommendation N°36 on Single Window Interoperability (op.cit.).

\(^5\) UNECE Recommendation N°34 on Data simplification and standardization for international trade (op.cit.).
• Develop, or modify where necessary, existing legacy systems;
• Generate the required level of commitment for project implementation;
• Make recommendations regarding a pilot implementation for the project.

Note: In some cases, it may be worthwhile to opt for multi-phased implementation, with short-term enhancements that still deliver adequate benefits to make the project attractive to the private sector, while moving closer to the desired single entry portal covering all import, export and transit related procedures. However, when implementing an approach in multiple 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 costed and assessed against strategic criteria before any decision is taken regarding implementation.

IX. Business Model

• Develop a business case for the establishment of 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 implementation;
• 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 the implementation of the project, including revenue streams as outline in UNECE Recommendation N°41⁶;
• Identify the key risks that the Single Window project may face. In particular, operational, legal, and infrastructural issues should be identified when they 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.

X. Promotion and Communications

• Recommend a promotion and communication strategy for the development and operation of the Single Window. This is essential to keep all stakeholders informed and “on-board” throughout the project.