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EXECUTIVE SUMMARY

The Customs Cooperation Council is the international legal instrument from which the WCO derives its authority. It exists to promote cooperation amongst Governments in Customs matters and “cooperation” implies communication and networking. The concept of global connectedness amongst Customs administrations is fully consistent with that principle.

“Everything is connected... no one thing can change by itself.” While this quote had nothing to do with the genesis of the WCO’s Globally Networked Customs (GNC) concept, it resonates nonetheless. In the international trade supply chain, there are myriad connections amongst a vast array of parties and processes. GNC envisages that connectivity between Customs administrations in an important part of that chain and that it has the potential to deliver significant benefits to all stakeholders, once the underlying processes had been rigorously explored.

GNC is a significant game-changer for border management. Unlike many other significant changes to border procedures, GNC involves parties in other jurisdictions and this, in turn, raises issues of international affairs, sovereignty and instruments such as trade agreements. Hence, strong executive guidance and political will is needed for border agencies and governments to align these strategic considerations, to more operational ones, including business processes, legal enablers, technical implementation and process governance.

In recognition of the importance of this idea, the World Trade Organization’s Agreement on Trade Facilitation (TFA) made specific reference to it under Article 12.2 of the agreement, which states:

“Members shall exchange the information set out in subparagraphs 6.1(b) and/or (c) for the purpose of verifying an import or export declaration...”

The data implied in its subparagraphs refers precisely to the exchange of commercial information, envisaged under GNC.

Specifically, the WTO document describes the data as follows:

“6.1(b) ….specific information as set out in the import or export declaration, or the declaration, to the extent it is available, along with a description of the level of protection and confidentiality required of the requesting Member;

6.1(c) ….specific information as set out in the following documents, or the documents, submitted in support of the import or export declaration, to the extent it is available: commercial invoice, packing list, certificate of origin and bill of lading, in the form in which these were filed, whether paper or electronic, along with a description of the level of protection and confidentiality required of the requesting Member;”

GNC lays the foundation for Customs and border agencies to extract value and efficiency from their existing processes through enhanced information exchange, it improves trade facilitation through the synthesis of existing commercial, regulatory and transportation information, available to different stakeholders in the supply chain, and can be a key enabler in bringing about smoother trade flows, improved risk management and sense-making, and regional integration initiatives. GNC can also play a key role in the dematerialization of supporting documents2, paperless trade and the promotion of unique identification numbers for traders and transactions. It is closely linked to the development of single window systems and can play an important role in furthering Customs’ claims to be the central governmental agency controlling and facilitating the international movement of goods, means of transport and people including crew and passengers.

During the development of GNC, the single most difficult misconception that had to be addressed was that GNC was an IT system, linking all WCO members via some a hub-like infrastructure, operating out of Brussels. It is not.

GNC is not an IT system; it is a set of guiding principles!

At its most basic, GNC is simply the exchange of information between Customs administrations. This is not new. Ad hoc exchanges had been happening for many years for enforcement purposes under Customs Mutual Administrative Assistance Arrangements (CMAA’s) and GNC does not seek to replicate or replace them3. Instead, GNC is a concept based upon the systematic exchange of information of a commercial nature for a wide variety of reasons that may include enhanced data re-use, improved risk assessment and control, improved data quality, and other reasons that enhances the ability of Customs and Border Agencies to discharge their responsibilities more effectively, by improving the use of data already available in import, export or transit declarations and similar data transfers from industry to Customs including cargo declarations and other transport logistics data.

GNC is the first building block of the “Customs in the 21st Century” vision which read:

““There is a need for closer real-time collaboration between Customs administrations and between Customs and business in facilitating legitimate trade and undertaking Customs controls.”

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1  Paul Hawke, US entrepreneur
2 A term used to cover the change from paper to electronic data for the various invoices, packing lists, descriptive material and all other documentation that might accompany goods or cargo declarations in order to assist in the regulatory process as mentioned in Article 12.6.1(c) of the WTO ATF text
3 The relationship between CMAA’s and GNC agreements is explained in the section on GNC Legal issues
This quotation raises another critically important aspect of GNC, namely the inclusion of the private sector as key stakeholders. A well-managed GNC operating environment promises greatly enhanced risk management with consequent improvements in facilitation to industry.

The backdrop to the role of industry is the simple fact that the information originates with the trade and transport sectors, not with Customs. This makes industry a key stakeholder in GNC. Finally, other stakeholder groups include partner cross border regulatory agencies such as quarantine and human health. It is common for Customs to manage permit and related data – or at least the clearance formalities – on behalf of other agencies.

In this scenario, the cross border exchange of data between Customs administrations can have implications for a wider group of border regulators at either end of the trade transaction.

Another key backdrop to GNC is its foundational links with a range of existing WCO instruments. The Revised Kyoto Convention (RKC) has several specific mentions of the benefit associated with data sharing between administrations but more fundamentally, the RKC is about the harmonization and standardization of Customs procedures internationally. GNC is a concept borne of the same foundation – it is based upon the harmonization and standardization of the information flows upon which Customs and all other border regulatory agencies rely in order to exercise their respective legislative remits.

The first pillar of the SAFE Framework is devoted to Customs to Customs networking and it contains specific references to the importance to C2C data exchanges, for example Section III, Section 2.1.4 that reads in part: 

"Customs administrations along the supply chain must consider Customs-to-Customs data exchange..."

The linkages between SAFE and GNC are clear and were recognized as such from the beginning of the development of the Feasibility Study.

There are many other WCO instruments and strategies that are pertinent and worthy of consideration for administrations setting up a GNC arrangement. These include:

1. The WCO data model (for standardized data structures)
2. The UCR (to link transactions)
3. The WCO Model Bilateral Agreement
4. The WCO Model Memorandum of Understanding in Mutual Administrative Assistance in Customs Matters
5. Exchanges of API/PNR data
6. Trade Recovery Guidelines
7. Mutual Recognition of AEO Arrangements

There have been many references to exchanges of commercial data so far. That does not mean that GNC has no regard to the vitally important exchanges between Customs administrations related to enforcement – the kinds of concealment methods, case information and other sensitive exchanges typified by the WCO’s CEN system and that have been the subject of CMAAA’s for many years. It was recognized at the outset that GNC is a two-track concept – commercial and enforcement – and this must be kept in mind throughout this handbook. Annex D of the GNC Feasibility Study is devoted to an analysis of these two tracks, how they differ and how they are similar in the context of exchanges between Customs administrations.

The concept of “Utility Blocks” that break the Customs business down into discrete, yet related components was the major leap forward in making GNC:

- simple (deal with one thing at a time),
- manageable (do it in a way that is standardized and repeatable),
- evolutionary (do what happens now, but improve it) and
- low cost (use what is already there and being done).

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4. For example General Annex references 6.7 and 9.4.
5. Term proposed by India during the development of the Feasibility Study that combines the widely different utilities of the GNC concept into building blocks.
An understanding of the Utility Block concept is fundamental to the way GNC was put together by the WCO and there is an explanatory section devoted to this topic in the main part of the handbook and a working example is shown in Annex 1.

Lastly, another angle to consider with respect to C2C data exchange is to look at it in light of other common exchanges of data that accompany international trade from a regulatory perspective. Diagram 1 below shows these familiar exchanges:

1. Business to Government/Customs in the country of origin (export goods declaration, outward manifest for example)
2. Business to Government in the country of destination (e.g. import goods declaration, inwards manifest)
3. Commercial exchanges between business entities – international or cross-border exchanges such as invoices, dispatch advices, shipping instructions and the like.

The C2C exchange – the dotted line at the base of the diagram – is a logical addition to that existing series of data flows. It complements those existing flows from a regulatory standpoint. The added point to appreciate is that the data flows themselves reflect the same physical cross-border movement of goods and, in theory, ought to be the same in all instances. This provides the essence of the potential benefits of GNC – it provides a further quality check on the veracity of data presented in goods declarations and other B2G exchanges at either end of the international trade supply chain.

For those readers interested in a deeper understanding of GNC, it is important to appreciate that this handbook provides a concise and updated coverage of the 2012 GNC Feasibility Study. For a comprehensive coverage of all matters related to GNC, reference should be made to the substantial set of documents that combine to form the Feasibility Study itself.

Diagram 1: Trade Data Flows Involving Customs and Industry

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6 Source: WCO Secretariat, based on a presentation by India at the 4th Meeting of the Ad Hoc Group on Globally Networked Customs (Brussels, Sep. 2010)
Background

Between 2009 and 2012 a purpose-built WCO working group performed a feasibility study on the Globally Networked Customs concept and reported its findings to the Council in June 2012. It reinforced the importance of connectivity and confirmed that the maximum benefits of Customs to Customs cooperation could be more effectively delivered by streamlining exchange of information processes. A standardized approach, using generic templates and blueprints, was considered able to facilitate and enhance these processes by speeding up the drafting and implementation of information exchange agreements. In addition, the compilation of a catalogue of documented arrangements in a standardized form, each of which can be replicated with minimum effort, would allow for the scope, growth and reach of Customs networks to accelerate.

GNC was a cornerstone of “Customs in the 21st Century” and is the key to the practical delivery of several key WCO instruments, including the revised Kyoto Convention, the SAFE Framework of Standards, the UCR and the WCO Data Model. An environment where Customs administrations can exchange information effectively to best suit their core business needs creates the potential to build upon the existing situation and enable the most effective possible implementation of these vital instruments.

One of the most important ideas to come out of the work of the development team for the Feasibility Study was that GNC is not an IT system. It is rather an incremental and systematic approach to the exchange of information between WCO Members based upon agreed protocols, standards and guidelines. It has policy, governance, legal, capacity building as well as technical/IT implications and it has been designed to be fully consistent with the existing framework of WCO instruments.

The driver for GNC is the increasing demand for international agreements (See Annex 5), including those for mutual administrative assistance and mutual recognition. Through a systematic approach, GNC will allow WCO Members to achieve a far more efficient means to produce such agreements based on a globally consistent methodology. All agreements are at the discretion of individual Members working collaboratively amongst themselves, and GNC does not imply any change to those arrangements – this is another critically important governance issue; the WCO Secretariat has no oversight role other than facilitating the sharing of Utility Blocks, best practices and experiences among member administrations in the area of C2C exchange of data, and providing a forum for discussion for the continual growth and improvement of the concept. The development of GNC, both as a concept, and in terms of the specific exchanges between countries, remains a members-driven process.

The breakthrough concept in GNC was the development of utility blocks (See Annex 1). They describe specific parts of the wider Customs business where Members may wish to exchange information. Each utility block has its own respective standards (e.g. the actual data elements to be exchanged) and they must be developed in conjunction by at least two Members. To date, there have been five fully completed utility blocks documented by WCO Members and listed in the members-only section on the WCO website (www.wcoomd.org).

Along with the theoretical framework of GNC, utility blocks need to be verified as being of real practical benefit through proof-of-concept projects. By building upon the standards already described in the Feasibility Study to create Utility Blocks to exchange information in a systematic way with other willing Members, GNC aims to achieve a more standardized approach to international data exchange over time, and to avoid the proliferation of non-standard approaches that would greatly increase the cost and complexity of Customs-Customs exchange of information.

At the time of writing, there were five discrete examples of utility blocks on the WCO website, but other examples are being pursued, for example in the South Asia Economic Cooperation (SASEC) Forum where it was agreed to pursue Customs to Customs exchanges in a systematic way and to learn more about the GNC methodology.

As a means of providing greater clarity to GNC, the second diagram shown below proved to be very useful in the early stages of the development of the Feasibility Study. It was a way of explaining simultaneously the different components of the concept plus the manner in which each of them can grow gradually. The model revolves around three distinct yet related axes, namely the:

- Information to be exchanged;
- IT applications; and
- Stakeholders or involved parties.

Moving along each axis implies a higher degree of sophistication or complexity. For example, on the “parties” axis the first point would be “Customs administration” moving out towards other Government agencies and, in the longer term, the private sector. That would imply that the first exchanges would involve only Customs but that later exchanges might involve other parties. Similarly the “data” axis could start with simple export/import data exchanges and move outward to embrace more complex examples such as goods declaration data for admissibility (as envisaged in SAFE) on towards more diverse commercial or enforcement purposes.

Finally the “IT application” axis would start with minimum communications protocols and move towards more complex international models. The potential for CEN to be used as a medium for GNC exchanges is made clear here. Although the model concentrates on the first steps along each axis, it can be seen how moving along the axes delivers a more complex and aspirational GNC model longer term. This helps describe the evolutionary approach to the implementation of GNC. As Members produce more utility blocks which can be easily replicated, and the capability and capability of Members grows with experience, the GNC process becomes increasingly industrialized (see Annex 5). This brings with it an exponential rise in the number of agreements able to be implemented.
Diagram 2: An Incremental Approach to GNC

GNC

PARTIES IN GNC

C-to-B & B-to-C

C-to-G

C-to-B (ad hoc)

C-to-C

Protocols & Standards

Full GNC platform

C-to-C data communication system

DATA

Safe Components + CEN/nCEN

Whole of Safe + Full WCO data model + CEN/nCEN

C- Customs B=Business G= Government
INTRODUCTION

Customs administrations are not immune to the rapid rate of change in society, technology, transportation and relations between nations. As the custodians of the border, both physical and virtual, WCO Members have a unique role to play in terms of national sovereignty, border security and, significantly for many administrations, Government finances. GNC is seen as a means to address some of the challenges that come from this demanding environment; the concept does not pretend to offer a policy stance on all matters facing Customs, but it offers significant benefits in many important areas, for example more accurate revenue collection, better risk management, higher quality trade data, enhanced border cooperation and trade facilitation.

GNC builds on what is already in place, with a minimum barrier to entry so that all Members can benefit. It complements existing instruments and allows for the gradual move towards a globally interconnected Customs community through the adoption of standards for data sharing, messaging, legal protocols and a consistent way to address capacity building needs.

As has been said earlier, it is not an IT system; it is a systematic approach to Customs networking as envisaged in SAFE, RKC and the WTO’s TFA.

POLITICAL WILL

GNC is visionary and a long-term investment for the future, to provide the enabling environment for the emergence of a truly global network of fully interconnected WCO Members, able to interoperate with one another to facilitate trade, enhance compliance, and improve supply chain security. The executive leadership will have to recognize this fact and commit their administrations to this international standard setting process even when commencing much more basic bilateral projects, where questions relating to costs and benefits, impact on international supply chain stakeholders, sovereignty, technological infrastructure, and the adoption of standards and legal authority, needs to be answered.

Clearly that is a wide range of issues and each has its own implications for not only Customs, but for other parts of Government and the private sector. Something as strategically challenging as GNC will need a clear enunciation of its goals, its potential benefits and a political champion if it is to succeed. That champion will need the executive influence to “make things happen” through his or her nominal position and ability to articulate a case.

SOVEREIGNTY

The benefits of improved connectivity and information sharing between Customs administrations are well known. Improved trade facilitation, enhanced compliance, faster processing, more precise risk management and more effective enforcement against illicit trade and security threats – these benefits are all derived through improved information-led decision making. The sensitivity of exchanging data is also well known and questions of information confidentiality and sovereignty will inevitably be raised.

For example, one of the possible applications of GNC relates to the receipt of trusted commercial data from a fellow Customs administration based upon exporter data submissions in that country as a means of augmenting the risk assessment of import submissions in your country. The critical question is this:

“will your country be prepared to make a decision of admissibility based on a risk assessment in another country?”

It is not relevant to discuss the pros and cons of that question in this handbook as the answer will vary greatly according to the countries in question, the mutual levels of trust, the respective risk management, data protection, and IT systems and many other factors. To the extent the answer is “yes” – and there will be compelling examples when it can be – legislative enablers and safeguards will have to be developed to allow for the exchange of specified data-sets for the prescribed purposes, in order for both countries to benefit from the improvements that had been identified. Sovereignty cannot be disregarded. But informed discussion is needed to achieve the necessary consensus so that information exchanges can be understood through the standpoint of mutual benefits and reasonable compromises, rather than purely as an infringement upon a country’s sovereignty.

SINGLE WINDOW

Single Window systems have been at the forefront of trade facilitation discussions for the best part of 20 years, yet still there is no common understanding of what constitutes the definitive solution. There is a WCO and UN recommendation that provides a high level definition, there are a number of other more detailed factors that most will agree must be in place (electronic data sharing between Customs and other border regulatory agencies, suitable legal cooperative instruments and so on) but still it is easy to point to different national “single windows” that vary in scope and operations extremely widely. Single windows have both a domestic and an international context – in the first instance, cooperation and collaboration amongst border agencies must occur at national level before attention might turn to cross-border data sharing and risk assessment. For purposes of this handbook and comparison with GNC, single window systems are not being evaluated as operational IT applications, but looked at in a theoretical way only. An actual single window solution and GNC solution might not look similar at all in an IT/technical sense, but they will share some important underlying features.

It is this cross-border setting that the single window concept shares much with GNC. Both require harmonized data clusters, agreed messaging, trust between the parties, data protection that is equivalent at either end of the transaction and a number of other issues. The most obvious commonality is the cross-border exchange of trade data for enhanced risk assessment and, hopefully, risk mitigation.
THE PRIVATE SECTOR

The private sector supported, was part of and encouraged the development of GNC, not least because a significant proportion already supported an integrated approach to managing information along the international supply chain. Any moves by Customs to become equally joined up were seen as positive, and a step closer to the Customs in the 21st Century building blocks – and strategic aims of the WCO – of ‘Implementation of modern working methods; procedures and techniques’ and ‘A professional knowledge-based service culture’. They stressed the linkages between GNC and Pillar II of SAFE. Some have underlined the potential of reducing illicit trade (e.g. of counterfeit goods) through better structured C2C exchanges, which could reduce losses to manufacturers and increase revenue collection by government agencies.

The international trading and transport logistics communities are crucial providers of the source information to be exchanged between Customs authorities, and were not only involved in the development of GNC, but acknowledged as important stakeholders in any implementation process. Although the proposed model did not include partnerships with the private sector, the model was constructed so that other stakeholders might be included in the future when Members choose to do so (see Diagram 2 above).

Private sector organizations, both commercial and not-for-profit, shared their knowledge and expertise with the ad hoc Working Group. In particular, in the area of the potential solutions Members could adopt to facilitate their exchange of information arrangements, and in the area of developing standards. In future, some Members looking to go down the GNC road will use the private sector to carry out implementation work, and/or use outsourced services to exchange information.

During the development of the GNC Feasibility Study, private sector support for the idea was made clear through industry participation in forums such as the Permanent Technical Committee and the then influential PSCG (Private Sector Consultative Group) re-affirmed its commitment to be a partner in the development of GNC.

MANAGEMENT STRUCTURE

GNC is a similar venture to single window, as has already been covered. Nonetheless, it does not have the same focus on the domestic coordination of Cross Border Regulatory Agencies. Rather it is centred upon Customs itself, but with extensive liaison with industry. The other dimension is its cross border nature and that has its own management implications. The first and most obvious requirement is a form of joint steering committee that allows for adequate involvement of Customs line branches (risk management, audit, IT), trade, transport logistics and those departments responsible for foreign affairs and telecommunications.

Such a committee ought to be chaired by Customs. There is a relationship to other cross-border Governmental issues such as FTA’s, CMAAA and relevant MoU’s with other agencies for data sharing and other collaboration, but this is not particularly relevant and beyond the courtesy of occasional updates, the committee can go ahead with considerable autonomy.

Within Customs, the project team will require subject-matter expert groups working on policy/administrative/procedural, legal and technical issues as described in this handbook. Some administrations will include a capacity building group as well. There will need to be either one senior executive or a very small steering committee within Customs responsible for the internal coordination of those expert groups and the management of the joint steering committee mentioned above. This is not meant to imply any “management overkill” but GNC is multi-dimensional in its impact across the various stakeholders and requires prudent management.

PROOF OF CONCEPT PILOT

Sound project risk management usually aims to avoid a “big bang” approach system implementation, unless necessary. An incremental approach through a pilot project with a limited number of transactions and an small set of key data elements would be more risk-contained and manageable. On the assumption that the project achieved its aims, the scope can then be expanded as shown in Diagram 2 above.

There are a number of examples already underway internationally at differing levels of maturity and further information is available from the WCO Secretariat. These include the formal set up of utility blocks and all the rest of the systematic approach outlined in the Feasibility Study. Examples include:

- Systematic Exchange of Electronic Data (SEED) managed by Serbia
- INDIRA (Argentina)
- Two projects run by the EU (DG TAXUD) including one that involves the mutual recognition of AEO requirements with the US
- Southern African Development Community managed by South Africa

Other examples of data exchange include the use of the WCO’s CENcomm facility by the EU and China under the Smart and Secure Trade lanes (SSTL) project and very recent developments within the South Asia Sub-regional Economic Community (SASEC) to instigate an analysis of possible systematic Customs to Customs data exchange within that diverse group of nations.

It can be seen from the above that the exchange of information between Customs administrations beyond enforcement needs typified by CMAAA’s is something that is already in place and growing in all parts of the global Customs community.

The incremental GNC approach built upon proven standards and within the structure of the WCO provides added structure and clarity to the concept.

CENCOMM

This WCO tool was mentioned above in connection with the SSTL project. It provides a secured communication system with personal login and password and encrypted data storage on the WCO server that is accessible only to closed user groups.

CENComm allows for the exchange of nominal and other information and connectivity to other Government agencies and the private sector if necessary. In addition, it has a library based upon a MS “Access” database and the facility to provide relevant operational or other statistics relevant to a project.

COMMERCIAL VERSUS THE ENFORCEMENT TRACKS OF GNC

Right from the outset, that is, at the first GNC meeting it was agreed that there should be a focus on two tracks within the GNC study – the “Commercial Track” and the “Enforcement Track.”

This recognized there are already two distinct types of ongoing engagements between WCO Members, namely:

1. Those related to enforcement efforts, where the content concentrates on enquiries and investigations and there is a suspicion of Customs irregularities or criminal activity; and

2. Those related to commercial efforts, where the content concentrates on enhancing trade facilitation and reducing the risk of revenue losses by government agencies.
2. Those dealing with day-to-day commercial transactions where the content of basic export, import and transit declarations is exchanged on a routine basis.

With respect to the second point, it was noted that one of the original stated aims for GNC was to provide an international basis for operationalization of the SAFE Framework and the Revised Kyoto Convention. Amongst other things, it was maintained that in order to do so might imply the need for a more innovative approach to using commercial data amongst WCO Members. Over the course of development of the Feasibility Study, participants continued to explore the linkages between the two tracks. Although this idea is much more fully described in Annex D to the original document, the commercial track can be understood as involving significant amounts of commercial data (the vast majority of which is expected to be reliable, accurate and above suspicion) in a real time manner under the often noted “your export is my entry” scenario. This more directly affects commercial transactions, whereas the enforcement track can be seen as a much smaller subset of exchanges (both structured and unstructured) amongst WCO Members to enhance and fulfill their enforcement mandates. Enforcement exchanges may or may not be connected with any real time commercial transactions.

The following diagram is designed to give a general sense of comparative volumes and potential interactions between the enforcement and commercial tracks under GNC – It is not an exclusive process flow to represent all possible transactional scenarios
INTRODUCTION
GNC is an adjunct to existing instruments for administrative assistance and cooperation in Customs matters that requires specific legal provisions to be incorporated within existing, or new instruments. It is important to note that in this context, customs matters should be regarded as covering a very broad ambit of laws and regulations concerning cross-border trade. This will help to ensure the proper application of customs laws and the security of the international trade supply chain by aiding the investigation and combatting of customs offences.

GNC must be underpinned by a rigorous and realistic legal framework that gives reciprocal confidence to contracting parties involved in Customs-to-Customs exchanges. Confidence must apply to electronic transactions, data protection, privacy, authentication and the integrity of the process. The legal framework not only has to deal with provisions on the actual exchange of GNC information, but also has to take into account these general aspects of enabling law. Importantly, it was the firm conviction of the legal working group during the development of the Feasibility Study that existing arrangements covering exchanges between administrations was built around the case-by-case enforcement related pattern covered in CMAAA’s, not the systematic exchanges of commercial data envisaged in GNC.

THE LEGAL TOOLBOX
The perceived distinction between CMAAA’s and GNC was the genesis of the so-called Legal Toolbox that was not intended to replace any existing agreements, but which contains a set of provisions that contracting parties should consider when developing exchanges in a GNC context, or when they decide to conclude a new agreement dealing with assistance in the full range of Customs matters.

The toolbox describes the various provisions to be considered by contracting parties to a GNC exchange agreement as they come to terms with the new concepts in mutual administrative assistance that GNC implies. In parallel with the concept adopted in the overall development of GNC, the toolbox is a practical set of legal protocols, standards and guidelines that provide flexibility and ease of use.

While the GNC legal toolbox ensures a standardized approach to all legal considerations, it nonetheless provides for:

- Different entry levels,
- Specific solutions that might be negotiated between contracting parties, and
- The further development of GNC.

The toolbox is built upon a presumption of bilateral exchanges, largely building upon what already exists but also, and arguably most importantly, upon emerging approaches for dealing with a new electronic transactions legal framework. The toolbox was constructed with an intention to encourage bilateral instruments to grow into a network of multilateral agreements. The utility block concept is fundamental to enabling such a flexible and scalable approach and the legal toolbox has been designed accordingly.

A wide range of potential entry levels to GNC were considered in the development of the toolbox which mirrors the flexibility built into the concept of utility blocks. In turn, as described in the section on IT matters in this handbook, utility blocks provide the basis for the systematic exchange of commercial information and form the core of the entire GNC concept. The actual information that it was imagined might be exchanged under the GNC legal provisions included data contained in Customs declarations, trader information, other commercial data, supporting documents and the traditional case by case enforcement information on offences.

Further flexibility has been built into the GNC toolbox through a provision covering mutual arrangements when dealing with specific operational and/or party-specific issues. As is the case with any mutual arrangement, the contracting parties are at liberty to add implementing provisions as they see fit. This can apply when negotiating either a broad scope of the agreement versus specific simplifications of customs procedures or compliance requirements, all based upon a relatively narrow implementation of the GNC Framework.

If contracting parties wish to change the scope of information to be exchanged in the legal arrangement, this should be managed through the creation of a new utility block, or (in order to foster greater standardization and to save time through re-use) the adaptation of those already in place.

Annex 3 is a copy of the relevant section of Annex L to the WCO GNC Feasibility Study that lists the specific contents of the legal toolbox. For more background, including legal commentary, readers should refer to the Feasibility Study itself on the WCO website.

LEGAL ISSUES – THE FUTURE CHALLENGE
Traditionally legal issues take second place to more immediate matters such as technology, procedural change and policy considerations. Despite this, the legal challenges imposed by GNC are significant and relate to a business process that is almost certain to become routine in years to come and one that is linked to a number of other WCO instruments. The task for legal experts in Customs administrations is to understand the various concepts that underpin GNC such as utility blocks and ensure that there is a proper, sustainable and consistent legal basis for future exchanges of data.

The GNC legal toolbox provides a useful starting point for this exercise, but only experience gained from implementation in the real world shall give the final shape and feel of the legal instruments that will be needed in the long term.
INTRODUCTION
In theory information can be exchanged in the conventional manner, that is, via paper documents. In reality, given the volumes of international trade in the age of globalization, this would be cumbersome and would not possibly deliver the kinds of efficiencies and benefits that modern information technology allows. As a result, GNC was always based upon the electronic exchange and the many implications that flow from that fact. Therefore one core requirement for all potential GNC compliant administrations is Customs automation and the ability to send and receive electronic transmissions. There would be very few, if any, WCO Members who would not possess such capabilities.

However, because GNC is not built around a monolithic IT system, but conceived as an approach to data exchange that is systematic and built around standards, it is even more necessary to develop GNC with interoperability in mind, so that different IT systems can work together.

IT ARCHITECTURE AND GOVERNANCE
The GNC architecture seeks to describe the concept from both its business and IT perspectives. In the absence of a central IT system, interconnectivity is intended to be enabled through the use of international standards between WCO Members, so that a distributed peer-to-peer internet-based network can emerge. This very broad section on architecture deals with the following questions from both the business and IT perspectives, in line with the opening sentence:

* What is GNC?
* How do its various parts fit together?
* What is the nature of the enabling IT that is needed to be a part of GNC?

The answer to the first question is deceptively simple – it is the systematic exchange of data between Customs administrations. During the analysis of the concept, certain attributes or rules were documented, namely, that it must not:

* Require new financing instruments,
* Require any transfer of responsibility away from WCO Members,
* Undermine the security and data protection needs of Members, or
* Require all WCO Members to be part of the network.

The GNC architecture was set up within the Feasibility Study as a guide for Members aimed at taking them through the process of “industrialisation”8 of their international Customs information exchange agreements in order to reap the expected benefits promised by such an outcome. The chief elements are:

* Rapidly improved business effectiveness;
* Enhanced predictability for all stakeholders;
* The efficiency implied by “develop once and reuse many times;”
* “Plug and Play” international agreements;
* Helping to create consistency and compatibility across all utility blocks;
* Capacity Building and other cost sharing arrangements;
* Full budgetary autonomy for Members; and
* A very modest governance structure maintained by the WCO Secretariat

Importantly, the architecture must address the differing perspectives of GNC – that is, how it looks to firstly the business analyst who evaluates it as a change management challenge with a potential direct impact on Customs processes. Secondly, there is the perspective of the functional analyst who is concerned about expectations of delivery from the IT system. Related to functional analysis is the task of the application designer who is concerned about with IT development, its costs, and associated development timetable. Another important party is the infrastructure manager, who, based on the work that has been done already, must manage procurement and resource deployment, that is, the actual operation of the IT infrastructure and related services that has been chosen. Further perspectives to bear in mind are the (Systems) security officer who is responsible for the protection of corporate IT assets and finally, the program manager who has overall responsibility for getting the whole job done in accordance with executive management expectations.

The GNC architecture has four discrete layers, namely business, functional, application and infrastructure. Each is described briefly below. Annex G of the WCO GNC Feasibility Study provides more details on the subject.

BUSINESS LAYER
The business layer is linked to the supporting instruments underlying GNC such as the SAFE Framework, RKC, data model and UCR. The architecture recognizes that within the boundaries of these standards, WCO Members will exchange streams of commercial data (possibly also enforcement information as noted before) according the agreed business rules, using agreed means to recognize parties and a transactional identifier. Utility blocks are the logical basis for all aspects of GNC and the business layer is captured largely in the first section, the “purpose” box.

The basic business process begins when the Customs administration at exit makes available to the corresponding administration at entry trader information as agreed in the International Agreement between them. In turn, the administration at entry will use that prearrival information to augment its risk assessment which is the basis of the expected benefits of GNC.
**FUNCTIONAL LAYER**

Administrations engaged in GNC have two main functions to manage.

- When acting in the role at the point of export/exit, each administration must make its trader and transaction information available to other parties as stipulated in its exchange agreement as well as to its own officers.
- In its role at entry/import, it will need to access the relevant trader transactional information from that export/exit data and perform its risk assessment.

**APPLICATION LAYER**

The application layer potentially represents an IT cost for GNC parties. An administration could engage in GNC through the set up and operation of a portal interfaced with its existing automated system. This scenario has its focus on the commercial track whereas it is assumed that for the enforcement track, administrations will utilize the user interface offered by the WCO’s CEN system.

The envisaged GNC portals would ensure that the interface between the automated systems of the various parties is properly functioning. The GNC portal will be structured around the three main information streams (trader identification or reference data, transactional data from declarations and the like, enforcement information) and might require a special module to manage the various technical aspects of the information exchange. Specialised modules (for example, a form of plug in) will offer the specialised services as determined by each of the utility blocks in the commercial track.

**INFRASTRUCTURE**

Each GNC enabled WCO Member will be responsible for defining its respective IT infrastructure needed to support their exchange agreements. They will have to design, size, provide for, deploy and operate within budget. In addition, they will have to act in compliance with their national law and procurement policy. They will use their own IT architecture, including the security policy, risk assessment, and configuration items such as firewall, proxy, security systems, servers, commercial off the shelf software and, if they so choose, cloud services.

WCO Members must assess the budgetary and operational implications of the solution they choose, such as the commercial cloud or a hub solution. There is no preferred GNC option in this area. Members are advised to select the most appropriate approach after due consideration of their business needs and likely developments in the future.

In summary, the following diagram is a very basic description of a typical exchange between two Customs administrations. As previously mentioned, to get a more detailed understanding of GNC architecture, interested readers should review Annex G of the WCO GNC Feasibility Study, including Annex A which is a far more detailed diagram of how it all fits together.

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**Diagram 4 : A Simple Representation of GNC Architecture**
DATA AND MESSAGING

It has been mentioned that GNC is aligned with relevant WCO instruments wherever possible. When it comes to data standards for exchanges of structured information in goods declarations, the WCO Data Model provides the basis for semantic interoperability. It was recommended in the Feasibility Study that wherever administrations agree on utility blocks for formalizing exchanges, the data clusters involved should be harmonized against an agreed version of the WCO Data Model. This does not imply that WCO Members will have to make wholesale alterations to their existing databases – the intent of this step is to ensure that the data being shared is semantically harmonized, and replicable.

Messaging should also follow standards wherever possible. If EDI messaging shall be adopted, then UN/EDIFACT ought to be used. Once again, the WCO Data Model supports all the major Customs messages in EDIFACT as well as the modular GOVCBR message that covers data exchanges in the single window domain. If exchanges are to be based on the use of web forms then standard XML should be used and, once again, the WCO Data Model has schema design standards that could be used if needs be. The key is flexibility while adhering to a standardized and mutually agreed approach.

IDENTIFIERS

There are two main issues in this section. Firstly, administrations at either end of the exchange need to be able to identify the relevant parties such as importer, exporter, transit principal, transport operator and the like. All administrations with automation will work in an environment where some sort of codified representation of these parties exists – perhaps a taxation number, VAT number or Customs coded system for traders. Such numbers are by their nature for domestic use and, as a result, of limited use in country to country exchanges. The GNC partners could agree a “virtual” trader identification number for the purposes of exchanges only and map their respective national codes accordingly. Alternatively, countries might agree to make the relevant code lists available to each other so that the IT applications can access the coded representation in the same way in both administrations.

Another possible approach to entity recognition of this kind could also involve the use of international numbers for the identification of parties – the GS1 GLN and DUNS number are two leading examples, depending on the commonality of such numbers in the country, as well as the cost and legal considerations involved in the use of such numbers. These are business decisions to be made by Customs.

The second type of identification is the transaction itself. There needs to be a mutually recognizable number that uniquely identifies the transaction that is sent and then received, so that both parties are confident it is the same transaction. The WCO Recommendation and Guidelines on the use of the Unique Consignment Reference which provides detailed guidance on the implementation and use of such an identifier.

BUSINESS RULES/INTERFACE/INTEGRATION

There are a number of important issues to be addressed and documented by the exchange parties so that there is clarity concerning the manner in which the technical aspects will operate. These issues will differ depending upon a wide range of national factors, but there will be commonality in terms of how they are analyzed and described. The utility block brings these factors into one unifying descriptor which is the essence of that core concept in GNC and underscores its importance (See Annex 1 for an example of an actual draft utility block).

The business rules will apply at both national and international levels, in other words, there will be requirements that must be decided within each administration and, arguably more demandingly, those that involve all parties in the exchange. Obvious considerations are “pull/push,” data clusters, type of messaging, identifiers, authentication, encryption and other communication issues.

The interface layer in the utility block refers to the means by which the exchange parties will interact with each other via the agreed exchange system. The integration layer refers to the means by which the exchange mechanisms shall be brought within the overall system architecture employed by each respective Customs administration. Annexes E and G of the Feasibility Study provide more detail in this and there is also a wider discussion of many IT issues in Annex 1 to this handbook.
INTRODUCTION
From the very beginning of development of the GNC concept, it was recognized that capacity building (CB) was an essential part of the process. As will be evident from even a brief scan of this handbook, GNC is a complex initiative with a number of challenges for even the most advanced administrations. The CB implications are therefore obvious and in recognition of that fact, a CB sub-group was part of the GNC Feasibility Study team from the outset. The foundational concept behind GNC – the utility block – has CB as one of its key components.

As the GNC concept developed, it became possible to identify those factors deemed to be the minimum requirements to ensure full participation for all WCO Members, such as a level of automation enabling electronic information exchange and the capacity to manage the legal and governance aspects of GNC participation. The following factors were seen as critical:

- Political will and ownership;
- Strong leadership and appropriate institutions;
- Partnership with the private sector;
- Appropriate infrastructure; and
- Implementation of key WCO instruments, especially SAFE and RKC, but ideally also the WCO data model and the UCR, or other means if transactional identification.

Capacity building should be geared towards supporting Customs administrations to reach the required entry level with due emphasis placed upon the factors listed above.

CAPACITY BUILDING: HOW?
The means of delivering effective CB is one of the WCO’s most important missions. In many ways, the approach to CB for GNC is no different from that associated with any other significant aspect of Customs modernization and change management. The distinctive features of CB in this example relate to the multi-pronged nature of the challenge that GNC is not merely a question of IT systems and the specific unique aspects of the GNC model – utility blocks, the legal toolbox, IT architecture and entity identification being examples. Apart from its unique characteristics, GNC imposes more generic challenges of the kind implied by any major change initiative such as:

- Adequate governance
- The ability to perform risk assessment by automated means
- An overall effective IT system for the management of declarations and other forms of electronic data.

It is important that administrations put in place practical and measurable approaches allowing: incremental implementation and gradual expansion and not trying the “big bang” approach. It is obvious that a global Customs network will not be achieved in a single implementation step and that GNC implementation will be modular and flexible. To build upon this idea, it is worth an exploration in more depth of these dimensions:

- **Incremental implementation:** Customs administrations should focus initially on establishing networks based on key bilateral relationships as the foundation for building regional arrangements moving towards regional networks and, eventually, wider multilateral networks.

- **Possible expansion of scope:** The initial focus will be Customs-to-Customs networks serving as the foundation for possible expanded networks that might include other Government border regulatory agencies and the private sector. The design of a roadmap for national GNC implementation should take into consideration both of these dimensions.

![Diagram 5: An incremental approach to Capacity Building for GNC](image-url)
The Utility Block (UB)

The Utility Block is a core concept of GNC for achieving the consistent and standardized development of Customs to Customs data exchanges globally. Each UB follows a consistent format and describes a specific part of the Customs business process, explained in simple terms such as “exchange of transit data” or “mutual recognition of AEO.” Every UB has a mixture of policy and technical layers and they must describe strategic aims for policy makers, business processes for managers, legal issues for lawyers, functional approaches for operational officers, and technical data, messaging and architectural specifications for IT staff.

UB’s are to be constructed and reviewed by experts within each field using a standard development template as shown below. It focuses on the needs of a specific part of the Customs business process, including data clusters, the means of interface between different IT systems and the legal basis for cross-border data exchanges.

Breaking the huge extent of Customs business into discrete UB’s allows Customs authorities to choose the business processes and associated information they intend to share with their partners, and more quickly facilitate the associated exchange arrangements. The choice of which UB to use will be determined by the business need and that, in turn, falls within the decision making powers of the parties to the agreement. The entire basis of UB’s and of GNC itself is re-use, standardization and a systematic approach.

Therefore, to make the most of GNC, each UB should be implemented in the same way by all partners, to the extent possible. While each individual exchange agreement will have its unique features, there is flexibility implicit within the design of each UB, in all its layers including the type of legal arrangements, the capacity building requirements and the list of data elements to be exchanged. The UB is simply a standardized template – it is not a global instrument that demands a “one size fits all” approach to cross border data exchanges.

The main attraction of a standardized approach such as the UB is that once an example is lodged with the WCO Secretariat, it can be accessed and re-used by any WCO Member with little further work required.

The following is an example of the basic template showing the various categories or layers that might be used in a typical UB. The list is not binding and Members may wish not to use all those shown below and, more importantly, might decide some others are needed. As mentioned above, in order to try to maintain global consistency and transparency, as new UB’s are created, they ought to be sent to the WCO Secretariat who will maintain a repository and evaluate them for the sake of achieving a more consistent approach over time. The template below has an extra column at the right where examples from real UB’s have been added to illustrate the layer being shown. In addition, Annex 1 is an example of a real UB.

<table>
<thead>
<tr>
<th>UB SEGMENT</th>
<th>DESCRIPTION</th>
<th>HOW USED BY WCO MEMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of the Block</td>
<td>The business procedure, e.g. MR of AEO, Commercial Fraud</td>
<td>There are a number of UB’s listed on the WCO’s website covering most parts of the world.</td>
</tr>
<tr>
<td>Purpose</td>
<td>What the block is supposed to do.</td>
<td>From the SEED project (Serbia &amp; Customs Administrations in the Balkans)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Systematic and automatic electronic exchange of data from Customs Documents (Transit, Export and Import Customs Declarations, TIR and ATA carnets, Simplified Procedure accompanying document – Invoice, including the records about border crossings of empty trucks) between Customs Administrations.</td>
</tr>
<tr>
<td>Legal Framework and Compliance</td>
<td>The law, including the instrument providing the legal gateway.</td>
<td>From the EU-US Mutual Recognition of AEO.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Legal Framework – all bilateral AEO MRAs between partners;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Compliance - the partners must ensure that the AEO information exchanges and all related data comply with the data protection legislation of each partner; that the data remains secured in their respective systems and is synchronised across the IT systems of all involved parties. The availability of the AEO information is specified and measures are defined, in the case where AEO information would not be available for the processing of a Customs notification or Customs declaration.</td>
</tr>
<tr>
<td>UB SEGMENT</td>
<td>DESCRIPTION</td>
<td>HOW USED BY WCO MEMBERS</td>
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<tr>
<td>------------</td>
<td>-------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Entities</td>
<td>Those who can send/receive information, and the methods of identifying them.</td>
<td>From the SEED project (Serbia &amp; Customs Administrations in the Balkans)</td>
</tr>
<tr>
<td></td>
<td>Partner Administrations: Customs Administrations of Export, Transit and Import, having the following roles:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Administration of Departure: Providing PRE-ARRIVAL and EXIT data</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Receiving automatic data matching results from the other (ENTRY) side or the border;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Administration of Arrival: Providing ENTRY data;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Receiving automatic data matching results;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Receiving alarming notifications on received PRE-ARRIVAL data and based on dynamically defined Risk Criteria;</td>
<td></td>
</tr>
<tr>
<td>Business Rules</td>
<td>The specific rules for the UB, if not described elsewhere, includes relevant Protocols, Standards and Guidelines.</td>
<td>From the EU-US Mutual Recognition of AEO</td>
</tr>
<tr>
<td></td>
<td>Comprises a number of detailed rules concerning the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contact points between partners;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Requirements for:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• AEO information;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• the trader as one of the supporting participants in the end-to-end business process;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Customs transaction systems in the “Lodgement” partner;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• the risk analysis systems in the “Lodgement” partner;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• AEO Identity Management and, in particular, the aliasing process by the “Lodgement” partner;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• the nature and frequency of data exchange, monitoring and statistical requirements.</td>
<td></td>
</tr>
<tr>
<td>Data Cluster</td>
<td>The list of data elements for the UB</td>
<td>From South Africa – Swaziland Project</td>
</tr>
<tr>
<td></td>
<td>Based on the premise above, partner countries may agree on all or a combination of the following message exchanges –</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Export &amp; Transit Message Export &amp; Transit consignment information validated and approved by the country of departure.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Movement information -</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Release Message Release Notification (upon completion of customs procedure in the country of departure).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Arrival Confirmation Message Arrival Confirmation (upon the completion of customs procedure in the country of arrival).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Manifest Message Manifest information (Road) information relating to consignments conveyed cross-border upon a road vehicle.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Discrepancy Consignment Message Discrepant Consignment information, where after matching and risk assessment in destination country, discrepancies are identified.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Bond/Guarantee Acquittal Message Bond/Guarantee information, where a common (trans-national) bond exists for a given transport (transit) corridor.</td>
<td></td>
</tr>
<tr>
<td>UB SEGMENT</td>
<td>DESCRIPTION</td>
<td>HOW USED BY WCO MEMBERS</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>------------------------</td>
</tr>
</tbody>
</table>
| **Triggers** | Events that either start the data flow, or respond to data receipt | From the SEED project (Serbia & Customs Administrations in the Balkans)  
Events initiating the data flow:  
1. Pre-arrival: the commencement of the Customs procedure in the Administration of Departure. At the moment of acceptance of Customs Document – Export Single Administrative Document (SAD), Transit SAD, TIR carnet, Simplified Procedure accompanying document. These data are used for the risk analysis and generation of alarms.  
2. Exit: ending the Customs procedure in the Administration of Departure. At the moment of confirming the arrival of the truck at the exit BCP in the neighbouring Administration and verification of the truck exiting the neighbouring country. These data will be used as reference for automatic data matching.  
3. Entry: the commencement of the Customs procedure in the Administration of Arrival. At the moment of acceptance of the Customs Documents at the Customs Office of Entry the data will be used for automatic comparison with reference data received from the neighbouring Administration of Departure AoD. |
| **Interface** | How the parties in a GNC relationship are connected | From the Argentina INDIRA UB used by countries in MERCOSUR  
The connection between the parties is done through the interaction of Webservices consuming information from both the Customs Informatics Systems of Ecuador and Argentina.  
These systems are:  
ECUAPASS SYSTEM – It is the Ecuadorian Customs Service newest computer system that facilitates customs operations for trade operators, reducing time associated with then compliance of customs formalities and obligations.  
MALVINA SYSTEM – It is the Argentinean Customs Service’s informatics system.  
The information exchange works as follows:  
Requesting country: Each country develops a web application that resides in a server of his property. This application calls the WebMethod corresponding to the desired query on the web service of the answering country.  
Requested country: Each country develops a web service that resides in a server of his property, according to the specifications defined by an agreement between both Customs Services.  
A fully agreed security system (PKI – Public Key Infrastructure) is used with the digital certificates in order to ensure the information being sent and received between Ecuador and Argentina. |
| **Integration** | How a GNC partner connects to its own systems | From the Mutual Recognition of Controls between EU and Switzerland  
The Countries have to connect their own system to the system of the other GNC compliant Country  
The integration layer needs to be profiled by each Country;  
It includes the business case for national profiling, the use of the GNC information for the risk assessment of declaration/notification, sets the requirement for the availability of the exchanged data, provides an indication of the possible data volumes, the compliance and infrastructure requirements. |
<table>
<thead>
<tr>
<th>UB SEGMENT</th>
<th>DESCRIPTION</th>
<th>HOW USED BY WCO MEMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>The electronic means of exchanging information</td>
<td>From South Africa – Swaziland Project</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Information Exchange between the participating countries shall take place over internet based secure connections established using appropriate encryption technologies. In addition to the security of the communication channels, the exchanged messages shall also be secured through encryption.</td>
</tr>
<tr>
<td>Advantages</td>
<td>Benefits delivered to: Customs, Business and Other Agencies</td>
<td>From the Mutual Recognition of Controls between EU and Switzerland</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cost reduction due to better risk analysis by the Customs administrations, lower risk score for licit shipments (based on better quality data) and simplification, while enhancing overall security;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Transparency and predictability of the processes by all countries of the international agreement provided by harmonization of data and processes.</td>
</tr>
<tr>
<td>Capacity Building</td>
<td>Areas where targeted capacity building has been identified</td>
<td>From South Africa – Swaziland Project</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Some options are presented to promote the roll-out of this UB with partners that have limited IT capacity:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Any technology provider with software that will assist WCO members in implementing GNC, for example, Automated System for Customs Data (ASYCUDA) that is used in a number of Customs agencies could embed the role of the “Submitter” partner and of the “Receiving” partner, as a low cost option to facilitate the data exchange capability of the user countries;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Incorporation and use of a unique transaction ID in national legislation;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Proper engagement with external stakeholders concerning the importance of the use of a unique transaction ID – specifically on the import leg of the supply chain;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Obtain lessons learnt from prevailing data exchange pilot programmes; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Partner countries could require 3rd party technical expertise and funding to define and build sub-systems to support Export &amp; Transit information exchange.</td>
</tr>
</tbody>
</table>
The following words from the original “Customs in the 21st Century” official WCO document put the case for GNC eloquently and warrant new exposure despite having been written in 2008:

“The concept of networked Customs is critical for the 21st Century model of managing seamless end-to-end international supply chains. End-to-end supply chain management enables risks to be assessed in more depth and managed earlier where necessary, it reduces the need to intervene with goods in the choke point of the port of arrival, and it allows for the tracking and tracing of goods throughout supply chains.

The basic operation relies on secure, real-time exchange of information between business and Customs and between the Customs administrations in a supply chain starting with the export administration. This will require:

(I) Internationally standardized data requirements for export, transit and import and the implementation of the WCO Unique Consignment Reference number as part of a Cross-Border Data Reference Model;

(II) Interconnected systems and aligned Customs databases to enable the electronic exchange of data between Customs administrations as early as possible in the international movement of goods;

(III) Mutual recognition and coordination protocols between exporting, transit and importing administrations to eliminate unnecessary duplication of controls in international supply chains;

(IV) Standards to enable the development of a system of mutual recognition for AEOs; and

(V) A set of rules governing the exchange of information between Customs administrations, including rules on data protection.”

This handbook cannot cover the depth of the original 2012 GNC Feasibility Study. Its intention is to whet the appetite for potential project participants and encourage them to take up the standardised approach that GNC adopts.

There is no doubt that there shall be much more GNC-type of data exchange in future; the way ahead is ideally not to reinvent the wheels, but to follow an incremental and proven path. This handbook provides some basic information and should be seen as a pointer to learning more from what exists already and what more is being developed today.

Annex 1 Sample Utility Block (EU-US Mutual Recognition of AEO)

UTILITY BLOCK EXECUTIVE SUMMARY

PURPOSE
To specify the process that regulates the information interaction between partners, and involved traders, that subscribe to an AEO Mutual Recognition Arrangement/Agreement (MRA);

To enable each of the partners to grant benefits to AEOs of all other partners;

To provide future partners negotiating a bilateral AEO MRA with a template (this UB) for completing the technical annex to exchange the AEO identities.

ADVANTAGE TO GOVERNMENT
Streamlined process for exchange of data allowing the re-use of this same approach for all bilateral AEO MRAs to which a WCO Member subscribes;

Reassurance of a consistent and coherent automatic implementation of the bilateral AEO MRAs across all partners, promoting all the foreseen benefits across the geographical footprint of the bilateral AEO MRA (better control targeting, as a direct result of more effective automated risk analysis);

Low costs to establish the technical annex (using this UB as the template) of their bilateral AEO MRA with high opportunity for reuse and therefore reduction in the costs for the IT implementation.
| ADVANTAGES TO BUSINESS / STAKEHOLDERS | Transparency and predictability of the AEO benefits granted by all partners of the MRA;  
Reassurance that the partners are committed to successfully implement the bilateral AEO MRA and to grant benefits to the recognised AEO (facilitation, lower risk score, reduction of control at export and import, expedited release time) in a systematic and predictable way;  
Brings a full transparency on the Trader Identification Number(s) (TIN) that need to be used with each of the partners to ensure the recognition of their AEO status. |
|-------------------------------------|-----------------------------------------------------------------------------------|
| LEGAL FRAMEWORK AND COMPLIANCE      | Legal Framework – all bilateral AEO MRAs between partners;  
Compliance - the partners must ensure that the AEO information exchanges and all related data comply with the data protection legislation of each partner; that the data remains secured in their respective systems and is synchronised across the IT systems of all involved parties. The availability of the AEO information is specified and measures are defined, in the case where AEO information would not be available for the processing of a Customs notification or Customs declaration. |
| ENVITIES LAYER                      | Partner refers to the contracting party to the bilateral AEO MRA, (e.g. National Administration for Customs). It is important to note that every partner will act in two distinct roles:  
“Granting” role: As the “Granting” partner allocating the AEO status to a trader, performing reassessment and evaluation of this AEO.  
“Lodgement” role: As the “Lodgement” partner processing a notification/declaration lodged in its Customs transaction system by a trader.  
Trader refers to the economic operators which play an active supporting role in the information exchange underpinning the bilateral AEO MRA process. Two trader roles participate in the bilateral AEO MRA process:  
• “AEO”: As the trader certified as an AEO by the “Granting” partner;  
• “Lodging” trader: As the trader lodging a notification/declaration to the “Lodgement” partner making reference to his AEO status and the AEO status of his partners.  
The bilateral AEO MRA process choreographs the exchange of information between the partners. The two trader roles are included in order to illustrate the end-to-end process. However, it must be noted that the first pillar of the GNC only covers Customs-to-Customs interactions. |
| BUSINESS RULES LAYER                | Comprises a number of detailed rules concerning the following:  
Contact points between partners;  
Requirements for:  
• the AEO information;  
• the trader as one of the supporting participants in the end-to-end business process;  
• Customs transaction systems in the “Lodgement” partner;  
• the risk analysis systems in the “Lodgement” partner;  
• AEO Identity Management and, in particular, the aliasing process by the “Lodgement” partner;  
• the nature and frequency of data exchange, monitoring and statistical requirements.  
The compliance of all partners of the bilateral AEO MRA to the WCO standard regarding the TIN structure is a MAJOR simplification opportunity in the implementation of this UB. |
| DATA CLUSTER LAYER                  | The UB relies on the exchange of two functional messages:  
• “Granted” AEO information;  
• “Alias” TIN between the “Granting” partner and the “Lodgement” partner.  
The associated rules, supporting codes and dictionary are detailed further in this document. |
| TRIGGER LAYER | The UB features three variations for choreographing the interactions between the partners according to the following criteria:

Whether or not there is the need for the “Lodgement” partner to assign an “Alias” TIN (triggered by misaligned structures of the TIN numbers between the partners);

and in the case of alignment\(^9\) of the TIN structure between the partners, the choice for a “Lodgement” partner to opt for a “Pull” mode (instead of “Push” mode) to access the AEO information from the “Granting” partner.

The three options are:

- “Push” of “Granted” AEO information and “Push” back of “Alias” TIN between the “Granting” partner and the “Lodgement” partner, for those cases that the partners have misaligned TINs;
- “Push” of “Granted” AEO from the “Granting” partner to the “Lodgement” partner when partners have aligned TINs;
- “Pull” of the “Granted” AEO information by “Lodgement” partner from the “Granting” partner, which requires TIN alignment.

| INTERFACE LAYER | The UB defines the set of four technical messages associated with the following three options in the trigger layer:

- “Granted” AEO information is sent from the “Granting” partner and the “Alias” TIN is returned from the “Lodgement” partner, for those cases that the partners have misaligned TINs;
- When partners have aligned TINs, “Granted” AEO is sent from the “Granting” partner to the “Lodgement” partner;
- “Granted” AEO information is acquired directly by the “Lodgement” partner from the “Granting” partner.

It also provides the technical messages in Extensible Markup Language (XML) schemas and Web Services definition in Web Services Definition Language (WSDL).

| INTEGRATION LAYER | The integration layer needs to be profiled by each partner during the negotiation process of the Bilateral AEO MRA. This includes the business case for national profiling, the use of the AEO information for the risk assessment of notification/declaration, and national provisions for AEO identification. It also sets the requirement for the availability of the exchanged data, provides an indication of the possible data volumes, and the compliance and infrastructure requirements.

| COMMUNICATION LAYER | The information exchanges take place over the internet. The security of the exchanges is ensured by encryption using security certificates.

| GOVERNANCE | The Governance section provides a starting point and basis to define the project governance structure between the partners.

It provides a template for the project plan, the organisation of the test phase, the Operational Level Agreement between the partners, the help desk arrangements and escalation mechanisms. In addition, the change management process of the technical annex of the bilateral AEO MRA, based on a change management board is included.

| CAPACITY BUILDING | Several options are presented to promote the roll-out of this UB with partners that have limited IT capacity:

all “Granting” partners should offer access to their “Granted” AEO via a web interface/application, as long as they have given their agreement for their information to be published. Each partner ultimately decides if the access via web interface will be offered and made available;

- any technology provider with software that will assist WCO members in implementing GNC, for example, Automated System for Customs Data (ASYCUDA) that is used in a number of Customs agencies could embed the role of the “Lodgement” partner and of the “Granting” partner as a low cost option;
- the lite and fat hubs will decrease the entry costs for their client partners. However, funding arrangements are required to support the set up and operation of these hubs.

\(^9\) TIN aligned refers to the compliance of the AEO structure and policy.
Annex 2 Frequently Asked Questions

This Annex provides a “quick fix” for those seeking a general understanding of GNC and answers to some of the most common questions and misunderstandings that surrounded the original concept. It is reproduced here exactly as documented in the 2012 Feasibility Study as it is deemed to be as relevant now as it was then.

**QUESTION:** What is the Globally Networked Customs (GNC) concept?

**ANSWER:** A standardized way for Customs authorities to exchange information.

**QUESTION:** What is the scope of GNC?

**ANSWER:** Customs-to-Customs (C2C) information sharing only, including data obtained from commercial sources.

**QUESTION:** What will GNC arrangements look like?

**ANSWER:** As happens now, most arrangements will be bilateral, i.e. Customs-to-Customs. Some will be multilateral, in particular where there are Customs Unions.

**QUESTION:** What are the principle elements of the GNC approach?

**ANSWER:** As with other WCO instruments, there will be a set of Protocols, Standards, and Guidelines for WCO Members to follow.
QUESTION: What will GNC do for a Customs administration?
ANSWER: It will speed up the time between agreeing on an exchange of information arrangement, and implementation. It will also lower implementation and operation costs.

QUESTION: How will that be achieved?
ANSWER: By complying with GNC, WCO Members can industrialize the setup of their exchange of information agreements, i.e., speed up the creation of agreements and replicate them at low cost.

QUESTION: Will GNC become the mandatory method for exchanging information?
ANSWER: Using GNC is voluntary. WCO Members can continue to negotiate, develop and agree one-off arrangements. This also applies even if partner countries are using GNC for other exchange of information arrangements.

QUESTION: Are there prerequisites for GNC?
ANSWER: Yes, though they are basic. An administration must have national laws which allow for the exchange of information, and which protect the information shared with others. Customs must also be prepared to share information electronically using GNC standards.

QUESTION: Why are there two tracks, namely a Commercial Track and an Enforcement Track?
ANSWER: This mirrors what already happens. The Commercial Track handles systematic transaction type exchanges. The Enforcement Track handles messages exchanged as a result of specific requests for information made by Customs authorities.

QUESTION: What is in the Commercial Track?
ANSWER: Systematic exchange of information such as export data which is input through a national Customs application. This Track will contain most of the exchanges taking place under GNC.

QUESTION: What is in the Enforcement Track?
ANSWER: Information exchanges initiated by a Customs authority, either under Mutual Assistance agreements/arrangements, or where a risk assessment on data in the Commercial Track triggers the need for further information.

QUESTION: Is GNC future proof?
ANSWER: The model has been constructed so that it can accommodate further stakeholders such as commercial partners or other government agencies, take on a wider range of functions, and capitalize on advances in Information Technology (IT).

QUESTION: Will there be conformity with other WCO instruments?
ANSWER: Where relevant, the standardized approaches for GNC will be constructed in conformance with existing WCO instruments such as the Data Model, the Revised Kyoto Convention and the SAFE Framework of Standards.

QUESTION: What is the implementation process?
ANSWER: Pilot ‘proof of concept’ projects are envisaged. The results from those which successfully prove that standardized approaches can be easily replicated by any WCO Member will be made available through the WCO Secretariat.
QUESTION: What is a Utility Block?
ANSWER: A specific part of the Customs business process, explained in simple yet comprehensive terms that everyone can understand. It describes strategic aims for policy makers, business processes for managers, legal issues for lawyers, functional approaches for operational officers, and technical specifications for IT staff.

QUESTION: How is a Utility Block put together?
ANSWER: It is constructed and reviewed by experts using a standard development template. It focuses on the needs of a specific part of the Customs business process, including relevant data elements. For example, Authorized Economic Operator (AEO), commercial fraud, transit, etc.

QUESTION: Why break down Customs business processes into individual Utility Blocks?
ANSWER: This allows Customs authorities to be selective about what business process and associated information they choose to share with their partner(s), and to more quickly facilitate those networking arrangements.

QUESTION: Do the same Utility Blocks have to be used in the same way with all partners?
ANSWER: The choice of Blocks falls within the purview of the parties to the agreements. To benefit from GNC, each block has to be implemented in the same way by all partners. However, there is flexibility within each block, such as the list of data elements to be exchanged.

QUESTION: What is the principle attraction of a standard Utility Block?
ANSWER: Once tested and lodged with the WCO Secretariat, it can be accessed and re-used by any WCO Member with little further work required.

QUESTION: Can all the Utility Blocks be implemented in one go?
ANSWER: Yes, but do not assume your partner(s) can also cope with making a quantum leap to full data exchange across all parts of the Customs business at one go. Also, it will take time to build up the WCO library of blocks.

QUESTION: Is sophisticated IT infrastructure needed?
ANSWER: As a minimum, you will need an Automated Customs System which can process the information to be exchanged. You must be able to access the Internet.

QUESTION: Does an IT system have to be changed?
ANSWER: Existing systems can continue to be used, but they must be able to send and receive information electronically.

QUESTION: Does GNC require the use of the Unique Consignment Reference (UCR)?
ANSWER: Using the UCR is not mandatory. However, there has to be an identifier for transactions included in the Utility Block so that a sender and a receiver can track individual exchanges. GNC recognizes and accommodates the diversity of national identifiers as the solution to achieve this. The same applies to the need for a trader identifier.
QUESTION: What about security and data confidentiality?

ANSWER: These are covered in the texts of the agreements. Broadly, both parties must have in place, and must observe, laws which guarantee equivalent levels of data security and protection.

QUESTION: Do existing agreements need to be amended?

ANSWER: Yes, if one wants to be GNC compliant. Even then, the need for amendment will be small as GNC texts broadly mirror existing model WCO texts.

QUESTION: Are the GNC texts legally binding on those who choose to adopt them?

ANSWER: The texts are binding, but have sufficient flexibility for both those who want legal agreements and those who prefer to have Memoranda of Understanding (MOUs).

COSTS AND BENEFITS

QUESTION: Would it be cheaper and simpler to build one system that everyone can use?

ANSWER: Cheaper at a global level, but not necessarily simpler. Cost is only one factor. Obstacles to that solution at this stage include legal issues, data security and protection concerns, general lack of trust, the need to have an organization responsible for the system, the complexity of setting up and financing such a system, and the absence of initial investment funds.

QUESTION: Are there winners and losers?

ANSWER: No losers, but those in the top and bottom tiers of the World Trade Matrix stand to make the biggest gains. The gains for the middle tier are less dramatic.

QUESTION: What is the World Trade Matrix?

ANSWER: A map of trade flows between 150 countries and Customs Unions. For GNC purposes they have been split into three tiers: high, middle, and low.

QUESTION: Can the middle tier of the World Trade Matrix improve their benefit potential?

ANSWER: Yes. If their business model justifies it, they can have more exchange of information agreements than is the norm for their tier, or they can get together with like-minded countries to form hubs and reap benefits through economies of scale.

QUESTION: Why use it for GNC purposes?

ANSWERS: To build a simulation model for cost benefit analysis, on the basis that there would be a correlation between the amount of trade between countries and their business case for justifying exchange of information arrangements.
Annex 3 Content of GNC Legal Toolbox

The GNC legal toolbox contains several important provisions to be considered during legal negotiations concerning GNC within the context of national legislation. This includes national enabling law on e-commerce and ideally extending to encompass Customs and other governmental agencies involved in the cross border movement of goods.

The following provisions should be intrinsic to any GNC instrument.

**ARTICLE 1 - AUTOMATIC EXCHANGE OF INFORMATION FOR RISK MANAGEMENT PURPOSES**

1. The Parties shall provide each other through their competent authorities in a systematic way with the electronic information as defined in the utility block or utility blocks, as mentioned in article 2, and under the conditions set out by mutual arrangement.

2. The Parties shall, in addition to the other conditions and provisions of their agreement, only exchange information on the basis of this article once they have established compatibility with the relevant national enabling law and regulations.

3. The mutual arrangement shall, for the purposes of this article at least, contain provisions on:
   a) the ‘customs authority’ and ‘competent authority’ as defined in article 4;
   b) the procedures for establishing the compatibility of national enabling law and regulations;
   c) the utility blocks that apply between the Parties; for each applicable utility block the following data have to be entered:
      I. Name
      II. WCO reference number
      III. Date of effect
   d) the choice of any non-mandatory information they want to include in their exchanges of information, based on options given in a particular utility block;
   e) all technical and operational matters on the exchange of information, including procedures relating to communication, retention and access of information, when applicable, in automated information systems, modification of information, and information security for transmission and electronic archiving and
   f) the governance and funding arrangement of the exchange of information.

4. Nothing in a mutual arrangement can put aside the provisions of the agreement.

**ARTICLE 2 - UTILITY BLOCKS**

1. A utility block is a functional set of information, consisting of several layers, on a customs law related topic. The utility blocks that can be included in the mutual arrangement, are laid down in the WCO Repository [exact reference still to be determined].

2. Any changes to the content of a chosen utility block after the date their agreement entered into force, will be considered to be applicable between the Parties starting the moment they have stated that this is the case.

3. Any utility block that Parties want to include for the exchange of information, after the date this agreement entered into force, can be determined by changing the mutual arrangement.

These provisions should always be linked to the following general provisions on the use, confidentiality and protection of information and to provisions on exemptions.
ARTICLE 3 - USE OF INFORMATION

1. Any information received under this agreement shall be used only by the customs authorities of the Contracting Parties and solely for the purpose of assistance and cooperation under the terms set out in this agreement.

2. On request, the Contracting Party that provided the information may, notwithstanding paragraph 1 of this article, on the basis of a prior consent in written form, authorize its use by other authorities or for other purposes, subject to any terms and conditions it may specify. Such use shall be in accordance with the legal and regulatory provisions of the Contracting Party which seeks to use the information. The use of information for other purposes includes its use in criminal investigations, prosecutions or proceedings.

3. Paragraph 2 shall not impede the use of information obtained in accordance with this agreement as evidence in administrative proceedings subsequently instituted in respect of customs offences. Therefore, the Contracting Parties may, in their records of evidence, reports and testimonies and in administrative proceedings, use as evidence information obtained in accordance with the provisions of this agreement. The customs authority which supplied that information shall be notified of such use.

ARTICLE 4 - CONFIDENTIALITY AND PROTECTION OF INFORMATION

1. The Contracting Parties shall, for the application of this article, communicate to each other information on the relevant laws and regulations of each Contracting Party.

2. Any information communicated under this agreement shall be treated as confidential depending on the laws and regulations of each contracting Party, and shall enjoy the same confidentiality and protection extended to similar information under the relevant laws and regulations of the Contracting Party where it is received.

3. Exchange of personal data under this agreement shall not begin until the customs authorities have, by mutual arrangement established in accordance with this agreement, decided that such data will be afforded, in the territory of the Contracting Party where it is received, a level of protection that satisfies the requirements of the national law of the providing customs authority.

4. On request, the customs authority receiving personal data shall inform the customs authority which provided that data of the use made of it and the results achieved.

5. Personal data provided under this agreement shall be kept only for the time necessary to achieve the purpose for which it was provided. Parties shall, by mutual arrangement established in accordance with this agreement, set time limits for the retention of this data in a mutually agreed upon secure data environment and shall establish data deletion procedures.

6. The customs authority providing personal data shall, to the extent possible, ensure that this data has been collected fairly and lawfully and that it is accurate, up to date and not excessive in relation to the purposes for which it is provided.

7. If personal data provided is found to be incorrect or should not have been exchanged, this shall be notified immediately. The customs authority that has received such data shall amend or delete it.

8. The customs authorities shall record the supply or receipt of personal data exchanged under this agreement.

9. The customs authorities shall take all necessary security measures to protect personal data exchanged under this agreement from unauthorized access, amendment or dissemination.

10. Either Contracting Party shall be liable, in accordance with its legal and regulatory provisions, for damage caused to a person through its use of personal data exchanged under this agreement. This shall also be the case where the damage was caused by a Contracting Party supplying inaccurate data or supplying data that is contrary to this agreement.

The following provisions are recommended for incorporation when opting for exchanges of information on the basis of the GNC Framework.

- Definition of “customs authority” as the customs authority of the Contracting Parties responsible for applying the customs law and any other authority empowered under national law to apply certain customs law;

- Definition of “competent authority” as the competent customs authority or another authority which has been designated by a Contracting Party for sending and receiving the information under automatic exchange (see article 1) on the basis of this agreement or the application of any other article of this agreement.

It is important to note that parties should pay particular attention defining the scope of customs law, in view of the provisions...
of article 1.

GNC furthermore benefits from clear articles on the scope of the assistance in general and, in particular, concerning the definitions on customs declarations, customs duties, information, the international trade supply chain and risk management. In general the phrasing of these provisions together should cover and make allowance for an effective range of risk management. Other important definitions include those in national law covering, for example, electronic data, documents and messages.

The GNC legal toolbox can be inserted in many instruments of varying scope and provenance. It is important to note that the provisions in the toolbox are part of the scope of administrative assistance and cooperation between customs authorities. As such, they fit in more comprehensive instruments on administrative assistance and cooperation to ensure the proper application of customs laws and the security of the international trade supply chain, and to prevent, investigate and combat customs offences.

When doing so, due consideration should be given, as applicable, to distinguishing clearly the exchange of information for risk management purposes from other forms of exchange of information, especially when these other exchanges also take place electronically. This will be necessary when, besides the exchange of information on the basis of the GNC Framework, there are for example, exchanges of information on a case by case basis in the enforcement track.

It can be an option to allow for specific provisions, in line with the philosophy of GNC, that a Party adheres to an existing GNC instrument between other parties. In this way GNC can develop on a multilateral basis, for instance in regional contexts. For this, all the national procedures and the conditions for adhesion have to be fulfilled. This includes conditions Contracting Parties have set out in mutual arrangements on for example, the process for establishing compatibility of national enabling laws as mentioned in article 1 paragraph 2.

It can also be an option to stipulate that, when their instruments and mutual arrangements fall within the scope of Globally Networked Customs and the agreed upon toolboxes, Parties will deposit them in the proposed GNC Repository of the World Customs Organization, following procedures that remain draft at this stage (refer Annex N to the GNC Feasibility Study).

It is further proposed that the WCO Secretariat shall have to advise the Parties specifically whether the instrument and arrangements that they want to have included in the GNC Repository comply with the various protocols, standards, guidelines and any other relevant rules of the GNC Framework. (refer Annex N to the GNC Feasibility Study)

#### Annex 4 Glossary of Terms

<table>
<thead>
<tr>
<th>TERM</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>Authorized Economic Operator (AEO)</td>
<td>A party involved in the international movement of goods in whatever function that has been approved by or on behalf of a national Customs administration as complying with WCO or equivalent supply chain security standards. Authorized Economic Operators include inter alia manufacturers, importers, exporters, brokers, carriers, consolidators, intermediaries, ports, airports, terminal operators, integrated operators, warehouses, distributors.</td>
</tr>
<tr>
<td>Business Rule</td>
<td>A business rule is a statement that defines or constrains some aspect of the business. It is intended to assert business structure or to control or influence the behavior of the business.</td>
</tr>
<tr>
<td>Coordinated Border Management (CBM)</td>
<td>CBM entails coordination and cooperation among all the relevant authorities and agencies involved in border security and regulatory requirements that apply to passengers, goods and conveyances that are moved across borders.</td>
</tr>
<tr>
<td>Commercial track</td>
<td>Information exchange of data such as export data which is input through by the trade.</td>
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<tr>
<td>Customs Control</td>
<td>Measures to ensure compliance with the laws and regulations which Customs are responsible for enforcing.</td>
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<tr>
<td>Customs Transit</td>
<td>Customs procedure under which goods are transported under Customs control from one Customs office to another.</td>
</tr>
<tr>
<td>Customs Enforcement Network (CEN)</td>
<td>The global customs enforcement system developed by the World Customs Organization (WCO) for gathering data and information which also acts as a central depository for enforcement-related information.</td>
</tr>
<tr>
<td>Customs Enforcement Network Communication (CEN Comm)</td>
<td>A communication tool developed by the World Customs Organization (WCO) to enable law enforcement agencies to exchange and disseminate information securely within a Closed User Group.</td>
</tr>
<tr>
<td><strong>Data privacy</strong></td>
<td>Relationship between collection and dissemination of data, technology, the public expectation of privacy, and the legal and political issues surrounding them.</td>
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<tr>
<td><strong>Data protection</strong></td>
<td>The ability to ensure that data is protected against unauthorized access and/or use.</td>
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<tr>
<td><strong>Data security</strong></td>
<td>Means of ensuring that data is kept safe from corruption and that access to it is suitably controlled. Thus data security helps to ensure privacy. It also helps in protecting personal data.</td>
</tr>
<tr>
<td><strong>Dematerialization</strong></td>
<td>Electronic submission of supporting documents such as Certificate of Origin, packing list, invoice etc.</td>
</tr>
<tr>
<td><strong>Enforcement track</strong></td>
<td>Information exchange initiated by Customs authorities which occurs either under Mutual Assistance Agreements/MoUs, or where a risk assessment on data in the Commercial track triggers the need for further information.</td>
</tr>
<tr>
<td><strong>Globally Networked Customs (GNC)</strong></td>
<td>A systemized approach based on standards, protocols and guidelines that would enable Customs to exchange information to support and improve the functioning of the international trading system, national economic performance, and the protection of society and fiscal management.</td>
</tr>
<tr>
<td><strong>GNC certification</strong></td>
<td>An official confirmation that Utility Blocks or information exchange agreements/MoUs are consistent and coherent to the protocols, standards and guidelines of the WCO instruments.</td>
</tr>
</tbody>
</table>
| **Governance** | d) **IT**: The rules and regulations under which an IT department functions and the mechanisms put in place to ensure compliance with those rules. IT Governance is one component of Corporate Governance. Project Governance is a subset of IT governance.  
  e) **Project**: The rules and regulations under which an IT project functions and will outline the relationships between all groups involved in the project, describe the project information flow to all stakeholders and ensure reviews and approvals at appropriate stages of the project. |
| **Guideline** | A recommended practice that allows some discretion or leeway in its interpretation, implementation, or use. |
| **International Supply Chain** | Covers all stages following the recognition of need by a Customer for a product or service to the fulfillment of an order by a Supplier and the resulting financial settlement. It incorporates any necessary activities carried out by Intermediaries and Authorities. |
| **Mutual administrative assistance** | Actions of a Customs administration on behalf of or in collaboration with another Customs administration for the proper application of Customs law and for the prevention, investigation and repression of Customs offences. |
| **national Customs Enforcement Network (nCEN)** | A system developed by the World Customs Organization (WCO) to assist Customs administrations in collecting, storing and exchanging law enforcement information. |
| **Protocol** | 1. A set of rules and procedures to be followed when communicating.  
  2. A set of rules determining the format and transmission of data. |
| **Revised Kyoto Convention** | The expression commonly used to refer to the International Convention on the Simplification and Harmonization of Customs Procedures (amended), adopted by the Customs Co-operation Council in Brussels in 1999. |
| **Risk analysis** | The systematic use of available information to determine how often defined risks may occur and the magnitude of their likely consequences. |
| **Risk Management** | The systematic application of management procedures and practices which provide Customs with the necessary information to address movements or consignments which present a risk. |
| **SAFE Frameworks of Standards** | The expression commonly used to refer to the WCO SAFE Framework of Standards to secure and facilitate global trade, adopted by the Customs Co-operation Council in 2005. |
| **Single window (SW)** | A facility that allows parties involved in trade and transport to lodge standardized information and documents with a single entry point to fulfill all import, export, and transit-related regulatory requirements. |
### Standard

1. A technical standard is an established norm or requirement. It is usually a formal document that establishes uniform engineering or technical criteria, methods, processes and practices.

2. A software standard is a tool which is essential to achieve interoperability.

### Trade Facilitation

The simplification and harmonization of international trade procedures, including activities, practices, and formalities involved in collecting, presenting, communicating, and processing data required for the movement of goods in international trade.

(NB: This concept refers to the WTO definition of trade facilitation)

### Transhipment

Customs procedure under which goods are transferred under Customs control from the importing means of transport to the exporting means of transport within the area of one Customs office which is the office of both importation and exportation.

### Unique Consignment Reference Number (UCR)

W reverence number used as an access key to uniquely identify transactions between the seller and the buyer involved in international trade.

### Utility Block

A functional subset of GNC, which offers a tangible value proposition to Customs administrations by meeting specific needs through sharing of information. Each Utility Block is designed and focused on a specific and specialized domain of Customs functions, and has its own data elements, – for example AEO, Commercial Fraud, etc.

**Note**

8. “Utility” is derived from IT domain. In the IT domain, a ‘utility’ is a program designed to run a specific task or a range or tasks.

9. “Block” is derived from C21 document referring to GNC as building block.

### WCO Data Model

A framework with a maximum of standardized and harmonized sets of data and standard electronic messages for the arrival, departure, transit and clearance of goods as well as conveyance reporting in international cross-border trade.

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**Annex 5 An Industrialized Approach to Exchange Agreements**

It was recognized that at bilateral and multilateral levels, Customs administrations continue to work toward arrangements and agreements that allow for sharing of information in the most effective way possible. This practice is well established in the enforcement and intelligence sharing domain, but there is an increasing perception of the need to exchange commercial transactional data, often between multiple Customs administrations and including business stakeholders.

Enhanced Customs cooperation is the embodiment of GNC (as it is for the WCO) and it provides an overarching framework through which administrations can apply a common methodology to develop strategic and operational blueprints aligned with relevant instruments. These blueprints will facilitate inter-connectedness through the proliferation of information exchange arrangements.

Using the available expertise and resources of WCO Members, global standards can be developed to be re-used many times and allow for an “industrialized” approach to exchanging information. The connectivity between individual WCO Members through automated systems at the technical level can be significantly enhanced through this scaled up global approach.

The following expansion of the concept of “industrialization” for agreements is copied from a WCO Secretariat document that accompanied the draft Feasibility Study in mid-2012.

For centuries, artisans took great pride in their handiwork, whether it was porcelain, precious metals, glassware or any other creation. Each article was individually crafted in a way that guaranteed the mark of each craftsman would be a defining characteristic of each unique product. The Industrial Revolution took away that mark of individuality in the interests of mass production and all the other hallmarks of the modern age. Mass production implied a new paradigm in terms of efficient production of goods, and this idea can be applied more widely to encompass the production of other things such as international agreements.

For Governments, in particular Customs administrations, the future will see a great increase in the demand for new international agreements covering matters of mutual cooperation and assistance. These agreements have been individually fashioned as the need arose - tailored to meet the unique circumstances of each bilateral or regional arrangement. This corresponds to the handicraft means of production. Alternatively an Industrial Age mass-production approach can be adopted through the use of a standardized methodology for the creation of agreements. This is the nub of GNC, to industrialize the production of international agreements through an approach based on an existing set of rules rather than starting each time with a clean slate.