

Public - Private Partnership on Integrated Customs Services in Ghana

Business and Trade Policy

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Preface

The International Trade Centre (ITC) is the joint technical cooperation agency of the United Nations and the World Trade Organisation (WTO). ITC supports policy-makers in developing and transition economies to integrate the business sector into the global economy for export success.

To achieve this, ITC promotes business advocacy to ensure that business priorities are integrated into national trade policies, and that the needs of business, especially small and medium-sized enterprises (SMEs), are taken into consideration in the negotiation of international trade agreements. Linking the business sector, through their representative trade support institutions, to policy-makers is a key factor for the promotion of a conducive business environment.

Public - private partnerships offer a mechanism that enables private sector groups and business associations to play a greater advocacy role in policy formulation and implementation. Public – private partnerships can also deliver infrastructure and services projects in a more economically efficient and sustainable manner.

This case study showcases Ghana's success in implementing a public - private partnership to integrate and improve Customs operations. The project highlights the importance of private sector participation in creating an enabling business environment for economic growth. The strategic partnership of one multinational company in particular was a major contributing factor to the success of the project. As a result, the competitiveness of Ghana's exports was significantly improved, above all for SMEs.

The use of a public - private partnership to achieve export impact for good makes the case study replicable in other countries. ITC, in partnership with GCNet, has produced this report to share best practices of a public - private partnership that led to significantly improved export competitiveness.

This case study presents a comprehensive package that may assist other countries undertake similar projects. It includes Ghana's experience in initiating the partnership, including choosing the right partners, critical factors for success, operational aspects, and how the major challenges were overcome.

Innovative trade facilitation project

The public-private partnerships (PPPs) have become a useful medium for project implementation or delivering services, which were traditionally provided by the public sector, in a more economically efficient and sustainable manner¹.

In Ghana, the Government found it expedient to use PPP to modernize its customs operations without having to support, on its own, the total cost (US \$12 million) for physical infrastructure work, the establishment of communication networks, the upgrading of customs facilities, and electric generators placed in remote border stations.

Private sector as engine of economic growth

The Government of Ghana identified the private sector as the engine for economic growth and thus, made efforts to build the capacity of private sector groups and business associations to play a greater advocacy role in policy formulation and implementation. An umbrella body for various private sector business associations – Private Enterprise Foundation - was also established.

The Government, often with support from its development partners, undertook policy reforms, which included the removal of restrictive regulations, private sector capacity building through the provision of training and consultancy services, development of product, market, and Management Information Systems (MIS), and investment in infrastructure (e.g. development of artisanal centres)². The President of Ghana, in his inaugural address in January 2001 also declared a "Golden Age of Business for Ghana". This found expression in closer collaboration between the public and private sectors, including the creation of a Ministry of Private Sector Development to promote such public-private sector collaboration.

Trade facilitation considered crucial for export-led growth

When the Government embarked upon the implementation of a Gateway Programme³, which sought to attract investments to accelerate export-led growth, remove constraints to trade development and facilitation as well as investment mobilization in Ghana, it decided to reform the processes and procedures used by the Customs, Excise and Preventive Service (CEPS).

This project aimed at attracting export-oriented investors to Ghana to accelerate export-led growth as well as to facilitate trade. The project also sought to increase the competitiveness of Ghanaian products in the global market through the reform of legislative, regulatory, and incentive systems; institutional strengthening and capacity building; and development of private participation in infrastructure. It was geared at

¹ See Heilman, J. and G. Johnston, 1992. "*The Politics Of Economic Privatisation*", University of Alabama Press, p. 197

² See Fox James, *"An Evaluation Of Trade Capacity Building Programs"*, USAID Behind The Border Trade Capacity Building, The Louis Berger Group, Working Paper No. 14,October 2004, p.7-8

³ Ghana Trade and Investment Gateway Project (GHATIG), World Bank Appraisal Document, June 5, 1998, Report No. 17736-GH, p. 7 – A World Bank funded project designed to attract export-oriented investments, facilitate trade and enhance the Ghanaian competitiveness through regulatory reforms, capacity building; and the development of private participation in infrastructural and systems development.

reducing and improving the process time for customs documentation and standards, whilst preventing fraud and improving revenue collection.

Furthermore, the project aimed to enhance the capacity of Customs and related agencies by equipping them with an electronic data interchange platform that interconnected both private and public agencies to avoid duplication, and reduce costs and time for processing customs and trade documents.

Developing a Public-Private Partnership

The Government of Ghana faced financial constraints and a dearth of technical capacity in maintaining the previously deployed system. Therefore, PPP was considered an ideal method for implementing the new automated system, to foster stakeholder buy-in, and to ensure its sustainability. As a result, a conscious attempt was made to bring in as many credible stakeholders as possible, together with a strategic technical partner.

The Government of Ghana was motivated to use this arrangement drawing upon its earlier experiences in the execution of trade facilitation and revenue management projects.⁴

The Government was the primary project champion, although through earlier public – private sector policy dialogue, both sectors had identified the need to address certain constraints that affected business competitiveness within the economy, and were therefore clamouring for the project.



The Ghana Community Network Services Limited (GCNet) was thus established in October 2000 as a joint venture PPP to ensure that all stakeholders with a vision for enhancing Ghanaian competitiveness, participated in this electronic community network for the processing of trade and customs related transactions.

The identified partners brought into the partnership, not only their financial resources, technical know-how, and other strengths, but also became very supportive "project champions" who drove the project.

⁴ Previous experience with such projects suffered from implementation delays so that by the time the project was implemented the desired goals were not fully achieved. They were also largely driven by technical assistance with inadequate provision for renewal or maintenance of investments to ensure sustainability of the project once the technical assistance was withdrawn.

Overcoming challenges of the past

On the basis of ensuring that best practices were followed, Government was obliged to identify a strategic technical partner that was also prepared to invest in the project and drive the process. This was considered a critical success factor as previous egovernance projects implemented by Government had not met all the start-up goals, and had not been sustainable due to a number of factors including the inadequate provision of budgetary resources for investment and recurrent expenditure, lack of managerial core competencies, and lack of drive to overcome the inherent change management challenges.

With regard to earlier e-governance projects, particular needs were identified and through the Government's own initiative or through donor support, technical solutions were identified and deployed. Unfortunately due to peculiar donor requirements (e.g. tied aid or long drawn-out project appraisal and implementation requirements) optimal technical solutions were not deployed. Complementary processes such as effective change management (e.g. intensive sensitization and education of stakeholders) that would have contributed to project success were in the past often given relatively little attention.

The projects were often implemented through the medium of project management teams, who were not core officials of the implementing institution but outsiders recruited for the life of the project. Institutional core competencies and capacities were therefore not built for the long-term duration of the project. Whilst the specialized IT skills and managerial expertise required for such e-governance projects was often lacking within the public services, the public sector could also not retain the specialists as it could not compete with the better conditions of service provided by the private sector.

Also once the project was rolled out, there was scarcely any new funding to undertake system upgrades or developments as new technologies or operating systems evolved. In due course the system failed to meet operational requirements, and the e-governance project failed.

Choosing the right partners

To address these challenges, Société Général de Surveillance (SGS) S.A. was identified as a potential partner, having already proposed TradeNet as part of its bid proposal. As part of the selection process, SGS was identified as a global company with substantial financial resources to finance the project.

Through its trade inspection and verification services, SGS was also seen as having adequate experience in trade facilitation and revenue enhancement programmes. Beyond these factors, it had a strategic partnership alliance with the foremost

TradeNet operator (then Singapore Network Services) and was prepared to invest and commit to driving the project implementation process through a strategic partner arrangement. This commitment to the project, unlike other proposals that largely sought to "supply software and install some hardware to run it" without ensuring that the system works efficiently and is sustainable, gave assurance to the Government to choose SGS. SGS was then mandated to identify suitable partners for



the PPP, for the consideration of the Government.

Overtures were made to all relevant stakeholders that had an interest in facilitating the importation or exportation of goods through the ports and the mobilization and collection of trade-related revenue. These stakeholders included the Ghana National Chamber of Commerce and Industry (GNCCI), the Association of Ghana Industries (AGI), Ghana Shippers Council (GSC), the Ghana Harbour and Ports Authority (GPHA), the freight forwarders' associations, inspection companies, the ship owners' association, the banks, and the foremost telecommunications company.

In the wake of the previous track record for e-governance projects (e.g. the Public Financial Management Reform Project)⁵, and as a start-up in a perceived risky project, most of these stakeholders were reluctant to commit the required risk capital for investing in the project. This was not withstanding the fact that an executive of the AGI, at the time, commented, "We want this project like yesterday. You take off and we'll join later".

The guarded response towards e-governance projects was further reinforced by the fact that in 2000 when the project was being promoted, interest rates were very high, hovering around 40% per annum. Investment in Government treasury bills and bonds offered a more secured return for any investor than an investment in a perceived risky e-governance project.

To address these challenges SGS, as a strategic technical partner and a fulcrum around which the project evolved, became a promoter of the project - preparing the project prospectus, sensitizing all stakeholders and potential members about the project benefits for primary stakeholders and the economy as a whole. The experience of Singapore and its benefits were also well touted.

With the support of Government, selected stakeholders were given the opportunity to see, appraise and learn first hand similar experiences elsewhere (e.g. the case of Mauritius). Furthermore, stakeholders were regularly apprised about each development stage of the system and its deployment. In doing so, stakeholders could relate the progress of work with each goal or benchmark that had been set before the project start up.

Also, through the medium of a Project Implementation Team and its sub-groups, which cut across a broad spectrum of stakeholders, the interested parties considered themselves as having a vested interest in the rollout of the "community" project. Through the use of the above measures, a convincing outcome was showcased and the scepticism that blighted similar e-governance projects was overcome.

Legal / regulatory changes

To implement the project, there was a need to review the legislative framework that under-pinned Customs clearances. Whereas in the past almost all the processes were manual, the introduction of an automated system called for the enactment of new legislation that recognised electronic processing of transactions and payments. In the light of this a new Legislative Instrument (LI) was passed by Parliament⁶.

⁵ The Public Financial Management Technical Assistance Project, World Bank Document No. PIC 4904, October 1995

⁶ Customs, Excise And Preventive Service (Automation) Regulations, 2002, Legislation Instrument (L.I. 1704) enacted on May 13, 2002 by Ghana Parliament

To ensure its easy passage through Parliament and subsequent conformance by stakeholders, the LI was drafted by a broad stakeholder group that ensured all stakeholder concerns were considered and addressed.

After its enactment, the Legislative Instrument was periodically elaborated on with Commissioners' Orders (operational regulations) that revised some operational procedures. The Commissioner was vested with these powers under the Customs Management Law, which governs the administration and operations of Customs⁷.

Besides automation, certain operational and administrative processes had to be rationalised. There was no point automating existing inefficient processes. As a result, certain operational functions were eliminated whilst a few were also introduced to ensure efficient and transparent operations (e.g. elimination of "Face Vet"⁸, "Numbering"⁹, "Bond Seat"¹⁰ and creation of "Compliance Officer"¹¹, "Help Desk Officer"¹², functions at CEPS).

A culture of change management was also promoted through a number of measures, including the acquisition of new skills, improving the work environment through the refurbishment of offices, promoting efficient work, and rewarding it as depicted by the photos below, which show a "before" and "after" project implementation state of a CEPS office¹³:



Beyond kitting the officers with new work tools and systems, their work environment was also improved to make them feel the changes, and to promote a new work ethic. This was geared at encouraging officers to provide quality service, whilst the beneficiaries of the service (i.e. trade operators) were also made to feel and benefit from this change.

⁷ Customs, Excise And Preventive Service (Management) Law, 1993 (PNDC Law 330)

⁸ Face Vet was the process whereby manually completed Single Administrative Document (SAD) forms where presented to a CEPS officer to verify whether the form had been properly filled in before it was submitted to the computer by data entry clerks.

⁹ After data entry each SAD was also presented for a unique number by a CEPS officer.

¹⁰ In the case of transit declarations, the SAD had to be submitted to a unit that administered the bond that had to be posted by the transitor, as a guarantee against the potential duty and taxes payable on the consignment, in the event that it did not exit the country, and was diverted on to the domestic market. This unit is referred to as the "Bond Seat".

¹¹ Compliance Officers monitor and control declared consignments that are selected for review and examination.

¹² Help Desk Officers are designated to assist with enquires by Declarants and operators generally (e.g. process to follow, duty/tax rates payable)

¹³ Photos are made available courtesy of GCNet

Technical, human and financial aspects of the project

The technical aspect of the project entailed the introduction of TradeNet an electronic data interchange platform with Extensible Mark Up Language, American National Standards Institute, and functionalities for the transmission of electronic messages and replies between trade operators, Customs, regulatory bodies involved in the clearance process for goods through the ports, and others who peruse the data generated.

The TradeNet was to serve the role of the "Single Window" through which all trade and Customs electronic procedures were to be processed.



It could literally take weeks to clear consignments ...



Networking all the parties to a common platform ...

A versatile automated system for processing all Customs declarations and payments was also developed and deployed. This system enabled all the various Customs operational functions such as Manifest transmission and integration, Importer / Exporter Declarations, Warehousing, Free Zone, Valuation and Transit Tracking to be carried out.

The functionality for electronic Issuance of Certificates, Permits, Licences and Exemptions required for Customs clearances by regulatory agencies, also plays an important part in the importation and exportation of goods (e.g. the Standards Board, Environmental Protection Agency, Investment Promotion Centre). In this respect, the

TradeNet served as a "Single Window" through which all trade and Customs electronic procedures were to be processed.

In a similar vein, relevant agencies like the Finance and Trade Ministries, Statistical Service, and central bank, were connected to the system to enable them to access data required for the preparation of their statutory reports (e.g. on foreign trade, revenue reconciliation or development planning purposes).

An e-services portal was also introduced that enabled users, through the internet, to check on the status of their various declarations, access the car valuation database, run web-based reports, and enable transit operators to track their consignments along the transit corridor.

The operation of the project

The project operated mainly through GCNet, the PPP joint venture company. GCNet was primarily responsible for development and deployment of all systems, including hardware and software. Whilst it operated the e-messaging platform that served as the front-end system for all non-Customs users, Customs was responsible for the operation of the back end application, the Customs Management System (CMS).

The front-end system (FES) was part of the software that was a thick client application used by importers/exporters, freight forwarders, carriers, ministries, departments and agencies to enable them to communicate and undertake relevant processes electronically through the system. The back end application, on the other hand, was the CMS application that processes the output from the FES (e.g. by validation or verification as this process queries the CMS database).

To ensure the PPP met its service mandate, the Board of Directors regulated it internally. The Directors were mainly representatives of the PPP partners and a Government representative.

Externally, the PPP's functions were regulated and reviewed by the Ministry of Trade and Industry, which set up a Review Committee to appraise the operations and to determine whether the PPP met its contractual service mandate.

Beyond this, the PPP collaborated with various regulatory agencies, including the Ministry of Finance and Economic Planning, the Revenue Agencies Governing Board, the Ministry of Ports and Railways as well as the Ministry of Communications.

The change management process

The introduction of the GCNet system led to a radical change in the way Customs operated. Not only did the automation process lead to the elimination of the manual mode of operations and the need to rationalize certain operations, it also generated a number of changes. Certain operational functions, for instance, were eliminated and new ones introduced.

Also having been deployed in complex and intensely political agencies, some users saw it as a threat to their existence, perceived "benefits", or entrenched operational modes, and in many respects resisted the change. To redress this, project champions with the requisite clout to act as change agents were identified to manage the change process, and to assuage anxieties about the changes introduced. For example, a message that assured officers that automation did not necessarily mean a loss of jobs, so long as they were trainable, was propagated. In reality, the introduction of the system churned out a lot of data that needed to be analysed for management reporting purposes. Thus the system did not lead to redundancies as was feared, but entailed some change in job content for the Customs Officers.

An organizational systems review was also advocated. Fortunately, the introduction of a corporate planning capacity in Customs and an ISO certification programme ensured that some systems skills were improved on a regular basis. The review included compensation, appraisal, promotion, reward and incentive systems to ensure effective change management.

Efforts were also made to build the commitment, buy-in and ownership of the foremost change agents by encouraging them to learn to use the system, appreciate its capacity to drive the change process, and appreciate how the system contributes to corporate goals (e.g. revenue targets). For instance, if the clearance station commander, who was an older person with no prior ICT skills, could use the system, it obliged his younger colleagues to learn to use the system. Doing so, not only improved knowledge and usage of the system, but also enabled them to establish authority and show subordinate officers, in tangible terms, successful deliverables (i.e. how the changes helped to enhance Customs operations). Leadership by example was thus displayed, and ownership was also established.

Furthermore, the chief agents were also encouraged to exercise their authority, reward good performance, and impose sanctions where discrepant conduct was identified. In doing this, GCNet supported a Customs annual award scheme for best officers, provided logistical support to high performing stations, and also provided a monthly stipend to all key officers who were identified to be using the system effectively.

Achievements of the project

Implementation of the project resulted in the realization of all stakeholder goals that were set.

1. Simplified customs procedures

There was a significant ease in clearances of goods through Customs.

- a. The clients shuttling to and from one agency to the other to procure certain permits, licences, or exemptions, which are required as part of the clearance process, have been largely eliminated.
- b. The tedious process of getting cargo manifests to Customs and other relevant agencies was eliminated as cargo manifests are submitted in advance electronically.
- c. Thirteen manual processes¹⁴ within the Customs "Long Room" that used to take approximately two to three days to undertake have all been eliminated.

¹⁴ These processes were Face Vet, Valuation, Duty Payment, Computer Room For Data Capture, Computer Receipt Issuance, Numbering, Hologram Sealing, Detachment, Dispatch, Outdoor to Chief Collector Outdoor, Assigned to Examination Officer, Examination Officer Submits to Supervisor and thence to CCOD before authorization for release of consignment or other wise by CCOD

2. Faster clearance times

Significant reduction in time for clearance of goods at the main port of Tema, which prior to the implementation of the project used to take on average two weeks, now takes an average of two to three days. Clearances through the second port of Takoradi are almost done in a day, whilst clearances through the Airport are averaging two to four hours, unlike the two to three days average before the implementation of the project. Similarly, at the land borders, consignments are being processed within a matter of hours an improvement upon the whole day (or longer) that clearance took prior to the implementation of the project. These clearance times have been possible because of the usage of the risk selectivity features of the system, the selective targeting of consignments as well as the possibilities for pre-arrival submission of declarations.

The system's risk selectivity features were varied, and configured by a range of parameters determined by a high level Risk Management Committee, which was headed by a Deputy Commissioner of CEPS. Among the parameters used were intelligence from other customs administrations or security agencies, risk profiles (of importers/exporters, agents, vessels, country of shipment, etc) based upon previous transactions or overall tax records. Also the pursuit of the "Single Window" concept through the issue of permits, licences and exemptions electronically through the system ensured that pre-Customs documentation requirements were expedited.

Overall these clearance times could have been further reduced if trade operators improved their relatively low level of compliance, thereby obliging Customs to reduce the relatively high level of targeted examinations they carry out. Also the acquisition of additional cargo handling equipment and systems could have further enhanced the reduced clearance times that were achieved.

Furthermore, a seamless electronic process would best be fostered if all relevant agencies had automated their operational processes. In this way, systems interoperability and interfaces could be pursued, with its possibilities for better exchange of data across the agencies in an expeditious and secured manner for the benefit of stakeholders.

3. Quicker transit with satellite tracking system

With the introduction of satellite tracking of transit goods, transit consignments are exiting the country quicker than when escorts were being used.



¹⁵ Courtesy GCNet

4. Increased revenue collection

There has been a surge in revenue collection by Customs since the project was implemented. Since 2003 when the project started, there was an average annual growth in revenue of 33 percent for Tema and 32 percent for the Kotoka Airport (see Tables below relating to the growth in revenue mobilization). Total revenue collected by Customs grew by nearly 170 percent since 2003.



Table 1: Total revenue growth for Kotoka International Airport

The significant growth in revenue was not a coincidence, but attributed to the control features within the system that ensured that whilst trade was facilitated, revenue mobilization was not compromised. For instance, the disparate verification of Customs entries that gave rise to inconsistencies in the classification and valuation of consignments from one Customs clearance station to the other were eliminated.

Also previously the absence of an efficient system, that ensured carriers arriving at the ports provided Customs with a detailed manifest of consignments prior to arrival or upon arrival, paved the way for some consignments to be "smuggled" out of the port and cargo lists to be manipulated so they could not be properly accounted for. These problems have all been significantly eliminated.

Other problems included compromised revenue collection due to ineffective control of transit consignments, which led to their diversion onto the domestic market without payment of relevant duties and taxes. The system has curtailed many of these problems. Similarly the ineffective control and abuse of warehousing and free zone privileges, granted to some trade operators, were all been addressed to a large extent.

Also by capturing export declarations electronically, not only was the process facilitated, but it became possible to track exports better to ensure that the proper export receipts were declared and, where necessary, repatriated through the capture.

5. Improved competitiveness

The export competitiveness of the Ghanaian exports also increased due to the expeditious processing of export consignments as well as the electronic issuance of permits and certificates of origin and their transmission to the authorities of the export destination. In its survey of the cost and competitiveness of doing business in over 150 countries, the International Finance Corporation (IFC) recognised Ghana to be one of the most improved countries for doing business. The IFC acknowledged that the introduction of the GCNet system had been one of the major contributing factors to the improvement.

In 2005 Ghana ranked 108 in the category of "Trading Across Borders", with an index of 6 against a regional index of 8.5 and an OECD index of 5.3 for export documentation. It was noted "in Ghana new technology links with several commercial banks so that customs officers can confirm the payment of duties without the need for additional paperwork". By 2007, Ghana's ranking had improved to 61, and among the notable factors that contributed to this were the application of risk management techniques and the introduction of electronic data interchange systems.

In 2006/2007 also, Ghana received an award for being the top African reformer. It also ranked as a global top 10 reformer for the second year running. It was noted, for instance, "changes in operations sped up imports, while new civil procedure rules, and mandatory arbitration and mediation reduced the time needed to enforce contracts."

Success factors of implementation

Whilst the PPP contributed to successful implementation, a number of other critical factors also contributed to the success of the project. They include the following:

1. Government support and belief in the project

The Government believed that the project would contribute towards the realization of its Gateway Programme objectives of promoting trade facilitation, investment, and the competitiveness of business (to help foster its declared Golden Age of Business). It thus supported the project's implementation. This conviction was reinforced by the surge in Government revenue mobilization efforts after its immediate deployment and the expeditious Customs clearances that were achieved.

The growing recognition of the PPP's contribution towards the business environment in Ghana, and its attestation by international organizations such as the World Bank and International Finance Corporation, also reinforced the Government's belief and support in the project¹⁶.

Over time, the Government noted the potential of ICT for accelerated economic development, and sought to promote ICT initiatives.¹⁷ Thus in all respects, the implementation of the project was a "win-win" situation for the Government, and it provided the necessary support for its success.

2. Credible PPPs

The strong public-private partnership of GCNet was due to the very credible shareholders who brought their respective core competencies to the partnership. The PPP took advantage of the respective strengths of each of the partners, and harnessed them for the benefit of the PPP. For instance, as integrity and ethics was at the core of the corporate governance of two of the partners, the PPP was obliged to adopt this practice.

Similarly, the PPP on its own was able to raise finance for its operations on account of the fact that two of the PPP partners were banks. It gave the PPP an advantage to raise additional financing (e.g. for new investments) when the need arose.

¹⁶ World Bank, "Doing Business 2007/2008 Reports"

¹⁷ Ministry of Communications, *Ibid*, pp 45-46

With regard to technical operations also, it drew upon the technical know-how and experience of the PPP partners on several fronts (e.g. performance of equipment, the after-sales service support by vendors, disaster recovery plans, etc).

Thus the respective strengths of the PPP partners, which were deployed in their role as project champions, were one of the critical factors to GCNet's success.

3. Development of own infrastructure

Another critical success factor was the willingness of GCNet to invest in its own infrastructure to overcome the paucity of the infrastructure that existed at the start of the project. Electricity supply and telecommunication services (particularly internet services) were not only inadequate and limited to certain regions of the country, but what was available was unreliable. As a result whilst a project would typically rely on services provided by the normal service providers, GCNet was compelled to put in place its own arrangements to ensure it was able to fulfil its commitment to operate on a 24 hour / 7 day basis.



As a result not only were generators, for instance, installed to complement the normal supply of electricity and UPS hardware, but fuel storage tanks with personnel to refuel them regularly were deployed. This ensured that electricity supply was regular, and systems uptime was assured.

Also, where service by Ghana Telecommunications (GT) (the foremost service provider with the widest network) was unavailable, GCNet was obliged to either finance GT to extend its network or build the facility on its own with its attendant additional project cost.

4. Phased project implementation

Another critical success factor was the phased approach that was adopted by the PPP. From an initial station (i.e. Kotoka International Airport) that was a microcosm of the entire operation, the project was gradually rolled-out throughout the country.

¹⁸ Courtesy GCNet

GCNet deployed its service geographically to various Customs stations as well as sectorally to connect other agencies gradually instead of going for a "big bang" approach. In a relatively weak infrastructural environment, this phased strategy was considered more appropriate.

Phased project coverage:

- □ 2001-2002 was taken up as a Development Phase
- □ From 2003 to 2007 the System (GCMS) was rolled out to the following CEPS Stations that collect over 95% of CEPS revenue:

GCNet – Geographical coverage

Kotoka Int. Airport - January 2003 Tema - June 2003 James Town - August 2003 Takoradi - November 2003 Aflao - September 2004 Elubo - August 2005 Paga - March 2006 Kulungugu - March 2007 Hamile - June 2007

Besides helping to overcome the infrastructural constraints, the phased strategy also helped to effectively address challenges associated with the change management processes. The geographical or sectoral expansion of the service or deployment of new system features, at any point in time, was marked by its peculiar challenges that had to be tackled. As these challenges were varied, and included infrastructural, technological, human resource or attitudinal challenges, the phased deployment ensured that they were addressed successfully.

In addition, the phased strategy enabled the PPP to control costs, especially at the remote border posts where it was compelled to build much of the telecommunication and logistical infrastructure on its own. It is worthwhile to note in this regard that the cost of project implementation tendered to escalate as one moved into the relatively less developed areas, where facilities were limited.

Also the strategy did not only foster cost-effective deployment, but also helped to sustain the delivery of a consistent, high quality service that met stakeholders' aspirations. The service delivery quality could not have been properly controlled with a multi-pronged deployment. Hence the phased deployment was a prudent measure that contributed to the success of the project.

5. Tangible manifestation of modernization / transformation of processes

Another critical success factor was the incorporation of a strategy that sought to demonstrate a tangible manifestation of success, with its positive change management effect, into the reforms. For example this included a more congenial work environment for Customs officers, user perception of an improved customer friendly service, and the benefits of trade facilitation through quick clearance times and quick permit / exemption processing.

In the wake of the strategy, the PPP played an advocacy role that ensured that regulatory agencies that resisted the ensuing reforms had a mutually beneficial dialogue for the reforms to be carried through.

As a result of these tangible effects, and its positive impact on their operations, stakeholders were generally prepared to support the innovations proposed and the changes made, thereby contributing to the success.

6. Training, sensitization and extensive capacity building

The sensitization and training of users as well as the provision of extensive capacity building to the various stakeholders were also critical success factors. As at 2007, three thousand users were trained in the usage of various functionalities of the system.

Users were also provided with extraneous training (e.g. provision of training in valuation, tax audits, corruption and fraud detection), which was not directly system related but ensured that usage of the system was simplified and its benefits enhanced. The training programme was both localized and external, with the external training used in a number of ways (e.g. as a means of deepening know-how and exposure to best internal practices, and as part of the reward system for performance to promote efficiency).

In addition to training, stakeholders were regularly sensitized in new system add-ons, features deployment, and their input was sought in the deployment process. In so doing, their buy-in was enhanced to push for successful project outcomes.

7. Responsiveness to emerging trends / exigencies

The capacity to respond promptly to emerging trends and exigencies also served as another critical success factor. GCNet was able to take advantage of its PPP status to promptly address any unforeseen exigency (e.g. the configuration of the system to meet the requirements of the re-denomination of the currency over a three-month period by the Bank of Ghana) and to respond promptly to address such an exigency.

Also the PPP was able to circumvent the bureaucratic constraints of other operations. For instance, whilst the PPP procured through tender processes, it was not unduly constrained by the bureaucratic requirements to advertise over a certain minimum period, as was required of a purely Government implementing agency or a donor funded project.

Similarly, when it became necessary to capture declarations made by oil marketing companies as they lifted petroleum products from the refinery, GCNet was quick to adapt its system to meet this demand. This was crucial in plugging revenue leakages associated with petroleum product lifting by the oil marketing companies.

Advantage was also taken of the PPP arrangement to adopt new trends (e.g. new technologies) to operate at the cutting edge to deliver an effective service that responded to stakeholder needs and concerns. For example the PPP responded to the challenges posed by the increase in transit trade, and the need to discard the ineffective escort system, with a more sophisticated satellite tracking system (as illustrated below), which placed Ghana Customs at the forefront of transit tracking in Africa.

8. Sustainable self-financing arrangement

To finance the initial cost of the project, the joint venture partners contributed equity capital. With the exception of one partner that contributed its equity in kind in the form of hardware, all the partners provided their equity in cash.

To recoup this initial investment and generate adequate revenue for replacing the initial investments, a fee structure (levied on import declarations only) was agreed upon. The service was also made mandatory, although certain sensitive transactions (e.g. petroleum imports) were exempted from the fee payments. It was also envisaged that through this arrangement adequate revenue would be generated to invest in new technology that would ensure that the systems continued to operate at the cutting edge of technology.

The PPP arranged a fee that ensured it did not depend upon Government budgetary funding, but was able to raise its own funding to cover operational expenditure and to finance new investments for replacement software, hardware, systems upgrades, and maintenance of systems.

Investors recovered their investments through revenue from the fees charged by the PPP. From this revenue, its equity holders were paid dividends after the necessary corporate statutory obligations and provisions for new investments and expenditures were made.

Challenges of implementation

In spite of its successful implementation, a number of challenges were encountered during the implementation process.

1. Resistance at individual and institutional levels

Overcoming the human factor, in terms of the availability of skilled personnel to operate the systems, and the seeming reluctance to change the way they have done things over the ages, posed the foremost challenge that constrained the project implementation.

Whilst the computer skills of the target users of the system were not available or at best limited, a number of them also showed an inhibition to learn and change to the new skills required of them. To a large extent this was due to certain vested personal interests. For instance, some individuals in certain key positions in the previous manual processes sought to resist the changes introduced. This stemmed from the fact that the transparent electronic processes eliminated the possibility for them to have personal contact with trade operators, with its attendant loss of status and rent seeking possibilities.

This resistance to change at the individual level was also manifested at the institutional level with its attitudinal constraints. The rationalization of operations demanded a clear delineation of operational functions and boundaries. In a few cases, this gave rise to institutional turf wars, which unduly led to a resistance to the revised new processes and operational workflows, and thereby stalled implementation progress.

2. Ensuring compliance

The general level of compliance within the economic environment was also low, and ensuring that a credible level of compliance was maintained among trade operators,

especially as attempts were made to remove undue controls and facilitate trade, posed another challenge. There was some fear that letting go of the previous manual controls would lead to undue abuses.

This was due to the fact that declarations made by a number of importers, for instance, in terms of the description, quantities or values of their consignments tendered to be questionable. Under the circumstance, it was challenging for some Compliance Officers to accept innovations proposed such as risk selectivity and consignment targeting, designation of certain Declarants as Gold Card bearers who need not be subject to intrusive examinations, and post clearance reviews in order to facilitate trade.

3. Upgrading processes in other agencies

Also for the benefits of a seamless clearance process to be fully obtained, there was the need to automate the manual, paper-based operations of other agencies within the clearance process. The development and introduction of such complementary electronic systems for other trade-related agencies posed yet another challenge. With regard to port operations, for instance, the electronic issuance of bills of lading by the shipping lines to consignees or the amendments of bills of lading (e.g. where shipments are made through consolidators) and the related payments would significantly have contributed to expeditious clearances.

4. Assuring stakeholder confidence

A further challenge was the need to ensure that the system's integrity was not breached, and to assure and enhance stakeholders' confidence in it by consistently demonstrating through its performance that it was credible and reliable. This was especially critical at a time when some existing manual revenue and security controls were being removed to facilitate trade.



5. Ensuring security

At a time when even reputed financial institutions were being hit by a spate of frauds, a major challenge was to ensure that the system, through which almost sixty-percent of the country's tax revenue was collected, was not breached either by intrusion, spam, or various viral infections (e.g. "Netsky, "My Doom", "Nimda", "Blast", "Novarg") that hit a number of systems around the world and brought operations to a halt. The PPP ensured that the system proved its mettle, and with regular upgrades and application of appropriate security measures, the challenge was addressed to provide assurance about the system's robustness and reliability.

Critical success factors leading to a fruitful PPP

A number of critical success factors contributed towards bringing the PPP into fruition. Firstly, the Government supported the project and invested in the venture through two public sector agencies, the Customs Excise and Preventive Service (CEPS) and the Ghana Shippers Council (GSC) as well as the Ghana Commercial Bank (GCB), in which it held an equity stake.

¹⁹ Courtesy GCNet

Secondly, the technology that was deployed had a proven track record of delivering the envisioned goals, and thus alleviated certain stakeholders' and partners' concerns about the possibility of failure. Having reviewed a number of possible technological and organizational options, Ghana had decided to model its TradeNet, and its technology and implementation arrangements along the lines of the Singaporean model with its inherent PPP arrangements. As is well documented, the Singaporean model had a good track record and proven to be a great success. It thus provided a positive assurance to the partners about the potential of the GCNet PPP, and to enable them to commit fully to the PPP.

Thirdly, all the potential partners that were invited to join the venture, especially those that eventually formed the partnership were credible partners, some of who had significant international business operations with experience in the implementation of complex ICT projects. They were thus not seen as "cowboy operators who were out for a kill", but entities with a reputation to protect, and desirous to execute a successful project in line with their respective corporate missions.

SGS S.A., for instance, always claimed to be "the world's leading inspection, verification, testing and certification company". Similarly whereas GCB had the largest branch network and the highest net worth at the formation of the PPP, Ecobank was also aspiring to surpass its original mission of being the West African bank to a Pan African Bank²⁰.

The business model that was employed was also sound and ensured that the system deployed would be used effectively for the mutual benefit of all stakeholders. The PPP was always going to be self-financing, and it had a service mandate that ensured Customs declarations were processed through the system for a regulated fee.

Sustainability and prospects for replicating the project

As a PPP, GCNet worked out a fee that ensured it did not depend upon budgetary funding, but was able to raise its own resources to cover operational expenditure and to finance new investments for replacement hardware, systems upgrades, and the maintenance of systems integrity at levels that ensured GCNet operated with leading edge technology.

Besides having the requisite financial resources, and its capacity to leverage new capital for new investments, GCNet invested continuously in Information Technology (IT) infrastructure, hardware and software. This was to ensure that its operating systems were stable, reliable and secure to meet high operational standards and requirements. ICT capacity was also developed with substantial flexibility and scalability to meet client needs and emerging exigencies. In spite of the hardware capacity, GCNet was committed to a programme of new investments in IT to ensure that it deployed systems at the cutting edge of technology, which met international "best practices".

In the area of communication, for example, GCNet made an investment of almost US\$2 million in the development of its own secured and robust virtual private network (VPN), including ownership of a radio frequency. The VPN, which comprised a combination of broadband fibre optic links, radio networks, E1 links, dedicated leased lines and dial up lines, was scalable to accommodate additional links that may have

²⁰ See www.ecobank.com, www.gcb.com, and www.singlewindow.sgs.com.

been required for other operations. The VPN stretched across the country, including selected border points, and covered every region.

It also put in place systems, such as the operation of two data centres, within the concept of business continuity and disaster recovery, which ensured that the system was available on a 24 / 7 basis. Also, to assure the integrity of its operations, promote quality delivery to its clientele, and continued improvement in the quality of the service, GCNet introduced control regimes in its operations, namely (i) An Effective Security System, (ii) Operational Controls, and (iii) Quality Management.

The PPP was well managed by a team of professionals who were responsible to a Board of Directors. From its membership, the Board was possibly one of the strongest corporate boards that existed in the country. GCNet also adhered to the tenets of good corporate governance, with a Code of Ethics that ensured the highest possible standards of transparency were practised. Full disclosure principles, for instance, were followed to foster prudent management and reporting of corporate resources.

GCNet also had a number of technical partners, whose technical resource capacity it drew upon.

The PPP was thus sustainable and became the benchmark for e-governance projects. It proved its worth and in Ghana there were attempts to replicate its approach to all new e-governance projects. Given its achievements and resounding success, the PPP provides a good model for replication in other African countries.

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