



# Technical Assistance Consultant's Report

---

Project Number: 39094  
July 2006

## Support to Trade Facilitation and Capacity Building in the Greater Mekong Subregion (Cofinanced by the Government of the People's Republic of China)

Prepared by  
The Services Group  
Virginia, United States of America

For  
Asian Development Bank

This consultant's report does not necessarily reflect the views of ADB or the Government concerned, and ADB and the Government cannot be held liable for its contents.

Asian Development Bank

## TABLE OF CONTENTS

|   |           |
|---|-----------|
| <b>Acronyms and Abbreviations .....</b>   | <b>iv</b> |
| <b>Chapter I. Project Proposals.....</b>  | <b>1</b>  |
| Background .....  | 1         |
| Need for a Strategy.....  | 4         |
| General Strategy for Trade Facilitation.....                                      | 4         |
| Intervention by Exception.....  | 5         |
| Coordination and Integration .....  | 5         |
| Information Sharing .....   | 6         |
| GMS Information Sharing Platform.....   | 8         |
| Customs Initiatives.....  | 10        |
| Component 1: Intervention by Exception .....                                      | 12        |
| Component 2: Integrated Border Management.....                                    | 13        |
| Component 3: Customs IP Module.....   | 15        |
| Inspection and Quarantine Initiatives.....  | 16        |
| Component 1: SPS IP Module .....  | 18        |
| Component 2: Risk Management.....   | 20        |
| Component 3: SPS Laboratory Mutual Recognition and Support.....                   | 21        |
| Component 4: Support to Hazard Avoidance Legal Framework and SME Compliance ..... | 22        |
| Logistics Initiatives .....   | 24        |
| Component 1: Freight Logistics Action Plan.....                                   | 25        |
| Component 2: Institution Building .....   | 27        |
| Component 3: Logistics Module for GMS-IP .....                                    | 28        |
| Component 4: Constructing and Auditing Special-Purpose Supply Chains.....         | 28        |
| Component 5: Border Exchange .....  | 29        |
| Business Mobility.....  | 30        |
| Component 1: Harmonization of Multiple-entry Visas .....                          | 31        |
| Component 2: Immigration Module .....   | 31        |
| Summary .....   | 32        |
| <b>Chapter II. SPS .....</b>  | <b>35</b> |
| Background .....  | 35        |
| Regional issues and donor support.....  | 36        |
| Regional issues.....  | 36        |
| Regional Donor Support .....  | 38        |
| The Project .....   | 41        |
| Component 1: SPS Information Sharing Platform.....                                | 41        |
| Component 2: Risk Management Support.....   | 46        |
| <b>Activity .....</b>   | <b>51</b> |
| Component 3: SPS Laboratory Mutual Recognition and Support.....                   | 53        |
| Component 4: Support to Hazard Avoidance Legal Framework and SME Compliance ..... | 59        |
| <b>Chapter III. Customs.....</b>  | <b>68</b> |
| Background .....  | 68        |
| Concept of Customs Trade Facilitation.....  | 69        |

|   |            |
|---|------------|
| Major CTF Programs .....  | 71         |
| Regional Initiatives .....  | 73         |
| Intervention by Exception .....   | 73         |
| Integrated Border Management .....  | 75         |
| Information Sharing Platform .....  | 77         |
| Regional Technical Assistance.....  | 78         |
| Interim CTF Measures .....  | 79         |
| Project Proposals .....   | 81         |
| Component 1: Intervention by Exception .....                                | 81         |
| Component 2: Integrated Border Management.....                              | 82         |
| Component 3: Customs IP Module.....   | 83         |
| Component 4: Data-Mining .....  | 84         |
| Component 5: GMS Joint Research Center .....                                | 84         |
| Specific Country Initiatives.....   | 85         |
| Cambodia .....  | 85         |
| Lao PDR.....  | 86         |
| Vietnam.....  | 87         |
| Thailand .....  | 88         |
| China .....   | 89         |
| <b>Chapter IV. Logistics Services.....</b>                                  | <b>92</b>  |
| Background .....  | 92         |
| Results of Gap Analysis .....   | 93         |
| Thailand .....  | 96         |
| Cambodia .....  | 97         |
| Lao PDR.....  | 98         |
| Vietnam.....  | 99         |
| China - Yunnan and Guangxi AR.....  | 99         |
| Complementary Efforts to Improve Logistics Sector .....                     | 101        |
| Structure of the Logistics Industry .....                                   | 103        |
| Changes in Demand .....   | 104        |
| Role of the Public Sector.....  | 106        |
| Seamless Borders .....  | 108        |
| Common Strategies for Improving Logistics .....                             | 111        |
| Proposed Initiatives .....  | 113        |
| Project 1 - Information Sharing Platform .....                              | 113        |
| Project 2 - National Freight Logistics Action Plan .....                    | 119        |
| Project 3 - Institutional Capacity Building for 3PLs and Their Clients..... | 123        |
| Project 4 - Development and Audit of Specialized Supply Chains .....        | 128        |
| Project 5 – Cargo Exchange.....   | 130        |
| Project 6 – Logistics Module for the Information Sharing Platform .....     | 131        |
| <b>Chapter V. Business Mobility .....</b>                                   | <b>133</b> |
| Background .....  | 133        |
| Current Arrangements for Business Travel.....                               | 133        |
| Risks to Issuing Country .....  | 135        |
| Multiple country, Multiple entry Visa.....                                  | 136        |
| Proposed System .....   | 136        |

|                                 |     |
|---------------------------------|-----|
| Proposed Initiatives .....      | 138 |
| Action Plan.....                | 138 |
| Workshop .....                  | 141 |
| Information Sharing Module..... | 141 |
| Project Risks.....              | 142 |

## ACRONYMS AND ABBREVIATIONS

|          |   |
|----------|---|
| 3PL      | Third Party Logistics Service Provider                            |
| 4PL      | Fourth Party Logistics Service Provider                           |
| ADB      | Asian Development Bank  |
| AFSIP    | ASEAN Food Safety Improvement Plan                                |
| APEC     | Asia and Pacific Economic Cooperation                             |
| APHIS    | US Animal and Plant Health Inspection Service                     |
| APLAC    | Asia Pacific Laboratory Accreditation Cooperation                 |
| APRIS    | EU-ASEAN Regional Integration Support Program                     |
| AR       | Autonomous Region   |
| ASEAN    | Association of South East Asian Nations                           |
| ASYCUDA  | Automated System for Customs Data                                 |
| AusAID   | Australian Agency for International Development                   |
| AWP      | ASYCUDA World Project   |
| B2B      | Business to Business  |
| BDS      | Business Development Support                                      |
| BIDV     | Bank for Investment and Development of Vietnam                    |
| BOT      | Build-Operate-Transfer  |
| C/T/R/F  | Cost/Time/Reliability/Flexibility                                 |
| CA       | Competent Authority   |
| CAC      | Codex Alimentarius Commission                                     |
| CAH      | Joint Venture Between Capital Airport Holding                     |
| CAP      | Common Action Program   |
| CBTA     | Cross Border Transport Agreement                                  |
| CEO      | Chief Executive Officer   |
| CEPT     | Common Effective Preferential Scheme                              |
| CIF      | Charges, Insurance, Freight                                       |
| CIQ      | Customs, Immigration, Quarantine                                  |
| CLMV     | Cambodia, Lao PDR, Myanmar & Vietnam                              |
| COO      | Chief Operating Officer   |
| CSF      | Classical Swine Fever   |
| CTF      | Customs Trade Facilitation  |
| DMBI     | Data Mining and Business Intelligence                             |
| DSC      | Data Service  |
| DWT      | Deadweight Ton  |
| EDI      | Electronic Data Interchange                                       |
| EILS     | Electronic Import Licensing Systems                               |
| EPS      | Electronic Payment Systems  |
| EPZ      | Export Processing Zone  |
| ESCAP    | Economic and Social Commission of Asia and the Pacific            |
| ETV2     | EU Technical Assistance for Vietnam Phase 2                       |
| EU       | European Union  |
| EurepGAP | Euro-Retailer Produce Working Group Good Agricultural Practices   |
| EWEC     | East West Economic Corridor                                       |
| FDA      | Food and Drug Administration                                      |
| FDI      | Foreign Direct Investment   |
| FMD      | Foot and Mouth Disease  |
| FOB      | Free on Board   |
| FOS      | Framework of Standards for Securing and Facilitating Global Trade |
| FTZ      | Free Trade Zone   |
| FVO      | EU Food and Veterinary Office                                     |
| GAP      | Good Agricultural (Aquaculture) Practice                          |
| GMO      | Genetically Modified Organism                                     |

|         |   |
|---------|---|
| GMP     | Good Manufacturing Practice                           |
| GMS     | Greater Mekong Subregion                              |
| GMS-IP  | GMS Information Platform                              |
| GDP     | Gross Domestic Product                                |
| GTZ     | German Technical Cooperation                          |
| HACCP   | Hazard Analysis Critical Control Point                |
| HPH     | Hutchison Port Holding                                |
| HS      | Harmonized System                                     |
| IAF     | International Accreditation Forum                     |
| IAI     | Initiatives of ASEAN Integration                      |
| IBGN    | Inter-Based Government network                        |
| ICA     | Investment Climate Assessment                         |
| ICC     | International Chamber of Commerce                     |
| ICD     | Inland Container Depot                                |
| ICT     | Information and Communications Technology             |
| IE      | Intervention by Exception                             |
| IEC     | International Electrotechnical Commission             |
| IPZ     | Industrial Processing Zone                            |
| ISC     | Industrial Standards of Cambodia                      |
| ISO     | International Organization for Standards              |
| ISPM    | International Standards for Phytosanitary Measures    |
| IT      | Information Technology                                |
| IVC     | International Veterinary Certificate                  |
| JICA    | Japan International Cooperation Agency                |
| JIT     | Just in Time  |
| JRC     | Joint Research Center                                 |
| LDC     | Least Developed Country                               |
| MLA     | Multilateral Recognition Arrangement of IAF           |
| MOU     | Memorandum of Understanding                           |
| MRA     | Mutual Recognition Agreement                          |
| MRL     | Maximum Residue Levels                                |
| MTO     | Multimodal Transport Operators                        |
| MULTRAP | EU Multilateral Trade Assistance Project              |
| NSW     | National Single Window                                |
| NTC     | National Transport Committee                          |
| NVOCC   | Non-Vessel Operating Common Carrier                   |
| NZAID   | New Zealand International Aid & Development Agency    |
| ODCY    | Off Dock Container Yard                               |
| OECD    | Organization for Economic Cooperation and Development |
| OGA     | Other Government Agencies                             |
| OIE     | Office International des Epizootics                   |
| PFI     | Participating Financial Institutions                  |
| PRA     | Pest Risk Analysis                                    |
| PSI     | Pre-Shipment Inspection                               |
| RFID    | Radio Frequency Identification                        |
| RILO    | Regional Intelligence Liaison Office                  |
| RITS    | Regional Trade Information System For ECOWAS          |
| RKC     | Revised Kyoto Convention                              |
| RM      | Risk Management                                       |
| RSC     | Reform Score Card                                     |
| RSS     | Rich Site Summary                                     |
| SAD     | Single Administrative Document                        |
| SATS    | Singapore Airport Terminal Services                   |
| SCCP    | APEC Subcommittee on Customs Procedures               |
| SEW     | Single Electronic Window                              |
| SEZ     | Special Economic Zone                                 |

|                 |  |
|-----------------|--|
| SFA-TFI         | Strategic Framework for Action on Trade Facilitation and Investment  |
| SITF            | Special Inter-ministerial Task Force                                 |
| SKU             | Stock Keeping Unit   |
| SME             | Small and Medium-size Enterprise                                     |
| SMTQ            | Standards, Metrology, Testing and Quality                            |
| SOE             | State Owned Enterprise   |
| SPCD            | Strategic Plan for Customs Development                               |
| SPS             | Sanitary and Phytosanitary Measures                                  |
| SSOP            | Standard Sanitary Operating procedures                               |
| TA              | Technical Assistance   |
| TBT             | Technical Barriers to Trade  |
| TEU             | Twenty-Foot Equivalent Unit  |
| TFP             | Trade Facilitation Program   |
| TOR             | Terms of Reference   |
| TRC-ELS         | Trade Regulatory Control and Electronic Licensing System             |
| TRS             | Time to Release Study  |
| UNCTAD          | United Nations Commission on Trade and Development                   |
| UNIDO           | United Nations Industrial Development Organization                   |
| UPC             | Universal Product Code   |
| USAID           | United States Agency for International Development                   |
| USDA            | United States Department of Agriculture                              |
| WB              | World Bank   |
| WCO             | World Customs Organization   |
| WTO             | World Trade Organization   |
| <b>Cambodia</b> |  |
| Camcontrol      | Cambodia Import-Export and Fraud Repression Department               |
| CED             | Cambodia Customs and Excise Department                               |
| DIS             | Department of Industrial Standards (MIME)                            |
| ISC             | Institute of Standards of Cambodia                                   |
| LMQSPS          | Law on the Management of Quality and Safety of Products and Services |
| MAFF            | Ministry of Agriculture, Forestry and Fisheries                      |
| MIME            | Ministry of Industry, Mines and Energy                               |
| MOC             | Ministry of Commerce   |
| MOH             | Ministry of Health   |
| PAS             | Port of Sihanoukville  |
| PPIA            | Phnom Penh International Airport                                     |
| RCR             | Royal Cambodia Railways  |
| RGC             | Royal Government of Cambodia   |
| <b>China</b>    |  |
| AQSIQ           | Administration of Quality Supervision, Inspection and Quarantine     |
| AWPT            | Asia World Port Terminal   |
| BGS             | Beijing Aviation Ground Services                                     |
| CFLP            | China Federation of Logistics Providers                              |
| CNCA            | Certification and Accreditation Agency                               |
| GACC            | General Administration of China Customs                              |
| MOA             | Ministry of Agriculture  |
| MOH             | Ministry of Health   |
| MOST            | Ministry of Science and Technology                                   |
| PRC             | People's Republic of China   |
| RMB             | Renminbi, Chinese Currency   |
| SAIC            | State Administration of Industry and Commerce                        |
| SEPA            | State Environmental Protection Agency                                |
| SFDA            | State Food and Drug Administration                                   |
| <b>Lao PDR</b>  |  |
| DISM            | Department of Intellectual Property, Standardization and Metrology   |
| LIFFA           | Lao International Freight Forwarders Association                     |

|                 |  |
|-----------------|--|
| MAF             | Ministry of Agriculture and Forestry                                   |
| MOH             | Ministry of Health   |
| MOIC            | Ministry of Industry and Commerce                                      |
| STEA            | Science, Technology and Environmental Agency                           |
| <b>Myanmar</b>  |  |
| DOF             | Department of Fisheries  |
| FDA             | Food and Drug Administration   |
| LBVD            | Livestock Breeding and Veterinary Department                           |
| MAPT            | Myanmar Agricultural Produce Trading                                   |
| MIP             | Myanmar Industrial Port  |
| UVS             | University of Veterinary Science                                       |
| <b>Thailand</b> |  |
| ACFS            | National Bureau of Agricultural Commodity and Food Standards           |
| CP              | Charoen Pokphand Group   |
| FAST            | Food Alert System of Thailand  |
| MOAC            | Ministry of Agriculture and Cooperatives                               |
| MOPH            | Ministry of Public Health  |
| NAC             | National Accreditation Council of Thailand                             |
| NIAH            | National Institute of Animal Health                                    |
| NIMT            | National Institute of Metrology  |
| RTC             | Royal Thai Customs   |
| TIFFA           | Thailand International Freight Forwarders Association                  |
| TISI            | Thai International Standards Institute                                 |
| <b>Vietnam</b>  |  |
| GDVC            | General Department of Vietnam Customs                                  |
| MARD            | Ministry of Agriculture and Rural Development                          |
| MOFI            | Ministry of Fisheries  |
| MOH             | Ministry of Health   |
| MOI             | Ministry of Industry   |
| MOST            | Ministry of Science and Technology                                     |
| NAFIQAVED       | National Fisheries Inspection Quality Assurance and Veterinary Direct. |
| STAMEQ          | Directorate of Standards and Quality                                   |
| VFA             | Vietnam Food Administration  |
| VND             | Vietnam Dong   |
| WB-VCMP         | Vietnam Customs Modernization Program                                  |



## EXECUTIVE SUMMARY

This report presents the results of an examination of ongoing efforts to facilitate trade in the countries of the Greater Mekong Subregion (GMS). The GMS comprises Cambodia, the People's Republic of China, Lao People's Democratic Republic (Lao PDR), Myanmar, Thailand, and Vietnam. In 1992 with the ADB's assistance, the six countries entered into a program of subregional economic cooperation. This report was prepared as part of the ADB-sponsored technical assistance program “*Support to Trade Facilitation and Capacity Building in the Greater Mekong Subregion.*” This examination took the form of gap analyses that covered four specific functional areas: customs procedures, sanitary and phytosanitary regulation, logistics services and business mobility.<sup>1</sup> These gap analyses, which are presented in the technical annexes, were used to develop a series of potential projects that would contribute to the objectives embodied in the Strategy Framework for Action on Trade Facilitation and Investment.

This report identifies current regional obstacles to trade and reviews existing performance improvement programs in these four areas. The examination identified four initiatives requiring immediate attention across the region:

- Expanding the use of information and communications technology to improve communication among those involved in trade facilitation and to automate the processes involved in clearing cargo;
- Enhancing cooperation and coordination between the public and private sectors. For Customs procedures and SPS regulation this cooperation takes the form of trader compliance programs. For logistics it takes the form of closer monitoring of supply chain activities, including tracking of goods;
- Increasing regional integration through coordination of the activities of Customs and other regulatory agencies operating on the border, cross-border cooperation between Customs and between other regulatory agencies, and the integration of logistics services in order to improve supply chain management; and
- Improving use of resources through application of risk management for customs and SPS regulation and through greater variety of supply chain configurations.

### SPS

The capability in SPS inspection and quarantine varies considerably among the GMS countries. Those countries that have had the greatest international trade exposure i.e. Thailand and China, are the most advanced and have most of the necessary institutional and legal framework in place. In other countries, robust compliance is only found in those food or agricultural sub-sectors that are export-oriented.

The principal objectives for improved inspection, quarantine and SPS measures are to move physical inspections off the border and to reduce the number of inspections without sacrificing safety. For some GMS products, particularly foodstuffs, the current inspection rate is 100%. Even Thailand and China show little flexibility in inspection and examination of agro-based

---

<sup>1</sup> The review of the situation in Myanmar is limited because the authors were not able to visit the country and information available through third parties is limited.

products from other GMS countries. A reduction in inspections to allow for smooth flow of goods can only be achieved by targeting cargo for examination through utilization of risk assessments. In addition, up-to-date information should be exchanged not only between government institutions but also between government and private sector traders and importers.

The regional project for SPS inspection and quarantine addresses the main weaknesses to the free flow of goods across GMS borders: (i) weak intra-GMS coordination and communication; (ii) limited use of risk management, and variation in the interpretation of risk management between GMS countries; (iii) laboratories in some countries are not internationally compliant with the result that there is only partial mutual recognition between laboratories in GMS; and (iv) limited mutual recognition of hazard avoidance and the inability of producers and SMEs to afford the cost of hazard avoidance certification.

The first project component would utilize a regional information platform to improve risk management through better communication and risk analysis transparency among GMS countries. At present, information sharing between GMS countries is poor, and, as a result, the identification of risks and hazards within the sub-region is weak. National institutional coordination is also poor within each of the GMS countries. This is particularly true of other government agencies (OGAs) supplying information to Customs on risks, hazards and importer/exporter non-compliance.

The information-sharing platform would cover the following subjects:

- Pest categorization and distribution;
- Pest risk assessments, surveillance and monitoring;
- Exporter/importer profiling for compliance and certification; and
- Non-conformity issues and notification of unsafe and defective products through a rapid alert system.

Although national information systems exist, they are not as comprehensive as the proposed regional system. At present, GMS information is placed on an ADB webpage. However, the GMS would need its own independent site as well as staff and infrastructure to support the information platform.

There is need for monitoring and surveillance of pests, diseases and hazards in food, and improved sharing of information among countries. The second project component would standardize the interpretation of SPS risk management within the GMS as a means to develop sound risk management practices that allow intervention by exception through flexible inspection and quarantine procedures. The overall aim is to identify shipments that may present a risk or hazard if imported and thus warrant examination, destruction or return. The interpretation of risk management varies depending on the GMS country and the Ministry or agency involved. Although risk management has been or is being incorporated into the legal framework of GMS countries and the designated implementing agencies have shown a commitment to the process, there has been limited flexibility introduced in these procedures to date. This is true even when a risk assessment has been undertaken and the necessary hazard and traceability certification has been provided to the border agencies.

A third project component would provide mutual recognition of SPS analytical/biochemistry laboratories to avoid duplication of testing and to instill confidence in laboratory results throughout the GMS. Mutual recognition in laboratory accreditation and certification will avoid repeated and duplicative analyses and diagnostic work, which increase transaction costs, particularly for regulated and controlled commodities. Within the GMS there are three issues regarding SPS laboratory capability:

- There is no full mutual recognition of laboratory testing across GMS;
- Equipment for more complex testing protocols is antiquated or not available, even in internationally accredited laboratories of Thailand; and
- The Chinese, Thai and Vietnamese accreditation agencies have the capacity to accredit and certify laboratories in other GMS countries.

Cooperation among the GMS national accreditation services is important in order to harmonize test results and therefore instill confidence in such results within the whole sub-region. Another factor to be addressed is the turnaround time in analysis and sampling of imported goods for clearance. Even in the more advanced GMS countries the use of multi-testing equipment is limited to the most modern laboratories.

The removal or avoidance of hazards in the food chain is becoming a priority for most governments, particularly in light of recent food safety scares and alerts. Governments also want to provide a safe food system for the increasing number of tourists that visit the Mekong region. The fourth component of the project would include efforts to:

- Harmonize GMS food laws to include compulsory hazard avoidance compliance for GMS food processors in order to improve sub-region food safety; and
- Determine the feasibility of supporting the private sector, particularly SMEs, in obtaining hazard avoidance compliance and assisting SMEs in undertaking due diligence activities, through business development support (BDS) cost sharing programs.

There is already an obligation as part of the ASEAN Food Safety Improvement Plan (AFSIP) that ASEAN members should have hazard avoidance procedures for food processors in the form of Hazard Analysis Critical Control Point (HACCP) incorporated into the legal framework by 2010. With more importance being given to HACCP certification, enterprises that cannot afford to become hazard avoidance compliant are increasingly being marginalized from the international market. To assist SMEs to become compliant, a BDS facility needs to be established in GMS countries.

### Customs

In order to promote trade, it is necessary to reduce bottlenecks associated with Customs without compromising legitimate concerns regarding security and collection of taxes. The GMS countries have made significant progress in reforming Customs procedures, reducing import/export licensing requirements, liberalizing trade finance and improving cargo clearance services. There are a number of ongoing or proposed donor-assisted projects, most notably the customs modernization projects assisted by the World Bank in Cambodia, Lao PDR and Vietnam that will spur further reforms.

Despite these efforts, there are marked differences between countries such as China and Thailand, where there have been concerted reform efforts, and Cambodia, Lao PDR, Myanmar, and to a lesser extent Vietnam, where there are still significant impediments. Furthermore, within the GMS countries, there are dramatic differences in procedures and performance at various points of entry. The major gateways usually have the most advanced procedures, while the land borders utilize more traditional procedures. Finally, all GMS Customs authorities continue to have problems with transparency and excessive informal payments, especially at more remote customs facilities and entry points for high-value goods. These problems have decreased over time as a result of reform, but there is a need to accelerate this process.

Since the status of trade facilitation differs widely among the GMS countries, the components of the Customs Trade Facilitation Program (CTFP) initiatives for each country would differ as well. Each country should pursue its own national program consisting of those activities that are already ongoing plus those identified in this study. In the interest of better resource management and of promoting regional harmonization, it would be advisable that the common components in all the national programs be pursued as regional programs.

The first component of the Customs project would provide regional support for a program of Intervention by Exception (IE) in the GMS countries. This activity would complement national efforts by Customs authorities. It would encourage coordination among the Customs authorities in areas of common interest such as the following:

- Sharing experiences in implementing modern techniques such as risk management, data mining and business analytics;
- Identifying opportunities for collective action in introducing programs such as authorized persons and economic operators and compliance incentives;
- Sharing of information on profiling and valuation; and
- Setting priorities for initiatives to facilitate intra-regional trade.

The second component would be regional support for integrated border management. The increasing use of ICT has created an opportunity to accomplish integrated border management without locating all agencies in a common facility. Equally important, integrated border management allows improved compliance and transparency by providing shippers with better information on regulatory requirements, cargo clearance procedures and status of their cargo awaiting clearance. Important initiatives to be encouraged include: Electronic Import Licensing System, single submission, joint scheduling of inspections, collection of samples and testing and common risk profiling databases.

The third component would be development of an ICT module to improve trader compliance. The ICT module would provide an easily accessible source of information on trade regulations and procedures for all GMS countries. It would utilize an indexing system for documents (permits, clearances, and licenses), regulatory procedures and other requirements based on Harmonized System (HS) commodity code. The module could also offer a secure system for transmission of cargo information from the country of export to the country of import to support

pre-arrival clearance procedures. Finally, the module would serve as a secure medium for exchange of risk profiles and commodity valuation among Customs administrations.

### Logistics Services

In the GMS countries, logistics services are generally provided by small companies that offer basic services. However, a significant portion of these basic services continues to be provided by the shippers themselves rather than third parties. Some integration of services has occurred, most notably the combination of customs clearance with forwarding and transport services with storage, but most supply chains are still limited to simple domestic movements. More sophisticated logistics services are provided by large integrated manufacturing and retailing enterprises or by international third-party logistics service providers (3PLs). Transport services on the principal trade corridors have improved substantially over the last two decades in terms of both cost and transit time. Multimodal transport has been much slower to develop, in part because the relatively short travel distances within the region limit opportunities to reduce cost or transit time. Improvements in land transport services combined with the development of better port facilities and improved scheduling of ocean shipping services have allowed shippers to offer greater reliability in terms of scheduled delivery times. The greatest source of uncertainty remains the time and cost for movements across borders or through international gateways.

Improvements in the quality of the region's logistics services must begin with an understanding of the central role played by the private sector. The role of the public sector is generally limited to regulation in the areas of health and safety. When government intervention extends to economic regulation, it often reduces the quality of service and limits innovation and risk-taking. Improvements in logistics services involve not only reducing the cost and time of individual services, but also expanding the range of services in order to offer different combinations of cost and speed. Improvements can also include integration of service combinations to form unique supply chains, and introduction of value-added services that allow traders to tailor both their shipments and the configuration of their products to meet changing demands while avoiding excess inventory.

As a service industry, most private sector providers respond to the requirements of their clients. Improvements in the quality of services create opportunities to better serve markets and to offer greater value to customers. However, it is sometimes difficult to convince the producers and shippers that there is competitive advantage to be gained by using logistics to increase the value of the delivered product or even to minimize the total delivered cost. In lieu of an awareness of potential benefits from increasing the value of the delivered products, there is no demand for value-added logistics services. In practice, the shippers' interest is limited to out-of-pocket costs for domestic transport of the product. While there is growing awareness of the competitive pressure to supply goods reliably and with shorter lead times, there have been few efforts to reduce inventory within supply chains or introduce just-in-time manufacturing.

One of the major challenges for the logistics industry is to convince potential clients of the value to be gained from improving the quality of logistics services and the integration of their supply chains. The international 3PLs have concentrated on providing services to overseas buyers and suppliers who appreciate higher quality and value-added services. These organizations are in a

position to act as a model for the domestic 3PLs, who have had limited success in developing local markets for more sophisticated services.

This proposed initiatives for improving the quality of logistics services would address both the supply of and demand for these services. These initiatives include training and other technical assistance to raise the awareness of domestic 3PLs and their clients regarding the advantages to be gained from improving the quality and variety of services and developing integrated supply chains. Another initiative is the development of national logistics action plans. These would be distinct from national transport plans in that they are not concerned with long-term capital investment. Instead, they would clearly identify major transport bottlenecks as well as regulatory impediments while providing a framework to address minimum standards of health safety and quality of service. These plans would encourage freedom of entry, allow vertical integration within the logistics service industry, and provide complementary ICT systems to assist in integrating logistics services and coordinating the supply chains. Finally, the proposed initiative would focus on development of more sophisticated supply chains with an emphasis on secure supply chains, cool chains and other special-purpose applications.

### Business Mobility

Development of intra-regional GMS trade requires easy international mobility for business people to be supported by a harmonized system for application and issuance of business visas.

Business travel can be divided into three main categories, each of which requires a different type of documentation: 1) cross-border trade, which is accommodated through permits for day trips by traders in border towns; 2) business development travel, generally accomplished using tourist visas or single entry business visas; and 3) business operations travel, which requires either single or multiple-entry business visas that accommodate longer stays.

Simplified and standardized application procedures that can evolve from multiple-entry business visas to a multi-country GMS visa system are the goal for the region. Such a system should be integrated with other regional efforts including those being developed by ASEAN and APEC. At the same time, the system must be robust enough to meet the immigration and security requirements of GMS countries. Applications may require additional initial efforts on the part of the business traveler. This would be offset by the convenience of entering and exiting one or more GMS countries without additional documentation.

### Information Platform

The proposed projects require the introduction of information systems to improve efficiency and transparency of trade-related procedures. These would be developed as separate modules with communications and data exchange between the involved agencies. They would operate at a regional level through connections with agencies in each of the GMS countries. In order to provide a center for this exchange and technical support to insure a properly integrated system, these modules would be included as part in a GMS Information Platform (GMS-IP) operating out of one of the GMS countries.



This would utilize a Virtual Private Network, initially to provide interconnectivity between countries and to offer access to trade-related information and websites. The information sharing platform will need to be based on assessment and readiness of each individual sector, covering customs, SPS, and logistics, and in consideration of the national progress in these areas.

## CHAPTER I. PROJECT PROPOSALS

### Background

At the 11th GMS Ministerial Meeting in Phnom Penh in September 2002, member countries adopted a 10-Year Strategic Framework to promote the three regional ideals of economic growth, equity and prosperity. Areas of emphasis included:

- Strengthening of infrastructure linkages through a multi-sectoral approach;
- Facilitation of cross-border trade and investment; and
- Enhancement of the private sector's competitive position and its participation in economic development.

These issues were already being addressed through an existing program of coordinated investment in infrastructure on the region's major trade routes, the Cross Border Transport Agreement (CBTA). A complementary project for development of economic corridors was also underway. After the September 2002 Ministerial, the *Strategic Framework for Action on Trade Facilitation and Investment in the GMS* (SFA-TFI) was created to facilitate trade among the GMS countries and between the GMS and the rest of the world.

The CBTA, which was launched in 1996, focuses on expediting the movement of goods and vehicles across the land borders, a longstanding bottleneck in bilateral and regional trade. The CBTA provides a guideline for harmonization of most of the transport and trade-related regulatory procedures occurring at the border. Implementation of harmonized procedures began with pilot programs at several border crossings in 2005. Although the scope of these pilots is narrow and progress has been slow, they have created the groundwork for cooperation and coordination among border management agencies. Further progress will require not only substantial cooperation but also flexibility to accommodate evolving practices in border management including increasing use of ICT systems, changing documentation requirements and restructuring of international supply chains.<sup>2</sup>

The second effort is a program to develop economic corridors that link the GMS countries. A large number of corridors have been identified. These provide a basis for coordinating investment in regional transport infrastructure. As a result, many of the corridors have, or will soon have, good road connections (4-lane or better) between major economic centers and international gateways.<sup>3</sup> The investments combined with improved customs procedures and more efficient cargo transfer operations at the border are expected to accelerate the growth in intra-regional trade. Pent-up demand for intra-regional trade can already be observed in the rapid growth of informal trade along the borders. The challenge of the program is to facilitate cargo movements on these corridors by:

---

<sup>2</sup> The agreement has considerable breadth. While its recommendations generally conform to the reforms introduced as part of the Revised Kyoto Convention, its annexes, which were developed over a number of years, do not always reflect current best practices.

<sup>3</sup> There are also plans to develop and enhance rail connections on certain corridors, but these are not expected to gain significant market share in the medium term.



- Strengthening cross-border collaboration between logistics service providers; and
- Constructing logistics facilities to integrate linehaul and distribution/collection activities and improve intermodal connections.

The project expects its activities to lead to clustering of production activities along the corridors that will take advantage the proximity of both international gateways and domestic markets.

The CBTA and the economic corridors were designed around a geographic base. In contrast, the SFA-TFI was developed with a functional focus. The SFA-TFI concentrates on four functional areas (Customs, Inspection and Quarantine, Logistics and Business Mobility) and has identified a number of actions to be taken (see Table 1.1). Many of SFA-TFI's proposed initiatives relate to functional areas also addressed by the CBTA, but the SFA-TFI is concerned with how these functions can be performed more efficiently rather than what protocols should govern them. SFA-TFI incorporates best practices and how to implement them. The initiatives aim to improve performance at the border as well as along the corridors.

The scope and priority of the SFA-TFI initiatives were designed following an abbreviated gap analysis conducted for each country. These analyses were prepared based on available reports as well as field trips to Thailand, Vietnam, Cambodia, Lao PDR, and the Yunnan and Guangxi Autonomous Regions (ARs) of China. Consultations were held with government agencies, the private sector and various donor agencies active in the field. Among the current practices discussed were:

- Procedures and technology used by customs;
- Organization of and procedures for inspection and quarantine; and
- Structure and capabilities of the logistics industry.

The consultations included regional workshops and country brainstorming sessions conducted in Bangkok, Hanoi, Phnom Penh and Kunming. These meetings confirmed the importance of increasing and coordinating resources via the following techniques:

- Information sharing through ICT;
- Risk management in customs, inspection and quarantine, and immigration;
- Integrated and value-added trade logistics; and
- Training and capacity building in these three techniques.

The consultations also highlighted the differences among GMS countries in terms of the progress made in the area of trade facilitation. Common activities are recommended, however, because the GMS countries have similar priorities regarding trade. The common activities would have flexibility to allow each GMS country to formulate individual action plans.

**Table 1.1: Actions Contained in SFA-TFI and Related CBTA Provisions\***

| <b>Focal Areas<br/>(CBTA)</b>  | <b>Principal Actions</b>  |
|--|---|
| <b>Customs</b><br><br><b>(Annexes<br/>4, 6, 8,<br/>14, 15)</b>                           | <ul style="list-style-type: none"> <li>• Simplify procedures and, where appropriate, laws and regulations by aligning them with key international standards</li> <li>• Improve transparency for trade operators and the public</li> <li>• Reduce Customs control at the border through the development of Customs post-clearance/post-release control regimes, supported by effective risk management systems and procedures</li> <li>• Develop concurrent controls by Customs and other relevant border control agencies, consistent with the principles of 'single window inspection'</li> <li>• Enhance the compliance of GMS countries with the WTO, TBT, and SPS agreements</li> </ul>   |
| <b>Inspection<br/>and<br/>Quarantine</b><br><br><b>(Annexes<br/>3, 4)</b>                | <ul style="list-style-type: none"> <li>• Improve cooperation and exchange of information among focal units, enquiry points or the national notification authority</li> <li>• Align quarantine and inspection laws, regulations and procedures in each GMS country with commonly agreed international standards, and develop a harmonized approach among all GMS countries</li> <li>• Improve transparency of all GMS technical standards, inspection and quarantine laws, regulations, procedures and forms</li> <li>• Increase sharing and exchange of information/data at the GMS level in connection with risk assessment, control, inspection and approval, and conformity assessment procedures</li> <li>• Conduct inspection &amp; quarantine controls concurrently with those of other border control agencies</li> <li>• Put in place intra-GMS mutual recognition agreement(s) on conformity assessments, and seek to introduce bilateral or multilateral agreements on equivalence of specific sanitary or phytosanitary measures</li> <li>• Establish a regional network for epidemiological surveillance and reporting</li> </ul> |
| <b>Logistics</b><br><br><b>(Annexes<br/>9, 10, 12, 13,<br/>Protocols<br/>I, II, III)</b> | <ul style="list-style-type: none"> <li>• Finalize the CBTA and initial implementation along GMS economic corridors</li> <li>• Assess and document trade transaction costs along GMS economic corridors</li> <li>• Develop facilities to support the development of an efficient and integrated GMS trade logistics network</li> <li>• Upgrade and build human resource capacity within the logistics/freight forwarding</li> <li>• Develop a national logistics plan to guide policy</li> </ul>   |
| <b>Business<br/>Mobility</b>   | <ul style="list-style-type: none"> <li>• Simplify the formalities for visa application, deferral and temporary stay for GMS citizens conducting business activities in the sub-region</li> <li>• Establish a GMS business visa scheme allowing multiple-entry for GMS citizens in the sub-region</li> <li>• Improve transparency of relevant laws and regulations for business travelers, e.g. through appropriate publications in English</li> <li>• Expand the GMS business visa scheme to third country nationals</li> </ul>   |

\* Parentheses refer to CBTA

## Need for a Strategy

Intra-regional trade among the GMS countries is relatively low in terms of both volume and value relative their total trade with the rest of world. However, for the smaller GMS countries, intra-regional trade represents both a significant proportion of total trade as well as a potential growth area. Various opportunities for increasing intra-regional trade between the larger and smaller economies have been identified, most notably exporting food products to China and importing intermediate goods from China to the smaller countries. In addition, there is potential for growth in existing bilateral trade of consumer goods. Such trade flows will be enhanced by improved logistics that can address concerns over synchronized production, and inventory control.

Current intra-regional trade flows primarily break down into three categories: large-scale sea shipments between the GMS ports, smaller shipments by truck across designated land borders and ubiquitous, informal trade between towns along the borders. While the first and last have achieved reasonable levels of efficiency, land transport through designated border crossings still faces multiple obstacles. Since shipment by truck is the primary modality of trade for the landlocked areas of GMS, i.e., Yunnan and Lao PDR, as well as the major inland economic centers, i.e., Hanoi, Phnom Penh, Nanning, and Chiang Mai, the efficiency of trade processes at land border crossings is critical. To date, efforts to improve the border crossings have focused on customs procedures and reduced clearance times. This combined with improvements in the roads connecting to these crossings have significantly reduced the time and cost of transport.

The challenge confronting the GMS countries is to continue improving both time and reliability of the cross-border movement so as not to impede intra-regional or international trade. The former requires additional improvements in customs procedures, but more importantly, a major modification in the non-customs clearance procedures. Any improvements would need to accommodate substantial increases in the volume of trade as well as significant changes in the regulation of health, safety, and security issues for traded goods. They should support improvements in the overall supply chain performance rather than that of specific logistics activities in the supply chain. This requires not only better integration of cross-border transport services but also relocation of supply chain activities to sites where they can be most efficiently performed.

## General Strategy for Trade Facilitation

Trade facilitation is an extremely broad topic to address. An effective trade facilitation strategy requires understanding the changing requirements of trade as well as existing impediments. Global competition has placed increasing emphasis on fast delivery times to not only reduce inventory but also to avoid a significant mismatch between supply and demand. Reliability is another important component of global trade competition as reflected in the growing emphasis on order fulfillment. It is an important prerequisite for the integration of supply chains since it allows sequential activities to be interconnected with minimal delays. Global competition has also led to a proliferation of new health and safety standards, due partly to heightened awareness of risk but also to increased competition, which has allowed importers to be more selective in their choice of suppliers. At the same time, political concerns with regards to security have led

to stricter monitoring of imports and exports. These concerns are currently addressed through greater oversight at the border, but increasingly will require better monitoring of good moving through the entire supply chain.

An effective strategy for trade facilitation must address not only the traditional impediments to the free flow of goods but also the new requirements arising from the trends mentioned above. The strategy proposed to accomplish this would have three components:

- Intervention by exception;
- Integration of processes; and
- Interchange of information.

### *Intervention by Exception*

Efforts to improve compliance often begin with increased enforcement of regulations, e.g. increasing the rate of inspection of traded goods. Unfortunately, this is not a successful strategy in the long run. More inspections increase delays and costs (both formal and informal), and reduce competitiveness. Furthermore, increased inspection often fails to improve detection rates.<sup>4</sup> Therefore, this strategy proposes two alternatives that would improve compliance while reducing delays and resource use. Both alternatives are part of a general program of intervention by exception.

The first alternative is a more effective use of risk management techniques to allocate resources according to the level of perceived threat. Efforts to upgrade risk management from traditional intelligence gathering to computerized data analysis and application of business analytics are advancing rapidly in China and Thailand, but more slowly in the other GMS countries.<sup>5</sup>

The second alternative is the provision of incentives for compliance. One set of incentives rewards a record of compliance with expedited service, e.g., green channels, gold cards and Authorized Economic Operators status. The other offers a general set of incentives that apply to all shippers and includes eliminating activities that are no longer relevant, making the remaining activities more transparent, and informing shippers of changes in regulation. The latter option, often overlooked, is particularly important since failure to adequately inform shippers often results in confusion that allows those enforcing the regulations to extort payments from those involved in trade.

### *Coordination and Integration*

Trade facilitation requires both a harmonization and simplification of the activities and procedures associated with trade. One means for achieving this is greater coordination of the

---

<sup>4</sup> It is one of the ironies of this type of strategy that the net result of greater inspection is often less effective enforcement because there is no complementary increase in resources available to undertake the additional scrutiny. However, the incentive to circumvent the inspection process has increased.

<sup>5</sup> Annex 4, Article 10 of the CBTA Agreement specifies “the contracting parties will endeavor to reduce the practice of routine physical exhaustive inspection” and “customs inspection may be performed by random testing, supplemented by inspections when an irregularity is suspected”. For the ASEAN countries, the 2020 vision is to use advanced risk assessment, profiling and selectivity techniques to identify risk consignments for physical examination.

procedures and documentation of Customs and SPS inspection and quarantine. Another is increased integration of logistics services. A third is collaboration on a common mechanism for expediting business travel

Nearly all Government and donor support for improving border management has concentrated on improving the regulatory framework and operations of Customs agencies. Almost no support has gone to the other government regulatory agencies operating at the border (OGAs). As a result, Customs is the only agency that has made significant progress in simplifying documentation requirements, introducing IT systems, and applying modern risk analysis. Since inefficiencies in the OGAs procedures can easily counteract the gains made by Customs, there is a growing awareness that the procedures of all border management agencies need to be improved simultaneously. Lack of coordination leads to excessive and redundant enforcement, with shipments being inspected more than once and the submission of multiple documents containing the same information. This reduces the effectiveness of enforcement of health, safety and security regulations. While there has been discussion of introducing a combined document, and possibly a single electronic window, for submission of all required information, the OGAs need to simplify their documents and introduce IT systems before this can proceed

Third party logistics services in the GMS are relatively simple and generally limited to single functions such as transport or storage. Integration of these services reduces the transactions involved in a supply chain and provides better coordination of the activities within a supply chain. The result is a reduction in time and cost for moving goods through the supply chain and an increase in the value of the goods by insuring reliable delivery. Most of the incentive for integration of services comes from the marketplace with service providers offering a package of logistics services as a means to increase the volume and profitability of their business. The role of government is to develop policies that allow this integration without compromising competition.

Business mobility requires coordination among the immigration authorities in order to harmonize their procedures and offer business visas with comparable conditions. This can then be integrated into a regional business visa.

### *Information Sharing*

All of the initiatives considered for improving the performance of Customs, inspection and quarantine, logistics services and business mobility require a substantial improvement in the exchange and processing of information. The Customs reform agenda involves changes in procedures based on better processing of cargo information and development of risk profiles. It also requires better sharing of information not only with other Customs agencies but also with the other parties involved in trade. The demand for more effective SPS inspection and quarantine requires a major improvement in the collection and processing of information regarding trader non-compliance, risks of individual commodities, potential threats and certification of cargo that presents a potential health or safety risk. Of particular importance is the exchange of information among the concerned agencies in the GMS. For logistics, most of the advances in quality and scope of services as well as in supply chain management have been achieved through improvements in exchange and processing of information throughout the supply chain.

A variety of interventions have been identified that could be implemented as part of this strategy. These interventions fall into five categories linked to the strategic components shown in Table 1.2. The first involves both the establishment of a platform and then development of modules in each of the four functional areas. The second and third interventions apply to both Customs and SPS Inspection and Quarantine.

These interventions have been mapped into the four functional areas to produce the specific initiatives described below. The initiatives incorporate some but not all of the practices included in the CBTA but with a focus on the performance of the supply chain rather than just border crossings. They would acknowledge the significant advances achieved by some of the GMS and promote their adoption of successful practices in other GMS countries. The initiatives can be implemented in a coordinated manner with ongoing efforts to address these four functional areas initiated by national governments, donor organizations and the private sector.

**Table 1.2: Proposed Interventions**

| Intervention                 | Strategic component | Project Components  | Major Goals   | Precedence                                   |
|------------------------------|---------------------|---|---|--|
| Information Sharing Platform | IE<br>CI<br>IX      | Basic platform<br>Specific modules                                      | Better exchange of information between agencies in sensitive areas and between agencies, shippers and logistics service providers   | ECOWAS, various domestic trade networks      |
| Risk Analysis                | IE<br>IX            | Profiling<br>Business Analytics   | Improve detection and compliance without increasing delays;<br>More efficient use of resources                                      | Philippines, China/Thailand, Malaysia        |
| Integrated Border Management | IE<br>CI<br>IX      | Designated lead agency, Common documentation, Coordinated inspections   | Improve detection;<br>Simplify procedures;<br>Reduce total time for clearance; More efficient use of resources                      | Canada, US, EU                               |
| Improve Logistics Industry   | CI<br>IX            | Strategic planning, Supply Chain Management and Integrations strategies | Develop both demand for and supply of integrated logistics services and value-enhancing logistics                                   | Chile, EU, Dubai and Singapore, GCC, Morocco |
| Simplify Business Travel     | CI<br>IX            | Harmonize application procedures and visa conditions                    | Simplify procedures for business travelers with established business relationships in the GMS countries; Adopt local best practices | Schengen, APEC, Selected GMS countries       |

IE = Intervention by Exception, CI= Coordination and Integration IX = Information Exchange,



## **GMS Information Sharing Platform**

Increased sharing of information requires both greater cooperation among the parties involved and the technology to enable the exchange and processing of the information. The latter is being achieved through a dramatic increase in the use of IT systems and the Internet by both Government agencies and the private sector. While the communications situation has been improving at the national level, problems persist in promoting the cross-border flow of information among Government agencies, and between Government agencies and the private sector.

Improved trade facilitation requires a better medium for exchange of information. For this purpose, the project proposes to establish a regional ICT platform for sharing information. This platform, GMS – Information Platform (GMS-IP), would consist of a central facility with secure linkages to agency computer systems in each country. The GMS-IP would provide a “post office” for the interchange of information and a repository of information for Government agencies and private sector participants in trade and logistics.<sup>6</sup>

The GMS-IP would have modules for processing information from different agencies. The first four modules would correspond to the four functional areas as follows:

- A Customs module would be used to provide pre-arrival information on cargo crossing the GMS land borders, to share information that would be used in profiling trades and shippers, and to provide up-to-date data on cargo valuation, among other uses;
- An Inspection and Quarantine module would provide a hub for collecting and circulating alerts on food and other products and for developing risk profiles for intra-regional trade;
- A Logistics module would provide shippers and logistics service providers with data on available logistics services in the region, the costs for regulatory and cargo handling services that have published tariffs, and the operating hours and status of these services. The Logistics module could also be used to provide tracking information and performance data; and
- An Immigration module would provide a regional database for screening visa applicants and for monitoring persons who hold specific categories of visas. This platform would also provide a central site for electronic filing of visa requests.

The GMS-IP would also serve as a regional source of information on trade opportunities and procedures. The information platform would have an office and central computer system located in one of the GMS countries. It would be interlinked with national agency ICT systems via Internet through a Virtual Private Network. The platform would have staff responsible for developing modules and complementary databases, and for maintaining secure and reliable access. A more detailed description of the platform is presented in the Sector Report on Logistics. Development of the basic module would be undertaken through the project described in the following paragraphs.

While there are merits to a regional information platform, and to a central facility, the foremost initial step is review the information gaps under each sectoral area, i.e. customs, SPS, logistics to

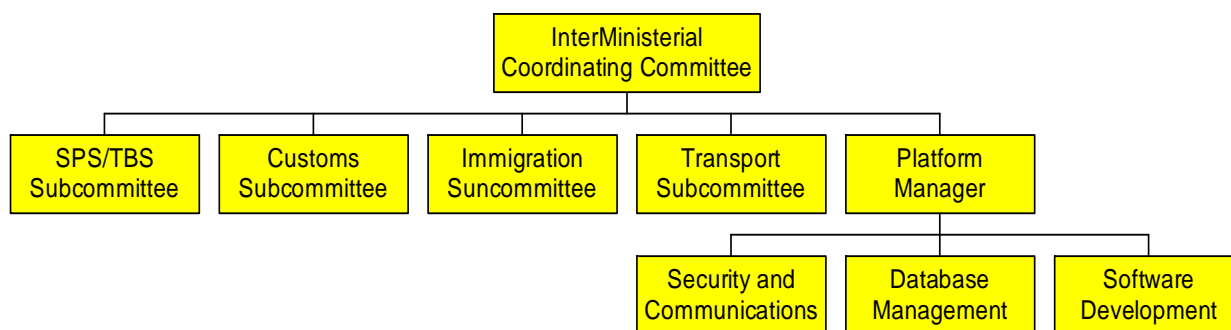
---

<sup>6</sup> This could serve as a complement to the functions preformed for customs by the WCO (Regional Intelligence Liaison Office RILO) facility.

determine the scope, legal requirement, and contents for information sharing. Information sharing for SPS, customs and logistics among the GMS countries, and between the public and private sector is critical for improved border handling, but it needs to be tackled by an assessment of each sector. The key issue for information sharing is not technical, but an indepth understanding of the underlying legal and regulatory constraints for cooperation, sequencing, and national progress, amongst others, before consideration of the physical set up of the regional platform

Because users and providers of information would be primarily Government agencies, oversight would need to be conducted through a committee structure (Figure 1.1). A central inter-ministerial coordinating committee comprised of high-ranking officials from the various GMS countries with the authority to promote the use of the platform would oversee the project. The

**Figure 1.1: Proposed GMS-IP Management Structure**



committee would decide on the functions to be supported by the platform and the level of participation by the relevant government agencies. Each function would have a separate system module and server, and would be supervised by a technical subcommittee representing the agencies supplying information to the platform, querying the database and communicating with agencies in other countries. The committee would decide on sources and format of the data, the procedures for updating the data and restrictions on access to the data. The management of the central system and development of the module software would be the responsibility of the platform's permanent staff.

The initial function of the platform would be to provide a website offering basic information on trade procedures and logistics services in the GMS countries. The information would be in the form of links to agency websites and Rich Site Summary (RSS) feeds from existing websites. Additional modules would be developed within the first few years of operation. These would allow exchange of cross-border information among agencies responsible for customs, health, safety and immigration. The additional modules would also provide information on regulatory requirements affecting shippers and logistics service providers.

In order to develop GMS-IP, it would be necessary to agree on the location of the central system, the procedures for recruiting staff and a method for long-term funding. An initial sum of about \$1.5 million would be required for the set-up and initial operations. It is expected that this platform could be operational within one year and have a number of modules functioning two years after the project's initial year.



The benefits associated with this platform are substantial. The GMS-IP would help reduce the current information asymmetry affecting regional trade. The private sector communicates extensively with international buyers, suppliers and logistics service but Governments often have difficulties communicating a few kilometers across a border. More importantly, the GMS-IP would provide a mechanism for standardizing the format and substance of trade-related data and would allow a region-wide exchange, extending beyond countries that share a common border. If it is properly implemented, this project would not only facilitate cooperation among border management agencies, but also increase the transparency of their activities. The improvement in communication together with ongoing attempts to simplify procedures would significantly reduce one of the major impediments to intraregional trade.

Strong Government leadership will be essential for the success of this project. The GMS-IP central committee must include senior representation from coordinating Ministries in each country. The committee must have the authority to ensure active involvement and cooperation by relevant national agencies. Lack of cooperation is a major risk for the success of this project.

### **Customs Initiatives**

The GMS countries have made significant progress in reforming Customs procedures, reducing import/export licensing requirements, liberalizing trade finance and improving transport infrastructure and services.

The path for Customs reform has been set out in various documents, most notably the Revised Kyoto Convention (RKC). A summary of the best practices distilled from these documents is shown in the box above. Despite efforts to implement these reforms, Customs authorities in the region continue to have problems with transparency and excessive informal payments, especially at more remote customs facilities and where high-value goods are handled. These problems will diminish over time as more efforts are made in Customs reform and in management re-engineering, but the existence of informal payments indicates a need to accelerate the process.

There are a number of on-going and/or proposed donor-assisted projects that focus on Customs procedures. Notable among these are the Customs modernization projects assisted by the World Bank in Cambodia, Viet Nam and Lao PDR. Despite these efforts, there are marked differences between countries such as China and Thailand where there have been concerted efforts to

#### Best Practices in Customs – Programs for Reform

- **Intervention by Exception** – Reduction in the number of transactions (declarations) required for normal customs and OGAs processes at the borders and conversely programs that increase the proportion of transactions that are moved off the borders or that require a minimum number of submissions and intervention. Included here are programs that allow the immediate provisional release of goods upon arrival at the frontiers and upon submission of minimum information. The goods are still subject to subsequent clearance processing outside the customs zone, normally at the importer's premises.
- **Minimum Submissions and Data Elements** – Reduction in documentary and data submission requirements and formalities for border crossing and harmonization with other countries according to international conventions.
- **Electronic Services and Automation** – Development and use of ICT both for the front-end electronic registration of Customs, OGA, transport, banks and other supply chain documents as well as for the associated back-office automation.
- **Dispute Avoidance and Resolution** – Accession and compliance with various international conventions that promote simplified, harmonized, uniform and consistent Customs operations as well as efficient and reasonable dispute resolution mechanisms in the traditionally dispute-laden Customs operations of valuation, classification and rules of origin.
- **Transparency and Partnership with Trade** – Improve transparency for shippers and consignees of data and information requirements of Customs and OGAs. This includes Voluntary Compliance Programs that encourage traders to interface their systems with Customs. In addition, Shared Compliance Programs promote the concept that traders should share in the burden of compliance enforcement in order for Customs and OGAs to intervene less in the logistic chain.
- **Export Facilitation** – Simplification of export documentation and programs to facilitate entry into countries of destination by instilling confidence in information provided the Customs administration in the exporting country concerning those export trades.
- **Transits and Temporary Admissions** – Promote an integrated production base through the unimpeded flow of material imports and outputs into and out of the region without payment of duties and taxes as well as with a minimum of documentary requirements and formalities.

upgrade customs systems, procedures and staff skills, and countries such as Cambodia, Lao PDR, and Myanmar, that have exhibited a reluctance to reform traditional, inefficient, and often corrupt procedures. Furthermore, within individual countries there are dramatic differences in procedures and performance at various ports of entry. Major gateways usually have the most advanced procedures while land borders tend to utilize less advanced practices.

The proposed Customs project would have three components: expand intervention by exception, integrate border management and develop a customs module for the information platform.

### *Component 1: Intervention by Exception*

The objective of this component is to provide regional support for a program of Intervention by Exception in the GMS countries. The component's activities would complement national efforts by customs authorities to improve detection and compliance, increase efficiency and reduce delays. Among the techniques already available or being introduced under on-going donor-assisted programs are the following:

- Limitations on the practices of temporary storage, document completeness checks, physical examinations and review of self-assessed duties and taxes to situations in which Customs is in receipt of specific intelligence or the shipment has been selected by the risk management system;
- Special processes such as periodic customs declaration, release on submission of minimum data, clearance at premises of trade as well as pre- arrival processing and notification of release;
- Technologies such as data mining, business intelligence, risk assessments, profiling, selectivity and random sampling to identify exceptions requiring intervention; and
- Initiatives for compliant traders such as Shared Compliance Programs and Customs-Trade Memoranda of Understanding (MOUs) as well as qualifying authorized persons under the RKC and Authorized Economic Operators under Framework of Standards (FOS).

The introduction of the above techniques would represent a dramatic change from current approach. China and Thailand are already making a concerted effort in this area. The other GMS countries are proceeding more cautiously and to date have only managed to introduce a very limited version of green, yellow and red channels. Efforts by the World Bank in Vietnam, Cambodia and Lao PDR, as well as the ADB through its CBTA program, should accelerate the introduction of these techniques.

This component would complement on-going efforts by introducing a regional dimension to the activities. The component would encourage coordination among the Customs authorities in several areas of common interest such as:

- Sharing experiences in implementation of modern techniques such as risk management, data mining and business analytics;
- Identifying opportunities for collective action for programs such as Authorized Persons and Economic Operators and compliance incentives;
- Sharing of information on profiling and valuation; and
- Setting priorities for initiatives to facilitate intraregional trade.

The component's focus would be to provide senior customs management with a strategic understanding of the practical problems and opportunities inherent reform. This component would begin with a meeting of the leaders of the GMS Customs authorities to review ongoing efforts in customs modernization and to identify areas where collective action could advance the

objectives. At the same time, a proposal for conducting an opinion survey of shippers, and clearance agents to evaluate the current performance of Customs authorities would be tabled and a scope and timeline developed. The user survey would be undertaken under the direction of a survey expert familiar with trade facilitation issues utilizing enumerators from each country. The survey results would be correlated with previous gap analyses in order to identify the current areas of reform that should be given priority

Following this meeting, a study would be organized to explore, in greater detail, those activities where collective action could be utilized and the mechanism for organizing it. The study would involve specialists in organizational theory and customs.

The study and survey results would serve as a basis for identifying priority areas where reforms should be accelerated. They would be discussed at a second meeting of the leaders of regional Customs agencies. An action plan would then be prepared, identifying initiatives to be undertaken by the group by the individual customs authorities and as a group with ADB support.

The component's risks are that some of the undertakings may conflict with other efforts in the relatively crowded field of trade facilitation, or that the Customs authorities would be cautious in introducing changes in procedures. Therefore, it may not be possible to complete the interventions within a short time frame.

### *Component 2: Integrated Border Management*

An increasing proportion of the paperwork and procedures required for cargo clearance and the delays incurred at the borders are attributable to the OGAs rather than Customs. While the structure of these organizations varies from one country to another, they generally include representatives from the Ministries of Health and Agriculture as well as the agencies responsible for standards, food safety, drug enforcement and security. The OGAs are responsible for commodities on the Control, Regulated, and Prohibited list. Their roles change as this list is modified. Each agency has a separate mandate, but in many cases there are overlapping responsibilities.

The roles of the OGAs are likely to grow, not only to meet increasing concern over quality and safety of products being imported,<sup>7</sup> but also to ensure that exports meet the standards required by importing countries.<sup>8</sup> In order to improve detection of anomalies without increasing the delays associated with clearance and to encourage compliance, it is important to coordinate the activities among the OGAs and with Customs.<sup>9</sup> This coordination should extend to the submission and processing of cargo declaration forms as well as to cargo inspection.

The increasing use of ICT has created an opportunity to introduce single windows without the need to locate all agencies in one facility. Equally important, new technology can improve

---

<sup>7</sup> These problems are occurring more frequently in both developed and developing countries, e.g., the current concern over lapses in inspection procedures for food and drugs.

<sup>8</sup> As recent history demonstrates, individual shipments of substandard goods can have a serious impact on a country's trade.

<sup>9</sup> ASEAN has already introduced its Strategic Plan for Customs Development (SCPD) Program, which includes a major component on Customs -Government Agencies and Line Ministries Partnership to coordinate interventions in the cross border flow of goods in pursuit of their respective mandates.

compliance and transparency by providing shippers with better information on regulatory requirements, cargo clearance procedures, and status of cargo under clearance.

This component would involve a broad program of support for the OGAs to improve and integrate procedures. Potential activities would introduce several new technologies, including the following:

- Electronic Import Licensing System;<sup>10</sup>
- Single submission providing the information required for all of the OGAs;
- Electronic processing of this document including automatic notification of the OGAs according to the commodity classification;
- Joint scheduling of inspections, collection of samples and testing; and
- Common risk profiling database.

These processes would be supported by complementary efforts to encourage the OGAs to improve several internal processes, including:

- Introduction of risk management techniques;
- Development of partnerships with the private sector to improve compliance; and
- Monitoring efficiency and effectiveness of detection efforts.

The component would begin with an assessment of the strategies and techniques available for improving coordination among the OGAs. This assessment would provide input for a regional workshop to identify priority areas and prepare a list of donor and Government-supported efforts that could be mobilized. A scoping effort would follow that covers several tasks, including the following:

- Map the responsibilities of each OGAs and the commodities for which they are responsible;
- Inventory documentation, processing activities and inspection procedures for these OGAs;
- Determine the willingness of the OGAs and related ministries to reform their cargo clearance procedures;
- Select a list of initiatives for each of the OGAs along with priorities; and
- Prepare a budget and timeline for these initiatives.

Undertaking these activities is expected to require 10-12 months. The leadership in this effort should come from a senior Ministry in each of the GMS countries that is able to coordinate the participation of border management agencies.

The second phase of the component would involve implementation of those initiatives with the highest priority. Since these initiatives seek to change procedures at the agency level, they can be undertaken as separate activities by each relevant agency. The objective of the component is to improve interagency coordination, so the new procedures should be introduced jointly as part

---

<sup>10</sup> The administration of permits, clearances, licenses and similar authorizations issued by OGAs and required for Customs clearance can be integrated into an Electronic Import License System (EILS) linking all of the participating agencies.

of the pilot projects at designated border crossings. The core budget for this phase is estimated to be around \$10 million. It is anticipated there would be a variety of sources of funding and participation by a number of donor organizations and Government agencies that would allow for a significant expansion of this budget.

The component would provide several important benefits. They include:

- Lower transaction costs by converting the OGAs' paper-based procedures to electronic processing and from multiple documents to a SAD;
- Shorter cargo clearance times through joint inspections;
- Better enforcement through sharing of data among border management agencies; and
- Better enforcement through private-sector compliance programs.

This component would complement those activities proposed for improving Inspection and Quarantine. This structure assumes that the Customs authorities will continue to be the lead agency in coordinating border management. One of the risks is that should this not be the case, turf battles could develop such as those in Cambodia and China. Another risk is that the disparities in the capacity of the individual OGAs would prevent them from collaborating or introducing the necessary IT systems.

### *Component 3: Customs IP Module*

Improvements in compliance can be achieved when shippers, forwarders and clearance agents become more familiar with the requirements of their trading partners' border agencies. An increase in familiarity would require the development of a common, easily accessible source of information on trade regulations and procedures for GMS countries. This component proposes to develop such a source via a website that is part of the GMS-IP. The website would feature a system for indexing documents (permits, clearances, licenses), regulatory procedures and other requirements for each GMS country based on the HS commodity code.

The module could also offer a secure system for transmission of cargo information from the country of export to the country of import. The information could support pre-arrival clearance, and release upon arrival. Customs administrations would be more confident in facilitating the clearance of arriving goods if they can obtain detailed goods declaration from a secured source in advance. The information could also be used to facilitate transit movements. At present, a photocopy of the export declaration in one country is required as a supporting document for transit to another country.

The same module can also serve as a secure medium for exchange of risk profiles and commodity valuation between Customs administrations. The information that could be exchanged includes several critical issues, such as the following:

- Anti-price fraud data or statistical ranges of valuations by HS Codes;
- Export declarations of one country transiting to another for confirming legitimacy of transit applications;
- Temporary exports of one GMS country for temporary admission to another; and
- Regional gold cards issued for companies operating in two or more GMS countries.



A technical subcommittee would coordinate the development of this module, and the GMS-IP technical staff would design and program the module. Data would come from the GMS customs authorities.

This component would assist in formulating software applications for the module including a technical regional workshop to reach consensus on those applications that should be given priority. Time needs are anticipated to be 10-12 months for development of the module and an additional year for securing the cooperation and inputs from different Customs administrations.

The principal benefits of this component would be increased compliance by traders, shippers and better compliance management by the Customs administrations, as well as potential clearance of imported goods on arrival. The risk is that the Customs administrations may be reluctant to share what they see as proprietary information or to accept the liability attached with sharing this information.

### **Inspection and Quarantine Initiatives**

The strategic objective regarding Inspection and Quarantine measures is to improve trade facilitation by reducing the need for inspection and quarantine at the border. The initiatives would focus on progressive implementation of the WTO Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements by those GMS countries that are WTO members, and the adoption of similar disciplines by Lao PDR, which is in the process of WTO accession. These initiatives are meant to encourage best practices in Inspection and Quarantine as shown in the box on the following page.

Technical capacity in SPS varies considerably among the GMS countries, especially inspection and quarantine. The countries with the greatest international trade exposure (Thailand and China) are the most advanced in SPS and have most of the necessary institutional and legal framework in place. The other countries are less advanced, with the exception of certain food and agricultural sub-sectors that are export-orientated and already comply with the health and safety measures of their trade partners, primarily Organization for Economic Cooperation and Development (OECD) member countries. Good examples of this are fish export from Vietnam and Myanmar.

In this area, the principal objectives are to move physical inspections away from the border, and

### Best Practices in SPS

**Food Safety** – For any food safety program to work it must adhere to 5 basic principles (i) knowing where the food and feed comes from and how it was produced (traceability); (ii) having an integrated agricultural health safeguarding system in place (through Food Standards Agencies); (iii) applying risk analysis; (iv) using hazard avoidance procedures in production and processing; and (v) having a broad based institutional approach in food safety.

**Import/Export SPS Measures** – The importation of food and agricultural products can be compartmentalized into three activities (i) prevention (which is the best approach); (ii) early detection; and (iii) rapid emergency response to risks or hazards that may occur. Domestic agro-based production for exports should utilize SPS measures to deal with pests and diseases already present or endemic in the country and to ensure the proper use of pesticides and veterinary products to confirm that the supply chain is hazard-free.

**Regionalization** – The implementation of SPS measures can be carried out in specific geographic areas rather than confined to national borders. Regionalization or zoning is a risk management option that requires mutual trust and confidence between member nations and meets the provisions of Article 5.6 of the SPS Agreement.

**Risk Analysis & Assessment** - Risk assessment is an efficient and effective tool for identifying non-compliance and ensuring that known compliant traders benefit from limited or no inspections. The competent authorities (OGAs) provide information for risk assessment work and perform diligence to ensure that an importing company or retailer has taken all reasonable precautions to avoid any hazards that may be detrimental to human health.

**Accreditation and Certification:** Accreditation enhances customer confidence in consumer products as well as in testing and calibration reports. Accreditation within a trading block will provide uniformity in quality management, laboratory systems and hazard avoidance. It will also address environmental and social responsibility concerns. Some Certification examples are in ISO9001 (quality management), ISO17025 (laboratory systems), Hazard Analysis Critical Control Points (HACCP) and Good Manufacturing Practices (GMP). In a trading block the best practice is to achieve accreditation through mutual recognition and application of internationally recognized standards.

**Private Sector Involvement** – The private sector has a role to play in (i) contributing to standard-setting at the national and international level (ii) complying with food safety and agricultural health requirements as well as complying with TBT standards (iii) obtaining certification for production, processing and manufacturing activities (iv) building capacity in SPS management and product analysis and testing, through private sector quality assurance (QA) programs (iv) creating an effective lobby to encourage the public sector to implement its SPS management responsibilities and developing secure supply chains and (v) the development and maintaining pest free areas.

**Competent authority:** Government agencies have jurisdiction over specific activities and are designated as responsible for performing the duties arising from directives, laws and decrees. Any authority must have the following attributes: (i) a clear mandate (ii) commitment (iii) competence (iv) efficiency (v) transparent procedures and integrity.

to reduce the number of inspections without sacrificing animal/plant health or food safety. For some GMS products, particularly food products, the inspection rate is 100%. Even Thailand and China show very little flexibility in the rates of inspection and examination of agro-based products from other GMS countries. This reflects a lack of confidence among GMS countries regarding the SPS standards of trade partners. A reduction in inspections can only be achieved by using risk intelligence and assessments to targeting consignments for examination. Such intelligence is based on analysis of available data on shipments and shippers (including exporter in-country inspections), as well as timely exchange of information between Government institutions and with private sector traders.

The SFA-TFI provides a regional blueprint for action on SPS and TBT measures, but provides flexibility for each GMS country to formulate individual action plans toward achieving common objectives. The proposed project is meant to address current constraints including: (i) weak



intra-GMS coordination and communication; (ii) poor risk management; (iii) sub-standard compliance testing laboratories; (iv) limited mutual recognition between laboratories in GMS countries; and (v) inability of producers and SMEs to afford the cost of hazard avoidance certification. It would have four components:

- Feasibility and design of an SPS module for the GMS-IP;
- Technical support for risk management;
- Mutual recognition and support for SPS laboratories; and
- Support for hazard avoidance legal framework and SME compliance.

These components, which would be implemented over a 24-month period, are described in the following paragraphs and in more detail in the Sector Report on Inspection and Quarantine.

### *Component 1: SPS IP Module*

At present, communication and information sharing on SPS issues among regulatory agencies in the GMS countries is poor.<sup>11</sup> Unless this problem can be resolved, the identification of risks and hazards within the sub-region will continue to be weak. Continued doubts about the reliability of the limited information that is transmitted among the GMS countries will lead to even more inspections. There is need for monitoring and surveillance of pests, diseases and hazards in food, and improved sharing of information among countries.

Some national SPS information systems do exist but they are usually not comprehensive. As a result, both the quantity and quality of public information on risks, hazards and importer/exporter non-compliance is low. In addition, private sector information is rarely used when determining whether to examine cargo. The problem of insufficient information extends beyond the agencies concerned with inspection, quarantine and SPS to agencies that regulate agricultural health and food safety. The result is a lack of a coordinated and consistent approach on critical SPS issues, particularly the following:

- Pest categorization and distribution;
- Pest risk assessments, surveillance and monitoring;
- Exporter/importer profiling for compliance and certification; and
- Non-conformity issues and notification of unsafe and defective products through a rapid alert system.

This component would develop an inspection and quarantine module for the GMS-IP that would assist in improving communication among GMS agencies and would provide greater transparency of the risk analysis process. The module would require a significant effort because of the number of government agencies involved in SPS matters as well as the wide range of information that would be collected, including that provided by agencies outside the GMS. An initial scoping effort would be undertaken by a team including an international expert. The team's activities would include the following:

---

<sup>11</sup> At present GMS project information is placed on an ADB website, since the GMS project does not have an independent website or the staff and infrastructure to support an information platform.

- Identification of the government agencies that would implement and act as the conduit of information;
- Resource audit of the proposed implementing agencies to determine capacity to undertake the national communication role;
- Identification of specialists from relevant agencies to collate and update information;
- Prioritization of information requirements as well as an assessment of the information that could be practically supplied in the short term;
- Identification of the capacity-building requirements for information;
- Recommendations concerning qualifications and responsibilities of agency personnel that would coordinate, update and send input to the module;
- Definition of the role of and information to be provided on the Inspection and Quarantine public website;
- Determination of mechanisms to be used by companies to raise alerts through their own QA programs;
- Determination of mechanisms to be used by consumers to raise alerts through a complaints procedure; and
- Development of proposals for study visits to evaluate other international information sharing platforms.

Based on the results of this scoping exercise, a GMS-IP SPS/TBT technical committee would be established to design the module concept. This technical committee would determine both the scope of the information available for the module and the scope of information that would be offered to different categories of website users. A sub-committee would be established, including representation from each of the national agencies concerned with enforcing SPS/TBT measures, to draft of MOUs to supply specific information on a timely basis.

The GMS-IP staff would design and program the module, establish the communications protocols with the various government agencies and collect public information for the website. The component is expected to require 12-15 months.

The benefits of the module would include:

- Improved risk assessment on the basis of information provided by GMS countries;
- Improved risk profiling and rapid response to risks; and
- Improved transparency among countries and greater private sector trader information.

The risks are considerable because of potential problems at the national level, e.g. agencies having overlapping responsibilities and lacking clear mandates, and commercial confidentiality issues for some required information. At the regional level, there is lack of national leadership in the area of Inspection and Quarantine.

## *Component 2: Risk Management*

The overall aim of risk management<sup>12</sup> is to identify consignments that may present a risk or hazard if imported. Although risk management has been or is now being incorporated into legal frameworks in the region, and although implementing agencies have shown a commitment to the process, there remains limited flexibility in the inspection and examination process. This applies even in cases where a risk assessment has been done and the necessary hazard and traceability certifications have been provided by the shipper to the border agencies.

There is need for monitoring and surveillance of pests, diseases and hazards in food, and improved sharing of information among countries.

Component 2 aims to assist in the development of a standard interpretation of SPS risk management within the GMS and the introduction of sound risk management practices that would allow flexibility in inspection and quarantine methods. The initial phase would include the following three activities:

- A risk management workshop with private sector speakers that would explain several key concepts, including
  - a. The rationale behind risk management;
  - b. The use of OGAs information and intelligence;
  - c. Private sector due diligence work in the risk management process; and
  - d. The process of introducing intervention by exception.
- Technical assistance in risk management to include:
  - a. A regional program for in-country training;
  - b. Evaluation of the existing legal framework associated with risk management in the GMS countries, to ascertain mechanism for further harmonization;
  - c. Assessment of the current level of risk management and scope for flexibility in the inspection process; and
  - d. Examination of the role of the private sector and mechanisms to incorporate due diligence audits into the risk management procedure.
- Risk management seminar/training session to prepare a plan for implementation and further action.

The findings and recommendations from the first phase would provide the basis for a program of continued assistance in risk management. The program would provide assistance for preparing bilateral protocols on risk management for agro-based products that have sufficient trade volumes within the sub-region and for conducting inter-governmental meetings to finalize bilateral MOU's on risk management protocols. Continued training would include:

- Practical training based on scientifically-based risk assessment, including hazard identification and characterization, exposure assessment, and risk characterization;
- Presentation of the three pillars of risk analysis: assessment, communication and management; and

---

<sup>12</sup> The interpretation of risk management varies depending on the GMS country and the ministry or agency questioned.

- Introduction of ICT systems to support risk assessment by individual agencies and to improve communication among agencies.

These activities are expected to require 12-18 months. During this period, the scope and budgets for the national programs would be developed. The various ministries and agencies responsible for enforcement of SPS measures would participate in the implementation of the national programs.

Benefits from training and assistance in the process of risk management would result in multiple improvements, including the following:

- Reduced inspections for the cargo of compliant importers;
- Enhanced harmonization in the risk management process;
- Greater transparency in the process of risk management;
- Improved regional cooperation in risk assessments, particularly pest risk analysis
- Sharing of surveillance information;
- Less frequent border closures due to perceived risks; and
- Incorporation of private sector due diligence work in the risk management process.

The risks are similar to those facing the introduction of the SPS-IP module.

### *Component 3: SPS Laboratory Mutual Recognition and Support*

The objective of this component is to achieve mutual recognition of SPS analytical/biochemistry laboratories throughout the GMS in order to avoid duplication of testing and instill confidence in laboratory results. It would also address problems regarding:

- Equipment for more complex testing protocols that is antiquated or sometimes not available (even in some internationally accredited laboratories in Thailand); and
- The ongoing debate regarding whether Chinese, Thai and Vietnamese accreditation agencies and boards have the capacity to certify laboratories in other GMS countries.

Cooperation among national accreditation services in the GMS is important in order to harmonize the quality of test results, instill confidence in such results within the region and avoid repeated and duplicative analysis and diagnostic work. If mutual recognition of the laboratories and their testing procedures is achieved it would reduce transaction costs especially for regulated and controlled commodities.

Testing procedures and the range of tests required is becoming increasingly more complex. International SPS standards are becoming more stringent and labeling requirements are becoming an increasing barrier to trade. Tighter requirements present a problem for the GMS countries since many of them do not have the laboratory equipment or reference samples that can determine the presence of several elements prohibited by or of concern to importing countries. The use of multi-test equipment is limited to the most modern laboratories, even in the more advanced GMS countries. The substances of concern include the following:

- Genetically Modified Organisms (GMO);

- Minute levels of stabilizers, preservatives, sweeteners, additives and colorants in food and feed;
- A wide range of antibiotics and pharmacologically active substances in meat and fish products; and
- A wide range of pesticides used on agricultural crops.

The time required for sampling and analysis of goods presents another problem. Often, testing laboratories are located far from the borders, requiring significant time to transport samples and confirm results.

For this component, a decision would be made regarding whether to establish independent internationally recognized laboratory accreditation agencies in Myanmar, Lao PDR and Cambodia, or to utilize existing GMS agencies to certify laboratories and their SPS testing procedures in those three countries. The former option requires building capacity to certify tests of animal, plant, food and feed products to meet international quality standards. The eventual aim would be for Myanmar, Lao PDR and Cambodia to join the Asia Pacific Laboratory Accreditation Cooperation (APLAC) as full members. The decision to establish these agencies requires the formation of a laboratory accreditation working group and mobilization of a regional consultant with experience in SPS measures, ISO 17025 certification and knowledge of APLAC.

The component would implement the findings of the working group discussed above and would also strengthen local testing capacity. Strengthening capacity would begin with an assessment of the equipment needs of key laboratories throughout the GMS. A program would then be developed to upgrade lab equipment to keep pace with the increasing complexity of trade-related testing requirements. Acceptable equipment must be able to detect minute levels of contaminants and test or screen several samples at a time, all within minimal time and cost requirements.

The time required for the component, exclusive of equipment procurement, laboratory rehabilitation and ISO 17025 certification, is expected to be 8-12 months. The participating agencies would be those involved in laboratory accreditation and certification in the GMS countries.

The benefits of SPS Laboratory Mutual Recognition and Support activity would include:

- National and international recognition of conformity test compliance;
- Reduction in technical barriers to trade through improved conformity assessments;
- Elimination or at least reduction of duplicate tests in the importing country; and
- Incorporation of reliable lab tests in the risk assessment process.

The risks for this component are those common to any attempt to build sustainable technical certification including continual upgrading of laboratories to meet new testing requirements and quality reassessment to retain certification must be continual.

#### *Component 4: Support to Hazard Avoidance Legal Framework and SME Compliance*

The removal or avoidance of hazards in the food chain is becoming a priority for most GMS governments. Increased attention to this issue has emerged because of (i) recent food safety

scares and alerts that have occurred and (ii) the increasing number of visitors to the Mekong region. At the same time, OECD countries are placing an increasing emphasis on private sector participation in risk management, specifically through the company or trader due diligence process. Such due diligence work usually involves visits by the private sector buyers to inspect the sites of production and processing, and review and collation of health, safety and traceability information.

The HACCP concept is meant to ensure that food processing is hazard free or that hazards that are identified are eliminated before the commercialization of the final product.<sup>13</sup> The use of hazard avoidance certification in the GMS food processing industry will be a major contribution toward removing or avoiding risks in the food chain and reducing morbidity levels from food- and water-borne diseases. HACCP compliance can be used as part of the risk assessment to determine whether further testing, inspection and examination is advisable for imported food products.<sup>14</sup>

The increasing prominence of HACCP certification means that production and processing plants that cannot afford compliance are being marginalized in the international market. This is a particular problem for SMEs, a large proportion of which do not have the financial resources to gain HACCP certification.<sup>15</sup> The objectives of this component are (i) to harmonize GMS food laws to include compulsory hazard avoidance compliance for food processors and (ii) to examine the feasibility of supporting SMEs in obtaining compliance and in undertaking due diligence activities. The latter would be achieved through Business Development Support (BDS) cost sharing programs. This requires the identification and cooperation of a Participating Financial Institution (PFI) or through the formation of a BDS development fund that would be independent of government ministries. The initial phase would involve mobilization of experts in several tasks:

- To review GMS food laws and highlight deficiencies with respect to hazard avoidance compliance and to recommend amendments;
- To review existing GMS Government institutions and agencies that offer financial support to SMEs, with emphasis on the food processing industry;
- To identify specific subsidies and cost sharing programs to assist SMEs;
- To determine which future food safety projects would have impact on any GMS BDS initiatives; and
- To make recommendations on BDS cost sharing support in each GMS country.

These reviews can be completed in 8-12 months. The amount of funding required in an individual country for an effective facility that would finance SME certification will depend on the number of SMEs that can benefit from this service, the need for consultancies, and capacity

---

<sup>13</sup> The European Union introduced new food hygiene regulations on 1 January 2006 that requires all food businesses within the EU to operate food safety management procedures based on HACCP principles. The USA is increasingly requesting importers to ensure that the foreign processing plants are HACCP certified. The HACCP principles are incorporated in the Codex Alimentarius quality and food safety codes.

<sup>14</sup> There is already an obligation as part of the ASEAN Food Safety Improvement Plan (AFSIP) that ASEAN members should have hazard avoidance procedures for food processors in the form of HACCP incorporated in the member nation's legal framework by 2010.

<sup>15</sup> A typical audit with related corrective action can cost between US\$10,000-\$100,000. The final cost depends on whether the auditors are national, regional or international and the number of visits needed to ensure the full corrective actions have been undertaken.



building that is required for the PFI's fund management and administration charge. The time required to set up such funds would be 12-15 months.

Any amendments to GMS country national food laws would require the participation of the respective Health Ministries. The Ministries may delegate the work to their respective Food and Drug Administrations, if they exist. Any BDS support would require the participation of Ministries of Commerce and/or Finance. The only exception is Vietnam where the Ministry of Trade has the mandate to monitor the export of goods and their labeling.

The benefits of efforts to support the legal framework for hazard avoidance and SME compliance include the following:

- Improved safety for GMS food products;<sup>16</sup>
- Less scrutiny of products exported to other GMS countries;
- Greater sub-regional confidence in food products;
- Harmonization of food laws with respect to food production hazard avoidance;
- Enhanced food safety awareness;
- “Trickle down effect” of hazard avoidance at the production base (agricultural raw material supply); and
- Improved risk assessment process.

The primary risks confronting this component are:

- Difficulties of introducing changes in laws especially within the context of regional harmonization;
- Problems with setting up a financing mechanism that is attractive to SMEs; and
- Willingness of government to provide financial support to the private sector.

## Logistics Initiatives

Efforts to improve trade competitiveness may require changes in regulations. However, it is often possible to reduce time and cost for delivery of goods and to increase the reliability and security of supply by improving the quality of logistic services. Such improvements are generally achieved through the efforts of both buyers and manufacturers. Buyers reach back through the supply chain to reduce their order cycles and costs of storage. Manufacturers reach forward in their supply chains to reduce delivery times and improve order fulfillment as well as to reduce the cost of production and storage. Both efforts improve supply chain performance by improving the performance of individual logistic activities, increasing control and coordination of these activities and introducing new value-added services.

The following paragraphs describe a project to strengthen the logistics sector and improve supply chain management in the manufacturing and retail sectors. This project contains three components. Principal among these are a public-sector effort to develop a national action plan

---

<sup>16</sup> Diarrhea was the second highest cause of morbidity in Cambodia in 2000. In 2001, Government of Vietnam estimated that more than 4.2 million people suffered from food-borne diseases, with an annual economic loss of some \$34.5 million.



and a private-sector effort to improve management capacity. In addition, there are initiatives to develop new approaches to cross-border movements of cargo and to manage special-purpose supply chains. Finally, there is a proposal to develop an IP module to support cross-border logistics arrangements. These are also described in more detail in the Sector Report on Logistics.

### *Component 1: Freight Logistics Action Plan*

While concern for improving logistics has been a major theme in trade facilitation for a number of years, governments have had difficulty determining how to contribute other than through capital investment in transport infrastructure and improvements in public transport services. This is because logistics is a private sector service industry that responds directly to the profit-based incentives of the manufacturing, retailing and trade sectors. Its focus is to use available infrastructure efficiently rather than to develop new infrastructure. Government does have a role as a regulator, but this is generally limited to issues of public safety and business environment.

Nevertheless, government can contribute to improvement of logistics through policies aimed at simpler and more transparent procedures, ease of entry and incentives for integrating services and providing value-added services. It can also act as a provider of:

- Trade-related information among countries; and
- Land and/or facilities for establishing logistics hubs.<sup>17</sup>

While there is general agreement that GMS countries need to develop national action plans in the area of logistics (in fact Thailand was in the process of completing one at the time of this report), the objectives and scope appropriate for such plans have yet to be defined. The provision of basic public infrastructure is best done as part of a government's long-term planning to support economic growth. In contrast, a logistics action plan should be strategic and therefore short-term in focus. It should identify critical bottlenecks that can be eliminated through changes in operations or small, short-term investments, but otherwise focus on incentives for improving quality of services. The latter might include private sector investment in logistics facilities such as warehouses, truck terminals and modern trucks/rail wagons.

The development of a national action plan requires considerable coordination among governmental agencies. It is important to involve the Ministries responsible for transport, communications, commerce, industry and border management. It is also important to have active participation by the private sector, including providers of logistics services (i.e., transport operators, freight forwarders, and consolidators) as well as users of these services (i.e., manufacturers, retailers and traders). Such a wide range of stakeholders makes it challenging to achieve consensus on a manageable set of initiatives. For this reason, it is necessary to have strong leadership, preferably by a Ministry that has the authority to direct the participation of other ministries.

---

<sup>17</sup> Logistics hubs could serve a wide range of functions including interchange between transport modes or between linehaul and local transport, consolidation of shipments and distribution of goods, clearance of international cargo, and assembly/customization/packaging of goods.

Although logistics affects many activities within an economy, a national plan should limit its scope to specific types of supply chains such as major international trade corridors, national distribution networks, or farm-to-market delivery systems. Since the demand for logistics services and the ability to deliver them vary considerably based on the size of enterprise, it is important that the plan consider both large enterprises and SMEs.

Once the scope of the plan has been defined, an assessment of the existing situation should be prepared. This can be done using supply chain analysis to identify bottlenecks and areas in which there is potential for significant efficiency gains. At the same time, demand for logistics services should be evaluated. Traditionally, this demand has been for minimum delivered cost, which implies using individual services, e.g., transport and warehousing, provided at the lowest cost. More recently, attention has shifted to integrated services that add value by reducing time and/or increasing reliability. In the GMS countries, most domestic logistics service providers and their clients focus on cost minimization, while international logistics, manufacturing and retail companies focus on adding value.

A sample task schedule for preparing an action plan would be as follows:

- Define goals and scope including trade routes to be examined (1-2 months);
- Assess current performance in terms of cost, time and reliability for major corridors and trades and sensitivity of demand to these three parameters (2-4 months);
- Identify bottlenecks and institution-building requirements (1 month);
- Scope out possible initiatives and prepare supply chain/corridor scenarios (2-3 months);
- Set priorities for the initiatives and determine their resource requirements, risks and provisional timeline (2 months); and
- Prepare and approve a final plan (2 months).

Since the concept of a national logistics action plan is relatively new in the region, donor-provided technical assistance may be appropriate. While there is considerable local experience in measuring supply chain performance, there is less experience in improving that performance or using value-chain analysis to prioritize improvements. Similarly, while there is awareness of the different weights given to cost, time, and reliability for individual trades, there is usually insufficient appreciation of the competitive implications and potential market opportunities created by reducing time and increasing reliability.

In the GMS region, workshops would be used to develop a common set of objectives and approaches for the national plans. A regional mechanism for coordinating plans affecting cross-border movements would also be developed. At the national level, workshops and other assistance would be used to develop the scope, organize the initial assessments and assist in preparation of final plans. The total time needed to develop a plan would depend on how fast individual countries are able to organize this effort, but it should not exceed one year.

The benefits from this component can be considerable if the countries are able to develop and implement effective policies and incentives. At the same time, risks are significant since the component requires substantial and effective collaboration between government agencies and between the public and private sector.

## ***Component 2: Institution Building***

The logistics industry in the GMS countries has demonstrated a reasonable level of flexibility in adjusting operations and services to meet the needs of its clients. However, it has not evolved beyond providing relatively simple services. At the same time, the industry's clients have not advanced beyond the traditional business strategy of minimizing the delivered cost of goods. In order to move both the logistics industry and its clients to the next level (integrated logistics), it will be necessary to demonstrate to both that enhanced logistics will improve competitive positions in both local and international markets. This component would address this issue by providing targeted training for the management of both 3PLs and the manufacturing and retailing sectors.

Training would include seminars for CEOs and COOs, workshops for senior managers, and multi-week training courses for line managers and professionals in logistics industry. Much of the content for this training would be developed at a regional level and then tailored for individual countries. Seminars and workshops would use international and regional experts from industry and academia. Training courses would utilize a mix of national and regional experts presenting training materials developed by international and local organizations that have been upgraded for mid-level practitioners and higher.

The component would attempt to develop a sustainable effort in capacity building by working with local business associations to create an annual program of seminars. In addition, business associations and academic institutions would be encouraged to establish short-term management courses within a university framework.

The tasks to be performed in this component include:

- Needs assessment/market analysis to determine both the knowledge gaps and level of interest at the senior management level;
- Identification of institutions to participate in the presentations;
- Recruitment of foreign and local presenters;
- Preparation of the core content;
- Delivery of the initial round of presentations;
- Development of a business model for sustaining these efforts; and
- Transfer of these materials to the institutions that would continue the program.

The first four tasks could be conducted in parallel and are anticipated to require 4-6 months. The latter steps would be conducted over the next 6-8 months. Since this component is designed to upgrade the skills within the private sector, leadership would ideally come from business associations such as the Chambers of Commerce and/or Freight Forwarders Associations. For each country program, the assessment and additional content development and presentation would extend over 8-12 months, after which local institutions on a fee basis would present the courses.

The objective of these activities is to stimulate demand for new approaches in logistics and begin the transition of the industry to the next tier. Risks include lack of interest from CEO's of the larger companies (for example, if the presenters for the executive seminars lack recognized

expertise and/or skills) or lack of free time for senior management to attend the courses. In order to mitigate the risk, the process for selecting experts would need to be carefully planned to make the seminars as compelling as possible.

### *Component 3: Logistics Module for GMS-IP*

The third component would support development of a logistics module for the GMS-IP to be used primarily by the private sector as a source of information on regional logistics services. The information provided would:

- Facilitate cross-border B2B transactions;
- Identify availability and costs of services at the international gateways;
- Evaluate performance levels for border crossings, corridors and gateways; and
- Locate websites providing information on the documents and regulations for transit, import and export shipments within the GMS.

Much of the information for this website is already publicly available, however, some is not readily accessible. None of the performance data is currently reported. Therefore, it would be necessary for the GMS countries to agree on the information to be provided through the module as well as the mechanism for collecting data that is not currently available. The component would provide assistance for cataloging the current sources of data and designing procedures to collect additional data. Workshops at the GMS level would be held to specify the data that would be maintained in this module, the formats and protocols for exchanging the data and the rules regarding data use and access. The component would also finance the design and preparation of the module, and the website that would provide shippers and 3PLs with access to this information.

This component is expected to require 12-18 months of effort. The benefits would be better information on the choices available to shippers and logistics service providers, leading to improved performance and lower costs for supply chains. The risk is that the government will be reluctant to share data on performance or to provide information on the performance of public infrastructure.

### *Component 4: Constructing and Auditing Special-Purpose Supply Chains*

Each of the GMS countries faces a significant challenge in developing reliable supply chains to meet the increasingly demanding requirements of their major export markets. Market trends indicated growing demand for more sophisticated transactions, including traceability from point-of-production through to point-of-sale, verification of the security of the cargo as it moves through the supply chain and conformance with environmental requirements especially in the case of perishables. The challenge is not only to construct supply chains that can meet these increasing demands, but also to audit performance to ensure that the standards are met.

This component would provide assistance for export manufacturers and 3PLs in setting up their supply chains, and also for the government or business associations to establish an audit capability. For both efforts, assistance would be in the form of technical workshops at the regional and national level. The workshops would provide training in the organization and

monitoring of special-purpose supply chains followed by pilot projects for setting up these chains and conducting audits. The longer-term goal would be to establish an organization responsible for certification of supply chains according to the standards promulgated by the major trading partners.

The tasks for this component would include the following:

- Market survey to assess the demand for specialized supply chains and to evaluate the capacity of the leading enterprises offering these supply chains;
- Workshops addressing the requirements of specialized supply chains;
- Demonstration audits;
- Strategy for institutionalizing the audit capacity; and
- Business models for these audit services.

The leadership for this component would come from private sector associations interested in increasing competitive advantage of and maintaining the reputation of their members. The Ministry of Commerce/Trade would support association leadership, as their activities would strengthen the country's trade and reduce the likelihood of shipments of substandard goods. The component is expected to take 18-24 months, beginning with regional workshops and concluding with the establishment of the institution responsible for audits.

The benefits from this component would be substantial. The failure to develop these special-purpose supply chains would result, at a minimum, in increased levels of inspection and possibly in the loss of major export markets. The component risks are those common to any attempt to create an audit capability, which is maintaining the integrity and professionalism of the audit activity.

### *Component 5: Border Exchange*

The CBTA annexes address issues surrounding the cross-border movement of vehicles and cargo. However, the introduction of customs procedures and protocols that expedite this movement has proved difficult not only for the GMS, but also for ASEAN and elsewhere. While it is important to continue with efforts to permit unrestricted cross-border movement, much of the GMS intra-regional trade does not require vehicles to cross the border. All that is required is an efficient exchange of cargo between vehicles at or near the border. The use of articulated vehicles allows for a rapid exchange of trailers and their cargo, which avoids the challenges of cross-border movements of the drivers and truck tractors. The use of domestic containers allows the transfer of cargo quickly with minimum risk of damage. Both involve a temporary admission (of the trailer and container), but this should be easy to arrange. Even without these options, it is still possible to transfer loose or palletized cargo between vehicles quickly and safely through mechanized transloading or cross-docking operations at covered facilities.

Each of these alternatives requires relatively low-cost facilities to be built at or near the border. They also require close coordination between transport operators on both sides of the border. Coordination should not be a problem assuming the transport operators utilize modern communications and scheduling techniques, and that access to the border is not congested.

The objective of this component would be to identify the most effective means of interchange for the principal cross-border cargo movements, and to provide facilities and procedures that allow an efficient interchange. Assistance would be provided to forecast the potential traffic and identify the most efficient alternative for serving this traffic. The component would also provide funding for facilities and equipment. The complete set of component tasks is:

- Prepare a traffic forecast and economic evaluation of cargo exchange alternatives;
- Prepare an agreement at the regional level concerning the acceptable methods of cargo exchange;
- Develop bilateral agreements to introduce the most efficient mechanism of exchange;
- Review regulations governing these operations and identify any necessary changes;
- Identify the facilities and equipment required to handle the projected cargo volumes; and
- Procure the facilities and equipment through public or private investment.

The leadership for this component should come from the Ministry of Transport in cooperation with the Customs agency. The first four tasks are expected to require 6-8 months. The final two tasks 12-18 months. These estimates include the time to secure the land, construct the facilities, procure equipment, and make the necessary modifications in border management procedures. The benefits of the component would be a reduction in the time required for crossing borders and damage incurred during exchanges, especially for perishables. The risks are that there would be delays in reaching a bilateral agreement and resistance to new procedures from border management officials who fear that such changes would reduce their informal payments.

### **Business Mobility**

In order to promote intraregional trade as well as international trade, it is essential that businesspeople be able to travel to the GMS countries with relative ease. The most effective way to achieve this is for the GMS countries to issue multiyear, multiple-entry visas. Most of the countries already provide some form of business visa, but the procedures for application vary, as do the conditions imposed on the visa holder. It is necessary not only to harmonize the procedures, but also to make them more efficient. In addition, it is important to incorporate conditions of use that maximize the flexibility for the business traveler.

Unfortunately, there is a trend towards making business travel more difficult, because of increasing concerns about security and illegal employment of foreign nationals. Therefore, it is important to develop a system for approving these visas that addresses current concerns as well as concerns likely to arise in the future.

The initial multiple-country, multiyear, multiple-entry visa should apply initially to business travelers from within the GMS. This would then be expanded to include businessman from outside the GMS. The following two project components are proposed to support this effort:

- Workshops to decide on the features of the business visa; and
- GMS-IP module to facilitate the processing of visa applications and the movement of visa holders.



These are described below and discussed in more detail in the Sector report on Business Mobility.

### *Component 1: Harmonization of Multiple-entry Visas*

There has been a substantial discussion on visa harmonization in the past, culminating in a workshop in December 2006 attended by representatives of UNCTAD. It is now time to move towards implementation of a uniform, multi-year, multiple-entry business visa for the GMS countries. For this purpose, Component 1 proposes a workshop to evaluate a proposal based on best practices among the GMS countries summarized in the box to the right. The workshop would be attended by representatives from the Ministries of Foreign Affairs and Internal Security for each of the GMS countries. The goal of the workshop would be to develop a consensus on a standard set of conditions and application procedures for business visas to be adopted throughout GMS. In addition, a schedule for adoption by individual countries would be developed.

This workshop should be conducted as soon as possible. This component could be completed within 6-12 months of the conclusion of the workshop. The benefits of this program would be substantial, as it would help to create a pro-trade environment for both goods and services. Despite the advances in telecommunications, business transactions require substantial face-to-face contact and flexible travel schedules. These visas would facilitate both. The principal risk is that some of the participating countries would be resistant or would change their requirements over time. For this reason, it is anticipated that the arrangements for the visas would be included as a part of bilateral trade agreements.

#### **Best Practices in GMS for a Multi-Year, Multiple-entry Business Visa**

|                      |   |
|----------------------|---|
| Application          | Embassy or Consulate<br>(Electronic submission)               |
| Supporting Documents | Letter of Invitation<br>Letter from Business<br>Digital photo |
| Duration             | Three years   |
| Passport             | Machine-readable, Valid for at least 3 years, one month       |
| Visit Restrictions   | 90 days per visit,<br>120 days per year                       |
| Privileges           | Special immigration lane                                      |
| Fee                  | US\$200 (electronic payment)                                  |
| Processing Time      | One week maximum<br>Expedited processing available            |
| Renewal              | Same procedure  |

### *Component 2: Immigration Module*

In order to facilitate the issue of multi-year, multiple-entry visas, it is important to have a means for exchanging information among the immigration and security authorities in participating countries. These authorities need to determine if a visa applicant appears on any security watch list, is wanted for any criminal activity, or has had a visa cancelled, or an application rejected in the past. This could be done through a direct communication among authorities but can be accomplished more efficiently, if there is a central point for communication and data storage as is the case for Schengen visas and APEC travel cards. The pooling of intelligence not only provides better oversight, but also faster response times. Furthermore, a central point of communication creates an opportunity for issuing multiple-country visas from a single location. Monitoring the activity of the visa holder would also be facilitated. Some information would be stored in the central database, but more sensitive information would be accessed through a query



system implemented through the central point. For both types of information, there would be a number of access controls to maintain the integrity and confidentiality of the data.

This component would prepare an immigration software module to maintain the central database and control access to additional information maintained by the security agencies. The functions to be performed by the module, either directly or through links with other IT systems, would evolve over time under the direction of a technical subcommittee. The initial design of the module would include functions and communication linkages to support the business visa program. The module would be developed following the agreement reached during the first component and would require 8-12 months to develop and make operational.

## **Summary**

A summary of the projects discussed above is presented in Table 1.3. Taken together, these projects involve a potential commitment of about \$50 million. However, it is anticipated that only a subset of these projects would be implemented in the short to medium term and not implemented in all of the countries, so that the actual commitment would be closer to \$20 million. The next step is for the GMS countries to assign priorities to these projects and to prepare a timeline for their implementation.

**Table 1.3: Summary of Proposed Projects**

| Project                          | Leadership                                    | Estimated Cost \$'000                   | Estimated Period Months | Benefits   | Risks  |
|----------------------------------|---|---|-------------------------|--|--|
| Information Platform             | Inter-ministerial Committee                   | 1,500                                   | 12                      | Improved communication between GMS countries in the area of trade facilitation | Reaching agreement to support a central facility and follow the recommendations of the center    |
| <b>Customs</b>                   |   |   |                         |  |  |
| 1 Intervention by exception      | Customs                                       | 400.                                    | 6-8                     | Reduce time at border  | Lack of political will, difficulties in changing customs officials behavior                      |
| 2 Integrated Border Management   | Senior Ministry                               | Phase I: 1,000<br>Phase II: 10,000      | 10-12<br>24-36          | Reduce delays, uncertainties and costs for crossing the border                 | Continuing turf wars, difference in level of preparedness of different agencies                  |
| 3 IP Module                      | Customs                                       | 500                                     | 10-12                   | Increase compliance  | Sharing “proprietary” information and indemnifying customs from inaccuracies                     |
| <b>Inspection and Quarantine</b> |   |   |                         |  |  |
| 1 IP Module                      | Lead I&Q Agency                               | 750.0                                   | 12-15                   | Intervention by Exception<br>OGA-Customs Coordination                          | Reluctance of customs agencies to share information or accept liability for information provided |
| 2 Risk Management                | Lead I&Q Agency                               | Phase I: 250.0<br>Phase II: 1,000-1,500 | 10<br>12-24             | More efficient inspection and improved compliance                              | Resistance of border officials to change in procedures   |
| 3 SPS Laboratory                 | Accreditation Agencies                        | 1,250.0                                 | 20-24                   | Improvement in quality of inspection and mutual recognition                    | Sustainability of accreditation process  |
| 4 HACCP Compliance               | Ministry of Health, Food and Drug Agencies    | Phase I: 300.0<br>Phase II: 15,000      | 8-12<br>12-15           | Improvement in food safety   | Inability of GMS countries to harmonize regulations  |
| <b>Logistics</b>                 |   |   |                         |  |  |
| 1 National Freight Action Plan   | Senior Ministry                               | 750                                     | 12-18                   | Elimination of bottlenecks, strengthening of logistics industry                | Too broad a scope, difficulty in getting Ministries to think outside of their “silos”            |
| 2 Institution Building           | Industry Associations                         | 550-850                                 | 8-12                    | Begin the transition of the logistics industry to the next tier                | Quality of consultants for addressing senior management  |
| 3 IP Module                      | Technical Subcommittee                        | 250-500                                 | 12-18                   | Greater transparency and competition   | Reluctance to monitor performance accurately   |
| 4 Special Supply Chains          | Ministry of Commerce and Chambers of Commerce | 1,000                                   | 18-24                   | Competitive advantage in trade of sensitive products                           | Maintaining integrity of audit   |
| 5 Cargo Exchange                 | Ministry of Transport                         | 300                                     | 18-24                   | Minimize delays and damage to cargo at border                                  | Resistance of border officials to change in procedures   |

| <b>Project</b>                | <b>Leadership</b>                          | <b>Estimated<br/>Cost<br/>\$'000</b> | <b>Estimated<br/>Period<br/>Months</b> | <b>Benefits</b>   | <b>Risks</b>  |
|-------------------------------|--|--------------------------------------|--|---|---|
|                               |  |                                      |  |   |   |
| <b>Business Mobility</b>      |  |                                      |  |   |   |
| Harmonize Multiple-entry visa | Ministries of Foreign Affairs and Security | 100                                  | 6-12                                   | Simplified and standardized procedure for issuing multiple-entry visa                     | Resistance of Security agencies to a common procedure |
| IP Module                     | Ministries of Foreign Affairs and Security | 350                                  | 8-12                                   | Simplification of application procedures and potential to introduce multiple-country visa | Unwillingness to share data                           |

## CHAPTER II. SPS

### Background

The GMS program is designed to enhance economic cooperation for the mutual benefit of its member states. Cooperation among the six countries in infrastructure development, trade, and investment, in tandem with national reform and market liberalization, is progressing. The GMS now wishes to build on the work undertaken to create a dynamic and vibrant trading block/economic community in Central Southeast Asia. In order to attain the goal of relatively free movement of goods across national borders and to promote trade facilitation, the inspection of goods must become streamlined and seamless between GMS countries. Any decision to inspect (examine) must utilize risk assessment methodology based on scientific principles and sound intelligence. Inspection will be improved through efficient information sharing and mutual recognition of each country's standards, hazard avoidance certification, analytical and diagnostic methods. The strategic objective regarding Inspection and Quarantine Measures is as follows:

*To achieve a greater degree of trade facilitation by reducing the need for inspection and quarantine at the border through progressive implementation of the WTO Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) agreements for WTO members and the adoption of similar disciplines for the GMS country (Lao PDR) which is in the process of WTO accession.*

To promote trade facilitation and investment, it is important that GMS countries “all sing from the same song sheet” by: (i) making more transparent their specific technical and quality standards including sanitary and phytosanitary measures; (ii) aligning and harmonizing standards or achieving mutual recognition across the GMS; (iii) promoting regionalization with respect to the containment and eradication of animal and plant pests and diseases and most importantly; (iv) having confidence in their respective inspection and quarantine measures and risk assessment, surveillance and management activities.

To realize these objectives, it is important that the capacity exists within each GMS country to manage the demanding work involved. It is also critical that such work is coordinated between the Customs agency and other ministries, agencies and bodies concerned with trade (OGAs), and that those institutions coordinate well in developing the relevant legislative, regulatory and administrative provisions.

The (SFA-TFI provides a blueprint for action for SPS and TBT measures, with flexibility for each GMS country to formulate individual action plans directed at the achievement of common objectives at the sub-regional level. Some countries particularly China and to some extent Thailand are moving ahead rapidly with SPS measures but the strength of the GMS is only as strong as the weakest link and there are many capacity and capability limitations to address.

## Regional issues and donor support

### *Regional issues*

The capability in SPS measures, inspection and quarantine varies considerably among the GMS countries; those countries that have had the greatest international trade exposure i.e. Thailand and China are the most advanced and have most of the necessary institutional and legal framework in place. In other countries compliance is only found in those food or agricultural sub-sectors that are export orientated and must comply with strict health and safety measures by importer nations, primarily the Organization for Economic Cooperation and Development (OECD) countries. A good example is Viet Nam's fish and fish products sub-sector.

There is still work to be undertaken by China, particularly with a review of existing laws and regulations, further controls and enforcement on food and drug safety and greater transparency in trading procedures and documentation. Thailand needs to revise some of its laws relating to food and quarantine in light of recent global developments and increasingly complex trading requirements.

China is moving relatively quickly with its trade facilitation activities<sup>18</sup> with most targeted to be completed by December 2008. The country wants to succeed in making GMS a reality by turning the GMS into a trading block with the free flow of goods. If collaboration is not improved considerably in assisting other GMS countries (Cambodia, Lao PDR, Myanmar and to a certain extent Viet Nam) to move faster, harmonize and become compliant, then the reality will be that SPS and TBT measures will remain disjointed within the sub-region, which would limit confidence in risk analysis, third country domestic surveillance measures and decision making between inspection and quarantine agencies, and would lead to weaknesses and safety issues in the supply chain and with it, inherent risks.

In order to improve SPS inspection and quarantine and other measures, the principal objectives are: (i) to move physical inspections off the border; and (ii) to reduce the number of inspections without sacrificing animal and plant health and food safety. For some GMS country products, particularly food, the inspection rate is 100%. Even Thailand and China show very little flexibility in inspection and examination for agro-based products from other GMS countries, reflecting a lack of confidence in the SPS standards of their trading partners. However, the SPS agreement does not provide for countries to have a zero-risk policy with regard to trade in agro-based commodities. Reductions in inspections can only be achieved by targeting consignments for examination by using risk management. This is supported by the use of risk assessments (including exporter in-country inspections), up to date information exchanges (not only between government institutions but also between the private sector traders) and information from importers in the risk management system.

Communication among GMS countries is weak. The mobilization of inspection teams to provide a risk assessment of field production, packhouses and processors is the only tangible practical activity, and that is on a bilateral basis. There is no central body within the GMS coordinating

<sup>18</sup> National Action Plan of PRC in Support of GMS SFA-TFI, January 2007

the information exchange, unlike ASEAN, the EU, and the North America Free Trade Association. Cross-border exchange of information must be further developed. This should include alerts for officials on the receiving side of the border concerning the arrival of shipments, their cargo classification and the parties involved in their production and shipment. This profiling should be extended to include information on product compliance with health and quality standards, the analysis/diagnostic work undertaken and whether the processor or manufacturer has relevant, up-to date compliance information. This information will drive the clearance and the decision to inspect/examine.

The customs, inspection and quarantine standards and procedures applied vary by GMS country, due to limitations in resources and differences in capacity. Notwithstanding, these processes should be compatible and, where possible, consistent with international best practices. Current differences including the following:

- The capacity of inspectors from the Ministry of Agriculture and Fisheries and Ministries of Health to identify pest problems and risks due to non-compliance;
- The capacity to fumigate, destroy or place in quarantine, which for fresh, perishable and living goods signifies quarantines facilities. The majority of border crossings do not have such facilities. Where there are problems with health and safety, the goods are returned but this is infrequent;
- The ability to have a quick turn-around on any analysis or diagnostic work that is required and whether the analysis is mutually recognized by the parties in the product exchange; and
- The updating of inspection of quarantine agencies on any risk assessment and intelligence received that would warrant full inspection or destruction.

For clearance procedures, the burden is placed on the private sector to declare a product's standard, condition, pest free status, origin and manufacturer. Such information provides the intelligence that is an integral part of risk management. However, in some countries (in particular China and Cambodia) the private sector's risk assessment work in the form of due diligence is very rarely taken into account. Within the GMS countries' legal framework, increasingly the private sector food, pharmaceutical and cosmetic manufacturers are obliged to obtain good manufacturing and hazard avoidance certification. The average cost of compliance can be a burden for SMEs, which are charged approximately US\$10,000-20,000 for a review with a single audit and limited compliance work. If there are non-compliance issues then the cost will rise accordingly. SME and small farmers will not have the financial resources to become compliant and as such will become marginalized from export opportunities.

All GMS countries will need to interface, regardless of the level of sophistication in measures and procedures. Mutual confidence in national procedures and methodologies is imperative, not only to reduce the shipment times but also to reduce transaction costs. It is important that the more advanced GMS countries assist others in standards development and systems accreditation, and in improving inspection and risk analysis procedures. It is the interest of the more advanced countries to bring all countries "up to speed" and to be mutually compliant.

To reiterate, the deficient sector outputs within the GMS (see Annex 1 for greater detail) are primarily the following:

- Weak intra-GMS coordination and communication;
- Variation in SPS awareness and capacity;
- Risk management not yet fully introduced and the interpretation of risk management varies between GMS countries;
- The laboratories in some countries are not internationally compliant and there is only partial mutual recognition between laboratories in GMS countries;
- Implementation and awareness of good agricultural and aquaculture practices is limited at the production base;
- Hazard avoidance is weak in the manufacturing and processing of agricultural products, food, drugs and cosmetics; and
- Inability of producers and SME to afford the cost of hazard avoidance certification.

The deficient outputs will lead a number of non-compliance issues. As a result, risk analysis and assessment as a tool for risk management is weak. This situation leads to increased food safety and agricultural health risks that impact the free flow of goods within GMS, as illustrated in the Problem Tree (Figure 2.1).

### *Regional Donor Support*

A great deal of work has been undertaken in capacity building and technical assistance as part of WTO accession, for SPS and TBT development, particularly through donor-supported ASEAN projects and international trade compliance. There is evidence of overlap and duplication of the limited resources in SPS capacity building, particularly pest identification and food safety in the ASEAN member countries. Annex 1, Appendix A details the main TA and projects undertaken by various donors and lenders over the last 5 years. Donors are aware of the need for coordination and collaborative efforts have been initiated in Cambodia, Lao PDR and Vietnam with the establishment or planned implementation of multi-donor trust funds.

The main donor support projects are the following:

**Food and Agriculture Organization of the United Nations (FAO)** has a program to improve food safety and its management in Cambodia, Lao PDR and Vietnam. Program activities include (i) obtaining ministerial-level endorsement for a coordinated farm to table approach (traceability) focusing on food safety and quality, and enhancing government capacity to implement the approach; (ii) strengthening the regulatory framework for food control; (iii) upgrading the scientific, technical and managerial capability of food laboratories and inspection services to provide sound monitoring, compliance and enforcement activities; (iv) increasing awareness about food safety among rural communities and enhancing the safety and quality of SME-produced food products in order to facilitate trade and reduce health risks; and (v) initiating or expanding food-borne disease surveillance. The FAO is also involved in strengthening compliance of SPS requirements to support expanded exports of fresh and processed fruits and vegetables (Phase II). In addition, the organization is working on improving the quality and safety of fresh and processed fruits and vegetables produced in



Thailand, through study tours of inspection and certification agencies, and through mobilizing consultants to improve food analysis.

The **FAO** is implementing a cross-border animal disease control project to establish a regional network for the surveillance of diseases. It is also establishing a disease control program with the aim of establishing disease free zones by 2010-2012 in both the Upper Mekong (including the 8 Northern Provinces of Cambodia) and Lower Mekong (Southern Vietnam and Lower Cambodia), concentrating on Foot and Mouth Disease (FMD) and Classical Swine Fever (CSF) and the containment of avian flu.

**AusAID's** SPS capacity building program supports ASEAN. The activities include the publication of an SPS awareness booklet, the diagnosis of particular plant pests and diseases, establishing pest reference collections, and improving pest risk analysis (PRA) capacity in ASEAN countries. Activities in animal health include a study of livestock trading in the region that identifies SPS barriers to trade and economically feasible means to overcome them. The program also continues the disease control programs in the Lower Mekong, targeting FMD and CSF, the latter implemented by FAO.

Through the Multilateral Trade Assistance projects in the sub-region, the **European Union** has been and is involved in creating awareness of the EU food safety legislation. The aim is to assist the private sector in exporting to the EU. This year the work is highlighting EU regulations on "food contact materials." Support will be given to the establishment of a rapid alert system under an ASEAN program linked into the EU rapid alert system, initially for fish products only. Training support is given to ASEAN members on risk management and on the awareness and significance of SPS and TBT measures. For ASEAN member countries that are also WTO members, assistance is provided on enquiry and notification points. The EC-ASEAN Standards and Quality Co-operation Program, which ended in 2005, assisted in the development of an ASEAN regional strategy for developing technical regulations, setting standards, metrology, accreditation and conformity assessment principles in the sectors of food products, pharmaceutical and cosmetics products, telecommunication and electronic equipment and services. The program also aimed to bring regional practices in line with WTO and EU policies. Under the EU-ASEAN Regional Integration and Support Program (APRIS) of which Phase II is scheduled to start in late 2007, activities will focus on the development and implementation of common ASEAN standards, conformity assessments, SPS standards and other technical regulations. These activities will work in specific sectors, in line with the Vientiane Action Program and modeled on EU systems where applicable. The outcomes will be supported by harmonization with international standards and the establishment of an ASEAN Post Market Surveillance system to ensure that technical regulations and conformity assessment procedures are implemented in practice.

The **United Nations Industrial Development Organization (UNIDO)** is developing in Thailand a model program and technical guidelines for food quality and hygienic practices. The program will be implemented in at least 15 Thai food-processing units. Activities will involve the transfer of knowledge on food quality and hygienic practices by providing advice and training to food manufacturing staff. The program will provide for the training of six standards officers in food chemistry, food science and technology, sanitary science for food processing plants and food microbiology. The program will also include the establishment of

a food analysis laboratory within Thai Industrial Standards Institute (TISI). In Cambodia, UNIDO is developing a technical assistance program (funded by Switzerland and Norway) that aims to facilitate SME market access and export capabilities by reducing technical barriers to trade. The project will focus on strengthening of standards, metrology, testing quality and conformity assessment, institutional structure and national capacities. The project objective is to upgrade the required technical infrastructure for metrology, textile/apparel, microbiology and chemical testing and calibration needs in industry. UNIDO's Cambodia program will also strengthen system certification capacity and Standards, Metrology, Testing and Quality (SMTQ) institutional service capability. During 2007-08 metrology laboratories in Vietnam will be certified to international standards at a cost of \$50,000. The cost does not include the annual reassessment.

The **New Zealand's Agency for International Development (NZAID)** funds a multi-year project entitled "Phytosanitary Capacity Building Project for the Mekong Region". Under the auspices of that project, NZAID contracted the FAO Legal Office to provide legal assistance to the Government of Cambodia. The objectives of FAO assistance for this project are (a) to assist the Government in the review and assessment of existing legislation on phytosanitary matters; and (b) to draft, in collaboration with national counterparts, a model regional law (for Lao PDR, Myanmar and Cambodia) on phytosanitary matters to enable the four countries to meet international standards. The University of Queensland is implementing the project from 2006-2009. The project will improve access to agricultural export markets for Cambodia, Lao PDR, Myanmar and Viet Nam (CLMV) by increasing the capacity to identify, monitor and respond to plant pests and disease problems. Although the project does cover Vietnam, the majority of the capacity building activity is being undertaken in Cambodia and Lao PDR.

**Canadian International Development Agency** has a project in Vietnam entitled "Food and Agriculture Products Quality", to be implemented from 2005 – 2010 with a value of US\$17 million. This project focuses on public health (food safety), farm incomes (product value) and trade development (SPS export requirements and harmonization of quality and grades standards). Activities target improving practices in both food production and processing, and product quality control and certification. The project includes the establishment of analytical laboratory capacity, and involves assistance to both the private sector (through farmers, farmer associations and processors) and the public sector. CIDA expects that through improved agriculture/food production, processing, quality control, and certification practices, Vietnamese producers will gain access to new markets, and poverty will be reduced through increased incomes.

The **World Bank** has been instrumental in setting up multi-donor trust funds with the support of the EU in Cambodia, Lao PDR and Vietnam. The World Bank has been involved in a number of studies and scoping missions that are focused on reviewing GMS countries' capability and capacity to meet WTO obligations and/or the preparation of action plans so that the countries can move forward within the global market and become fully compliant. The World Bank reports include:

- Vietnam Food Safety and Agricultural Health Action Plan;
- Lao PDR SPS Standards Management Action Plan for Capacity Building;

- Thailand - The Cost of Compliance with SPS standards (case studies of shrimp, fresh asparagus and frozen green soybeans); and
- China's Compliance with Food Safety Requirements for Fruit and Vegetables.

## The Project

Following two brief missions to the sub-region and the review of relevant documentation the weaknesses identified that require project support are as follows:

- Weak intra-GMS coordination and communication;
- Risk management not yet fully introduced and the interpretation of risk management varies between GMS countries;
- The laboratories in some countries are not internationally compliant and there is only partial mutual recognition between laboratories in GMS countries; and
- Hazard avoidance, lack of mutual recognition, and the inability of producers and SMEs to afford the cost of hazard avoidance certification.

The GMS countries are in various stages of economic development (see Country Assessments, Annex 1, Appendices B-G) and as such the GMS Project recommended below incorporates varying levels of national-level interventions depending on the current level of standards compliance. It is expected that the less-developed GMS countries will receive more support.

The project consists of four components and is recommended to be implemented over a period of 24 months. The components are: (i) the feasibility study, design and implementation of an information sharing platform for SPS measures; (ii) risk management support; (iii) SPS laboratory mutual recognition and support; and (iv) support to hazard avoidance legal framework and SME compliance.

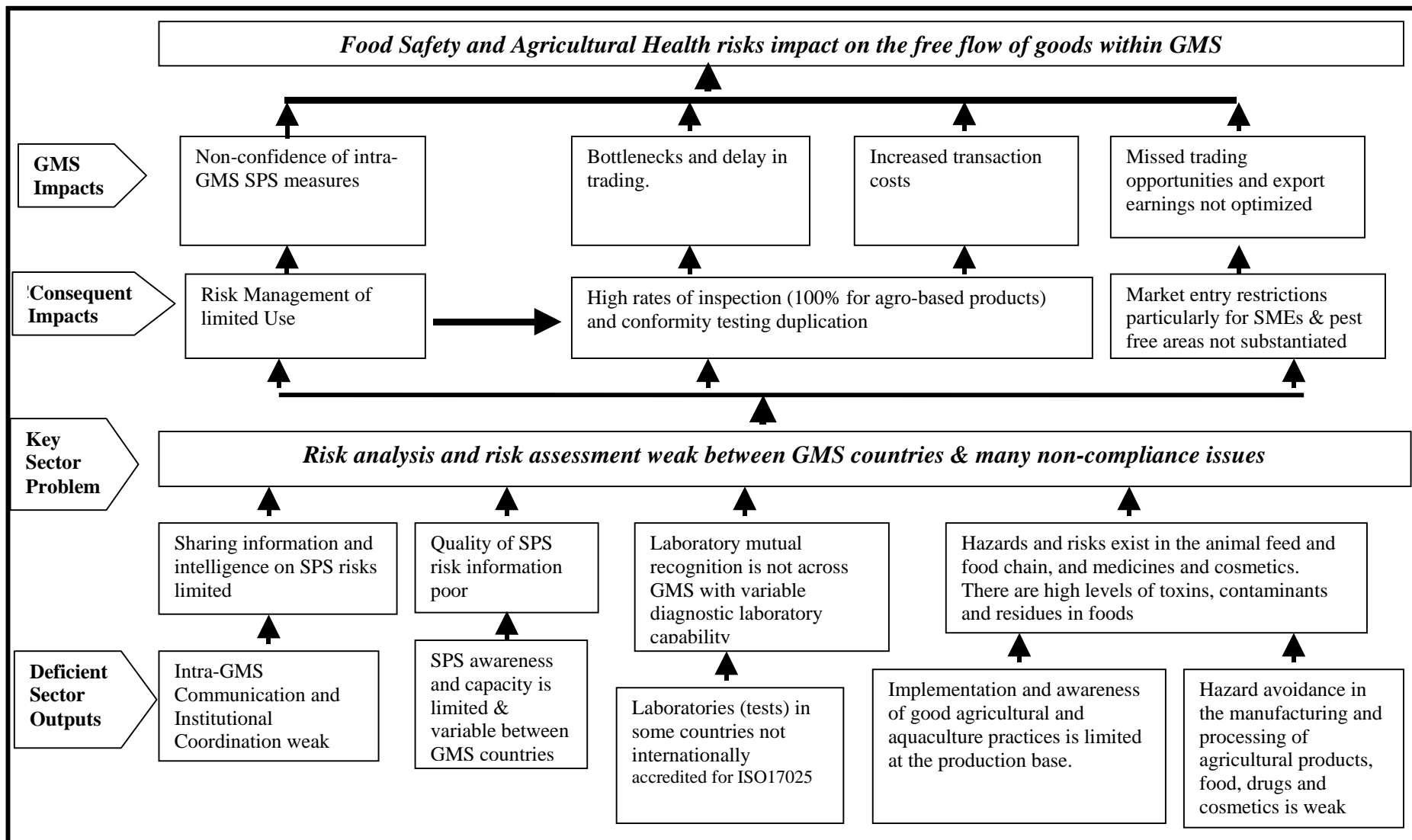
### *Component 1: SPS Information Sharing Platform*

The objective of the first component is to further the establishment of a GMS information sharing platform as a means of improving the risk management process. An information-sharing platform will allow greater communication and risk analysis transparency among GMS countries, leading to improved SPS risk assessment within the sub-region.

A regional intervention that should be supported by donors is to establish a facility to enhance information sharing and greater transparency within the GMS, which will lead to greater intra-GMS coordination in identifying risks. This initiative would take into account SPS best practices (Annex 1, Appendix H) and the emphasis on risk assessment and risk communication.

At present, communication and information sharing among GMS countries is weak, although at the border crossings good relationships at a local level are evident between Customs departments. If communication cannot be improved, then the identification of risks and hazards within the sub-region would continue to be weak. This weakness would reduce confidence in the limited information transmitted among GMS countries. As a result, a high rate of inspections would likely continue as a standard practice.

**Figure 2.1: GMS Problem Tree**



National institutional coordination is poor in all GMS countries. This is particularly true of OGAs supplying information to Customs on risks, hazards and importer/exporter non-compliance. In addition, information supplied by the private sector is usually not taken into account when government agencies determine whether to release or examine cargo.

To improve the situation, the establishment of a GMS-IP website and a GMS project management or coordinating unit to coordinate activities and collate information supplied from national implementing agencies is required. Greater communication among the GMS institutions that are concerned with inspection, quarantine and SPS measures is required. There is also a need for greater communication among agencies that are concerned with agricultural health and food safety, in order to bring about a consolidated approach to the determination of factors that impact on SPS measures. Improved communication among these agencies would also encourage transparency, particularly with respect to the following critical information:

- Pest categorization and distribution;
- Pest risk assessments (Annex 1, Appendix H), surveillance and monitoring;
- Examples of risk profiling (for example [www.nzfsa.govt.nz/science/risk-profiles/index.htm](http://www.nzfsa.govt.nz/science/risk-profiles/index.htm));
- Exporter/importer profiling for compliance and certification; and
- Non-conformity issues and notification of unsafe and defective products through a rapid alert system.

Not only is information transparency required between governments and government institutions. The private sector must also be aware of the procedures and steps involved in exporting to the various GMS countries.

Although national information systems do exist within GMS, they are not as comprehensive as the regional system proposed in this project. At present, GMS information exists on an ADB web page. The GMS needs its own independent site, as well as the staff and infrastructure to support this information platform.

### ***Existing activities and Implementing Agencies***

In line with the eventual establishment of the ASEAN-European Union Free Trade Agreement, the EU is implementing an ASEAN- EU alerts and notification system to link in with the Europa site (<http://ec.europa.eu/food/food/rapidalert>). This activity is part of APRIS. It is a pilot program and at present only involves fish products and their related alerts and notifications. China will not be involved and landlocked Lao PDR's participation will be limited as it has only a small fishery industry.

Various GMS government institutions have or are in the process of establishing information platforms or databases of varied sophistication and use, but many are either specific for domestic matters or do not cover the broad area of agricultural health and food safety. The implementing agencies include (subject to GMS approval) the following:

**China:** State General Administration for Quality Supervision, Inspection and Quarantine (AQSIQ) which manages a TBT and SPS notification and enquiry website and plays a central role in collating and updating the information from OGAs and from international sources.

**Thailand:** Ministry of Public Health - Food and Drug Administration (FDA) and Ministry of Agriculture and Cooperatives - Bureau of Agricultural Commodity Food Standard (ACFS). FDA is planning a Food Alert System for Thailand (FAST) based on the Irish Food Standards Authority of Ireland format ([www.fsai.ie](http://www.fsai.ie)). Within the next 12 months ACFS will have an alerts and notification system established for fisheries, based on the EU rapid alert system and in conjunction with ASEAN nations.

**Cambodia:** Cambodia Import-Export and Fraud Repression Department (Camcontrol) monitor imports and the domestic market. To date there is no SPS information-sharing platform. The Institute of Standards of Cambodia (ISC) does have a website specifying TBT measures, the legal framework and Cambodian standards. Camcontrol will not only work with ISC but also with OGAs to collate and update information.

**Vietnam:** Ministry of Agriculture and Rural Development (MARD) and Ministry of Health (MOH) and the Vietnam Food Administration (VFA). MARD has a website providing basic information for domestic purposes. VFA does not have an Internet site.

**Lao PDR:** Science Technical and Environmental Agency (STEA) is being provided Indian ICT training support. This support can be utilized to establish an information-sharing platform in collaboration with OGAs such as the Ministry of Agriculture and Forestry and Ministry of Health.

**Myanmar:** Ministry of Commerce can take on coordinating role-utilizing information supplied by OGA.

### *Interventions*

The component is divided into two phases:

During Phase 1 (8 months) the expertise of both international and domestic consultants would be utilized, in conjunction with planning and consultative meetings, to develop an implementation plan through GMS country consensus. Using a consultant, an implementation plan would be developed and drafted. The plan would include the following:

- A resource audit of the proposed GMS implementing agencies to determine capability and capacity to undertake the national communication role (The agencies would also be asked to identify specialists from the competent authorities in each GMS country to supply updated information);
- The determination through GMS consensus, in the form of a workshop, to confirm: (i) which government agency or agencies would implement and be the conduit of information; (ii) what information can be practically supplied in the short term; (iii) the capacity building requirements for information that would require greater effort to collate; (iv) the procedures required; (v) the location of the information unit, and (vi) the drafting of MOU to supply information;



- Recommendations regarding the design and establishment of an information sharing portal (GMS website) and the software to be used (possibly based on “Track and Trace” software with a database facility);
- The write-up of an ICT consultant’s Terms of Reference (TOR) to establish and initially implement the component and the elaboration of procurement documentation for the required equipment and facilities;
- Recommendations concerning the GMS national personnel (qualifications and TOR) that would coordinate, update, manage and release information, in the country where the office would be established;
- Determination of mechanisms by which companies can raise alerts through their own quality assurance programs and consumers can do the same through an effective complaints procedure; and
- Development of proposals for exposure visits to the EU and/or USDA (Animal and Plant Health Inspection Service-APHIS and the FDA) or other OECD Food Standards Agencies and Authorities to assess their information sharing platforms.

Phase 2 (12 months) would include the finalization of the information sharing platform design, with agreements among GMS countries to supply the information and data for the platform. The platform would be implemented through the use of the services of ICT consultants with experience in software design and hardware configuration.

### *Inputs and costs*

The Phase 1 costs and inputs for the activity are detailed in Table 2.1.

Phase 2 costs and inputs are difficult to calculate, as it would be determined by the results of the activities undertaken in Phase 1. An important variable is the willingness of certain GMS countries to fully implement the component, particularly with respect to divulging information that may be considered of interest to competitors (for example trader profiles). However, a realistic cost estimate for Phase 2 is within the range of US\$200,000 - \$250,000. These amounts would cover the costs of completing the planning process, procurement, exposure visits and implementation of an information-sharing platform.

### *Benefits and Risks*

The principal benefit of an information-sharing platform is enhanced Customs procedures with intervention by exception through improved risk assessment on the basis of information provided by GMS countries. Specific features would be:

- Rapid response to risks;
- Improved risk profiling;
- Greater intra-GMS communication;
- Improved in-country communication between OGAs and Customs; and
- Improved transparency among countries and greater private sector trader information.



**Table 2.1: SPS Information Sharing Platform Phase 1 Budget**

| Activity   | Item  | Approximate Cost US\$ |
|--|---|-----------------------|
| Development of component and implementation plan   | International ICT consultant with experience in SPS/TBT measures (4 months) | \$125,000             |
| Country resource audits and GMS coordination   | Domestic ICT consultants with experience in SPS/TBT measures (6 x 3 months) | \$54,000              |
| Determine the possible implementation mechanisms and the collaboration among GMS implementation agencies | Planning workshop (4 members from each GMS country x 4 days)                | \$30,000              |
| Implementation finalization and agreements   | Component presentation meeting (4 members from each country x 2 days)       | \$25,000              |
|  | Miscellaneous admin and support costs                                       | \$10,000              |
|  | Contingencies   | \$26,000              |
|  | <b>TOTAL</b>  | <b>\$270,000</b>      |

The risks of this component include:

- Renewed regional (or global) financial or economic crisis, which could cause a revival of protectionist tendencies;
- Increased perception by individual GMS countries that others are gaining from the process at their expense, leading to a lack of cooperation;
- Vested interests or lack of consensus among GMS authorities impede progress on information sharing;
- Failure to reach agreement on the information platform location and its funding;
- GMS implementation agencies fail to fulfill commitments in a timely manner; and
- Information posted by GMS individual members on the website may not be substantiated or may be biased, particularly with respect to food alerts and PRA results.

### *Component 2: Risk Management Support*

The objectives of the second component are to standardize the interpretation of SPS risk management within the GMS and to encourage a freer flow of goods across GMS borders. The latter would be addressed through development of sound risk management practices that allow flexibility in inspection and quarantine methods, primarily through utilizing intervention by exception.

Risk management is a logical and systematic procedure used to identify, analyze and above all, manage risks. The overall aim is to identify consignments that may present a risk or hazard if imported and as such warrant examination, destruction or return. Currently, the interpretation of risk management varies depending on the GMS country and the ministry or agency questioned.

The CBTA Agreement (Annex 4, Article 10) specifies “the contracting parties will endeavor to reduce the practice of routine physical exhaustive inspection” and “customs inspection may be performed by random testing, supplemented by inspections when an irregularity is suspected”. For the ASEAN countries, the 2020 vision is to use advanced risk assessment, profiling and selectivity techniques to identify risk consignments for physical examination. Codex Alimentarius has recognized risk analysis as one of the basic tools of food safety.

Rightly, there is significant emphasis on risk assessment and risk management as a means of reducing border inspections and achieving free flow of goods. Most border agencies are reluctant to move to a processing environment that involves release of goods without inspection. However, within the GMS there is an increasing volume of goods moving across the sub-regions borders, and traditional methods of inspection are not keeping pace. As such, there is no alternative to risk management, not just for customs-based procedures but also as it applies to SPS and TBT risk assessment and management methods.

Although risk management has been or is being incorporated into the legal framework of GMS countries, and although implementing agencies have shown a commitment to the process, to date there is still limited flexibility in the inspection/examination process. For agro-based, food and pharmaceutical imports, the examination rate is still 100% even when a risk assessment has been undertaken and the necessary hazard and traceability certification has been provided. The following statistics highlight this situation:

- China has a 100% inspection regime that includes food products that have EU, Canadian and US origins, even though risk assessments and private sector due diligence work has been undertaken for the imported articles;
- Thailand shows no flexibility in examination for GMS agro-based goods and food imports, but is flexible in cargoes from the EU and US; and
- The other GMS nations are obliged to examine all cargo, as their capacity to be selective is weak.

Donor support and training has been provided to a number of GMS countries, particularly on risk management guidelines for implementation that follow the Revised Kyoto Convention. However, the Revised Kyoto Convention is generic and targeted for Customs. Regarding SPS measures, training has included the practical applications and use of risk assessments. Such training has been limited to the foundations of PRA, identification of pests, their surveillance and monitoring, and how to establish pest-free areas. However, there has not been a holistic approach to risk assessments as a risk management tool, which would bring in all data to support intervention by exception. Also, there has been no inclusion of private sector risk information and data to support the risk management process.

Given the porous nature of the borders and similarities in ecosystems within the GMS, SPS border control measures have limited scope. Strengthening controls on the borders, especially in Lao PDR and Cambodia, may be a waste of limited resources. However, the confidence in other countries’ risk assessments and surveillance measures is still not sufficiently strong to warrant an open border policy within GMS.

### ***Existing Activities and Implementing Agencies***

Donor-funded and GMS domestic activities are primarily concerned with risk assessment and risk management processes.

Since 2001 New Zealand International Aid and Development Agency (NZAID) has supported the least-developed ASEAN nations (CLMV) to strengthen their phytosanitary capacity building programs. This support comprises training in pest surveillance, pest diagnostics and the development of a national phytosanitary database, with the overall objective to support the PRA process. The International Plant Protection Convention (IPPC) and the WTO SPS Agreement impose obligations for a prospective exporting country to provide the importing country with a list of pests likely to be associated with the exported commodity. The NZAID project is supporting the compilation of pest lists.

AusAID has been and is supporting SPS capacity building under an ASEAN support program. The AusAID program focuses on pest identifications (through diagnostic workshops), establishing biological connections and animal trans-boundary disease control in the Mekong Region, with the FAO implementing the latter. In Cambodia, AusAID has provided capacity building to Camcontrol, Ministry of Health and other government agencies on the “Facilitation of Trade through Risk Management.” The FAO is also involved in a regional food safety project in CLV, which includes the initiation and expansion of food-borne disease surveillance.

Risk management training has also been provided in the region, organized either jointly or independently by the World Bank, AusAID, the Japanese International Cooperation Agency (JICA) and the EU. These trainings have highlighted the procedures aligned with the Revised Kyoto Convention and much of the assistance has been provided to Customs agencies. PRA have been undertaken by the Thai Department of Agriculture on lychee, longans, rambutan, mangosteen, pineapple, durian, and young coconut for export to USA. The Department of Agriculture does conduct PRA on goods that Thailand imports from other countries.

China’s AQSIQ has received training in undertaking PRA and exporting country inspections for a range of crops and agro-based products. AQSIQ does provide inspectors to undertake risk assessments in other countries. The inspectors are dispatched on a government-to-government basis under existing bilateral agreements with Vietnam, Myanmar and Lao PDR. Pest assessments undertaken within the GMS include rice (Vietnam and Cambodia), watermelon and flowers (Myanmar).

Various GMS government institutions have an input in the SPS/TBT risk management process and will be asked to provide information and attend the recommended workshops and seminars:

**China:** AQSIQ is the only import/export inspection agency that has extensive capability in inspection and risk management. OGAs have limited input in the risk management process, but need to be involved to support the domestic risk assessment process. These agencies include (i) Ministry of Agriculture (MOA) which can assist in PRA and pest surveillance; (ii) State Administration of Industry and Commerce (SAIC) for the supervision of domestic

food retailing and marketing; and (iii) State Food and Drug Administration (SFDA) monitoring food and drug risks.

**Thailand:** The institutions involved in SPS and TBT measures are (i) the Ministry of Agriculture and Cooperatives' (MOAC) departments of Agriculture, Livestock and Fisheries which are involved in PRA and pest surveillance and have international experience; (ii) the FDA which has the responsibility of monitoring and inspecting food and drug imports; and (iii) Thailand Industrial Standards Institute which has responsibility for the development of standards related to TBT measures.

**Cambodia:** Camcontrol monitors imports and the domestic market and is the lead import inspection agency. OGAs include (i) the Institute of Standards of Cambodia (ISC) which develops standards to which risk assessments can be compared; (ii) the Ministry of Agriculture, Fisheries and Forestry (MAFF) which has a role in animal and plant health quarantine and surveillance measures; and (iii) the Ministry of Health (MoH) which is involved with food and drug safety.

**Vietnam:** Ministry of Agriculture and Rural Development (MARD), Ministry of Health and the Vietnam Food Administration (VFA) are involved in animal and plant health and food and drug safety risk assessment respectively. The agencies exhibit varying degrees of capability. The Directorate for Standards and Quality (STAMEQ) is the main implementing agency within the Ministry of Science and Technology and is responsible for standardization, metrology, and the quality of goods and products.

**Lao PDR:** The SPS and TBT measures line agencies are (i) the Department of Agriculture for plant health; (ii) the Department of Livestock and Fisheries for animal health; (iii) the Science Technical and Environmental Agency (STEA) for standards elaboration; and (iv) the Ministry of Health (MOH) has the responsibility for food safety and human hygiene, as well as drug control and standards.

**Myanmar:** The implementing ministries in Myanmar are (i) the Ministry of Agriculture and Irrigation, which has responsibility for plant quarantine; (ii) the Ministry of Livestock and Fisheries Food; and (iii) the Food and Drug Administration.

## *Interventions*

Intervention is divided into two phases

The objectives of Phase 1 (11 months) are as follow:

- To clarify further the rationale behind risk management and describe the procedures involved in the risk management process in order to achieve intervention by exception (i.e. less inspections of agro-based products);
- To determine the issues of greatest concern within the risk management process, particularly identifying the countries and agro-based products that cause the most concern;
- To determine the interpretation of SPS and TBT risk management as perceived by the GMS country line agencies;

- To evaluate the existing legal frameworks associated with risk management in the GMS countries and whether there is scope for flexibility in the inspection process;
- To discuss the role of the private sector and mechanisms to incorporate their due diligence process in risk management procedures;
- To illustrate the use of OGAs information and intelligence to further the risk management process; and
- To provide formal training in risk assessment, which is a scientifically based process consisting of: (i) hazard identification; (ii) hazard characterization; (iii) exposure assessment; and (iv) risk characterization. The training would also cover the three pillars of risk analysis (risk assessment, risk communication and risk management).

The interventions consist of 3 activities: (i) a risk management workshop; (ii) a risk management consultancy; and (iii) a final risk management seminar with consultant presentations, to determine the plan for implementation and further action.

### *Risk Management Workshop*

A 2-day GMS SPS/TBT Risk Management workshop would be held for implementing agencies. The workshop's proposed schedule would be as follows:

#### **Day one**

- Presentation by GMS member countries regarding their interpretation of risk management and the country's legal framework relevant to risk management;
- China and Thailand to present their possible role and strengths in risk management training to other GMS countries;
- Formal presentation of the risk management process in the EU (invited speaker); and
- Formal presentation of "What is Private Sector Due Diligence" and how inspection and quarantine agencies can use that information (invited speaker).

#### **Day two**

- Group sessions and presentation of risk management needs;
- Group session to make recommendations regarding the avenues of research and evaluation that the risk management consultant should take within his or her 2 months assignment; and
- Plans for further action and wrap-up.

### *Risk Management Consultancy*

An expert in SPS/TBT risk management processes would be recruited to act as a consultant for a period of 2 months. This consultant would moderate the risk management workshop and also determine the following:

- Scope of the risk management process within the GMS countries;
- Capacity of OGAs and lead agencies to undertake the work;

- Scope for flexibility and discretion within the legal framework and any necessary revision of the legal framework to allow for greater flexibility;
- Impediments to intervention by exception on the basis of risk management;
- Recommendations concerning practical training in i) hazard identification; (ii) hazard characterization; (iii) exposure assessment; and (iv) risk characterization, as well as the three pillars of risk; and
- Recommendations regarding future work in relation to or with other donor agency inputs, with a tentative action plan to be presented to the relevant government agencies.

### *Risk Management Seminar*

Following the consultant's mission he or she would present a seminar on the mission findings. The presentation would highlight impediments to the full implementation of risk management, discuss ways to remove impediments and present a plan of action to implement full risk management procedures for SPS and TBT measures within the GMS with particular reference to the timing and cost.

As a result of the findings and recommendations during the first phase, work would continue in Phase 2 (10 months). It is unlikely that all GMS countries would be in a position to fully implement risk management. Therefore, Phase 2 would entail the development of risk management protocols on a bilateral basis for certain agro-based products that have relatively large intra-GMS trade volumes. The goal is to fully implement the risk management process for these products. The prime candidates for bilateral agreements would be between Vietnam and China; China and Lao PDR; China and Myanmar; Thailand and Cambodia and Thailand and Myanmar.

### *Inputs and costs*

The budget and line items of the Phase 1 activities are itemized in Table 2.2.

**Table 2.2: Risk Management Support Phase 1 Budget**

| Activity                                      | Item  | Approximate Cost US\$ |
|---|---|-----------------------|
| <i>Risk Management Workshop</i>               |   |                       |
| GMS workshops attendance flights              | 4 representatives per country                   | \$10,000              |
| Guest speakers                                | Risk assessment and due diligence presentations | \$7,000               |
|   | Attendee subsistence 3 days                     | \$12,000              |
|   | Facility hire                                   | \$2,000               |
| <i>Risk Management Consultancy (2 months)</i> |   |                       |
| Provision of consultant                       | Fees and subsistence                            | \$45,000              |
|   | Transport                                       | \$4,000               |
| <i>Risk Management Seminar</i>                |   |                       |
|   | 4 representatives per country                   | \$10,000              |
|   | Attendee subsistence (2 days)                   | \$7,000               |
|   | Facility hire                                   | \$2,000               |
|   | Contingencies                                   | \$16,000              |
|   | <b>Total</b>                                    | <b>\$115,000</b>      |



The budget and costs of the Phase 2 activities would include: (i) the return of the risk management consultant for two months to finalize and liaise with certain GMS governments to agree on risk management bilateral protocols; (ii) further training in the practical risk management process; and (iii) the funding of inter-governmental meetings to develop bilateral MOU. The budget is detailed in Table 2.3.

**Table 2.3: Risk Management Support Phase 2 Budget**

| Activity                                      | Item                               | Approximate Cost US\$ |
|---|------------------------------------|-----------------------|
| <i>Risk Management consultancy (2 months)</i> |                                    |                       |
| Provision of consultant                       | Fees and subsistence               | \$45,000              |
|   | Transport                          | \$4,000               |
| <i>Risk Management training</i>               |                                    |                       |
| 5 training sessions                           | Participants per diem & travel     | \$30,000              |
|   | Specialist trainers                | \$10,000              |
|   | Facility hire                      | \$10,000              |
|   | Miscellaneous materials            | \$4,000               |
| <i>Inter-governmental meetings</i>            |                                    |                       |
|   | Participants per diem & travel     | \$40,000              |
|   | Trainers fees, per diem and travel | \$20,000              |
|   | Meeting facilities                 | \$5,000               |
|   | Contingencies                      | \$12,000              |
|   | <b>Total</b>                       | <b>\$180,000</b>      |

### *Benefits and Risks*

Many benefits would be realized from the training and consultancy on risk management, including the following:

- Improved understanding of the risk management process, particularly in the practice of risk management;
- Reduced inspections for compliant importer cargo;
- Improved in-country communication between OGAs and Customs;
- Improved transparency among countries in the process of risk management
- Intra-GMS cooperation in risk assessments, particularly PRA and the sharing of surveillance information;
- Fewer border closures due to perceived risks; and
- Private sector due diligence work is accepted as part of the risk management process, throughout the GMS.

The risks inherent in this component include:



- Vested interests in maintaining 100% inspection for agro-based goods, i.e. the charge of fees for the inspection work;
- Expected cooperation among GMS countries is not realized;
- Failure to reach agreement on risk management methodology;
- GMS implementation agencies fail to fulfill commitments in a timely manner; and
- The US Congress recently passed the Hollings Bill, which mandates tighter controls and cargo inspection levels at US borders and ports, possibly indicating that other countries would be less inclined to relax their inspection regimes in light of US government's stricter procedures.

### *Component 3: SPS Laboratory Mutual Recognition and Support*

The objectives of the third component are to achieve mutual recognition of SPS analytical/biochemistry laboratories, to avoid duplication of testing and to instill confidence in laboratory results throughout the GMS.

Within the GMS there are 3 important issues regarding SPS laboratory capability:

- There is no full mutual recognition of laboratory testing across GMS;
- Equipment for more complex testing protocols is not available or is antiquated, even in internationally-accredited laboratories in Thailand; and
- The Chinese, Thai and Vietnamese accreditation agencies have the capacity to accredit and certify laboratories in other GMS countries.

GMS cooperation among the national accreditation services is important in order to harmonize test results and thus inspire confidence in such results within the whole sub-region. This can be achieved through mutual recognition of the laboratories and their testing procedures (including staff competence). Mutual recognition in laboratory accreditation and certification will avoid repeated and duplicative analyses and diagnostic work, which increase transaction costs particularly for regulated and controlled commodities.

The China National Accreditation Service for Conformity Assessment (CNAS) and the National Accreditation Council of Thailand (NAC) are members of the International Accreditation Forum (IAF) of the Multilateral Recognition Arrangement (MLA). Membership signifies that these accreditation bodies have equivalence with certification/accreditation bodies in other countries and operate to the same standard. Other GMS countries have or are in the process of obtaining international accreditation and certification of their laboratories and the tests they undertake. To date, these countries have not sought mutual recognition, apart from Vietnam's STAMEQ which, along with China and Thailand, is part of the Mutual Recognition Arrangement with APLAC, which includes both testing and calibration. The APLAC agreement was signed on November 19, 1997 and establishes cooperation among many accreditation bodies throughout the Asia-Pacific Region. Lao PDR, Cambodia and Myanmar laboratory systems are not recognized and are not members of APLAC.

The testing procedures and the range of tests required are increasingly more complex, particularly as global food laws and SPS standards become stricter and the tougher labeling

requirements increasingly become a barrier to trade. Many developing countries do not have (and cannot afford) the sophisticated laboratory equipment that can determine presence of Genetically Modified Organisms, stabilizers, preservatives, sweeteners, additives and colorants in food and feed, or the presence of a range of antibiotics and pharmacologically active substances in meat and fish products and pesticides in agricultural crops.

Another factor to consider is the turnaround time in analysis and sampling of imported goods for clearance. Even in the more advanced GMS countries, the use of timesaving multi-testing equipment is limited to the most modern laboratories. A common complaint from both the private sector and the Customs department is the lengthy time it takes to get samples of goods tested.

### ***Existing Activities and Implementing Agencies***

Within the GMS, UNIDO has a lead role in laboratory accreditation and certification, primarily for metrology and physical testing related to TBT measures, with the Swiss and Norwegian governments funding the program. In Thailand, UNIDO is supporting a food analysis laboratory within Thailand's TISI. In Cambodia, UNIDO is developing a technical assistance program to strengthen metrology, testing quality and conformity assessment capacities. In Vietnam, metrology laboratories will be certified to international standards at a cost of \$50,000 (not including the annual reassessment). In Lao PDR, UNIDO will begin to audit government testing laboratories in 2008. Lao PDR has also received some support in preliminary accreditation work and laboratory equipment donations for food testing equipment.

Possible implementing agencies include the following:

**China:** Established in 2006, National Accreditation Service for Conformity Assessment (CNAS) is the national accreditation body of China responsible for the accreditation of certification bodies, laboratories and inspection bodies. CNAS is established under the approval of the Certification and Accreditation Administration of the People's Republic of China (CNCA) and authorized by CNCA in accordance with the Regulations of the People's Republic of China on Certification and Accreditation.

**Thailand:** National Accreditation Council of Thailand (NAC), which is part of the Thai Industrial Standards Institute, is the main accreditation agency for laboratories. However, other government departments also have a role in the accreditation process, including (i) the Bureau of Laboratory Quality Standards (BLQS), under the Department of Medical Sciences, Ministry of Public Health, which acts as the national accreditation body for testing medical and health product laboratories that evaluate food, beverages and water, pharmaceutical products, cosmetics, medical devices, toxic household products and clinical specimens; and (ii) the Bureau of Laboratory Accreditation, within the department of Science Service of the Ministry of Science and Technology which is involved in the testing of feedstuffs and non-foods.

**Cambodia:** The Department of Industrial Standards of Cambodia of Ministry of Industry, Mines and Energy (MIME) operates a non-accredited food-testing laboratory that can carry out a limited range of food testing functions. It would take the lead in implementing project

activities. (Camcontrol through its domestic health and safety mandate has a laboratory, but neither the laboratory nor its testing methods are internationally accredited.)

**Vietnam:** STAMEQ has the authority to accredit laboratory testing and calibration methods in both public and private sector facilities according to ISO guidelines and to provide accreditation of inspection bodies. Laboratory accreditation is under the auspices of STAMEQ's Bureau of Accreditation.

**Lao PDR:** STEA is the national standards development body. STEA primarily covers standards in the food safety area and accreditation. The Food and Drug Department together with its laboratory (Food and Drug Quality Control Centre) is responsible for analysis of domestic food and quality assurance of imported food.

**Myanmar:** Myanmar Agricultural Produce Trading (MAPT) has laboratories that provide conformity analysis for agricultural products. The Food and Drug Administration (FDA) monitors production in food and drug factories and samples their products.

### *Interventions*

The component is divided into two interventions. The first part of this intervention would decide between two available certification options:

- Option 1: Independent, internationally recognized laboratory accreditation agencies or boards would be established in Myanmar, Lao PDR and Cambodia in order to gain mutual recognition. These would have the capacity to certify tests of animal, plant, food and feed products. The eventual aim would be for these countries to join APLAC as full members.
- Option 2: The existing internationally recognized GMS accreditation agencies would certify specific laboratories in Cambodia, Lao PDR and Myanmar and their tests relating to SPS measures.

The second option would be simpler and easier to implement in the medium term, as there are international laboratory accreditation agencies within the region that can undertake third party accreditation. In addition, bilateral agreements for support are simpler than the multilateral mutual recognition agreements that APLAC membership requires. The second option is also more economic in terms of financing and manpower requirements.

The second part of the intervention would be to determine equipment needs for key laboratories throughout GMS, bearing in mind many laboratories have antiquated equipment. Equipment requirements would include:

Equipment that meets the increasingly complex testing requirements including the ability to detect minute levels of contaminants. This equipment might support high performance liquid chromatography (pesticides etc), mass and atomic spectrometry (heavy metals, trace elements etc), electrophoresis (plant and animal health) and Polymerase Chain Reaction (bacteria and virus identification for GMO). It would also require the procurement of reference (standard) samples for pesticide identification, toxins etc.

Equipment that can test or screen many samples simultaneously to speed up the process and gain economies of scale, with the use of computer technology and micro-well, micro-plates, strip readers, etc.

To undertake these activities, the formation of a laboratory accreditation-working group is required as well as the mobilization of a regional consultant.

### *Working Group*

The Working Group's members would include one representative from each GMS international accreditation agencies discussed above, namely CNAS (China), NAC (Thailand), ISC (Cambodia), STAMEQ (Vietnam), STEA (Lao PDR) and possibly MAPT (Myanmar). The Working Group would address the following issues:

- The option for Myanmar, Lao PDR and Cambodia to establish an independent internationally recognized accreditation agency or board in order to seek APLAC membership;
- Which GMS internationally-recognized accreditation agency or agencies will assist Myanmar, Lao PDR and Cambodia SPS laboratories to become ISO17025 certified;
- The current status of the SPS laboratories in all GMS countries to highlight constraints, tentative equipment needs and the selection of a regional consultant to review the capacity and capability of the GMS SPS laboratory network; and
- Recommendations on which GMS laboratories could become centers of excellence that would receive maximum financial and technical assistance support.

The Working Group would reconvene within 8 months to review the finding of the regional consultant and present an action plan for full GMS laboratory recognition.

### *Regional Consultant*

A regional consultant with experience in SPS measures, ISO 17025 certification and knowledge of APLAC would be recruited for 3 months to undertake the following activities:

- Using the submission by the working group members, determine and prioritize the number of SPS-oriented laboratories that need support;
- Review staff resources and capability and determine training needs that are applicable to each GMS country based on respective levels of development;
- Present recommendations on types of equipment needed and their costs. Equipment costs would include recurrent expenditure for reagents and disposable items;
- Present recommendations on ways to make laboratories cost-efficient and how they can become profitable cost centers; and
- Provide examples of private sector support and outsourcing.

### *Inputs and Costs*

The Budget and line items of the component activities are itemized in Table 2.4.

**Table 2.4: SPS Laboratory Mutual Recognition and Support Budget**

| Activity                              | Item                         | Approximate Cost |
|---------------------------------------|------------------------------|------------------|
| <i>Working Group Meeting</i>          |                              |                  |
| Work group meetings                   | 1 representative per country | \$4,000          |
| Mobilization of Moderator             | Subsistence and travel       | \$5,000          |
|                                       | Attendees subsistence 3 days | \$17,000         |
| Facilities                            |                              | \$1,000          |
| <i>Regional Consultant (3 months)</i> |                              |                  |
| Provision of consultant               | Fees and subsistence         | \$30,000         |
|                                       | Transport                    | \$3,000          |
|                                       | Contingencies                | 12,000           |
|                                       | <b>TOTAL</b>                 | <b>\$72,000</b>  |

On the basis of the work specified in the component, the Working Group and the regional consultant would establish whether an independent internationally recognized laboratory accreditation agency with capacity to certify bacteriology and chemical tests concerned with animal, plant, food and feed products is feasible in Myanmar, Lao PDR and Cambodia.

Laboratories identified for support and/or establishment by the consultancy mission and approved by the Working Group would need to be equipped. In some cases building rehabilitation would be required. For example, the equipment needs alone for a laboratory that can be considered a center of excellence would cost approximately \$900,000. This cost estimate includes international certification for a range of tests that conform to ISO 17025 guidelines and procedures. The cost for establishing an independent accreditation agency in countries that do not currently have such an institution is estimated to be approximately \$150,000 per country.

Table 2.5 provides an indication of the equipment needs and unit costs for a typical SPS analytical laboratory. To qualify for support under this program, individual countries would have to be able to fund the equipping and establishment of laboratories either through foreign assistance or utilizing their own resources.

### ***Benefits and Risks***

The benefits of SPS Laboratory Mutual Recognition and Support activity would be the following:

- GMS laboratory competence would be recognized nationally and internationally;
- Sub-regional confidence in test results generated by the accredited laboratory;
- Enhanced facilitation in trade within GMS and beyond;
- Reduction in technical barriers to trade through improved conformity assessments and elimination of repeated tests in the importing country with resulting reduction in transaction costs; and
- Greater reliability of the laboratory tests that can be used in the risk assessment process.

**Table 2.5: Equipment needs and unit costs for a typical SPS analytical laboratory**

| Item  | Unit   | No. | Unit Value | Cost             |
|---|--------|-----|------------|------------------|
| Laboratory staff training   | person | 10  | 2,000.0    | 10,000.0         |
| Certification costs   |        | 1   | 50,000.0   | 50,000.0         |
| Standardisation information & software  | unit   | 1   | 30,000.0   | 30,000.0         |
| <b>Equipment</b>  |        |     |            |                  |
| Inductive Coupled Mass Spectrometer   | unit   | 1   | 170,000.0  | 170,000.0        |
| High performance liquid chromatograph   | unit   | 1   | 70,000.0   | 70,000.0         |
| Capillary Electrophoresis   | unit   | 1   | 65,000.0   | 65,000.0         |
| Gas chromatograph with mass selection   | unit   | 1   | 85,000.0   | 85,000.0         |
| Gas chromatograph with FID detector   | unit   | 1   | 40,000.0   | 40,000.0         |
| UV-spectrophotometer  | unit   | 1   | 12,000.0   | 12,000.0         |
| DNA purification systems & real time<br>Polymer Chain Reaction (PCR) + ancillary<br>equipment | unit   | 1   | 60,000.0   | 60,000.0         |
| Densitometer  | unit   | 1   | 30,000.0   | 30,000.0         |
| Microwave oven (industrial)   | unit   | 1   | 2,000.0    | 2,000.0          |
| Halogen moisture analyser   | unit   | 1   | 6,000.0    | 6,000.0          |
| Tintometer  | unit   | 1   | 8,000.0    | 8,000.0          |
| Polarimeter   | unit   | 1   | 5,000.0    | 5,000.0          |
| Digital Balance   | unit   | 2   | 2,500.0    | 5,000.0          |
| Refractometer   | unit   | 1   | 1,500.0    | 1,500.0          |
| pH meter  | unit   | 2   | 1,000.0    | 2,000.0          |
| pH ionometer  | unit   | 1   | 2,500.0    | 2,500.0          |
| Water treatment system  | unit   | 2   | 5,000.0    | 10,000.0         |
| Acid purification system  | unit   | 1   | 13,000.0   | 13,000.0         |
| Titration   | unit   | 1   | 20,000.0   | 20,000.0         |
| Dry oven  | unit   | 2   | 1,000.0    | 2,000.0          |
| Technical Balance   | unit   | 4   | 3,000.0    | 12,000.0         |
| Laboratory glassware  | unit   | 1   | 20,000.0   | 20,000.0         |
| Reagents  | unit   | 1   | 15,000.0   | 15,000.0         |
| Standard samples (voucher) and buffers  | unit   | 1   | 14,000.0   | 14,000.0         |
| Laboratory refrigerator   | unit   | 5   | 900.0      | 4,500.0          |
| General purpose oven  | unit   | 2   | 1,000.0    | 2,000.0          |
| Autoclave   | unit   | 2   | 16,000.0   | 32,000.0         |
| Bench fume hood   | unit   | 3   | 1,500.0    | 4,500.0          |
| Laboratory furniture  | unit   | 1   | 30,000.0   | 30,000.0         |
| Microbiological safety cabinets   | unit   | 2   | 10,000.0   | 20,000.0         |
| Microbiological incubator   | unit   | 2   | 2,000.0    | 4,000.0          |
| CO2 incubator   | unit   | 1   | 10,000.0   | 10,000.0         |
| Laboratory centrifuge   | unit   | 2   | 2,000.0    | 4,000.0          |
| Hotplate  | unit   | 2   | 300.0      | 600.0            |
| Colony counter  | unit   | 1   | 1,400.0    | 1,400.0          |
| Biological microscope   | unit   | 2   | 1,000.0    | 2,000.0          |
| <b>Total US\$</b>   |        |     |            | <b>875,000.0</b> |

The risks of the SPS Laboratory Mutual Recognition and Support activity would be:

- The same that face any country, i.e., the inability to develop a sustainable process which requires continual upgrading of laboratories and meeting new testing requirements and periodic recertification to maintain the quality of testing;
- That the Working Group members do not have the authority to make decisions; and



- The willingness of Lao PDR, Cambodia and Myanmar to be affiliated with another GMS country's accreditation agency if Option 2 is recommended.

#### *Component 4: Support to Hazard Avoidance Legal Framework and SME Compliance*

The objective of the fourth component is to harmonize GMS food laws. This harmonization would include compulsory hazard avoidance compliance for food processors to improve food safety within the GMS. Component activities would also determine the feasibility of supporting the private sector, particularly SMEs, in obtaining hazard avoidance compliance and undertaking due diligence activities through Business Development Support (BDS) cost sharing programs.

The removal or avoidance of hazards in the food chain is becoming a high priority for most governments, particularly in light of recent international food safety scares and alerts. For regional governments, there is the additional concern because of the increasing number of tourists that visit the Mekong region and the importance of food safety to the tourism industry.

Reflecting these trends, there is now an obligation as part of the ASEAN Food Safety Improvement Plan (AFSIP) that ASEAN members must have Hazard Analysis Critical Control Point (HACCP) procedures for food processors incorporated into their respective national legal framework by 2010. The HACCP procedures ensure food processing is hazard-free or that hazards that are identified are eliminated before the commercialization of the final product. The European Union introduced new food hygiene regulations on January 1, 2006, that require all EU food businesses, except primary producers, to operate based on HACCP principles. In addition, the US is increasingly requesting importers to ensure that exporting country plants are HACCP certified. This has led to HACCP principles being incorporated into the Codex Alimentarius quality and food safety codes.

Disease control is also a critical issue. Diarrhea was the second highest cause of morbidity in Cambodia in 2000. In 2001 the Government of Vietnam estimated that more than 4.2 million people suffered from food-borne diseases, with an annual economic loss of some US\$34.5 million.<sup>19</sup> In Lao PDR diarrhea-related diseases are the leading causes of mortality among children. The use of hazard avoidance certification in the food processing industry will be a major contribution toward removing risks in the food chain.

Processors that become HACCP compliant can then provide the relevant documentation, which can be used as part of the risk assessment to determine whether inspection and examination and therefore further testing are advisable for imported food products.

Harmonization in the regulatory framework is required to incorporate hazard avoidance as a legal obligation for food processors. The current situation of GMS regulatory frameworks for hazard-avoidance is as follows:

**Thailand:** The Food Act (1979) is outdated and is in the process of being amended. Promulgation should take place late 2007, and will include hazard avoidance requirements for food processors.

<sup>19</sup> <http://www.undp.org.vn/mlist/devel/vn/042001/post32.htm>

**Cambodia:** The country requires the incorporation of hazard avoidance in the regulatory framework, possibly as an amendment to the Law of the Management and Safety of Products and Services (June 2000). This law covers the health and safety of the consumer of commercialized products and specifies descriptive and quality labeling which includes all labeling in the Khmer language. The Competent Authority (CA) has the duty to inspect products in order to determine conformity against the norm. The law also provides for the establishment of National Standards System and authorizes powers of enforcement for any contravention of the law. However, non-compliant products can be exported to other countries if the sale is legal.

**Lao PDR:** The Law on Food (2004) is one of the few SPS-related laws to be enacted in Lao PDR, but this law lacks clarity. Although articles 13 and 14 specify that food should be healthy and safe, there are no hazard avoidance measures codified. The regulations on the Control of Production and the Exported-Imported Safe Food regulation (2006) make only a cursory reference to GMP for processors.

**China:** HACCP certification is still not widely accepted in China nor is the idea of a legal obligation for processors. According to the Food Hygiene Law and the Law on Import and Export Commodity Inspection, AQSIQ is responsible for inspecting, supervising and administering the safety, hygiene and quality of imported and exported foods and cosmetics. Processors of agricultural products and foods require food production licenses issued by AQSIQ that are then listed in the food quality and safety supervision and management products register. This system falls short of effective hazard avoidance.

**Vietnam:** The Food Safety and Hygiene Ordinance (2003) provides a mandate to the Ministry of Health to assure the hygienic status of fresh and processed foods through the Vietnam Food Administration. The Ministry is promoting HACCP in the food processing industry.

Many GMS SMEs do not have the financial resources required to obtain HACCP certification. The cost for a typical audit ranges between \$10,000 and \$100,000<sup>20</sup> depending on whether the auditors are national, regional or international. The cost is also affected by the number of visits needed to ensure that corrective actions have been undertaken, that record keeping is compliant and that all necessary checks and verifications are in place. With more importance being given to HACCP certification, production and processing plants that cannot comply will become marginalized in international export markets.

In OECD countries, the emphasis of risk management is increasingly placed on the private sector via a company or trader's due diligence process. At the time of import, the private sector importer must be in a position to supply the border control agencies with the following information: (i) the product's origins including the location of production zones and the type and standard of the processing plants; (ii) standards compliance and production protocols followed; (iii) possible traceability work; and (iv) copies of hazard avoidance certifications. The due diligence work often entails site inspections by the private sector buyer of production and

---

<sup>20</sup> The actual audit and certification can cost less, but it is the work needed by SME to become fully compliant that is also a cost that needs to be taken into account.

processing facilities and the review and collation of information. For an SME, this full due diligence process is prohibitive in cost and human resources.

To assist SMEs to become compliant, a BDS facility or fund needs to be established in GMS countries.

### ***Existing Activities and Implementing Agencies***

In recent years SME donor support has been the strongest in **Lao PDR**, which has the weakest SME sector. Much of this donor support targets the SME institutional and legal framework. The ADB's SME development program (\$10 million) has a component to promote public-private partnerships and BDS. The program was scheduled for Board approval in September 2007. To complement this ADB project, the EU will be providing TA under its SME Development Program to build the capacity of government institutions for strengthening the SME legal and regulatory framework, investment procedures and trade. The German Technical Cooperation (GTZ) is implementing a private sector development project called "Human Resource Development for a Market Economy." The International Finance Corporation's Mekong Private Sector Development Facility (MPDF) is operating a US\$5 million program over the period 2005-2009. The ADB's Northern Regions Sustainable Livelihoods through Livestock Development Project includes a \$3 million revolving fund managed by the Lao Women's Union for livestock business development in five Northern provinces. None of these projects has a fund matching facility to support SMEs in BDS.

In **Cambodia**, SME support has been targeted towards competent authorities that would oversee hazard avoidance certification. UNIDO has undertaken training for lead and internal auditors in the development of HACCP and certification services within ISC. The EU has also supported ISC in EU-compliant certification and hazard avoidance in food processing enterprises. JICA is strengthening ISC capacity in HACCP, GAP and GMP. GTZ has undertaken limited SME support and the German development bank KfW (*Kreditanstalt für Wiederaufbau*) has a credit line with Aceda Bank with a minimum loan amount of \$5 million. ADB has provided TA in support of the SME secretariat and in information systems provision. It is the strategy of the Cambodian Government and donors to promote market-based private sector BDS providers. MPDF seeks to improve agribusiness in Lao PDR and Vietnam as well as Cambodia and assists businesses with access to finance (A2F). The World Bank will, during 2008, be funding an Export Development Fund based on BDS.

In **Vietnam**, GTZ and the Ministry of Planning and Investment are implementing a SME Development Program (\$10.5 million, 2005-2009). The program's focus is on improving the business environment for private sector development, and enhancing the market position of SMEs in selected sectors, specifically in provinces outside the major growth centers. Program components include (i) SME policy and enabling environment with legal framework revision; (ii) improving dialogue between the private sector and government; (iii) supporting value chains and cluster development, particularly in the fruit and vegetable agribusiness sector, in pilot provinces; (iv) improving market linkages; and (v) quality and environmental management testing improvements.

### *BDS Support*

When considering financial support to SMEs, major responsibilities rest with the GMS Ministries of Commerce and/or Finance. The only exception to this is in Vietnam where the Ministry of Trade has the mandate to monitor labeling and the export of goods.

Any BDS component will need the identification and cooperation of a participating financial institution (PFI) or the formation of a BDS development fund that would be independent of government ministries. A PFI would be selected according to eligibility criteria of (i) experience in working with SMEs; (ii) the existence of an extensive office/branch network; (iii) compliance with national prudential regulations; (iv) satisfactory performance in respect to key financial ratios; and (v) having an external audit conforming to International Accounting Standards by a firm affiliated to an international audit firm. In Vietnam, the Development Assistance Fund, which provides preferential loans for exporters, can be utilized as a channel for SME support funds.

### *Food Law Harmonization*

For any amendments to individual GMS country food laws, the Ministries of Health will be the implementing agencies. The Ministries can delegate the work to their respective Food and Drug Administrations, if such an agency exists.

### *Interventions*

The interventions are divided into two phases.

During Phase 1 two consultants would be mobilized: (i) a consultant in food processing hazard avoidance legislation, and (ii) a BDS consultant.

#### *Consultant in Hazard Avoidance Legislation*

The consultant would have experience in GMP and HACCP and be familiar with EU and US food regulations regarding the incorporation of hazard avoidance within the legal framework.

The consultant would be responsible for several tasks including the following:

- Undertake a review of GMS food laws to identify deficiencies with respect to hazard avoidance compliance;
- Recommend, where needed, methods to introduce hazard avoidance into the legal framework and how to achieve regional harmonization on the issue;
- Develop recommendations with regard to hazard avoidance awareness when related to food safety;
- Make recommendations as to whether or not hazard avoidance should be extended to cover the agricultural production base and, if so, the mechanism to do so; and
- Prepare an action plan for hazard avoidance compliance, highlighting activities, milestones and a realistic timeframe for implementation.

### *BDS Consultant*

The consultant would have a strong background in financial institution planning, and establishing and managing specialized financial products for commercial financial institutions. Ideally, the consultant would have expertise in BDS cost sharing products, their concepts, objectives, application procedures and eligibility criteria amongst agribusiness and BDS practitioners. The consultant would undertake the following activities:

- Review existing GMS government SME financial support institutions and agencies, with emphasis on the food processing industry. The review would make particular reference to the role of development banks, domestic financial institutions and government support funds that have the mandate to assist companies through subsidies and cost share programs;
- Determine which future food safety projects would impact on the proposed GMS BDS initiatives. The consultant would make particular reference to future food safety projects planned by World Bank and ADB in Vietnam and the SME support to be implemented in Lao PDR, as well as any relevant projects planned under the multi-donor trust funds in Cambodia, Vietnam and Lao PDR;
- Review of potential participating financial institutions within the GMS.
- Conduct a brief market survey to identify potential for BDS support for hazard avoidance compliance and due diligence activities;
- Determine mechanisms of financial support on the basis of a fund match. Recommend eligibility criteria for SMEs to receive support for hazard avoidance compliance and due diligence activities;
- Assess the role of private sector corporations (Thailand) or “dragon heads” (China) in facilitating support to suppliers and small farmers in achieving hazard avoidance compliance; and
- Elaborate on an action plan for further BDS implementation relating to specific countries.

During Phase 2 the action plans recommended by the consultants would be implemented following the approval of the GMS country representatives.

### *Inputs and Costs*

The inputs and costs associated with Phase 1 are detailed in Table 2.6:

**Table 2.6: Support to Hazard Avoidance Legal Framework and SME Compliance**

| Activity                           | Item          | Approximate Cost US\$ |
|------------------------------------|---------------|-----------------------|
| <i>Hazard Avoidance Consultant</i> |               |                       |
| Provision of Consultant            | 3 months      | \$60,000              |
|                                    | Travel        | \$5,000               |
|                                    | Misc support  | \$10,000              |
| <i>BDS Consultant</i>              |               |                       |
| Provision of consultant            | 3 months      | \$75,000              |
|                                    | Travel        | \$5,000               |
|                                    | Misc support  | \$10,000              |
|                                    | Contingencies | \$33,000              |
|                                    | <b>TOTAL</b>  | <b>\$198,000</b>      |

The inputs and costs relating to Phase 2 of this component will depend on the recommendations of the consultants and the willingness of individual countries to amend the legal framework and establish a BDS fund to assist SMEs. It is recommended that each consultant return for a period of 2 months, from month 13 onwards, in an action plan advisory and monitoring role. These additional activities will have a budget of \$130,000 to contract the consultants.

It should be noted that the major cost of the component is the financing of the BDS support fund in each GMS country. The value of the fund will depend on the number of SMEs that exist, the capacity building that is required for the PFI and the need for consultants to support the intervention. There will also be costs related to fund management and administration charges. The size of the fund in relation to the country or region, the need for consultants and PFI capacity building is estimated in the Table 2.7.

**Table 2.7: BDS Support Fund Estimates per Country**

| GMS country               | Consultancy needed | PFI Capacity Building | Fund size (\$)    |
|---------------------------|--------------------|-----------------------|-------------------|
| Cambodia                  | Yes                | Required              | 3 million         |
| China (Yunnan/Guangxi AR) | Yes                | Required              | 10 million        |
| Lao PDR                   | Yes                | Required              | 1 million         |
| Myanmar                   | Yes                | Required              | 3 million         |
| Thailand                  | No                 | Required              | 8 million         |
| Vietnam                   | Yes                | Required              | 10 million        |
| <b>Total Fund</b>         |                    |                       | <b>35 Million</b> |

### *Benefits and Risks*

The benefits of Support to Hazard Avoidance Legal Framework and SME Compliance would include:

- Harmonization of food laws with respect to food production hazard avoidance;



- Domestic food safety would be improved and by implication GMS food products would be safer and therefore not subject to excessive scrutiny when exported to other GMS countries;
- Greater sub-regional confidence in food products;
- Enhanced food safety awareness; and
- Improved risk assessment procedures.

The risks of Support to Hazard Avoidance Legal Framework and SME Compliance include the following:

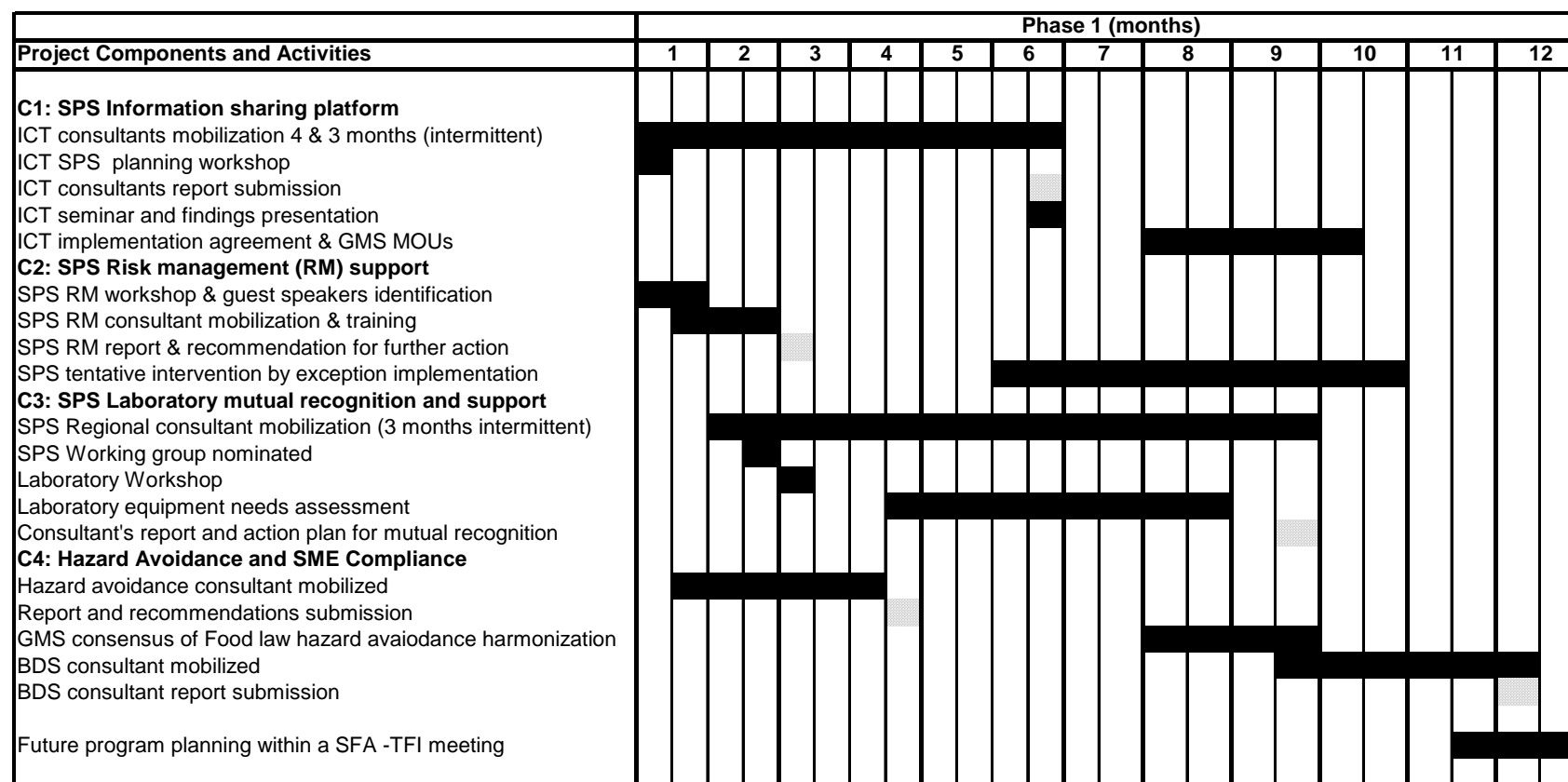
- Anticipated cooperation in legal framework harmonization among GMS countries is not realized;
- The follow-on from the BDS consultancy work would be the preparation of a project loan document. There may be reluctance on the part of GMS countries to take a loan from a multinational development bank that would be passed through the Government to support private sector BDS activities, particularly private sector grants;
- Lack of interest by the PFI in fund matching for BDS services and/or low implementation capacity of the PFI to distribute loans and grants;
- Independence and impartiality of fund match distribution is compromised; and
- GMS implementation agencies fail to fulfill commitments in a timely manner.

### ***Project Timeframe***

The project estimates that the above activities would take place over a period of 24 months. All components and their respective activities are subject to the approval of the SFA-TFI working group.

Although not discussed in this report, there is a need for a project coordinator/manager to ensure that the interventions, consultancies and workshops are scheduled as planned, especially bearing in mind that the activities would be spread across SPS, customs and logistics. An illustration of the timing of the inspection, quarantines and SPS recommended projects and interventions is detailed in Figure 2.2 and 2.3 below for Phases 1 and 2 respectively.

**Figure 2.2: The GMS SPS Project Timeframe Phase 1**



**Figure 2.3: The GMS SPS Project Timeframe Phase 2**

| Project Components and Activities                                 | Phase 2 (months) |   |   |   |   |   |   |   |   |    |    |    |
|---|------------------|---|---|---|---|---|---|---|---|----|----|----|
|   | 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| <b>C1: SPS Information sharing platform</b>                       |                  |   |   |   |   |   |   |   |   |    |    |    |
| Final information sharing platform design and location identified |                  |   |   |   |   |   |   |   |   |    |    |    |
| MOU signed between GMS for release of data                        |                  |   |   |   |   |   |   |   |   |    |    |    |
| Exposure visits   |                  |   |   |   |   |   |   |   |   |    |    |    |
| Hardware and software procurement                                 |                  |   |   |   |   |   |   |   |   |    |    |    |
| The information sharing platform on the web                       |                  |   |   |   |   |   |   |   |   |    |    |    |
| <b>C2: SPS Risk management (RM) support</b>                       |                  |   |   |   |   |   |   |   |   |    |    |    |
| Risk management consultant mobilization                           |                  |   |   |   |   |   |   |   |   |    |    |    |
| Further RM training   |                  |   |   |   |   |   |   |   |   |    |    |    |
| Inter-governmental meetings                                       |                  |   |   |   |   |   |   |   |   |    |    |    |
| Bilateral MOUs Signed   |                  |   |   |   |   |   |   |   |   |    |    |    |
| <b>C3: SPS Laboratory mutual recognition and support</b>          |                  |   |   |   |   |   |   |   |   |    |    |    |
| Equipment Procurement   |                  |   |   |   |   |   |   |   |   |    |    |    |
| Infrastructure/building improvement                               |                  |   |   |   |   |   |   |   |   |    |    |    |
| Installation and staff training                                   |                  |   |   |   |   |   |   |   |   |    |    |    |
| ISO 17025 audit and certification                                 |                  |   |   |   |   |   |   |   |   |    |    |    |
| Mutual recognition process begins                                 |                  |   |   |   |   |   |   |   |   |    |    |    |
| <b>C4: Hazard Avoidance and SME Compliance</b>                    |                  |   |   |   |   |   |   |   |   |    |    |    |
| Hazard Avoidance action Plan Implementation                       |                  |   |   |   |   |   |   |   |   |    |    |    |
| SME compliance and BDS action Plan implementation                 |                  |   |   |   |   |   |   |   |   |    |    |    |
| Future program planning within a SFA -TFI meeting                 |                  |   |   |   |   |   |   |   |   |    |    |    |

## CHAPTER III. CUSTOMS

### Background

It is generally accepted that most countries in the GMS lag behind other APEC countries in the use of trade-facilitative Customs processes and methods of work. Thailand and China have generally kept up with the compliance timetables of the Common Action Programs agreed to with the APEC Sub-Committee on Customs Procedures (SCCP-CAPs). Vietnam has lagged behind, however, having implemented only two components (HS Convention and Public Availability of Information).<sup>21</sup> Non-APEC members Cambodia, Myanmar and Lao PDR, have made little progress.

Annex 2, Appendix shows the CAPs of the New Focus and Transparency Standards under the APEC SCCP. The 2006 status of these programs shows that the majority of the countries are reporting full implementation. Thailand reported fully implementing thirteen CAPs, partially implementing one and is currently implementing two. China reported fourteen CAPS fully implemented and ongoing implementation for two.

Vietnam, a recent addition to the APEC community, reported fully implementing three CAPs (HS Convention, public availability of information and valuation); partial implementation of six (RKC, TRIPS, temporary imports, common data elements and express consignment); and on-going implementation of four (clear appeals procedures, risk management, customs integrity and business partnerships). It also reported no implementation on two CAPs (paperless transactions and advance classification rulings).

There is concern though within APEC that the quality of CAPs implementation is poor. A voluntary program called Peer Review has been added to the APEC SCCP to deepen and improve the quality of CAPs implementation. Non-APEC countries Cambodia and Lao PDR can at best claim ongoing implementation for some of the programs of the APEC-SCCP.

For the entire GMS, the challenge is not only to implement the CTF programs and standards but also to deepen the quality of compliance for those programs where implementation is underway. The Peer Review Program of APEC, or an alternative, is desirable for this purpose. The alternative for GMS is to put up its own TFP Performance Review Team and obtain support for its operations.

ASEAN has a sub-program under its Strategic Plan for Customs Development (SPCD) in recognition of the need to narrow the development gaps between the CMLV countries and the rest of ASEAN. The particular goals of the sub-program are the following:

- Assist the countries in introducing new developments in customs techniques;
- Reduce gaps in technical aspects and professional capacity; and
- Strengthen capability to conduct national programs in a more sustainable manner.

---

<sup>21</sup> 2006 SCCP report

For a number of years, GMS countries have been working on improvements in Customs procedures as part of the development of the annexes and protocols under the CBTA. Implementation has now begun and there has been some success in facilitating cross border flows. However, GMS countries recognize the need for a more holistic approach to trade and investment facilitation than the CBTA can provide, especially in the four priority areas of trade logistics, SPS, business mobility and Customs.

## **Concept of Customs Trade Facilitation**

As most of the GMS countries already have substantial programs underway to improve Customs facilitation, the objective of the SFA-TFI Customs component is to identify programs and related activities that will complement these ongoing efforts. An assessment was made of each GMS country's Customs processes and methods of work along with their planned improvements. The assessment was done in order to have a basis for identifying priority programs and related activities. In addition, gaps between current practices and international standards, guidelines and recommended practices of Customs Trade Facilitation (CTF) were identified. CTF is a discipline imposed by a Customs Administration upon itself to keep to a minimum the data submitted and formal procedures imposed upon cross border flow of goods. CTF aims to minimize the cost to trade and to improve the efficiency and competitiveness of the supply chain.

The ideal is a regime in which Customs does not require any data submission or formal procedures and does not intervene in commercial transactions. However, the closest that any country has come to this ideal is to exempt certain cross-border flows of goods from some documentary or data submissions and formalities. Among the goods traditionally extended zero intervention are company samples, documents, periodicals, post and other non-commercial goods. Also, many Customs administrations observe a cutoff value of import consignments, below which no tariff and formality are imposed.

For most goods, however, documentary and data submissions are essential for proper compliance with an economy's control objectives and concerns. For all the GMS countries, notifying regulatory authorities of the presence of regulated goods at the borders so that they can perform their mandate appears to be the responsibility of the importers. There are no other mechanisms for doing so. In recognition of this difficulty, ASEAN is pursuing a Cargo Clearance Module under its Strategic Plan for Customs Development (SPCD). Strategies and related activities have been introduced to address the difficulties that Customs faces in organizing integrated interventions with other government agencies and line Ministries.

For CTF, the documents and data required should, whenever feasible, be the same as used for commerce and transport. Assuming that the other agencies already have this information in their files, there would be little cost and difficulty sharing the data with Customs and other regulatory agencies. Facilitative Customs regimes should avoid making any additional data requests unless the submission of these documents and/or data are required for protection of revenues, health (human, animal and plant), environment, security or other critical concerns. A level of physical controls is needed to insure that the control objectives are faithfully observed and complied with, but the documentation required should be limited to that needed to support enforcement of clear control objectives.

All countries carry out regulatory measures on imports and exports to achieve certain control objectives. While individual countries have different emphases, the purpose of these control measures may be one or a combination of the following concerns: health and safety of the citizenry, conservation of plant and fauna; protection of the environment; and providing a level playing field for domestic and imported goods and others. Traditionally, countries adopt a three-stage control system to achieve the above objectives. These stages are:

*Stage 1. Pre-Shipment Stage with two Sub-stages:*

- (i) Qualification Stage (Sub-stage 1) wherein importers, exporters and/or producers of regulated products are accredited or pre-qualified; and
- (ii) Shipment Notification Stage (Sub-stage 2) wherein each and every shipment is notified to and issued the required license or permit by the regulatory office prior to shipment to insure that:
  - a. Importers and exporters have been previously pre-qualified;
  - b. That there are no special instructions that completely prohibit importation or exportation; and
  - c. Importers and exporters are aware of and comply with the terms and conditions (some of which are situational in nature) for allowing the cross-border flow.

*Stage 2. Arrival Stage*

Determination of shipment compliance with the requirements of Stage 1. Regulatory officers may be deployed at border stations and international gateways to, among other responsibilities, insure that each and every arrival or exit of the regulated products has undergone the pre-shipment stage and complies with conditions set for its cross-border flow. Said officers may either be regularly posted or just be on an on-call basis to assist Customs.

*Stage 3. Post Customs Release Stage*

Shipments may be taken to accredited holding or storage facilities for closer observation and test before they are finally cleared for use and/or consumption. For live animals and meat, it is not advisable to administer quarantine procedures at the border, hence the need for the conduct of the third stage off the border.

The optimum timing of Customs intervention is prior to the arrival of the goods into the customs territory or pre-border. Ideally, many arriving goods would be waived through the borders because the border is where it is most costly to undertake control activities (and also the most difficult in case of valuation). With advance clearance procedures, Customs administrations are able to give carriers and traders advance notice of their intention to release designated consignments immediately on arrival (subject to the basic right of Customs to stop and inspect goods at anytime during the control flow).



Another occasion for Customs intervention is after the goods have crossed the borders, i.e. “behind the borders”. Among the customs techniques employed at this stage are post-release clearance and post-audit as well as periodic Customs declarations. Facilitative Customs takes into consideration several factors in determining what percentage of goods needs to go through the regular Customs process at the border itself. Such factors include the requirements of trade, the available resources and facilities at the customs stations and the attendant risks to Customs. Modern Customs employs scientific methods for setting the optimum percentage of interventions, taking into account the above-mentioned factors.

When interventions are undertaken, the procedure employed is not “one size fits all” but is calibrated to the attendant level of risk, the handling requirement of the goods and the conditions of the port or station. Green lane channels are opened to low risk consignments and entities, while red lanes are provided for intensive checking of those goods for which there is derogatory information or which are otherwise assessed to be high risk. On the other hand, bulk goods and other shipments needing special equipment for inspection are usually taken to an off-border facility, or even allowed to proceed to the importer’s premises. For the latter, a more intensive physical examination can be made in the course of transferring the goods from the transport vehicles to the storage facility.

Customs examination is also integrated with the examination requirements of OGAs should those agencies elect to be present instead of delegating physical examination to Customs. Interventions should not expose the goods to losses, pilferage or deterioration, and should be positioned to avoid costly double handling in the course of releasing of the goods.

The guidelines, standards and recommended best practices most widely observed in a CTF program are presented below. However, a truly facilitative Customs administration is one that goes beyond international benchmarks in its compliance and even takes leadership in developing improved means for supervising trade and enforcing controls.

A facilitative Customs would assist other government agencies to develop the capability to discharge their respective mandates more effectively. Such an agency would champion seamless integration of disparate government systems, mindful that the efficiencies that Customs is able to provide can easily be dissipated by the inefficiencies in OGAs’ systems as well as those of other entities in the supply chain. Modern Customs would therefore make investment in state-of-the-art methods to include data warehousing, business analytics, ICT and scanning technologies, and would share these tools with its partners in the facilitation of trade.

## **Major CTF Programs**

Listed below are the major international conventions, guidelines and frameworks that provide a basis of a CTF program. These were used in preparing a Gap Analysis of the current situation and ongoing programs in each of the GMS countries (Annex 2, Appendix):

- ESCAP standards and ECE conventions
- Framework on Standards for Facilitating and Securing Global Trade (FOS)
- International Chamber of Commerce (ICC) Guidelines

- Revised Kyoto Convention (RKC)
- UNCTAD's Trade Efficiency Assessment Methodology (Team)

Since these regimes have significant overlaps, the various standards and recommended practices have been grouped into the following categories, which are presented in greater detail in the appendices to Annex 2.

**1. Intervention by Exception (IE)** are programs that directly reduce the number of transactions (customs declarations) required to go through regular Customs and OGA processes at the borders. IE programs also can increase the number of transactions that are waived through the borders or given special procedures with minimum of submissions and intervention. Included here are programs that allow the immediate provisional release of goods upon arrival at the borders, or programs for submission of minimum information for goods that are subject to subsequent clearance processing outside the customs zone, normally at the importer's premises.

**2. Minimum Submissions** are measures aimed at reducing the documentary and data submission requirements and formalities for border crossing, and harmonizing these with the requirements of other countries based on international conventions.

**3. Electronic Services and Automation** are standards for the development and use of ICT both for the front-end electronic registration of Customs, OGA, transport, finance and other supply chain documents as well as for the associated back-office automation.

**4. Dispute Avoidance and Resolution** includes accession to and compliance with various international conventions that promote simplified, harmonized, uniform and consistent Customs operations as well as efficient and reasonable dispute resolution in areas such as valuation, classification and rules of origin.

**5. Transparency and Partnership with Trade** are programs to make the data and information submission requirements of Customs and OGAs transparent to shippers and transporters. Voluntary Compliance Programs encourage trade partners to interface their systems. Shared Compliance Programs promote the concept that the traders should share in the burden of compliance enforcement in order for Customs and OGAs to implement more advanced trade facilitative measures.

**6. Securing and Facilitating Exports** are programs that simplify export documentation and facilitate entry into the destination country by relying on information provided the Customs administration of the exporting country.

**7. Transits and Temporary Admissions** are programs that promote an integrated production base through the unimpeded flow of material inputs and outputs into and out of the region without payment of duties and taxes, as well as with a minimum of documentary requirements and formalities.

**8. RKC Compliance** refers to programs that take full advantage of other trade facilitation measures in RKC and other International Conventions and Agreements. These activities will

support the convergence and harmonization of customs laws, regulations, procedures and forms in GMS.

**9. Trade Facilitation Strategic Planning, Goal Setting and Performance Measurement** are programs that insure quality and true Customs compliance with the standards, guidelines and recommended practices for trade facilitation. Quality and compliance are maintained through regular measurements of program success indicators and reporting to the designated program management.

**10. Other Programs** are other CTF measures not listed in the previous categories.

The gap analysis revealed that trade facilitation situations in the GMS countries differ widely. For this reason, the proposals for improvement are both regional and country-specific. Many are being pursued at the national level as part of donor-assisted projects for customs reform. However, there is a need for a region-wide program in the interest of better resource management and of promoting regional harmonization.

## Regional Initiatives

The regional components include intervention by exception, integrated border management, an information-sharing platform and a joint research center.

### *Intervention by Exception*

An IE program would make restrictions in the following procedures and actions:

- Temporary storage;
- Checking document completeness;
- Physical examination;
- Review of self-assessed duties; and
- Taxes.

These procedures and actions would be limited to situations where Customs is in receipt of specific intelligence or the shipment is selected under the risk management system. An IE program would also affect special processes such as periodic customs declaration, release on submission of minimum data, clearance at premises of trade as well as pre-arrival processing and notification of release. Exceptions requiring intervention would be identified by technologies such as data mining, business intelligence, risk assessments, profiling, selectivity and random sampling. The IE program would include arrangements for compliant traders such as Shared Compliance Programs and Customs-Trade MOUs as well as qualifying Authorized Persons under the RKC and Authorized Economic Operators under FOS.

The introduction of the above techniques represents a dramatic change in approach. China and Thailand are making a concerted effort to pursue this approach, but the other GMS countries are proceeding more cautiously. So far the Customs authorities in Lao PDR, Vietnam and Cambodia have only managed to introduce a very limited version of green, yellow and red channels, but

these authorities are expected to expand their efforts as part of ongoing programs. The CBTA includes provisions for the introduction of risk management and authorized persons as do the World Bank customs modernization projects underway in Vietnam and Laos. However, these initiatives would require several years to be implemented.

Intervention by Exception may be organized into nine sub-programs, each one itself a major effort:

- Data warehousing, data mining and business analytics in relation to risk management, profiling, targeting and selectivity;
- Support systems for advance declaration, advance manifests and inter-governmental data exchange;
- Special procedures such as those provided under RKC Standard 3.2 of General Annex;
- Release on the provision of minimum information necessary to identify the goods and permit the subsequent completion of the final Goods declaration;
- Clearance of the goods at the declarant's premises or another place authorized by the Customs;
- Allowing a single Goods declaration for all imports or exports in a given period where goods are imported or exported frequently by the same person;
- Use of the authorized persons' commercial records to self-assess their duty and tax liability;
- Allowing the registration of the Goods declaration by means of an entry in the records of the authorized person to be supported subsequently by a supplementary Goods declaration; and
- Post clearance and release and post audit systems.

A common difficulty among GMS countries, with the possible exception of China, is the lack of capability to warehouse and mine the large amounts of data that their respective ICT systems are accumulating. Most administrations are utilizing their declaration database only for revenue reporting purposes. Declaration data, along with manifest, payments, permits, exemptions and other third party data may be processed to generate information that can support compliance management, risk management, intervention by exception, performance measurement and other advanced customs and trade facilitation techniques.

A Data Mining and Business Intelligence system (DMBI) provides the capability to analyze Customs and other government databases for risk indicators and measures that may be automatically executed as part of a risk management program. Data Mining is the terminology for the various techniques of analyzing data contained either in a data warehouse<sup>22</sup> or in a data mart. The data is analyzed to detect patterns and knowledge that are useful for guiding management policies and decision-making as well as basis for operational action. Among its tools are software to examine, analyze, visualize and score data related to incoming shipments and people. Data mining can produce intelligence that will guide the locus, timing and nature of Customs intervention. Such actions are essential to the successful execution of an Intervention by

---

<sup>22</sup> A Data Warehouse is a repository of business information used for analysis, separate from the "active" business system files.

Exception (IE) Program. The same approach can then be extended to the OGAs as part of an effort to coordinate their regulatory efforts with those of Customs.

With practically all Customs administrations acquiring more powerful systems to gather data in real time, it is highly desirable that the agency has in its ranks a professional group that can convert these data to useful information to support more efficient customs operations. It would be highly desirable for the WCO Regional Training Office and interested Donor organizations to organize capacity-building programs for data mining and business intelligence. This would include evaluation of commercial software for business analytics as well as study tours.

### *Integrated Border Management*

Efforts to facilitate trade become more effective if they are extended beyond Customs systems and procedures to the systems and processes of other line ministries and OGAs that affect the efficiency of the cross-border flow. An increasing proportion of the paperwork and procedures required for clearing cargo and the delays incurred at the borders are attributable to the OGAs rather than customs. While these organizations vary among countries, they generally include representatives from the Ministries of Health and Agriculture as well as the agencies responsible for standards, food safety, drug enforcement and security. These OGAs are responsible for specific commodities on the CRP (control, regulated, prohibited) list; therefore, their role at the border changes as the list is modified. Each agency has a separate mandate but often these are overlapping responsibilities.

The role of OGAs is likely to increase, not only to meet growing public concern with the quality and safety of goods being imported<sup>23</sup> but also to ensure that exports meet the standards required by importing countries.<sup>24</sup> In order to improve compliance and detection rates without increasing the delays to cargo, it is important to coordinate the activity of the OGAs with each other and with Customs.<sup>25</sup> Two important areas for coordination are the approvals granted for import of controlled and regulated goods, and the cargo clearance documents.

This inter-agency coordination should extend to the submission and processing of cargo declaration forms as well as the inspection. Advanced Customs administrations do not just resolve working relationships with partner government agencies, they also assist in setting up Single Electronic Window (SEW) systems to improve the effectiveness of government supervision over cross-border flow of goods. Previous efforts to introduce single windows did not address the issue of coordination directly. On the other hand, the expanding use of ICT creates an opportunity for accomplishing SEW without requiring the agencies to locate in a common facility. Equally important, SEW can be used to increase both compliance and transparency by providing shippers with better information on regulatory requirements and procedures, as well as on the status of their cargo.

---

<sup>23</sup> These problem are occurring more frequently in both developed and developing countries, e.g. the current concern over lapses in inspection procedures for food and drugs

<sup>24</sup> As recent history demonstrates, individual shipments of substandard goods can have a serious impact on a country's trade.

<sup>25</sup> ASEAN has already introduced its SCPD Program, which includes a major component on Customs-Government Agencies and Line Ministries Partnership in coordinating interventions in the cross border flow of goods in pursuit of their respective mandates.

Setting up a Customs SEW requires that the licensing, clearing or permitting procedures of OGAs be available electronically so that the outputs can be uploaded to a Customs database available for retrieval during declaration processing. As part of this effort, a modern Customs administration must work with its OGA partners to provide an Electronic Licensing System (ELS). This ELS includes a Regulated and Controlled Commodity Database that can be made readily available to the public. It would also allow shippers, consignees and transporters to obtain the various permits, clearances and other authorizations needed for the clearance of controlled and regulated goods and their seamless uploading to Customs database. Priority agencies for this system of automation are those concerned with health, industrial standards, agriculture and fisheries, in addition to Customs.

The ELS would indicate the routine as well as the situational conditions for granting authorization. For example, importation of meat products may require submission of an International Veterinary Certificate (IVC) from the concerned agency in the exporting country to confirm that the quality, production and export regulations of the exporting country have been met. Situational conditions may include specialized test and treatment measures required prior to export in response to conditions prevailing in the country of export at the time of shipment. In some cases, third party inspection by a professional inspection company may be made a situational condition as well. The features of the ELS are described in greater detail in Annex 2, Appendix F.

Supplementing the ELS measures are the traditional methods of surveillance and inspections which maybe undertaken while the goods are still in the exporting country, at the borders or when the goods have been cleared and are already in the domestic market. Whatever control method is used, a good working relationship between the Customs authority and the regulatory agencies is an essential ingredient for effectiveness.

There are several standards and recommended practices on the working relationship between Customs and OGAs related to trade regulation and control. RKC General Annex Chapter 3 on Transitional Standard Number 35 provides that

“Should the goods be inspected by other competent authorities and Customs also schedules an examination, the Customs shall ensure that the inspections are coordinated and, if possible, carried out at the same time”.

ICC Guideline Number 20 on the Convergence of Official Controls is even more exacting by requiring that all official controls affecting goods moving over a national frontier including security, dangerous goods, hazardous waste and nuclear substances, be delegated to a single government agency. This would require an inter-departmental agreement to entrust Customs limited supervisory and detection duties. Once suspicions are aroused, Customs will arrange for the responsible control department to be alerted and brought on to the scene to carry out any necessary substantive investigation.

Donor support has focused on Customs systems to the detriment of OGA systems even though inefficient operations of the latter can negate gains achieved in reforming and modernizing the



Customs systems. To address the common problem of lack of coordination between Customs and OGAs, a partnership needs to be developed. However, the ASEAN program on Customs-Government Agencies and Line Ministries Partnership on the cross-border flow of goods has yielded little. Therefore, it is necessary to proceed carefully in developing such a partnership for the GMS countries.<sup>26</sup> Consideration should be given to obtaining assistance for introducing this program.

### *Information Sharing Platform*

Improvements in compliance can be achieved when shippers, forwarders and clearance agents become more familiar with the requirements of their trading partners' border agencies. Improved familiarity requires the development of an information source on the trade regulations and procedures for all GMS countries. This information should be easily accessible to those involved in intraregional trade. Traders within GMS as well as trading partners located outside the region need a quick and convenient source of information on the regulatory environment and other issues impacting trade and investment. An Information Sharing Platform can meet this need by providing the following:

- Central source of trade-related information;
- Front end system through which shippers, consignees, brokers, freight forwarders, banks, transportation and other logistic providers can obtain service or make required documentary submissions; and
- Data exchange with OGAs as well other Customs administrations.

This component proposes to develop a module for the regional information sharing platform (GMS-IP) that would provide the information described above through a website. Among the features of this module would be a system for indexing documents (such as permits, clearances or licenses), regulatory procedures and other requirements for each GMS country based on HS commodity code.

The module could offer a proprietary network for the electronic submission of cargo declarations from the country of export to support pre-arrival clearance at the country of import. Such a system would open the possibility of release upon arrival of the goods at the borders, and could also be used to facilitate transit movements. At present, a photocopy of the export declaration in one country is required as a supporting document for transit to another country. Customs administrations would be more confident in facilitating the clearance of arriving goods, and even potentially pre-process the same, if they could obtain in advance detailed goods declaration from a secure source.

The GMS-IP can also serve as a secure medium for exchange of risk profiles and other risk assessments among customs administrations. Among the information categories that could be maintained on a secured site are the following:

---

<sup>26</sup> This is a major component of the ASEAN SCPD for coordinating interventions in the cross border flow of goods. Focus maybe placed on government agencies with most number of interventions and the administration of the permits and licenses being issued by these.

- Anti-price fraud data or statistical ranges of valuations by HS Codes;
- Export declarations of one country transiting another for confirming legitimacy of transit applications;
- Temporary exports of one GMS country for temporary admission to another; and
- Regional Gold Cards issued for companies operating in two or more GMS countries.

Donor support is advisable for the following activities:

- Identifying the most important informational needs;
- Defining an appropriate electronic platform for the publication of this information; and
- Developing alternative business models for the establishment, operations and maintenance of the GMS platform.

The platform can also be organized as an infrastructure for the exchange of export declarations in support of advance declarations and processing as well as of intervention by exception.

### **Regional Technical Assistance**

There are a wide variety of focused initiatives that could be included in a regional program for improving trade facilitation. These potential activities are listed below:

- Organize a GMS CTF Review Team as an alternative to the Peer Review mechanism of APEC to promote sharing of CTF best practices and to deepen the implementation of CTF measures;
- Establish a Regional Intelligence and Enforcement Office which, in addition to building a Customs anti-price fraud data sharing platform (described in Annex 2, Appendix E), would maintain a regional database of all Customs data that maybe processed and shared in support of risk management and the other operations-related CTF activities. The sharing of Customs data would be subject to the legal requirements of GMS countries. The office could also support the monitoring and enforcement activities of operations on transits and temporary admission;
- Issue Regional Gold Cards similar to the Thai system, but expanded for entities operating in two or more countries in the sub-region;
- Develop a GMS Systems and Procedures Development Program to develop the following concepts: (1) Authorized Persons under RKC General Annex Transitory Standards 3.32; (2) Authorized Economic Operators under FOS; and (3) Enterprise Systems Netted to Customs Systems and other special procedures;
- Accelerate RKC accession and compliance processes, which are now at different stages in GMS. Emphasize those standards and recommended practices that directly impact on the implementation of the Intervention by Exception;
- Implement a set of common indices and performance measures for GMS including the establishment of standard rates of inspections and examinations with a schedule for their gradual reduction (as with the Thai CTF);
- Introduce a common GMS declaration form; and
- Contract a GMS Value-added Service Provider to complement and speed up the development of the GMS single electronic window.

A review of the planned CTF programs and activities for the GMS countries as reported in various publications has identified several gaps with the international CTF programs (Annex 2). There are several existing donor-funded projects with the potential to address these gaps. It is important that such projects incorporate a regional dimension. For example, considerable funds are being allocated to the development of ICT infrastructures and systems. Countries and donor organizations should consider how each country's ICT systems would interface and exchange data in support of the various CTF activities.

### Interim CTF Measures

Many of the international CTF programs that have potential for improving competitiveness and integration require expensive, sophisticated infrastructure that requires long development times. Therefore, new CTF programs must be developed that can operate with minimal investments. Since all GMS countries have ICT systems, albeit in differing degrees of development, the current and new ICT projects should be reviewed to identify programs and capabilities for promoting trade facilitation (not just enforcement) in line with RKC. Among the features to be evaluated are the following:

- Single window and multiple access channels;
- Support for risk assessment and identification of accounts and transactions to be facilitated;
- Netting with trade systems;
- Public information on the requirements per HS line (permits, clearances, licenses and other documentary, procedural requirements and relevant regulations; and
- Other transparency programs.

While donor-funded projects are fairly extensive in their coverage, there are some shortfalls with regard to the following systems: electronic front-end systems or electronic licensing systems for Customs partner government agencies; electronic payment systems; transit and cargo transfer systems; and factory-to-gateway automated export systems.

It is important for the GMS countries to have early introduction of non-automated systems of IE even as they continue development of automated systems. Non-automated systems will allow GMS countries to obtain the trade facilitation benefits from this effort and improve competitiveness and integration of processes sooner rather than later. This can be accomplished by utilizing the following tools:

- Risk management guided by intelligence operations of the national Customs administrations, and aided by bilateral or multilateral administrative assistance;
- Existing databases covering cases and offenders, as well as business registries and potentially even telephone company records;
- Advance processing of manifests from transportation companies, import permit applications and import notifications and inspection reports for countries with PSI programs. Also, in some cases, requiring a schedule of arrivals of shipments from

regular manufacturers, processors and importers may help to trap criminal organizations that present their shipments as being sent by legitimate organizations; and

- A review of arrivals based on advance manifest producing a list of shipments with high probability of being at risk for fraud or other form of violation. These shipments would then go through a red channel while the rest of the declarations would be accepted at face value upon confirmation of payment receipt or security for payment.

It will not be long before CMLV Customs will have operational ICT systems<sup>27</sup> with ASYCUDA++ or the newer generation ASYCUDA World. Both of these systems have a risk management engine that can automate the execution of complex risk profiles. It should not be difficult to migrate from a non-automated phase of intervention by exemption to the automated phase. The challenge is for Customs administration to make the transition and implement the IE philosophy.

All GMS countries have Intervention by Exception and risk management components in their respective CTF Programs for which data mining and business intelligence capabilities are needed. GMS Customs administrations need not start with systems used by more advanced countries, but instead can implement simpler and more basic applications such as the following:

- Anti-Price Fraud Data Mart and System<sup>28</sup> – Using the Customs declaration file, a valuation data mart can be created with which Customs assessment officers can establish the reasonable range of prices (transaction values) for various imported commodities. Other patterns like price movements are also important;
- Importer Profile – Database of suppliers, ports of exportation, ports of discharge, means of transport, routes, goods imported, modal size (volume, weight, value), schedules of arrivals by importer. This data will be particularly useful in identifying smuggling cases disguised as exempt, suspense regimes and temporary imports;
- Access for Customs risk assessment officers to the taxpayer registration database to establish importer's identity, nature of business and capacity for importation. This will enable Customs to correlate the capacity of the importer to actually import the amount and type of goods declared in the shipment;
- Access for Customs post-audit teams to VAT declaration files and VAT Invoices files. The declaration file can be used to determine how much input VAT credits are being claimed whereas VAT sales may be obtained from the VAT invoice files. Both data may be use as basis for establishing the import level for comparisons with the declarations with Customs. Importers with big discrepancies will be the priority of Customs post-release audits; and
- Access for Customs risk management officers, as well as post-audit officers, to the taxpayer account cards or ledgers as well as arrears and delinquency files. This access is advisable as there is a high correlation between tax offenders and customs violators. Companies in extreme financial difficulties are tempted to use the smuggling route as a way of extricating themselves from financial difficulties. Professional smugglers are

<sup>27</sup> Cambodia and Lao PDR have good prospect for the implementation of the ASYCUDA software by middle of 2008. Vietnam, while experiencing some delays in the procurement of the World Bank funded ICT, has made good progress in setting up an interim ICT, which is now being considered for further upgrade and roll-out.

<sup>28</sup> Data-Mart is a data warehouse with a special focus, usually a business issue.

adept at identifying such companies for the purpose of using them as conduits for their illegal activities either by conspiring with the owners/officers or by buying the company outright for nominal amounts.

Finally the GMS SFA-TFI needs to seriously consider pursuing a private sector approach to providing information sharing platforms.

## Project Proposals

In order to accelerate the introduction of the initiatives described above at a regional level, a Customs Facilitation project is proposed. This project would have five components as described below. The components could be implemented with donor assistance and coordinated with ongoing efforts in Customs reforms, but with shorter time frames than the larger donor-supported activities.

### *Component 1: Intervention by Exception*

The objective of the first component is to introduce a program of Intervention by Exception (IE). An IE program would provide Customs with the techniques and technology to reduce delays while improving detection, compliance and efficiency. This program would differ from more comprehensive Customs modernization projects in that it would build on existing initiatives with targeted interventions over relatively short time periods. The focus would be strategic, providing senior management with an understanding of actual experiences and quantitative benefits from applying these techniques. The benefits of training Customs IT professionals in the use of these techniques would also be covered. The component would begin with an evaluation by the Customs authorities of ongoing programs, as well as an assessment of current performance based on a survey of shippers, forwarders and clearance agents. The results would be correlated with previous gap analyses in order to identify interventions that could have a significant impact and offer a high probability of success. This effort would be coordinated with the Customs authorities to develop a consensus on critical interventions.

The first phase of the component would include the support of an expert to undertake three important tasks:

- Coordinate future collection of information;
- Prioritize initiatives; and
- Prepare terms of reference, budgets and timelines for these initiatives.

The component's second phase would implement those initiatives that have a high priority and a significant chance to achieve success in the short to medium term. The number and size of such initiatives is uncertain, but they should be executable within three years or less from the start of this component.

The leadership for this component would come from the Customs authorities working together with the Ministries of Commerce/Trade. The benefit from successful implementation of this component would be a dramatic reduction in the times required for clearance of cargo. This

improvement would occur in advance of and provide support for the long-term Customs reform programs currently underway in all of the GMS countries.

The risks are that some of the component's activities would conflict with other efforts in the already crowded field of trade facilitation, or that the Customs authorities would be cautious in introducing changes in procedures or technology so that it would not be possible to complete the interventions within a short timeframe.

### *Component 2: Integrated Border Management*

The second component would involve a broad program of support for the OGAs to improve and integrate their procedures. The component would begin with an assessment of the strategies and techniques available for improving the effectiveness of and coordination among the OGAs. The menu of available assistance activities would include the following:

- Introduction of a single administrative document providing the information required by all of the OGAs;
- Electronic submission and processing of this document including automatic notification of the OGAs according to the commodity classification;
- Electronic Import Licensing System;<sup>29</sup>
- Joint scheduling of inspections, collection of samples and testing; and
- A common risk-profiling database.

These activities would be supported by complementary efforts to encourage the OGAs to embark on three initiatives:

- Introduce risk management techniques;
- Develop partnerships with the private sector to improve compliance; and
- Monitor efficiency and effectiveness of detection efforts.

The assessment would also provide input for a regional workshop. This workshop would identify priority areas and prepare a menu of potential activities (to be funded by governments or donors) for integrating border management. The workshop would be followed by a scoping effort to undertake five tasks:

- Select the top priorities from the menu of potential activities for each of the OGAs;
- Map the responsibilities of each OGA and the commodities for which they are responsible;
- Inventory the documentation, processing activities and inspection procedures for these OGAs;
- Determine the willingness of the OGAs and related ministries to reform their cargo clearance procedures; and
- Prepare a budget and timeline for these initiatives.

---

<sup>29</sup> A potential area for coordination is in the administration of permits, clearances, licenses and similar authorizations issued by OGAs and required for customs clearance. These can be integrated into an Electronic Import License System (EILS) linking the OGAs with customs administration.



These activities are expected to require 10-12 months. The leadership in this effort should come from a senior Ministry in each of the GMS countries that is able to coordinate the participation of the various border management agencies.

The second phase of the component would implement of those initiatives that were assigned the highest priority. Since the initiatives seek to change procedures at the agency level, they can be undertaken as separate activities by the relevant agencies. However, given that the objective is to improve interagency coordination, the initiatives should be introduced jointly as part of pilot projects at designated border crossings. The core budget for this phase is estimated to be \$10 million. It is anticipated there would be a variety of sources of funding and participation by a number of donor organizations, and Government agencies that would likely result in a significant expansion of this budget.

The benefits of these activities would include the following:

- Lower transaction costs by converting the OGAs from paper-based procedures to electronic processing and from multiple documents to a SAD;
- Shorter cargo clearance times through joint inspections;
- Better enforcement through sharing of data among border management agencies; and
- Better enforcement through private-sector compliance programs.

This component would complement those activities proposed for improving Inspection and Quarantine. Component structure assumes that the Customs authorities will continue to be the coordinating agency at the border. One of the risks is that, should this not be the case, there would be continuing turf battles such as those in Cambodia and China. Another risk is that the disparities in capacity of the individual OGAs would prevent them from collaborating or introducing the necessary IT systems.

### *Component 3: Customs IP Module*

This component involves the development of a regional information-sharing platform. The platform would be designed to improve regional coordination and the interchange of information related to shipments, risk profiles and regulations affecting trade. The scope of the platform would be determined by a technical subcommittee comprised of representatives of the various agencies responsible for such information. The design of the module would be the responsibility of the GMS-IP technical staff employed to develop this and similar trade facilitation modules.

The component would assist in formulating the functions to be included in the platform. Component activities would include conducting a technical regional workshop to reach consensus on those applications that should be given priority. It is anticipated that 10-12 months would be required for development of the module and an additional year for securing the cooperation and inputs from the different customs administrations.

The principal benefits of the component would be increased compliance by traders and shippers as well as better compliance management by Customs administrations. The risk is that the

Customs administrations may be reluctant to share what they see as proprietary information or to accept the liability attached with sharing this information.

#### *Component 4: Data-Mining*

This component would provide technical assistance to GMS Customs authorities to upgrade their capabilities in the areas of data warehousing and mining. The data covered by component activities would include data generated internally and from other government agencies as well as from private sources and other GMS countries.

The initial phase of this component would have four activities:

- Orientation and Training in the principles and techniques of data mining including examples of risk management applications and intervention by exception, as well as demonstrations of commercial data mining software;
- Study Tour of Customs administrations that successfully utilize data mining including a visit to the EU's Joint Research Center to observe how data mining is used to support intervention by exception;
- An inventory of data sources suitable for data mining and the skills and resources available for data mining; and
- Preparation of a strategic plan for development of data mining and business intelligence activities within Customs.

The second phase would involve organizing interim data warehouses, data marts and knowledge generation systems using available in country and regional databases.

The first phase is estimated to require two experts in data mining for a period of 6 person-months and to cost about \$ 0.5 million.

#### *Component 5: GMS Joint Research Center*

It is the intention of each GMS Customs Administration to comply with the Revised Kyoto Convention and other international conventions on Customs Trade Facilitation. However, full compliance with many of the standards and recommended practices involves advanced customs techniques that are presently beyond the capacities of some GMS Customs agencies. One example is the implementation of the facilitative procedures for Authorized Persons under Chapter 3 of RKC General Annex. Setting the criteria for authorized persons, specifying acceptable commercial systems and detailing the mechanics of the various special procedures are matters that can more efficiently addressed through a collective GMS effort. The same may be said for the implementation of the Authorized Economic Operator Program under the Framework for Securing and Facilitating Global Trade. Advance declaration is another area of Customs operations where collaboration among GMS Customs Administrations would be a key success factor.

The European Union has a Joint Research Center (JRC) for collectively undertaking research and development work for Customs capacity development and similar EU interests. It may be

advisable for GMS Customs administrations to establish a similar center since individual country capabilities are limited in terms of complying with standards and recommendations. A GMS-JRC could coordinate the development of common systems and procedures. This center could work with the WCO Regional Capability Building Center to obtain training and other resources for GMS countries, although additional resources may be required.

This component would develop a JRC for GMS. The GMS-JRC would be responsible for the conduct of research and development for the required capabilities, facilities, infrastructure, systems and procedures to support the GMS SFA-TFI, GMS Customs Director Generals Forum Programs and other GMS Customs projects. The GMS-JRC would develop common systems and programs, and other activities that may be more economically and effectively pursued through a regional collaborative approach.

Technical assistance would be provided to the Customs administrations and their respective constituencies on the following concepts: (1) the feasibility of setting up a Joint Research Center for GMS along the lines above described; (2) developing structures and mechanisms for the implementation of the standards and recommendations in RKC and other international conventions, beginning with authorized persons and authorized Economic Operators; and (3) implementation of advance declarations.

Two international experts with experience in the special procedures of the RKC and FOS would be engaged for 6 months to undertake initial development work on the GMS-JRC. Two domestic consultants in each GMS country would assist the experts. One month would be devoted to familiarizing GMS Customs and concerned stakeholders with pertinent provisions of these conventions, and how some countries have already successfully implemented the same. Two months would be devoted to assessing country readiness for these standards and preparation of country implementation plans. The remaining months would be utilized for the execution of the plans and monitoring the results. Within the first six month period, the international and domestic consultants would assess the advisability of making research and development work a regular activity in GMS, define in detail the priority areas for R & D work, the appropriate organization and the mechanism for funding the work of the JRC. All of these assessments shall be presented in a concept paper on a GMS-JRC to be presented during the GMS Director-General's Meeting.

### **Specific Country Initiatives**

In addition to the regional approach discussed above, other initiatives are better suited to country-level development programs. These national programs could be undertaken simultaneously with the regional programs. Country-level initiatives are described below.

#### ***Cambodia***

The Royal Government of Cambodia has identified the following three goals as the major components of its trade facilitation and competitiveness program:

- Rationalization of the cross-border flow interventions of ministries and agencies;

- Application of risk management principles; and
- Extensive use of automation.

Priority has been given to the immediate execution of the instructions under RGC Announcement 90 as clarified by Sub-decree 21. The regional projects will provide substance and effective implementation of the objectives under RGC Announcement 90.

The ASYCUDA program is scheduled for initial implementation at the Port of Sihanoukville. In order to integrate this program, the Customs and Excise Department (CED) must undertake business processes re-engineering in order to provide advance declaration and clearance processes. Such improved processes will provide clearly defined benefits for participating traders, including minimum Customs intervention at the borders.

Progress is being made on implementation of the Sub-Decree on Special Economic Zones (SEZs), and it is expected that many enterprises will set up operations in the new economic zones. To accommodate them, CED should provide a cargo transfer system for the movement of goods from the borders and international gateways to these economic zones and bonded manufacturing warehouses. It would be desirable to use tracking technology and electronic broadcasting techniques to insure both speed and security of these operations.

CED should supplement IE and the ICT programs with the following two systems:

- Transparency and Trade Partnership Programs so that the more compliant traders can be waived through the borders; and
- Secured payment system through electronic linkage between the banking system and Customs. Organizing in-house banks to accept payments may be used as an interim arrangement.

Finally, the CED should continue with its Performance Measurement System and possibly even take the leadership in a GMS implementation of the system.

### *Lao PDR*

For Lao PDR, the programs required are similar to those in Cambodia. The following activities are of particular importance:

- The amendment of the 2005 Customs law to permit selective risk-based inspections, to provide advance declaration and processing and to support Intervention by Exception;
- The issuance of implementing instructions for these amendments of the Customs laws prior to the implementation of ASYCUDA.<sup>30</sup>
- Technical assistance on establishing formal policies, processes and structures for Intervention by Exception and setting risk profiles;
- Reengineering business processes that will optimize the power of and the benefits from the ICT system; and

---

<sup>30</sup> Without the re-engineered systems enabled by these advance Customs processes, the ICT system and ASYCUDA implementation would be nothing more than an oversized calculator and an electronic database of declarations.

- Capacity building on data management and business analytics as well as on the broader subject of IE.

Centralization is a pre-requisite for the national simplification and harmonization of Customs procedures, the alignment of Customs procedures with international conventions and standards and their strict observance at all levels of the Customs agency. To facilitate this process, Lao Customs needs to develop a manual of operations structured along the lines of the RKC. The manual should be developed in conjunction with the conduct of a gap analysis comparing national customs legislation with the RKC. Completion of the RKC gap analysis and the formulation of a national strategy for compliance and accession are important activities for Lao Customs.

Priority attention must also be placed on the following activities:

- Collaborative work with OGAs in the enforcement of trade regulations through an ELS Project;
- Development of a management control and information system by which the Customs Headquarters can effectively control the operations of the provincial and regional Customs offices; and
- Change management programs to prepare the Customs workforce for the changes in the methods of work and re-engineered processes accompanying the new ICT system.

### *Vietnam*

Vietnam's trade within the GMS and with the wider world has been growing at a fast rate that is expected to continue. It is important for General Department of Vietnam Customs (GDVC) and partner government agencies to anticipate changing requirements and provide a regulatory process that will not be an obstacle to but instead a facilitator of trade and investments.

Highly desirable initiatives include the following:

- Interim ICT capabilities and corresponding business process re-engineering activities that can address current difficulties and simultaneously pave the way for a smooth transition to the new and advanced processes being developed under the World Bank's Vietnam Customs Modernization Program (WB-VCMP); and
- Continued enhancements to the GDVC's current ICT system.

The following enhancements to the current ICT are advisable:

- End-to-end automation for green channel shipments via the Internet, from pre-arrival declaration through processing to payment and release;
- Clear facilitation benefits for electronically filed advance declarations (such as focusing enforcement on those not filing in advance); and
- On-line system for cargo release to cargo handlers (port operators, sheds and yards).

Providing the above enhancements would help optimize the benefits of green channel processing which ideally should bypass the second and third phases of document inspection and assessment. Risk-based processing should entail profiling at the beginning of the process and, if green channel is assigned, undertaking only payment verification and goods release. These processes can be easily automated as well.

One area of Customs operation where ICT enhancements are needed quickly (rather than 2010) is a Customs-Treasury Interface for payments. Such an interface would secure and facilitate both immediate and deferred payment systems by providing an electronic interface for the transmission of payment instructions (notification) from Customs to the Treasury and of payment confirmation from Treasury to Customs. The Treasury system must be enhanced to allow automated debits from nominated accounts. Automated debits can be executed on the date specified by Customs in the payment instructions of the account holder. In this manner, Customs need not worry about the responsibility of following up on payments, as the Treasury can assist this matter.

The ICT component of the WB-VCMP and the associated technical assistance provided by other donor organizations must be supplemented. A program is needed for reviewing the interventions of Customs' partner agencies and for making the interventions available electronically to their respective constituencies. Such a program would ensure that obtaining clearances from the concerned regulatory agencies and the coordination of their respective interventions with Customs would not create difficulties that constitute barriers to trade.

As more capabilities are incorporated into the IT system, GDVC must correspondingly re-engineer its business processes to provide for more trade facilitation and at the same time improve the effectiveness of the revenue and other control measures including those of OGAs.

### *Thailand*

Royal Thai Customs' (RTC) electronic registration system is not fully utilized. For example, the filing of declarations at the SCT-Inland Container Depot outside Bangkok has been observed to be primarily manual filings. Importers or their agents prefer to bring their documents to the Customs office at the ICD for input to the Customs system. It was reported that most declarations filed at Customs stations are multi-line items, which importers or their representatives prefer to manually file. At the border with Lao PDR in Nongkhai, declarations covering goods entering Thailand are encoded in the computer system at the broker's association office at the back of the Customs House. In Mukdahan, it was observed that Customs officials themselves key-in the declaration into the computer system.

The reasons for failing to utilize remote electronic registration via EDI have not been ascertained, but high VAN fees and the complexity of encoding multi-line items may be among them. There may be other reasons, such as the need to submit supporting documents (licenses, permits and clearances), and lack of interface with other Customs partners which require importers to go to the clearance facility. It is important that all the disincentives to utilizing the electronic registration facility be removed. This could be facilitated by comparing the existing



structure against the standards of Chapter 7 RKC General Annex on the use of Information and Communication Technology.

Similarly, while Customs legislation allows for the filing of declarations in advance of goods arrival, the number of traders using advance declaration is small. This is likely because of lack of awareness of the clear benefits of doing so. For importers to be encouraged to provide advance declarations, Customs must be able to complete the clearance process ahead of cargo arrival and notify the trader of its intention to release the goods on arrival. Customs would reserve the right to make spot or random checks should it be deemed necessary, such as when there is derogatory information on the shipment.

Thailand's ports of entry, particularly Laem Chabang and Suvarnabhumi, are important gateways for imports to and exports from the other GMS countries. Yet the transit procedures at these ports do not conform to international standards. The current system is almost entirely governed by the need to insure that transits are not diverted to the local economy. Improvements can be expected from the proposed CBTA transit protocol as well as from the GMS Transit System currently under development. Interim measures should be undertaken in the short or medium term since these multilateral arrangements would require some time to be implemented. Interim measures would include the following two actions:

- Opening and inspections of transits based on risk assessment; and
- Issuance of clear regulations mandating that the declaration from the exporting country (now a required supporting document for the transit application) shall be considered a declaration for customs purposes in Thailand, as a measure to dissuade diversion of transits to the domestic market and to have a basis for collecting the taxes due in case of lost of the goods in transit.

It is the intention of the RTC to integrate its new web based ICT with other government agencies as part of the move toward a paperless systems and a national single window. However, RTC's partner agencies are not yet ready for paperless transactions. This is a significant obstacle since there are reportedly 33 government and non-government agencies issuing various kinds of permits, clearances and authorizations for the cross-border flow of goods. In addition, Thailand's list of regulated and controlled commodities is long. Priority should be given to migrating the current manual trade regulatory services (provided by government and non-government agencies) to e-services. These e-services would preferably be web-based and interfaced with the Customs system in order to actualize the paperless environment desired.

RTC has reportedly completed its Gap Analysis on the RKC. However, the military government delayed parliamentary concurrence and approval for its accession, which was in power until the December 2007 elections. It is important that the process of compliance with the facilitative standards and recommended practices of the RKC get back on track now that a civilian government is in place.

### *China*

China's Customs clearance times (the time from declaration filing to issuance by Customs of the release order) are already comparable with the world's best. However, the country's total throughput times (elapsed time from arrival at the port or temporary store to delivery/exit) are not. For throughput times to be significantly improved, the other components of the clearance process must be improved as well. One area needing investigation and improvement is the percentage of goods subject to inspections and intervention by AQSIQ.

In accordance with RKC and ICC guidelines, there should be an Inter-departmental agreement to entrust Customs limited supervisory and detection duties. Once suspicion is aroused, Customs should arrange for the responsible control department to be alerted and brought on to the scene to carry out any necessary substantive investigation. China should consider the following two recommended actions:

- China should take leadership in GMS in the matter of observance of international standards pertaining to the Coordination of Inspections.
- The principle of "Quarantine Inspection Before Customs Declaration" must be modified to support coordination with, if not limited delegation to, Customs particularly for manufactured and processed goods that are accompanied by the required certifications issued by competent authorities of other countries.

ICC Guideline Number 9 states "... most advanced administrations are able to give carriers and traders advance notice of their intention to release designated consignments immediately on arrival, subject... to the basic right of customs to stop and inspect goods at any time in the control process." Compliance with this guideline is constrained under Article 24 of China's Customs law, which provides that declaration of imported goods shall be made within 14 days of the declaration of the arrival of the means of transport. The law also provides that export declaration shall be made by the exporter upon the arrival of the goods at Customs surveillance zone and 24 hours prior to loading unless otherwise specially approved by the Customs.

Consideration should also be given to the following three recommendations:

- Amend the Customs law to clearly allow the filing of a declaration and the processing of the declaration even before the arrival of the goods (for both imports and exports);
- Provide incentive for traders to utilize advance declaration; and
- Customs should provide notification of their intention to immediately release the goods on arrival subject to their right of inspection.

These facilitative measures can initially be extended to goods not subject to AQSIQ inspection. The measures may be subsequently extended to other imports except animals, plants and unprocessed food. For goods subject to AQSIQ inspection and quarantine, the ICC guideline cannot be carried out- because of the requirement for quarantine inspection prior to customs declaration. For goods covered by AQSIQ, the procedures that are required prior to Customs declaration can commence only when the goods have arrived in the Customs station.

The E-Port is already being used by 11 line ministries/government agencies. However, the E-Port system is not a single electronic window. At present, the import clearance slips for goods

cleared by AQSIQ have to be printed out and manually attached to the paper Customs declaration. Both documents are processed manually. Consideration must therefore be made to organize E-Port and E-Customs so that the permits and clearances of regulatory government agencies may be uploaded into databases. With such access, E-Customs can achieve a fully end-to-end automated process in Customs clearance.

## CHAPTER IV. LOGISTICS SERVICES

### Background

The logistics industry has two overarching characteristics:

- (i) It is private sector undertaking.
- (ii) It is a service industry.

As a service industry, logistics is responsive to the requirements of its clients, most of who are involved in manufacturing, retailing, trading or construction. The logistics industry offers an increasingly diverse set of services, the core of which is transport, storage, and processing of goods-related documentation. Because there are few barriers to entry for basic services, it can be a highly competitive industry, except in those situations where government restricts entry. Logistics providers tend to be relatively lean and agile, utilizing information rather than assets to be responsive to the needs of their clients. The industry is increasingly innovative constantly developing new services as a mechanism to meet the changing demands of its clients. Innovation is used to increase not only market share, but also the range of services in which it competes.

Logistics service providers can be divided into two groups: 1) those seeking to increase market share by offering the lowest cost service to their clients; and 2) those seeking to increase profitability of their services by improving the quality of the services offered. The first approach has dominated logistics activities throughout the region, especially where the requirements of clients are relatively simple (e.g. a truck movement between a factory and international gateway, a warehouse for distribution of goods within a region). The second approach has become more important for clients that seek to increase the value of exports and imports. Logistics service providers in the first group focus on improving the management of their assets as well as integration of the core services. Those in the second group focus on their client's value chain in order to offer services that add value or offer a more cost-effective service than is currently provided in-house.

Changes in the logistics industry occur in response to changes in the manufacturing and retailing sectors that affect the way enterprises organize their supply chains. Examples of such changes are decisions by manufacturers or retailers to take the following actions:

- Move up the value chain in terms of the goods and services they offer;
- Increase the scale of activity dramatically;
- Move activities in from the coast or out along major corridors;
- Expand from local to national markets or enter new regional and international markets;
- Reduce inventory in the supply chains;
- Outsource logistics to focus on the core business; and
- Subcontract production of intermediate inputs to a network of suppliers, especially SMEs.

These changes appear more dramatic when the effects are combined, for example when one of the following two scenarios occurs:

Manufacturers spin-off their logistics services, outsource production of intermediate goods and attempt to minimize inventories throughout their supply chain; or  
Retailers expand to the national market with coordinated sales, develop national distribution networks to support high-volume, narrow margin sales and outsource inventory management.

Revolutionary changes occasionally occur as a result of changes in technology or the pattern of trade. Recent examples of revolutionary changes are:

The use of Internet and ICT to increase the volume and speed of the exchange of information available to participants in a supply chain;  
Globalization of trade, leading to distribution of processing along a supply chain rather than at a single location; and  
Unitization of shipments.

However, most changes are evolutionary. Changes in the requirements of clients in a specific sub-sector lead to a modification of the services provided to that sub-sector. These “new” services are then offered to clients in other sub-sectors.

## **Results of Gap Analysis**

The gap analysis for the GMS logistics sector indicated that the state of development of logistics services in the region is consistent with the requirements of the clients. Since the majority of clients are SMEs with simple supply chains, most logistics service providers are small and offer one or two basic services. The larger companies usually provide their own logistics either directly or through subsidiaries. They tend to have more complex supply chains serving a greater diversity of their products and markets. As a result, the logistics services are more sophisticated and larger in scale.

The need for better logistics increases with scale of manufacturing and retail. Initially, this need can be met through improvements of in-house supply chain management. Eventually, supply chains reach a scale and complexity that requires contracting for specialized services. A similar situation occurs as companies move into higher value goods, which have more sophisticated production scheduling, smaller production runs and greater product customization. Again, companies tend to meet this requirement initially by improving in-house capabilities, but eventually outsourcing their logistics to specialized firms. When the demand for more sophisticated logistics become a significant drain on management skills, the companies outsource these functions either by spinning-off their shipping department’s functions or by contracting the majority of their services to third parties. The 3PLs respond by merging in order to provide the range and scale of services demanded.

So far there has been very little of this transformation in the GMS countries. Both small and large firms outsource their basic transport, but continue to manage their supply chains directly. There are two explanations for this. The first is that the manufacturers and retailers have been slow to move up the value chain in terms of product quality. The second is that manufacturers

and retailers focus on only part of the supply chain. For imports and exports, they are concerned only with the domestic movement. The foreign buyer or supplier manages the international logistics. For domestic trades, the supply chains are fragments. Wholesalers and traders are intermediaries breaking the supply chains into the movement from factory to warehouse and warehouse to retail outlet. The focus of most companies remains the cost of the individual movements rather than the overall cost of the supply chain.

A review of GMS logistics performance based on the perceptions of major international forwarders and logistics service providers reveals substantial differences among the countries. Countries were ranked on a 1 – 5 scale, with 1 being the lowest rating and 5 being the highest. China and Thailand have significantly better performance, comparable to Malaysia. Vietnam and Cambodia are ranked lower while Lao PDR and Myanmar have the lowest rankings among the GMS countries. The difference in absolute ranking would be greater except that some of the countries offset poor quality of service with lower costs as shown in Table 4.1.

**Table 4.1: Logistics Perception Index**

|           | Overall LPI | Customs | Ease of Shipment | Logistics Services | Internal Logistics Cost | Timeliness |
|-----------|-------------|---------|------------------|--------------------|-------------------------|------------|
| Singapore | 4.19        | 3.89    | 4.03             | 4.20               | 2.70                    | 4.53       |
| Malaysia  | 3.46        | 3.35    | 3.33             | 3.38               | 3.14                    | 3.94       |
| China     | 3.32        | 2.99    | 3.31             | 3.39               | 2.97                    | 3.68       |
| Thailand  | 3.31        | 3.03    | 3.24             | 3.31               | 3.21                    | 3.91       |
| Vietnam   | 2.87        | 2.88    | 3.00             | 2.67               | 3.33                    | 3.25       |
| Cambodia  | 2.50        | 2.19    | 2.47             | 2.47               | 3.21                    | 3.05       |
| Lao PDR   | 2.25        | 2.08    | 2.40             | 2.29               | 2.13                    | 2.83       |
| Myanmar   | 1.86        | 2.07    | 1.73             | 2.00               | 2.92                    | 2.08       |

A number of challenges facing producers and retailers in the GMS countries should accelerate the transformation of the logistics industry. Among these challenges is the decreasing order cycle<sup>31</sup> for consumer goods, especially garments, electronics and automotive parts. Competitive advantage is determined by the time manufacturers require to fill both initial orders and reorders. This leads to better control over the inbound supply chains, tighter sequencing of production activities and shorter delivery times. Eventually some companies adopt a just-in-time strategy, especially where production processes are geographically dispersed and require sequenced shipments of intermediate goods between upstream and downstream production facilities.

To date, the GMS countries have relied on international 3PLs to provide high quality, integrated logistics services. Most exporters continue to ship FOB using the services of foreign forwarders nominated by the foreign buyers for the outbound movement from the port of loading or forwarder's local warehouse. Most importers continue to purchase goods on a CIF basis with the suppliers using foreign forwarders to arrange the movement up to the unloading port or nearby warehouse. Domestic 3PLs provide the less demanding domestic component, principally the inland movement between the gateways and the exporter's/importer's warehouse. This is

<sup>31</sup> This cycle refers to the period of time between when the order is received and when the goods are delivered to the buyer or his nominated forwarder ex-factory, at the forwarder's warehouse or at the port for goods shipped FOB.



usually a direct truck movement because production facilities and major consumer markets are often located near a seaport. Currently, however, the 3PLs in China and Thailand, and to a lesser extent Vietnam, face the challenge of developing supply chains for producers and retailers located further inland. This requires overcoming the difficulties of providing road transport that extend across provincial borders. In addition, it highlights the growing importance of securing backhaul cargo and the need for logistics infrastructure to interface linehaul and distribution/collection movements.

Another important challenge for logistics service providers is the growing trade in perishables. The export of food products, especially fresh fruits and vegetables, is becoming increasingly difficult as greater scrutiny is given to health issues in GMS' major export markets. Trade within the GMS remains difficult because of competition from domestic substitutes. In order to be competitive internationally, cool/cold chains must be developed as well as the capability to trace products from retail shelf back to the point of production. So far, efforts to improve perishables logistics have been led by the retailers, who have assumed responsibility for an increasing portion of the supply chain between the farm and the point of retail sale.

The traditional method for improving the quality of transport logistics has been investment in transport infrastructure. The GMS countries have already made major improvements to their primary trade corridors. The trunk road networks consist of highways, an increasing portion of which are four lanes or wider. While some critical road links are still under construction or being upgraded, these should be completed within the next few years. Efforts to expand and modernize port facilities are underway in all GMS countries that are not landlocked. Most of the GMS countries have at least two modern container terminals. Bottlenecks continue to exist in the ports in Northern Vietnam, Cambodia and Myanmar, due to limited draft, but new deepwater facilities are being developed or access to existing deepwater facilities is being improved.

The rail networks are more problematic due to the prevalence of meter gauge lines with very limited capacity. Projects to upgrade critical sections of the rail network are underway in China, Cambodia and Vietnam. Air cargo has benefited from improvements in the international airports and growth in both passenger and air freighter capacity. The role of the inland water networks continues to be constrained by draft, especially during the dry seasons.

Bottlenecks occur where there is congestion on critical transport links or there is ineffective government regulation. The latter includes inefficient cargo clearance procedures and restrictions on movement of goods in transit under Customs bond. These procedures are sometimes combined with rent-seeking activities by Customs and other border management agencies. The CBTA addresses many of these problems, as do ongoing donor-funded projects in Customs reform and trade facilitation, but much remains to be done.

The remaining constraints on transport logistics are due primarily to the quality of services rather than infrastructure. Inefficiencies, where they exist, are due primarily to continued public sector involvement in the provision of logistics services. Most of the larger ports have developed into landlord ports with a significant level of private sector participation in their operations. The quality of public rail freight services in Thailand, Vietnam and Cambodia has limited traffic primarily to low value bulk commodities and empty containers. There are few unit train

container services, with the exception of the container shuttle service between Thai ports and Lat Krabang ICD, and linehaul movements between the coast of China and the capitals of the inland provinces.

In addition to the regional problems facing the logistics sector in the GMS countries, there are country specific problems as discussed below and summarized in Table 4.2.

**Table 4.2: Gap Analysis**

| Country                              | Corridors  | Facility Requirements   | Service Requirements  |
|--------------------------------------|--|---|---|
| Cambodia                             | Phnom Penh-Ho Chi Minh<br>Phnom Penh-Sihanoukville                   | Road Links<br>Inland Clearance Facilities<br>Bonded Warehouses<br>Special Zones                                   | Cold Chains<br>Partnerships   |
| China<br>(Yuannan,<br>Guangxi<br>AR) | Kunming-Bangkok<br>Nanning-Hanoi                                     | Intermodal Connections<br>Logistics Hubs Services   | E-Trucking<br>Cold Chains<br>Second Tier Logistics<br>Mergers and<br>Partnerships |
| Lao PDR                              | Vientiane-Nongkhai<br>Savannahkhet-Dasavanh                          | Inland container depot and<br>Consolidation Warehouses  | E-Trucking<br>Consolidation<br>Partnerships                                       |
| Thailand                             | Phitsanulok-Mukdahan<br>Bangkok-Mukdahan,<br>Nongkhai, Pakse, Boivet | Inland Clearance Facilities<br>ICDs and Dry Ports<br>Distribution Centers<br>Truck Terminals<br>Bonded Warehouses | E-Trucking<br>Cold Chains,<br>JIT Chains<br>Second Tier Logistics                 |

### *Thailand*

The Thai highway network is the oldest in the region and remains one of the best in terms of condition and connectivity. There are two major ports, one of which is a major regional container hub. The introduction of private management in the early 1990's did much to eliminate the problems of congestion and corruption that had plagued Bangkok Port for decades. The railroad has a limited role in the transport of cargo with its major cargo activity being a shuttle between Laem Chabang and the ICD. The international airport is a major hub for airfreight, handling about 1.2 million tons (as well as 42 million passengers) in 2006, but the national carrier, Thai Airways International, has only not yet introduced an all-cargo service. The inland water network, primarily the Chao Phraya River, provides a corridor for movement of bulk materials but not higher value goods.

The logistics industry in Thailand has received considerable attention in the last few years in recognition of the fact that the country's economic growth is directly linked to the efficiency of

its logistics. A strategic plan has been prepared for the sector and an action plan is under preparation. However, it is unclear if the plans will address the problems of upgrading the 3PLs or will merely reiterate earlier proposals for developing transport infrastructure and regulatory reforms for the border management agencies.

Thai manufacturing and agriculture sectors have been able to develop effective international supply chains, especially for trade in automotive parts, garments and processed food products. However, the logistics service industry remains under-developed in terms of its use of ICT, its ability to offer integrated factory-to-retail logistics services, and its provision of value-added services. The participation of international 3PLs in domestic logistics has been limited to warehousing near the major gateways, but this may be changing. Several international retailers operate in Thailand and have developed efficient distribution networks. These networks are primarily within a few of the largest urban areas and have yet to expand throughout the country (a notable exception is the Seven Eleven franchise operated by CP).

Efforts to develop efficient border management have been proceeding. The Royal Thai Customs has been working on a single window and expanding its ICT systems, but procedures at the land borders lack consistency and transparency. The public sector has been slow in developing critical logistics infrastructure such as inland container depots and support facilities at the border for inspection and quarantine. The commercial law related to trade and transport needs to be strengthened in order to promote competition between domestic and international logistics service providers. Some other areas in logistics requiring attention are:

- Expansion and improvement of the inland logistics network;
- Facilitating mergers and partnerships to increase the scale and integration of logistics service providers;
- Developing specialized supply chains, e.g. secure, cold, farm-to-fork chains; and
- Introduction of a private sector E-brokering for road transport to improve vehicle utilization.

## *Cambodia*

The trunk network in Cambodia is limited to the routes connecting Phnom Penh with the international gateways and borders. These are two- and four-lane roads in varying condition. The connections with Sihanoukville and the Vietnam border are in good condition. The railroad is in poor condition and carries limited amounts of freight with long transit times. The airport is small and handles relatively little freight (28 thousand tons and 1.3 million passengers).

The logistics industry in Cambodia is limited by the small size of client industries, simple supply chains, and the low value of the goods shipped. The 3PLs are small enterprises offering road transport, warehousing and cargo clearance. There is little use of ICT and no value-added services. Furthermore, most cross-border trade is small consignments with a large informal trade.

Most of the transport logistics are focused on the movement of cargo between Sihanoukville and Phnom Penh, although there is growing interest in the link between Phnom Penh and Ho Chi Minh. To date there has been no demand for inland clearance facilities outside of the dry ports

in Phnom Penh. There is little demand for intermodal transport as road transport remains the dominant mode, with the exception of cargo moving into the Mekong Delta.

The government's involvement in transport sector operations has declined significantly with the result that the logistics industry is extremely competitive. Most of the enterprises are small and compete on the basis of price. Competition from international logistics service providers is permitted, but there is little interest because of Cambodia's small volumes and consignments, limited opportunities for providing value added services and excessive informal payments. While the demand for strengthening the logistics sector is limited, some areas do require attention:

- Establishing partnerships for integrated logistics services; and
- Building of specialized supply chains, e.g. secure, cold, farm-to-fork.

### *Lao PDR*

The trunk road network in Lao PDR provides good connections to the major economic centers. Most of the major links have been rehabilitated or upgraded in the last decade. The country is landlocked and river transport is limited by draft to sections of the Mekong, even during the wet season. The airport is small and handles little airfreight. There is no rail service, although a connection to the Thai rail network is under construction.

The logistics industry in Lao PDR is limited to basic services, road transport, warehousing and cargo clearance. There is little cross-border trade and the goods involved are relatively low value and not time-sensitive. The shipment of goods to and from markets outside of GMS requires shipping through Vietnam or Thailand. The domestic logistics industry rarely participates in this movement despite provisions allowing Lao trucking companies to carry goods to and from the international gateways in Thailand and Vietnam. For imports and exports, most of the nominated forwarders are located in Bangkok and terms of the international shipment are to and from the Thai ports. Lao transporters are at a competitive disadvantage relative to Thai and Vietnamese competitors due the economies of scale and limited opportunities for securing backhaul cargo. In this situation, exporters have little option but to ship FOB and importers to procure CIF Bangkok. Forwarders might benefit if the destination in the Marine Bill of Lading were for a dry port in Vientiane or Savannakhet, but so far this has not been possible.

Given the size of the enterprises (both 3PLs and their clients), the size and value of the shipments, and the short travel distances within the country, it is not surprising that the Lao logistics industry is in the early stages of development. It is characterized by limited use of ICT, lack of integration of services and no value-added services. Despite its limited size, the transport and logistics industry offers competitive services. There is a limited presence of international 3PLs in addition to Thai and Vietnamese affiliated companies.

The public sector has been slow in providing complementary policy reforms. Customs procedures are neither consistent nor efficient. A significant portion of bilateral trade with other GMS countries moves informally across relatively porous borders. Because of a limited volume of trade and absence of significant concentrations of production or consumption, there is

relatively little demand for strengthening the logistics sector. Nevertheless, there are areas in which the logistics sector could be improved, including the following:

- Expanding partnerships for cross-border logistics services;
- Improving the facilities and services for consolidation and deconsolidation of shipments; and
- Simplifying procedures for transit movements combined with dry port operations.

### *Vietnam*

Because of the configuration of the country, Vietnam's economic activity is concentrated on the South China Sea coast near the major ports (Haiphong, Ho Chi Minh City and Danang). Vietnam's limited road network is gradually being upgraded. The trunk road, running North-South, is a combination of two- and four-lane links, most of which have been upgraded. The connections to the China border are in the process of being upgraded. The country has a large number of ports but most have draft limitations. Deep draft container facilities have only recently been constructed near Ho Chi Minh City. Government involvement in port operations is gradually being reduced. The railroad provides limited freight service and does not have the quality of operations to compete with trucks for container traffic. The airports have limited freight traffic (330 thousand tons through Ho Chi Minh City and Hanoi and 13.7 million passengers). Airports continue to be operated by government corporations. Inland water remains an important transport mode, especially along the Red River and in the Mekong Delta, but most of the cargo is low-value dry bulk.

The logistics industry in Vietnam has received considerable attention in the last few years as the country's strong economic growth has been directly linked to the efficiency of its logistics. While exporters have been able to develop efficient international supply chains, especially for trade in garments, footwear and seafood, the domestic 3PLs do not provide integrated or value added services and are limited in their use of ICT. Supply chains remain simple, as most manufacturing is located near the three major seaports. The retail sector consists primarily of SMEs although some larger retailers are located in the major cities. This situation is expected to change in a few years with the opening of the domestic market to international retailers and the expansion of manufacturing along the corridors connecting the major economic centers.

The public sector has been slow in providing complementary policy reforms and basic infrastructure. The public sector continues to have a significant role in the provision and regulation of transport services. Some Customs reforms have been cautious but the role of inland container depots is expanding. Of the areas in which the logistics sector can be strengthened are the following:

- Promoting value-added logistics services;
- Removal of the major bottlenecks on the more important trade corridors; and
- Strengthening the capacity for establishing specialized supply chains, e.g. secure, cold, farm-to-fork, JIT, and high value.

### *China - Yunnan and Guangxi AR*

Public investment in China's transport network has been substantial. The highway network provides good connections to the east coast of the country. Expressways connecting to the Vietnam border have been completed in Guangxi and are under construction in Yunnan. Rail connections are good but more developed in Yunnan since Kunming has been a traditional rail hub and has just established a large rail ICD/dry port. The airports handle limited quantities of airfreight (370 thousand tons versus 20.7 million passengers) and are constrained by the lack of international services.

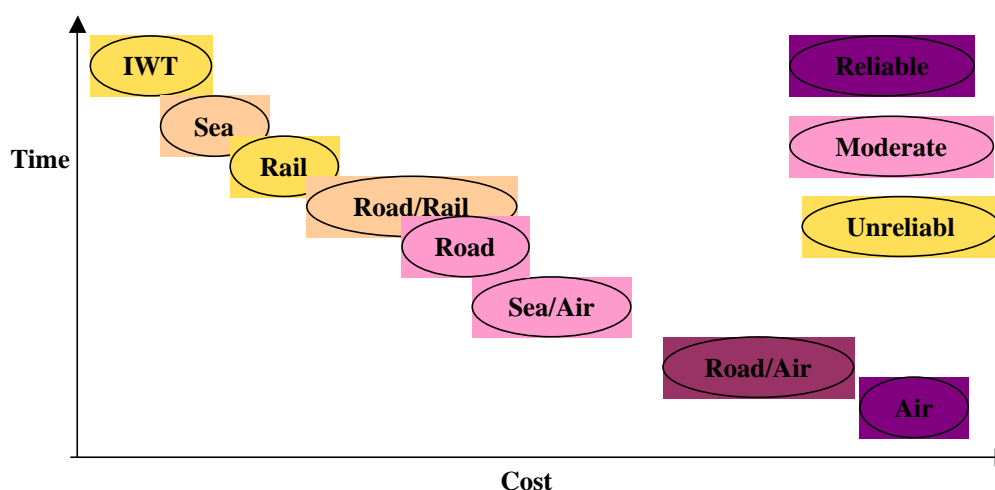
The logistics industry in Yunnan and Guangxi are considerably less developed than those in Thailand or the Chinese provinces on the east coast. Most logistics companies are SMEs providing basic services for clients who have relatively simple supply chains. International shipments move by road or rail to either the larger ports on the east coast, or the new ports on the South China Sea. These are direct movements primarily by road. Cargo clearance procedures at the border are improving, but still remain a significant impediment to trade, in part due to the lack of cross-border coordination.

The retail sector is mostly small scale, although the larger international and domestic firms have established a foothold in the provincial capitals. Efforts are underway to expand the manufacturing base and increase trade in intermediate goods and agricultural products; however, these products utilize relatively simple supply chains and basic logistics services.

Recent problems with control of product quality and the demand for increasing control over supply chains suggest areas in which improvements should focus. Specifically, efforts should undertaken on the following issues:

- Expand the size of 3PLs through mergers

**Figure 4.1: Cost, Time and Reliability of Different Transport Modes**



- Improve cross-border services through partnerships;
- Strengthen the capacity for establishing specialized supply chains, e.g. secure, cold, farm-to-fork, JIT;
- Promote the development of logistics hubs;
- Establish E-broker road transport services to maximize utilization of capacity;



## Complementary Efforts to Improve Logistics Sector

The concept of trade facilitation is quite broad and lacks precise definition.<sup>32</sup> It encompasses all initiatives to improve the efficiency of movement of goods across borders and through international gateways. Efficiency is measured as a function of the time, cost and reliability for these movements, with the relative weights given to these three parameters depending on the trade. A typical trade-off between time and cost for various modes is shown in Figure 4.1. Adding to this complexity is the fact that this movement involves three core activities — transport, storage and consolidation — as well as a number of supplementary activities related to processing the goods while in transit.

Public sector efforts to facilitate trade usually focus on the reduction of non-tariff barriers through harmonization of standards and introduction of regulations and procedures in conformance with internationally accepted conventions. SFA-TFI is one of three initiatives sponsored by the ADB to facilitate trade among the GMS countries. The oldest initiative, the CBTA, focuses on expediting the movement of goods across the land borders, which have been the traditional bottleneck for bilateral and regional trade. It addresses a wide range of issues affecting not only cross-border movements, but also trade in general including harmonization of customs procedures.

In the area of logistics, the CBTA proposes the introduction of a TIR-equivalent system, to allow movement of goods in bond through a country to either an international gateway or a land border. This same mechanism could be used for transit movements from the border to an inland clearance facility. However, the introduction of this system has proven controversial not only within the GMS, but also more widely within ASEAN. While the introduction of such an arrangement is important for intraregional trade, it is less so

Figure 4.2: GMS Corridors



<sup>32</sup> One example is "the simplification and harmonization of international trade procedures, which mean activities, practices and formalities involved in collecting, presenting, communicating and processing data required for the movement of goods in international trade".

for bilateral trade. The current project examines other alternatives with the intent of identifying a more efficient mechanism for transport.

The second GMS trade facilitation initiative sponsored by the ADB is the development of major economic corridors in the region. Considerable effort has been made to complete construction of corridor infrastructure and to provide the connectivity necessary to support economic growth along these corridors. The East-West corridor is now complete. The primary links of the north-south corridor should be completed within a few years. The upgrade of the connections between Kunming/ Nanning and Hanoi/Haiphong should be complete within five years. There are ongoing efforts to complete the other GMS corridors shown in Figure 4.2. While this network will provide the physical capacity required to support robust growth in trade, the quality of logistics services for storage and transport of goods remains at a relatively low level. Furthermore, there has been very little effort to develop the value-added services that are required to support trade in higher value goods.<sup>33</sup>

New trade facilitation efforts need to focus on developing efficient logistics services to support the production and consumption centers located along these corridors and to connect them to the international gateways at the end points of the corridors.

In addition to the two GMS programs, there are large technical assistance projects funded by the World Bank for Customs modernization in Lao PDR, Cambodia, and Vietnam. These projects focus on institution building, the introduction of advanced ICT systems based on ASYCUDA, and improvements in risk management procedures (in particular intelligence gathering and profiling). However, these multiyear, multifaceted projects require substantial changes in behavior by both Customs officials and those involved in trade. New incentives must be introduced to encourage compliance on the part of shippers and transparency on the part of the customs officers. While it is clear that a dramatic change from current procedures is needed to allow significant changes in the structure of the supply chains, it will be necessary in the short-to-medium term to continue with the gradual adjustments that have significantly reduced cross-border clearance times over the last several years.

It is important to improve not only efficiency, but also the scope and quality of these services. UNCTAD and ESCAP have also provided sustained technical assistance in logistics. At the same time, China and Thailand have developed extensive training programs to improve basic skills in the logistics industry. There have also been workshops aimed at increasing awareness of the importance of supply chain management for achieving competitive advantage in both the domestic and global market. This project would build on these efforts by offering training to senior management in integrating supply chain management into strategic planning. . The current project addresses this need by focusing on the weaknesses in the GMS logistics industry, and mechanisms for overcoming these limitations including a more holistic approach to the planning and management of these corridors

---

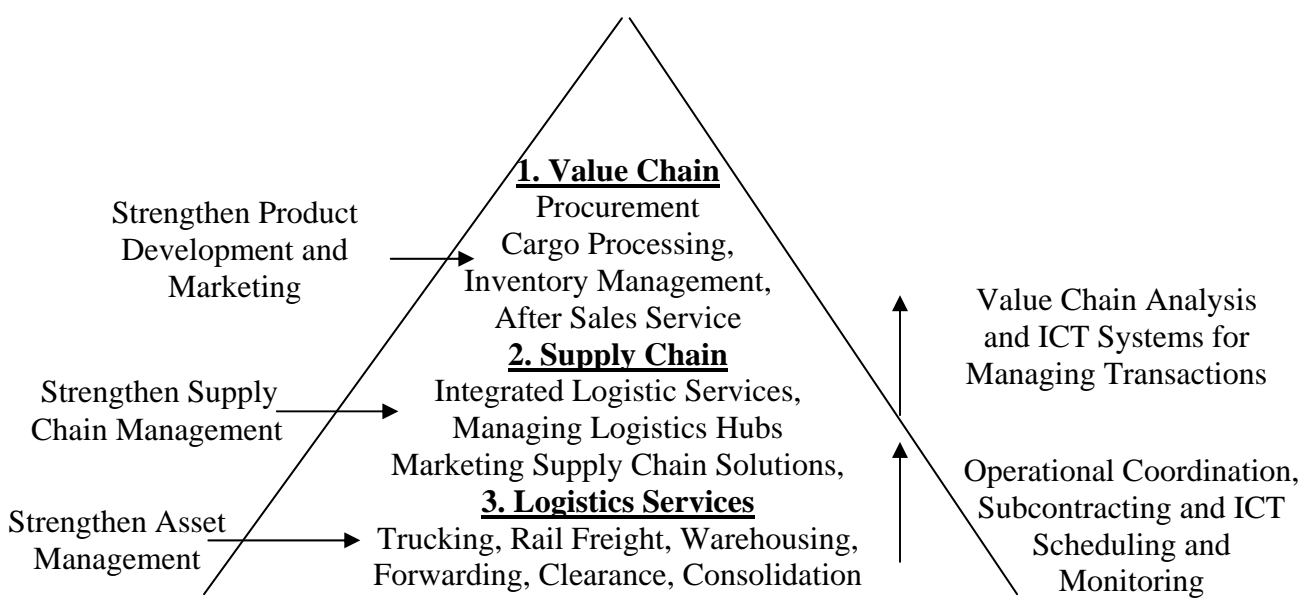
<sup>33</sup> As suggested above, these improvements are introduced only when there is a clear demand from client industries and to date this demand has only been expressed by some of the largest enterprises

## Structure of the Logistics Industry

The logistics industry can be divided in two between services provided by the owner of the cargo and by third parties. The third-party logistics service providers can then be subdivided into three tiers, based on the range of services offered (Figure 4.3). The lowest (third) tier consists of providers of individual services, e.g. trucking companies, cargo clearance agents, and warehouse operators. In some cases, these enterprises may offer complementary services, as in trucking companies that provide storage for the goods they carry or a warehouse operator that collects or delivers goods stored in his facilities. These complementary services may be provided directly by the 3PL or through subcontract, but are usually priced separately. Most of the 3PLs in the GMS countries are small, third-tier operators with limited staff and few assets, e.g. a couple of trucks or a single warehouse.

The second-tier 3PLs usually provide an integrated package of logistics services. For example, a freight forwarding company might offer a combination of transport, warehousing, consolidation and cargo clearance. Some of these services may be provided directly but others may be subcontracted by the 3PL, but all are provided to the client under a single service contract. This integrated service is intended to provide a manufacturer, trader or retailer with some or all the elements of a supply chain. The 3PL manages that part of the supply chain, monitoring and controlling movements through the chain and rerouting cargo as required by the client. The larger international logistics service providers (Panalpina, Schenkers, Geodis, and TNT) provide this combinations, using both their own and subcontracted services. They assume responsibility for the seamless integration of these services. In the GMS, there are a growing number of local second-tier 3PLs that serve the larger manufacturers and retailers. Some of these are subsidiaries of, or spin-offs from, these manufacturing and retail companies.

**Figure 4.3: Strengthening a Tiered Logistics Industry**



The first-tier 3PLs, otherwise referred to as 4PLs, offer not only supply chain services but also value-added services that support distributed processing. The latter refer to processing activities occurring between manufacturing and retail sales. Possible value-added services include the following:

- Networks of distribution center networks and cross-docking facilities;
- Inventory management including order processing, packaging, delivery, restocking, and invoicing;
- Product assembly, customization, and labeling; and
- Repair, part supply, and other after-sales services.

The first tier enterprises make extensive use of IT applications to manage their services and the activities of their clients. Aside from inventory management, they perform sales forecasting, billing and accounting services for their clients. Most are international companies (DHL, FedEx and UPS) providing services to the larger global manufacturers and retail chains. In the GMS, there are a few large domestic forwarding companies that aspire to first tier ranking, however, they are limited in the range of services offered and in the capabilities of their IT systems.

The transition of 3PLs from one tier to another is usually undertaken in response to the demands of major clients for enhanced services. An increase in the range of services offered can be accomplished initially by subcontracting other specialized 3PLs. Once management is familiar with the requirements for providing these services, it can add them to its core activities or enter into partnerships or mergers so as to provide these services directly. Regardless of the mechanism used, they must develop a management system capable of coordinating the expanded portfolio of services.

The technical support required by the logistics industry varies depending on the tier and how the industry is evolving. Figure 4.3 indicates methods for strengthening a 3PL (shown on the left) and methods for making the transition to the next tier (shown on the right). For third-tier 3PLs, improvements in performance are achieved by improving the utilization of fixed assets. This can include computerizing fleet management, warehouse management systems, reconfiguration of truck terminals and warehouses, and upgrading transport and cargo-handling equipment. For 3PLs making the transition from third to second tier, technical support is often needed to develop IT systems for coordinating activities, to introduce performance contracts for subcontracted services, and to reconfigure warehouse networks. For strengthening second tier enterprises, technical assistance would focus on developing supply chain management skills, including assessing client requirements, marketing supply chain solutions, and improving the utilization of complementary assets. This technical assistance would allow 3PLs to evolve from a provider of complementary services to provider of logistics solutions. For enterprises making the transition for second tier to first tier, enhanced management techniques in the areas of value chain analysis, product development and promotion are required. At the same time, it is necessary to provide training for the management of both the 3PLs and their clients in the range of services which can be provided by a third party.

## **Changes in Demand**

Currently, the two major factors determining the quality of the transport and logistics services are the size of clients and the quality of the goods produced. SMEs producing relatively low-value goods and utilizing relatively simple supply chains focus on cost. Such enterprises associate service quality with the price of individual services such as single-mode transport, cargo clearance and warehousing. In contrast, large international shippers and consignees measure quality of service in terms of delivery time, delivered cost, and order fulfillment. The latter is especially important for high-value goods and shipments with tight delivery times.

Foreign buyers and suppliers assume responsibility for the international component of their supply chains. Since the majority of production activity occurs close to the coast, the distance to the international gateways is relatively short. This is not the case for shipments that involve crossing land borders, but there is still a tendency to transfer responsibility for logistics services at the border. As a result, most 3PLs are third tier offering a single service, e.g. transport, storage or forwarding. Only large importers and exporters require integrated services.

The logistics market will change as domestic manufacturing and retailing evolve in terms of size of firms, dispersion of activities and markets, diversity of products and extent of outsourcing. Ongoing changes that will cause an increase in demand for second tier 3PLs in the next few years include:

- Manufacturers expanding inland to take advantage of lower cost land and labor in China and, to a lesser extent, in Thailand;
- Manufacturers disaggregating their production activities and distributing them along the supply chains based on potential savings in production costs, as has happened as producers in the GMS countries have become part of global supply chains;
- Large international buyers developing networks of suppliers as has happened in China and Vietnam;
- Large domestic retailers establishing national chains in China and Thailand;
- International and domestic brand manufacturers constructing national distribution networks in the GMS countries;
- GMS exporters increasing their involvement in the international portion of their supply chains, as has begun in China and Thailand; and
- Enterprises outsourcing logistics to third parties in order to focus on their core business, as has happened in larger companies in Thailand and as is beginning to happen in China.

In order to compete for the business that results from these changes, 3PLs must develop a wider range of services and offer them as integrated supply chains solutions. They must acquire the capacity to manage timely delivery of a large number of inputs to production, as well as fast and reliable delivery of a large number of SKUs to different markets distributed over a wide area. Generally, these changes occur gradually so that the 3PLs can evolve their portfolio of services to meet their clients changing needs.

Problems arise when the 3PLs attempt to expand too rapidly or shift quickly from third tier to second tier. Often they lack the management skills needed to maintain service quality while ensuring efficient utilization of the additional assets acquired to provide more sophisticated services. Problems can also occur when exporters start producing higher value goods, agreeing



to shorter delivery times, offering greater customization of products and/or providing additional after-sales services. In these situations, their 3PLs may have difficulty obtaining staff and management with the necessary skills or lack the capacity for upgrading their own staff. In this situation, the 3PLs may partner with larger international 3PLs or recruit their former employees.

Although there have been extensive efforts to provide training for the growing logistics industries in China and Thailand, most of this training has been limited to the basics of freight forwarding and cargo documentation. A large part of the skill set required for developing more sophisticated logistics services is in IT applications. However, it was only recently that the software industries in China and India began to develop the applications. Another important set of skills is marketing and strategic planning to support new services. Since most logistics companies are thin and agile, they are generally unwilling to invest in the development of future businesses. Instead, they copy the practices of the larger international 3PLs that have been willing to invest resources in new businesses.

A different set of problems arises when the logistics industry is called upon to provide services to small and medium-sized enterprises seeking to compete in distant markets. For SMEs acting as suppliers to larger domestic firms that sell to these distant markets, the challenge is to develop efficient supply chains linking the SMEs to these larger companies. This can take the form of improved connectivity and inventory management or can lead to the development of industry clusters. For SMEs that ship directly to foreign markets, the challenge is much greater since it requires 3PLs to handle relatively small volumes, in many cases will include LTL and LCL shipments, moving long distances.

## Role of the Public Sector

Since 3PLs are commercial enterprises, the private sector bears the greatest responsibility for modernizing the logistics industry. The public sector can assist by providing infrastructure, simplifying regulations and providing incentives to competitive behavior. Because most of the transport network is public infrastructure, the role of government in maintaining and improving the network is critical. Fortunately both governments and donors have considerable experience and investments usually generate significant benefits. However, these are long-term investments with the general goal of supporting economic growth. The logistics sector, in contrast, is concerned with the efficient use of this infrastructure. Therefore, logistics planning focuses on short-term changes to achieve growth in business activity. Successful logistics service providers minimize their investments in fixed assets and focus on improving the productivity of these assets and the quality of the services they offer.

There is one area in which there is significant overlap between the long-term interests of public sector investment and the short-term concerns of logistics service providers. This is the identification and elimination of bottlenecks due to infrastructure capacity. This does not involve expansion of the transport network but rather to modification of individual links or nodes that restrict the flow through the networks. Bottlenecks may be due to lack of physical capacity or inefficient allocation/management of available capacity. Therefore, they can be eliminated through investments that upgrade individual links or nodes or through changes in management of individual links and nodes. These are improvements need to be achieved in a relatively short



period of time. In terms of capital investment, these activities could include widening roads, lengthening berths, extending runways, improving railway signaling, etc. In terms of management, they could include commercialization of rail services, concessioning of seaport and airport terminals, or developing public-private corridor management entities.

Changes in the regulation of the transport and logistics services can complement the management improvements described above, in particular for road transport. There is little or no justification for economic regulation of freight transport, given the level of competition within the GMS countries and the minimal barriers to entry. The exception is rail services, which are still publicly owned. There is need however for regulation in the areas of safety and environmental impact. These regulations and efforts to enforce them can be done in a manner that provides benefits to the logistics sector in the medium term. For example, in road transport, the tendency is to focus on minimization of direct costs in the short term without consideration of the impact on the total supply chain cost. The result is a predominance of older vehicles operating with significant overloading. This situation may be optimal for operation over short distances on poorly maintained two-lane roads, but it is not for shipping long distances on the new GMS national highways and expressways. For the latter, the gradual replacement of rigid body, six and ten-wheel trucks with modern articulated trucks that utilize low power-to-weight ratios and strengthened leaf springs will improve efficiency of door-to-door movements, reduce damage to cargo and roadways and lower supply chain costs.

Transport regulation can also clarify the issue of liability for loss or damage to cargo while in transit. This issue has been an area of particular concern for multimodal movements and for goods in transit under customs bond. The challenge is that the logistics sector is constantly evolving and creating new commercial relationships whereas regulations tend to be narrow in their focus and thus can create barriers to entry. Market forces may provide part of the solution. As the ability to track cargo improves, and the information available to shippers concerning the performance of transport service providers increases, the need for regulation will diminish. In contrast, an area that continues to require regulation is the preparation and submission of cargo information to the public agencies responsible for regulating trade. For example, recent efforts to strengthen the certification procedure for Customs clearance agents has helped to improve transparency and reduce delays associated with documentary problems. Another example is the certification of forwarders to act as representatives of the consignee in clearing the cargo and paying duties. Another example is the certification of transport companies that carry transit cargo in order to ensure accountability and service quality without restricting competition. When properly designed, these regulations can facilitate trade without significantly restricting competition.

Other areas of regulation related to quality of logistics services are best dealt with through self-regulation. Such efforts require that the industry not only recognize the importance of quality of service, specifically value of time and reliability relative to price, but also convince its members and their clients of the importance of quality as a source of competitive advantage. The public sector can encourage this effort through on-going interaction with associations representing both the providers and users of logistics services. A similar situation applies in the area of strengthening technical capacity in the logistics sector. Both China and Thailand have made extensive efforts to develop technical training in the area of logistics. Training efforts have

included both the preparation of curriculum and delivery of courses, by utilizing the organizational skills of the logistics business associations, e.g. TIFFA and CFLP.<sup>34</sup> However, these efforts focus on procedures and target third and smaller second tier 3PLs. They do not provide support for developing the business strategies and new logistics services required by large second tier 3PLs.

Another role for the public sector is development of ICT systems that link public agencies and private sector enterprises involved in trade. In this area, most of the efforts by 3PLs and public regulators have been limited in scope. The coordination between these two groups requires a common platform for exchange of information. This type of platform can provide not only a point of interchange which converts data supplies by individual participants in different formats but also insure the security of that data. The public sector can provide this service directly but often lack the technical skills required. On the other hand, it can provide the regulatory oversight for private sector providers of this service. The public sector can guarantee of data security, insure cooperation from the appropriate public agencies and provide incentives for participation by 3PLs and other private enterprises involved in trade.<sup>35</sup>

## Seamless Borders

One of the primary goals of trade facilitation is to develop seamless borders in which goods can move freely across the border with procedural delays. The principal procedures occurring at the border are:

- (i) Transfer cargo between transport units;
- (ii) Record and examine cargo documentation;
- (iii) Value cargo and collect duties; and
- (iv) Inspect cargo for safety and security.

This first task is frequently performed through a back-to-back transfer in an open area on or near the border (Figure 4.4), or at a warehouse near the border where goods can be temporarily stored before loading to another truck (Figure 4.5). These procedures tend to be inefficient and can cause loss or damage of cargo. These inefficiencies can be mitigated through the construction of a covered transloading facility with a narrow platform and some forklifts. The inefficiencies can be eliminated by allowing the vehicle to cross the border with its cargo intact. However, this has been difficult to implement in the GMS countries and elsewhere due to concerns about the safe operation of the vehicle, repatriation of the driver and vehicle after the cargo has been delivered, and use of foreign trucks for cabotage. In addition, it is not always the most economical arrangement (see box below). An alternative for cargo transported in articulated vehicles is to allow the trailer and its cargo to cross over intact and to exchange tractors and drivers thus avoiding the problem of repatriation.<sup>36</sup> The time to unhook and hook the trailers is insignificant and this arrangement is often faster than the procedures for clearing the driver and tractor.

<sup>34</sup> Thailand International Freight Forwarders Association, China Federation of Logistics and Purchasing

<sup>35</sup> Singapore has had considerable success in developing these types of systems. Private sector attempts utilizing the Internet have not been as successful

<sup>36</sup> There may be some concern regarding the return of trailers and containers but this is minor.

**Figure 4.4: Back-to-Back Exchange**

The submission and examination of cargo documents can be expedited through electronic submission and automated processing of the information in these declarations. This approach is being implemented at various border crossings in China and Thailand. Having the cargo information submitted prior to its arrival at the border can further facilitate the clearance procedure. This can be done through early submission by the shipper or electronic exchange of cargo information between the border management agencies on either side of the border.



**Figure 4.5: Exchange through Warehouse**



The delays incurred while valuing goods for the purposes of collecting duties can be substantially reduced by applying risk management techniques to allow most cargo to cross the border without being inspected. Delays at the border can be eliminated if the inspection process is moved behind the border and the cargo moves under Customs bond between the border and an interior inspection facility.

### Choice of Transport Service Provider

The choice of transport service for movement of cargo through a transit country depends on a number of economic and regulatory considerations. The two most immediate choices are an operator from the country of origin/destination of the goods or an operator from the country in which the goods are moving in transit. The first consideration is whether and under what conditions a vehicle from another country is allowed to transport cargo through the transit country. If there is a prohibition against vehicles crossing the border or movement within the transit country is limited to a few miles in from the border, then there is little option other than to transfer the cargo to an operator from the transit country. A less severe constraint is where the cargo unit, either trailer and/or container, is allowed to cross the border but not the driver or the prime mover. In this situation, a transport operator from the transit country would provide the driver and prime mover and would be responsible for the round trip movement of the trailer or the one-way trip of the container. The least restrictive arrangement is where the truck, driver and cargo are allowed to cross the border intact and continue to their destination whether this is a gateway in the transit country or a consignee in a third country. In this situation, the selection of an operator will be based principally on considerations of cost and reliability.

Where there is a choice, the transit country operator is likely to have a cost advantage because the same vehicle can be used for transit and domestic movements. This is especially true when the distance to be traversed in the transit country is relatively long and the opportunities for obtaining a return cargo are limited. Also the foreign operator may have to provide special equipment to meet the standards and requirements of the transit country, e.g. length, driver side, inspection. If the cargo is to be delivered to a consignee in the transit country or to an international gateway and the round trip will require more than one day for the return trip, then a foreign transporter will incur the additional cost for the driver's accommodations. The operator from the transit country will require additional time to mobilize the vehicle and pick up the cargo at the border but will use less time in transit due to familiarity with the route and with the procedures at the gateway and border crossings.

The domestic transport operator will also have a competitive advantage in providing the customs bond necessary to transport goods in transit. This bond must be issued by a financial entity in the transit country. This entity will charge less for a domestic transporter than a foreign transporter because of the lower perceived risk. The same logic applies for insuring the cargo that is being transported in cases where a separate policy is required for each country through which the goods pass. This does not apply if coverage is available from a single carrier for the origin to destination movement.

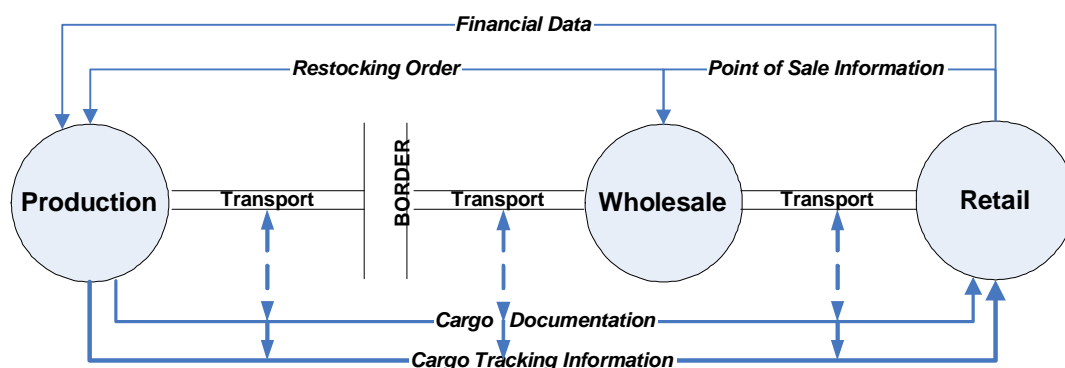
In summary, there are number of factors which favor the transport service provider in the transit country. Exceptions include where the travel distance within the transit country is relatively short, if the transit country's transport sector lacks competition and/or the probability of finding backhaul cargo is high.

These changes would create a seamless border except for cargo that is inspected for reasons of health, safety and security. Such procedures are likely remain at the border, as their objective is to prevent goods that present a safety or security threat from entering the country. For cargoes that represent a relatively low risk in terms of health and safety, it is possible to take a sample at the border and allow the goods to continue inland to a secure location where they would be kept pending the outcome of the tests. To further reduce the delays for the goods that are inspected, it would be necessary to locate the testing and quarantine facilities near the border.

## Common Strategies for Improving Logistics

There are three common strategies for improving the quality and efficiency of logistics services: 1) expanding the exchange of information; 2) integrating logistics activities; and 3) offering a variety of logistic services in different combinations and with different quality of service

**Figure 4.6: Information Flow Associated with the Movement of Internationally Traded Goods**



In order to trade goods there must be an exchange of information about the purchase from the point of consumption to the point of production, and about the delivery of the goods from the point of production to the point of consumption (Figure 4.6). The more effective this exchange, the more efficient is the trade. In the last few decades, the medium of exchange has gradually been converted from paper to electronic messages. This conversion is incomplete because a large number of the participants involved in international trade lack the necessary technical sophistication, both in the public and private sector. Transactions that continue to rely on paper documents often introduce bottlenecks especially:

At the borders, where border management agencies have been slow to automate their data processing and are reluctant to share information regarding cross-border cargo movements; and

At those points in the supply chain where there is a change in ownership of cargo requiring signed documents.

In order to address these bottlenecks, this project proposes to establish a regional information-sharing platform. This platform would not only support government-to-government exchange of data but also facilitate the exchange of information between those government agencies regulating trade and the shippers, consignees and their representatives who are involved in that trade.

In order for the logistics industry to improve the quality of services it offers, it must have clients who demand better quality and are willing to outsource in order to obtain this quality. Because international trade involves a sequence of activities, the total time and cost for delivery of goods from point-of-production to point-of-consumption depends on the coordination between these

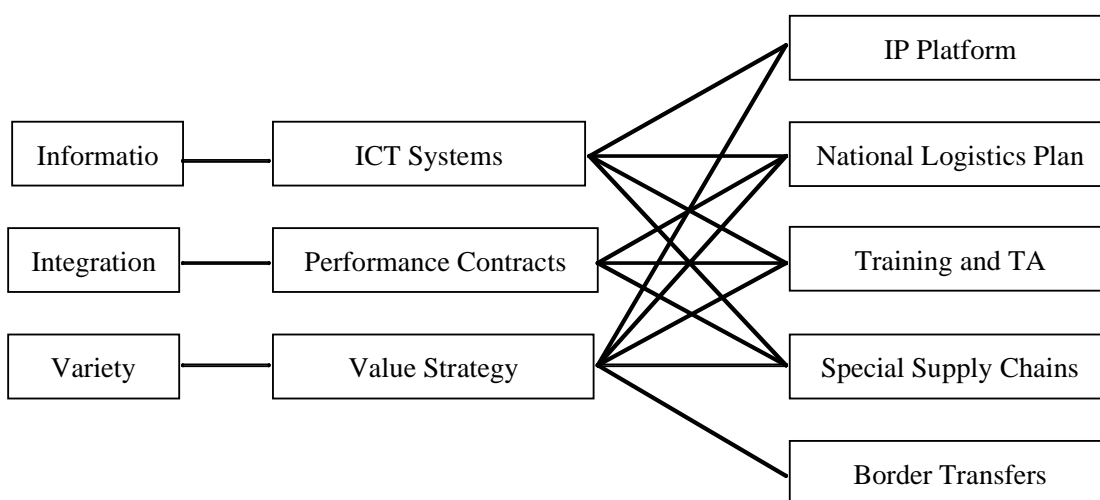


activities. Typically, this was accomplished done through vertical integration by the buyer or seller. However, as the coordination of global movements became more complex, the responsibility for coordination was often transferred to 3PLs that specialized in specific trades.

The development of second tier 3PLs with the necessary specialization and capability to handle large volumes was slow because service contracts tended to be limited in scope making 3PLs reluctant to invest in new businesses or assets. This changed when contracts for individual shipments were replaced with contracts for multiple shipments over a defined period of time. When shippers realized the benefits of having reliable logistics service, these contracts changed from procurement of specific services to performance-based contracts. This also allowed 3PLs to offer a range of choices for moving goods with different combinations of cost, time and reliability. It allowed exporters to customize their supply chains to meet the requirements of different markets. It allowed importers to better manage their inventory by using different supply chains for restocking goods based on the volatility of demand and shelf life.

Improvements in the logistics industry continued as shippers realized that their supply chain could be configured to increase the value of the delivered products. This lead to a new paradigm in which the logistics was not simply a cost of doing business but also a mechanism for adding value. This allows the 3PLs to extend the range of services offered and offer complete supply chain solutions

**Figure 4.7 Strategies and Initiatives**



The evolution in the logistics industry suggests that any program of training and technical assistance should be designed for the different tiers and should include targeted efforts for introducing new types of contracts and improving special-purpose supply chains. It also suggests that a national logistics plan should address the regulatory framework as well as identify bottlenecks and investments in logistics hubs. The relationship between the strategies for improving the logistics services, the initiatives that have been introduced and the logistics projects proposed as part of this RETA are shown in Figure 4.7.



## **Proposed Initiatives**

Six specific initiatives are proposed to stimulate ongoing efforts by the private sector to improve the quality and increase the scope of services provided by 3PLs. The first initiative would be the development of a regional information-sharing platform, the GMS-IP, to promote cross-border coordination between border agencies and to increase the consistency and transparency of cargo clearance procedures.

The second initiative would be the development of national logistics action plans through joint public-private undertakings. These would be undertaken at the national level but follow a common format and would provide a mechanism for addressing bottlenecks and other problems that are bilateral or regional in nature. The regional issues would be incorporated into a regional logistics plan in which the GMS countries would agree to participate.

The third initiative would be a program of capacity building for the logistics industry and its clients. This capacity building would assist manufacturers and retailers in developing business strategies that utilize value added logistics as a means to achieve competitive advantage. It would also assist 3PLs in designing and developing logistics services to implement these strategies. The training provided in this program would cover current trends in modern logistics but would be tailored for each GMS country according to the sophistication of its logistics industry and the scale of its manufacturing and retail sectors.

The fourth initiative would be a program for strengthening the private sector's capacity to manage specialized, export-oriented supply chains and the ability of the government and private sector to jointly audit the performance of these supply chains. The initial focus would be on food product supply chains including cold and cool chains. Subsequent efforts would focus on secure supply chains for exports of goods that are controlled or restricted by the importing country, as well as supply chains to support just-in-time, just-in-sequence manufacturing and assembly activities.

The fifth initiative would be to develop a trade module for the GMS-IP to improve the exchange of information among parties involved in trade. This module will provide traders from one GMS country with information on the trade opportunities and procedures in other GMS countries. The platform would also serve as the basis for establishing cross-border partnerships between GMS 3PLs and potentially other B2B transactions.

The final initiative would be to improve the procedures for cross-border movement of vehicles and goods. This would focus on improving the efficiency of the exchange of transport equipment at the border.

### ***Project 1 - Information Sharing Platform***

Nearly all efforts to facilitate trade involve methods to improve the flow of information between participants in the supply chains through which the trade moves. Information related to the cargo is transmitted among shippers, consignees and 3PLs and between these parties and the

government agencies involved in regulating trade. In recent years, these information flows have witnessed an increased use of ICT by all participants.

Although the volume of cross-border information exchanged among private parties involved in trade has grown rapidly, the flow of information among public agencies has not. A major impediment to efficient movement of goods into a GMS country is the limited amount of information available to the border management agencies prior to arrival of the goods. Although Customs agencies on both sides of the border require similar information, they have continued to require the data be entered into a form that is different from their neighbors. While the individual Customs have reduced their data requirements to a Single Administrative Document (SAD), the other border agencies continue to use separate documents even though much of the information collected is already included in the SAD. Because of the lack of harmonization exporters have difficulty in determining the requirements of the importing country with respect to supporting documentation, clearance procedures, and standards applied to controlled and restricted goods.

In order to dramatically increase the exchange of information among border management agencies within the GMS and to provide shippers with better information on regulatory requirements as well as business opportunities, a regional information-sharing platform (GMS-IP) would be considered for establishment. The basic goal of this platform would be to facilitate the interregional movement of people and goods.

While there are merits to a regional information platform, and to a central facility, the foremost initial step is review the information gaps under each sectoral area, i.e. customs, SPS, logistics to determine the scope, legal requirement, and contents for information sharing. Information sharing for SPS, customs and logistics among the GMS countries, and between the public and private sector is critical for improved border handling, but it needs to be tackled by an assessment of each sector. The key issue for information sharing is not technical, but an indepth understanding of the underlying legal and regulatory constraints for cooperation, sequencing, and national progress, amongst others, before consideration of the physical set up of the regional platform.

The GMS-IP would be maintained at a central facility with a common database and Internet connections to external trading partners. It is possible to create a distributed system in which servers in each GMS country communicate with each other in a matrix arrangement, but there are two advantages of employing a centralized configuration. First, the central system creates a focal point for promoting an exchange of trade-related data and negotiating the type of data to be provided. In addition, a centrally managed system will allow collaborative decision making on important issues such as:

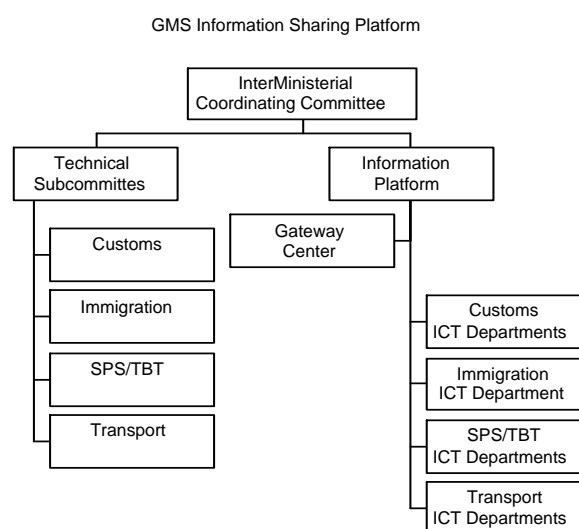
- The common elements of data that will be shared among participants;
- The format in which the data will be exchanged;
- The timeliness and accuracy of the data exchanged; and
- The security protocols.

A centralized configuration does not preclude bilateral exchanges of additional information but does guarantee that a basic set of data will be accessible to all GMS countries.

The second reason for centralizing the platform is that it would create a physical location in which the GMS countries can confer and where they can work on regional problems and formulate common policies. So far, the region's trade facilitation efforts have been limited to occasional meetings and workshops conducted at varying intervals in different cities. In order to create a sense of permanence and to support a process of continuous negotiation, the GMS-IP office would include a meeting center for negotiations related to trade facilitation among the GMS countries.

An inter-ministerial committee would be established to set objectives, formulate strategies, define policies and coordinate activities of the platform. This committee would be supported by technical subcommittees responsible for each of the applications developed for the GMS-IP. These subcommittees would determine: the types of information to be shared, sources and format of data inputs, processing that would be done on the data and limitations on access to the data. The results of their deliberations would be a set of technical specifications used by the platform's staff to develop the applications. The proposed management structure is shown in Figure 4.8.

**Figure 4.8: Proposed GMS-IS Management Structure**



The platform would operate as a virtual private network with separate modules to handle different types of information such as customs data for shipments, cargo specifications for inspection and quarantine, reference data for logistics services, tracking data for shipments and entry/exit data for immigration. The platform would use encryption and password protection, and conversion programs for exchanging data with different formats. The configuration of the proposed system is shown in Figure 4.9. Separate servers would be used for each application to provide additional security.

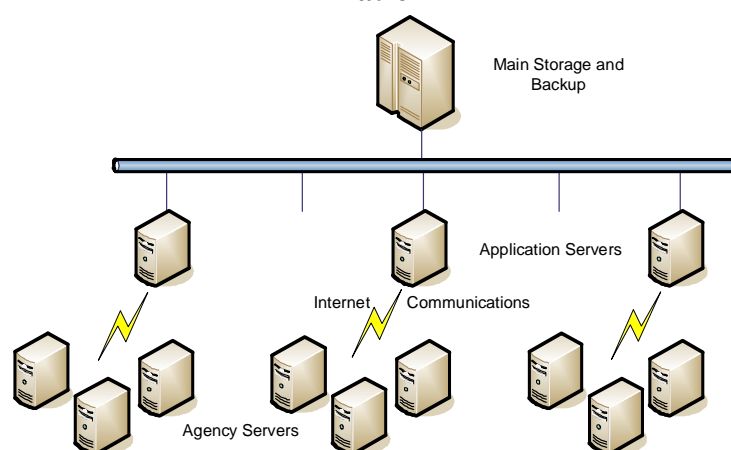
There would be three levels of security/access in the platform. The lowest level would be information made available publicly via the platform's website. The next level would be information available to authorized users including approved 3PLs and shippers. The highest level would be information available to the government agencies in each country, e.g. the Customs authorities.

The initial development of the platform would include four components. The first would be the negotiations between the GMS countries regarding several critical issues:

Committee structure and participation;  
Location of the center;  
Staffing levels and recruitment; and  
Mechanism for funding the center.

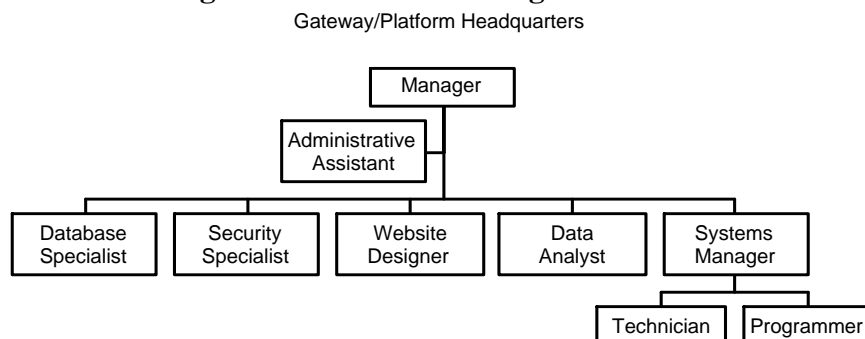
The platform would be expanded incrementally by providing additional modules for exchanging specific types of data. These modules would be developed once agreement had been reached between the relevant agencies in the GMS countries. The agreements would stipulate the type of data to be provided, the format(s) in which the data would be submitted, the frequency of updates, and the security protocols governing the exchange of the data.

**Figure 4.9: Schematic of Information Sharing Platform**



An initial staffing proposal is shown in Figure 4.10. The technical staff would include a database specialist for designing and maintaining the database and for developing a conversion program for interfacing with the different agency databases. It would also include a security specialist responsible for protecting the platform's database and designing the protocols to access different parts of the database. Finally, there would be a website designer to provide the interface between the system and its various users and a data analyst to collect information for inclusion on the website including links and RSS (Rich Site Summary) feeds. The staff would need to have some familiarity with the languages used in GMS countries but the common language for the system would be English. The initial organization would have about nine employees, with additional staff hired as more applications are added.

**Figure 4.10: Initial Staffing of GMS-ISP**



Initially the platform would serve as a regional website providing links to the websites in each GMS country concerning customs, inspection and quarantine, immigration and ocean and air transport services. It would complement the existing websites by providing not only links but also RSS feeds. The platform would also provide supplemental information gathered by the platform's staff on available transport services, cargo clearance procedures and documentation requirements for the GMS borders and gateways, preferential trade agreements and documentation requirements and price indexes for international and domestic transport. The result would be similar to that of the RITS system in West Africa (see box on right).

The functions of the platform would be expanded through the addition of specific application modules. A plan would be developed identifying the scope and goals for each application, the composition of the technical subcommittees to determine the scope of information to be included, the uses of information by GMS agencies, and restrictions access to the data provided through the platform's website.

The expansion would begin with four specific applications to be undertaken as part of the SFA-TFI project: a customs module, an Inspection and Quarantine module, a logistics module and an immigration module. Each of these is described in the other chapters.

Donor assistance would be required to establish and equip the center and to provide the basic communications, database systems and website. There would also be a need to provide partial support for the first two years of operation during which some of the modules would be developed. The required level of funding would be \$1.5 million based

### **RITS**

The Regional Trade Information System For ECOWAS provides access to a web of databases with content about goods and services in the ECOAWS region and beyond. It operates through an intranet Community Wide Area Network. RITS is intended to facilitate rapid information exchanges among buyers and sellers, thereby providing an integrated platform for trade promotion and economic cooperation among member states. The platform provides a hub of National LANs and WANs and also serves as a secure gateway to the Internet.

It accesses sectoral databases for Trade, Agriculture, Industry, Energy, etc. The systems, which are currently or will in the future be included in the platform, cover the following:

- Ports Management Systems
- Customs Administration Systems
- Clearing & Forwarding Systems
- Legal, Insurance & Banking Systems
- Settlement & Payment Systems
- Haulage & Transit Systems
- Distributive Trade & Commerce
- Consumer Protection Advocacy System



on the preliminary budget shown in Table 4.3.

### *Project 2 - National Freight Logistics Action Plan*

The goal of this project would be to prepare national action plans for improving both international and domestic freight logistics in GMS countries. The broad objectives for these plans would be to increase competitiveness in international trade and efficiency in domestic distribution. The plans would be strategic with a short-to-medium term timeframe. They would not include proposals for development of transport networks and other infrastructure associated with long-term economic development. Instead, the plans would focus on expanding the range of available logistics services for the manufacturing, wholesale/retail, and trade sectors. In addition, the plans would aim to improve the quality of all services by reducing transit time and cost, increasing delivery reliability and providing a greater variety of services in terms of time and cost.

**Table 4.3: GMS-IP Budget**

| Item                     | US\$000 |
|--------------------------|---------|
| Equipment, Installation  | 250     |
| Office Rental, Utilities | 250     |
| Staff Compensation       | 800     |
| Meetings, Travel         | 250     |

There are a number of challenges associated with the preparation of a logistics action plan. The first is the need to insure that planning is a collaborative undertaking. It is the natural inclination of Ministries and transport enterprises to focus on the specific modes of transport for which they are responsible, just as it is the tendency of regulatory agencies to focus on their mandates. Without collaboration, the plans will merely produce a series of un-integrated initiatives that are very likely to be recycled recommendations. In order to achieve successful collaboration, it is important to have strong leadership from government. This implies having a senior Ministry assume leadership. At the same time, it is important to obtain broad representation from the private sector. A committee structure would facilitate collaboration across transport modes and logistics services. The committee would have a technical staff to perform the necessary analyses.

A second challenge is to ensure that the plan considers both public and private sector initiatives as well as those that can be undertaken jointly. Most of the improvements in quality and range of logistics services will require changes in B2B transactions. On the other hand, changes in public policy and regulations will be important for removing bottlenecks, especially those at the border. For this reason there should be broad participation. Public sector participation should include Ministries such as Transport, Trade, Industry and Commerce, and Finance and agencies such as Customs and border security. Private sector participation should include representatives from the logistics, manufacturing, and retailing sectors.<sup>37</sup>

A third challenge is the tendency of all parties to focus on investments in public infrastructure and hardware, whereas improvements in logistics are more likely to require changes in operations and the introduction of value-added services. Since ICT applications are expected to play a major role in improving services, it is important to include experts knowledgeable about logistics software as well as operations and value-added services.

---

<sup>37</sup> This implies participation by the Chambers of Commerce and associations representing a majority of the 3PLs in terms of volume of business rather than the number of enterprises.

The fourth challenge is the sheer scope of a complete assessment. Because freight logistics encompasses a large part of a country's economic activity, it is important to limit consideration to major freight movements. This implies a focus on the major corridors and the principal services provided to goods moving on these corridors. However, it is important to consider the capacity of the national distribution network, as well as differences in the requirements of SMEs and large enterprises. To limit the analytic activities, supply chain analysis can be used to identify inefficiencies, bottlenecks and other constraints and determine their relative importance.

A final challenge is accounting for the synergy among individual initiatives. For example, a change in procedures at the border will have a significant impact on the routing of shipments and the different types of logistics services demanded. The development of the transport network and the efficiency of different transport modes will affect the configuration of the domestic distribution networks, the location of logistics hubs and the organization of logistics services at these hubs. In order to appreciate these interrelationships, the preparation of the action plans should consider different scenarios describing the development of transport networks and services, changes in government regulations and procedures, integration of retailing activities, disaggregation of manufacturing activities, and elimination of the current bottlenecks.

A general outline for a logistics action plan is shown in Table 4.4. There are seven basic tasks for preparing an action plan. The first is to agree on a scope and set objectives that are sufficiently limited to make the planning effort achievable. The scope should emphasize new ideas rather than recycling concepts used in other planning efforts.

The second task is an assessment of the logistics sector's current performance. This assessment could be difficult because there are few performance measures available and previous attempts to develop benchmarks, e.g. logistics expenditures as a percentage of GDP, have proven unsatisfactory. Surveys of supply chains along selected routes are useful in identifying bottlenecks, but this analysis needs to be supplemented with an evaluation of the impediments to their elimination. For this reason an evaluation that examines movement vertically and horizontally is recommended. Analysis of vertical movements up and down the supply chain and horizontally at the major activities occurring in these chains offers the best opportunity for understanding the major impediments.

The third task is an assessment of the relative importance given to time, cost and reliability by the different trades. The traditional distinction between high-value, time-sensitive goods and low-value, cost-sensitive goods provides a starting point, but the structure of demand is much more complex. The decline in the proportion of delivered cost attributable to transport relative to that attributable to manufacturing, marketing and sales has increased the importance of time and reliability relative to cost. Efforts to reduce inventories, synchronize deliveries and supply goods in narrow sales seasons have created a more complex demand structure. This assessment should

#### **Table 4.4. National Logistics Action Plan**

1. Objectives and goals
  - a. Improved competitive position
  - b. Diversification of markets
  - c. Diversification of products
  - d. Improved internal distribution
  - e. Cost and quality for transport and logistics services
2. Areas to be included
  - a. Regulation and public-private partnership
  - b. Infrastructure bottlenecks
  - c. Specific industry initiatives
  - d. Trade finance
  - e. Border processing
  - f. Applicable best practices and unmet potential
  - g. Target and milestones
  - h. Impediments to and incentives for integration
  - i. Information exchange
3. Analysis
  - a. Transport bottlenecks
  - b. Performance review of benchmarks,
  - c. Definition of appropriate performance measures and targets
  - d. Institutional performance
  - e. Financial-subsidies, incentives, trade investment
  - f. Legal review
4. Initiatives
  - a. Organizational - strategy for upgrading industry
  - b. Investment
  - c. Operational changes
  - d. Changes in policy and regulation
5. Benefit analysis
6. Implementation-plans, targets, timelines

also take into account current trends that will increase the importance of time and reliability, e.g. distributed processing, large-scale retail and enhanced security for food and other sensitive products.

The fourth task is to identify the management and technical skills that need to be improved in order to provide greater efficiency and integration of supply chain activities. Institutional strengthening must address efforts to reduce the number of transactions, use ICT systems to

simplify these transactions and improve scheduling and coordination of supply chain activities, to construct special purpose supply chains, and to introduce value-added services.

This fifth task is to design initiatives to eliminate bottlenecks and to strengthen the institutions involved in supply chain activities. It is anticipated that there will be a large number of such initiatives (Table 4.5). Some will be complementary but others conflicting. Some activities must be undertaken jointly; others can be introduced on a stand-alone basis. The activities will have different timeframes and will require different levels of political and industry support.

**Table 4.5: Potential Initiatives for Improving Freight Logistics**

***Possible***

- Establish national distribution networks – public land and connectivity, private functions and operations
- Organize a corridor planning entity to address maintenance, cross-border coordination, linkage between gateways, intermodal connectivity and capacity enhancement
- Develop SMEs through improvements in connectivity, clustering and e-commerce options
- Introduce IT systems for fleet and inventory management, tracking and tracing systems, cross-docking
- Introduce better transport technology, e.g. domestic containerization, articulated trucks, double stack trains, transloading and intermodal facilities
- Promote the use of partnerships, mergers and joint ventures for vertical integration
- Allow horizontal integration to increase scope, scale and quality of services provided by logistics companies
- Establish additional inland customs clearance facilities for the principal trade corridors
- Develop inland logistics hubs and free zones
- Liberalize regulations regarding cargo consolidation and processing of LTL/LCL shipments
- Facilitate investment in small and medium sized logistics service providers
- Complete commercialization of management for freight transport services and infrastructure for rail, road, air sea and IWT transport
- Complete deregulation of transport markets with regards to price and market structure
- Enforce restrictions on axle load and vehicle road worthiness and other safety measures
- Define, collect, and evaluate performance measures

***Existing Proposals including those recommended in this Project***

- CBTA initiatives – harmonization, transit regime, enforce axle load and road worthiness
- Upgrade path for transit movements from back-to-back to trailer exchange to through movement with guarantees and financing for vehicle standardization
- Integrate CIQ functions to expedite cross-border movement
- Educate 3PLs and their clients on value enhancing options
- Promote second-tier logistics through specialized training
- Facilitate custom-processing and inspection activities, implementation of risk management
- Improve regulation and certification of clearance agents and others involved in the handling of related documents
- Introduce authorized economic operators, both producers and 3PLs
- Improve SPS and TRT procedures, coordination and division of responsibility among agencies, and

In order to develop a consistent set of initiatives, individual initiatives would be integrated into scenarios, each with a primary theme. For example, there might be a “seamless borders” scenario for inter-regional trade in which the processing of international trade is moved off the border to locations near the principal origins and destinations of trade. This scenario would

require a better procedure for controlling inland transit movements, improved inland clearance facilities and greater interchange of cargo documentation including across the border. Alternatively, there might be a “green channel” scenario in which most goods crossing the border are cleared after a brief check of documents. There would be post-clearance audits but no requirement for transit arrangements or inland clearance facilities. There might be a “logistics hub” scenario for domestic movements, in which the distribution network has large multimodal hubs (ICDs, distribution centers, truck terminals, special economic zones) that serve the major centers of commerce. They would serve both intermodal and linehaul-collection/ distribution exchanges. Alternatively, there might be a “private distribution center” scenario in which larger enterprises and 3PLs establish their own distribution centers utilizing primarily road transport.

The final task would be selection of a preferred scenario and associated initiatives and determination of the resources and steps required for their implementation as well as the potential benefits and risks. This should include identification of the agencies that would be responsible for individual initiatives. It might also include the designation of a corridor planning and management unit that would coordinate the implementation of different initiatives affecting specific corridors and provide follow-up support to ensure that the improvements are sustainable.<sup>38</sup>

It is difficult to specify a timeline for developing an action plan. It would vary by country and depend on the scope of the undertakings. A tentative timeline for the basic tasks would be about one year as suggested in the following list:

- Define goals and scope including trade routes to be examined (1-2 months);
- Assess current performance and sensitivity of major trades to cost/time and reliability (2-4 months);
- Identify bottlenecks and institution building requirements (2-1 months);
- Scope out possible initiatives and prepare supply chain/corridor scenarios (2-3 months);
- Set priorities for initiatives and determine resource requirements, risks and provisional timeline (2 months); and
- Prepare and approve final plan (2 months).

The technical input would require only about 6-9 months, but the time required for collaboration and for reaching a consensus on the initiatives could easily double this time.

### *Project 3 - Institutional Capacity Building for 3PLs and Their Clients*

This institutional strengthening project would have twin goals of allowing 3PLs to capture a larger share of the logistics services from the cargo owners and to expand their role in international logistics. This would require strengthening the third-tier 3PLs in Cambodia, Lao PDR and Vietnam and the second-tier 3PLs in China and Thailand. Institutional strengthening would also involve providing assistance to the larger companies so that they could make the transition to the next tier.

---

<sup>38</sup> While there is limited international experience in corridor management, the successful efforts have generally been those that were established to guide the implementation of major improvements and then continued developing follow-on efforts to improve the performance of the corridor.

The project would accomplish these goals via the following activities:

- Strengthening basic skills in managing transport and logistics assets and services;
- Raising awareness of modern logistics and supply chain concepts among both 3PLs and their clients;
- Developing the skills needed to introduce value-added logistics services; and
- Creating specialized supply chains.

In order to strengthen the logistics industry in the individual GMS countries, it is important to understand the medium-term requirements of the major clients of these services. Since this varies from country to country, capacity-building programs would also be prepared on a country basis. The core content would be developed at the regional level, but the presentations would be customized to meet the needs of each country. Since the recipients of this type of assistance would come primarily from the private sector, the sustainability of this effort will depend on the involvement of both local associations (logistics, retailing, manufacturing, shipping, etc.) and academics.

Four training components are proposed as follows:

1. Business seminars. These would be 1-2 day seminars for CEOs, COOs and senior government officials responsible for policy related to logistics. The seminars would cover subjects such as current trends and evolving business practices in logistics and supply chain management. The presenters would be outside speakers, primarily from the international logistics industry. These seminars would be presented initially at the regional level with donor support and then at the national level jointly with the relevant industry associations. For both levels, there would be a fee for attendance. The national presentations would discuss concepts and techniques not currently utilized by the local logistics industry or its clients with an emphasis on business and marketing strategies.

Two sets of seminars would be developed, one specifically for the logistics industry and another for both the logistics industry and their clients. Topics that would be covered in the first set of seminars include the following:

- International and cross-border partnerships for serving intra-regional and international movements;
- Mergers, joint ventures and partnerships to increase the scale, scope and quality of services;
- Competitive strategies - low cost versus high value services;
- Market and value chain analysis to identify needs for new services;
- Operating a network of logistics hubs;
- The role of information systems in integrated logistics services;
- Modern warehousing and cross-docking services; and
- Simplifying the transactions in a supply chain.

The second set of seminars would cover the following topics:

- Inventory management strategies;



Distribution networks and distributed processing;  
Information systems linking point-of-sale to production planning; and  
Cash-to-cash cycle management.

It is anticipated that there would only be one round of presentations in each country. However, these could serve as a model for follow-on industry-sponsored seminars.

2. Management Training workshops. The International Freight Forwarding Associations and Chambers of Commerce would organize these 2-4 day sessions with a combination of local and international presenters. The courses would be held for senior line managers. They would provide training in modern business practices and use of information systems for logistics services. Local and foreign industry experts would develop the content with experience in operations and information systems. Industry experts would be involved in the initial presentations together with local academics. A fee would be charged for the courses but the cost for curriculum development would be covered through technical assistance. Among the topics to be covered would be:

Inventory management;  
Modern warehousing;  
Track and trace systems including GPS and RFID;  
Truck fleet management;  
Transloading/cross docking procedures;  
Consolidation techniques; and  
Cash-to-cash cycle minimization.

It is expected that new topics would be developed in response to the interests expressed by the logistics enterprises and that the business associations would provide support for development of new content. Business associations would also upgrade content from earlier workshops.

3. Management training courses. Courses would be offered on advanced techniques in Supply Chain Management for manufacturers, retailers and logistics service providers. These would be 1-2 week courses covering the organization, supervision, and auditing of specialized supply chains. The courses would include case studies from both local and international experience and would provide hands-on experience. The curriculum would be developed through cooperation with international and regional experts in designing supply chains. The experts would present the course together in coordination with local academics. Four types of supply chains would be addressed:

Secure supply chains;  
Cold chains;  
Just in time, just sequence; and  
Distributed processing.

These courses would complement the fourth project concerning the development of these types of supply chains.

4. Professional Training courses. These 2-4 week courses would provide training for professionals working in the field of logistics. The curriculum would be developed based on courses currently offered in the region by TIFFA and CFLP as well as by international organizations including ESCAP, UNCTAD and the World Bank's Distance Learning Center. Subjects to be covered include:

Cargo Documentation;  
Freight Forwarding Services;  
Cargo consolidation; and  
International Air and Sea Freight services.

Presentations would be arranged through regional cooperation. Thailand and China would take the lead in organizing the courses for the other GMS countries. The course content would be developed with technical assistance that would also cover the initial presentations. The courses themselves would be designed to be self-financing through participants' tuition.

There are a number of challenges associated with this project. The first is the recruitment of experts in the field to assist in the development of the curriculum and the initial presentations. For the Management seminars, it will be necessary to identify senior executives from the logistics industry who have both the experience and presentation skills to hold the interest of the target audience which includes CEOs, COOs and other senior managers.

Another challenge is to identify a niche for these presentations. The logistics industry has been and continues to rely on in-house training to develop the skills of its personnel. The larger logistics firms have formal training programs while the small companies rely on mentoring. The largest firms may hire external trainers when introducing new skills and processes that can subsequently be incorporated into their formal program. The goal of the presentations is to provide materials that cover new products and new ways of doing business that can subsequently be integrated into in-house programs.

A third challenge is to develop content that is appropriate for both large and small enterprises. It is anticipated that the small enterprises will be more interested in the training courses whereas the larger firms will be more interested in the seminars and workshops.

The courses must also be customized to take into account the level of technology and sophistication of the logistics services offered in the individual GMS countries. The project would begin with a needs assessment conducted by local business associations to determine interest in the various topics related to modern logistics. The survey technique and instrument would be developed at the regional level and then customized by the associations conducting the survey. The results would be tabulated on a regional basis as shown in Table 4.6.<sup>39</sup>

---

<sup>39</sup> The information presented in this table is based on the initial gap analysis rather than expressed preferences. A more comprehensive polling of enterprises is required to identify the appropriate content matter.

**Table 4.6: Technical Assistance Program: Priorities by Country**

|                                   | <b>China</b> | <b>Cambodia</b> | <b>Lao PDR</b> | <b>Myanmar</b> | <b>Thailand</b> | <b>Vietnam</b> |
|-----------------------------------|--------------|-----------------|----------------|----------------|-----------------|----------------|
| <b>Business Seminars</b>          | <b>3</b>     | <b>1</b>        | <b>1</b>       | <b>N.A.</b>    | <b>3</b>        | <b>2</b>       |
| Mergers and Partnerships          | 2            | 1               | 1              |                | 3               | 2              |
| Competitive Strategy              | 3            | 2               | 2              |                | 3               | 3              |
| Market and Value Analysis         | 2            | 1               | 1              |                | 3               | 2              |
| Logistics Networks and Hubs       | 3            | 1               | 1              |                | 2               | 2              |
| Information Systems               | 3            | 2               | 1              |                | 3               | 3              |
| Inventory Strategies              | 3            | 2               | 2              |                | 2               | 2              |
| Cash to Cash Cycles               | 2            | 3               | 3              |                | 2               | 2              |
| <b>Management Workshops</b>       | <b>3</b>     | <b>3</b>        | <b>3</b>       |                | <b>2</b>        | <b>2</b>       |
| Inventory Management              | 2            | 3               | 3              |                | 2               | 2              |
| Fleet Management                  | 2            | 3               | 3              |                | 2               | 3              |
| Transloading/Cross docking        | 3            | 2               | 1              |                | 3               | 2              |
| Consolidation                     | 2            | 3               | 3              |                | 2               | 3              |
| Cash-to-cash Cycles               | 3            | 3               | 3              |                | 3               | 3              |
| <b>Supply Chain Workshops</b>     | <b>3</b>     | <b>2</b>        | <b>2</b>       |                | <b>3</b>        | <b>3</b>       |
| Secure Supply Chains              | 3            | 3               | 3              |                | 3               | 3              |
| Cold Chains                       | 3            | 2               | 1              |                | 3               | 3              |
| Just-in-time, Just-in-sequence    | 2            | 1               | 3              |                | 3               | 2              |
| Distributed Processing            | 3            | 1               | 1              |                | 3               | 2              |
| <b>Professional Courses</b>       | <b>0</b>     | <b>3</b>        | <b>3</b>       |                | <b>0</b>        | <b>3</b>       |
| Cargo Documentation               |              | 3               | 3              |                |                 | 3              |
| Freight Forwarding                |              | 3               | 3              |                |                 | 2              |
| Cargo Consolidation               |              | 3               | 3              |                |                 | 3              |
| International Air and Sea Freight |              | 3               | 3              |                |                 | 3              |

Level of interest 3=High, 2=Moderate, 1=Low, 0=already have

During the period that the survey is conducted, the international and regional experts would be recruited to prepare the core content and make the initial presentations. At the same time, the planning for the presentations would take place including decisions regarding format, location, promotion and cost recovery for the regional and then national presentations. The initial presentations would occur within 3-4 months of the start of the project. The initial round of seminars and workshops would be completed within the first six months. The timeline for the preparatory activities would be as follows:

- (i) Needs Assessment (1 ½ month);
- (ii) Recruitment of presenters (2 months); and
- (iii) Content Preparation (6 months).

The organization of this effort would be undertaken as part of a technical assistance program working in cooperation with the appropriate Ministries and business associations in each country. The administration of the project would be performed through a combination of local and foreign consultants recruited for this purpose. Approximately 4 person-months of foreign experts would be required for development of the content at the regional level plus administrative support. An additional 4 person-months would be required for developing and presenting the national programs in each country.

In addition to the foreign experts, there would be an equal amount work required from local experts. The cost for the core content and regional presentation would be about \$150,000. For each country program, the cost for assessment and additional content development and presentation would range from \$50,000 to \$200,000. With full participation the amount would be between \$0.85 and \$1.0 million and extend over 8-12 months. After that period, the courses would be continued by local institutions on a fee basis.

#### *Project 4 - Development and Audit of Specialized Supply Chains*

This project covers the development and improvement of special-purpose supply chains. The project would provide technical assistance in constructing these supply chains and auditing their performance. The goal of this project is to improve competitive advantage in trades that are dependent on demonstrating the integrity of their supply chains. Of particular importance in this regard is the shipment of fresh food products. Transport of fresh food demands cool or cold chains and product traceability from the point of harvest to point of retail sale. For processed foods, only traceability is required. For manufacturing activities that involve tiered assembly e.g. vehicles and computers, there is a need for time-critical supply chains to support just-in-time production. These types of supply chains are also required in retail activities when replacing distribution centers with cross-docking operations.

A variation of this type of time-critical supply chain is applied for shipments of moderate-value goods that require reliable delivery at minimum cost. For these, multiple multimodal chain is constructed with normal shipments using a less costly, slower mode and delayed shipments or special orders using a faster, more expensive mode. Shipments of controlled or restricted goods often require secure supply chains to ensure the integrity of the product and to qualify for favorable treatment at border clearance.

In order to develop the capability of both shippers and 3PLs to manage these types of supply chains, the project would provide technical assistance in scheduling and coordination of the logistics services, implementation of a track-and-trace capability and procedures for monitoring performance. The project would also develop the capacity of governments and business associations to audit supply chains so as to ensure that they meet pre-defined standards. The purposes of these audits would be to allow suppliers to differentiate themselves in different situations such as the following:

- Situations where there is a perceived risk of contamination or misrepresentation of the goods being shipped;
- Situations where there are inflexible demands for on-time delivery; and
- Situations where a shipper is seeking preferred status with Customs or other border management agencies, e.g. Authorized Economic Operators.

The first situation is relevant in the current environment where there is a tendency to associate problems of contamination or substandard quality with a country rather than an individual producer. The second situation is important for SMEs that are seeking to expand and must convince buyers that they have the capacity to meet tight deadlines. The third is important as

part of a program of incentives for compliance that could be introduced as part of Customs reform.

Technical assistance would initially be provided at the regional level through a consultancy involving international and local consultants. Their services would be utilized in national workshops and pilot projects. It is assumed that this capability would eventually be transferred to local consultancies through the activities of this and the previous project.

Audit services would be developed at the country level through collaboration with local institutions. The goal would be to develop an independent entity to certify supply chain performance. This certification would be awarded to shippers and 3PLs responsible for integrating entire supply chains. Certifications could be awarded for a specific type of supply chain, e.g. a shipper would be certified for his ability to maintain the integrity of his cold chains. If a particular market or trade has more stringent requirements, then the specific supply chain of a shipper or 3PL could be certified.

The initial component of this project would involve two tasks. The first would be a market survey to assess the demand for specialized supply chains and the capacity of the leading enterprises to develop these supply chains. This survey would be conducted in collaboration with the national logistics, manufacturers and shippers associations. The second task would be a series of workshops addressing the requirements of specialized supply chains, presented initially at the regional level and then at the national level.

The second component would be performing audits in the GMS countries. Activities would begin with preparation of the training manuals for conducting supply chain audits followed by recruitment and training of local staff for performing the audits. There would then be a series of pilot audits conducted in each country.

The third component would be developing business models for the audit services. This would include pricing and promotion of audits, form of certification, and mechanisms for maintaining up-to-date standards and ensuring professionalism in the execution of the audits. The principal challenge for this project is to maintain the integrity and quality of the audit activity. The mechanisms proposed to meet this challenge would include the following:

- Charging a fixed fee for the audit service (a published fee schedule based on the complexity of the audit);
- Locating the audit activity in an institution that has experience in implementing compliance programs;
- Providing a mechanism for updating standards at the regional level and disseminating them to the individual countries; and
- Developing a clear allocation of responsibility and liability between the auditor and the companies being audited.

The fourth component would be development of long-term institutional capability to deliver supply chain advisory and audit services. The advisory services would follow from the collaboration involved in presenting the workshops. The challenge would be to develop a

strategy for dissemination of the skills required to provide these advisory services. For the auditing services, the task would be to identify an appropriate institutional partner in each GMS country for conducting audits.

The results from these components would be summarized in a final report prepared for each country that would include an action plan for establishing a permanent capability to conduct audits. The consultancy would require three foreign experts with expertise in cold chains, secure supply chains, and software for management of supply chains. The team would work with local institutions to assist in presentation of the workshops and recruitment of staff to perform the audits.

The time line for this project would be flexible because of the need to coordinate activities in five countries. The project is expected to require 18 months. The first component would require 3 months to organize and execute. The second, which would overlap with the first, would require 3-4 months. The third would require the team to divide its time among the countries. For each country, the training and audits would extend over a six-month period, but the total time for this component is not expected to exceed 12 months. The final component would require about 3 months to complete the activities in each country. Donors and the Ministries of Commerce and Industry would undertake project funding and coordination jointly.

### *Project 5 – Cargo Exchange*

The objective of this project is to establish an efficient mechanism for cross-border movement of cargo transported by truck. There has been a sustained, but so far unsuccessful, effort to introduce a TIR-like system in both the GMS and ASEAN that would allow trucks to carry cargo across borders under a common customs bond as a means for minimizing delays. While efforts to establish this system are continuing, it is not clear that through movement of trucks is always the economically efficient solution, especially for cross-border trade.

There are certain costs associated with a truck crossing a border that can make it more costly than transferring cargo at the border. First, it is necessary to pay additional allowances to the driver especially when the round-trip requires more than one day. Second, it is necessary to hire or train a driver licensed to operate in both countries who is familiar with the routes on both sides of the border. Third, there are informal payments to police and other officials who take advantage of the fact that the vehicle is from another country and therefore less likely to contest these charges. Finally, and perhaps most importantly, it is more difficult to obtain return cargo. The efficiency of a truck depends on its load factor. A truck that crosses over a border is not allowed to transport domestic cargo in a foreign country. For the return trip, the truck must find a cargo destined to its home country or to a third country. This can significantly increase the cost of transport making the truck less competitive relative to domestic operators.

The alternative to a through movement is a cargo exchange at the border. This is currently done in GMS in a relatively inefficient way. Better arrangements in order of efficiency would be:



- (i) Exchange of trailers between articulated trucks, which requires 5-10 minutes and does not expose the cargo to any damage. This requires tracking and eventually returning the trailer to the owner.
- (ii) Exchange of domestic containers, which takes only 10-15 minutes but requires special equipment. It also requires the return of the container but not necessarily to the same party.
- (iii) Transloading across a dock between trucks of similar configuration. This requires 15-30 minutes depending on the size of the truck and involves handling the cargo.
- (iv) Cross-docking in which cargo is transferred from one set of trucks to another with part of the transfer being to and from storage. This requires a slightly longer time than transloading.

This project would examine the potential benefits and costs of implementing these four alternatives either at the border or within a specified distance on either side of the border, as is the case on the Guangxi AR-Vietnam border. The project would prepare plans for the facilities and equipment needed for this exchange. If performed at the border, this would include provision for inspection of the cargo, either physical inspection, scanning or both. Based on this analysis, and the forecast of traffic, a plan would be developed for the provision of one or more facilities to support this exchange.

This project would have four components:

- A study of the potential traffic including projections for perishables and other cargoes having special handling requirements. The study would include truck operating costs between major origins and destinations computed with and without cross-border movements.
- A review of the regulations governing these operations and any changes necessary for efficient implementation including provisions for performing transfers behind the border.
- The design of facilities for the major crossings including site layout and provisions for special handling and cargo inspection, as well as cost estimates for construction, equipment and operations.
- A development plan including provisions for public or private investment and operation.

The first two components should be conducted simultaneously and would require about 4 months following recruitment of consultants. The second two components would follow-on immediately and would require 6-8 months.

The cost for this project would depend on the number of crossings that are examined. Assuming that 10 crossings are selected, this is expected to cost \$0.5 to \$0.6 million exclusive of construction.

### *Project 6 – Logistics Module for the Information Sharing Platform*

The final project would be the development of a separate logistics module for the GMS-IP. This module would provide information to shippers and logistics service providers via the platform's website. The module would initially be designed to provide four services as follows:

A B2B exchange providing a virtual marketplace to facilitate interaction between logistics providers on different sides of the border.

A compendium of transport regulations that affect freight movements within the GMS. These would be catalogued and indexed to facilitate searches.

Monitoring gateways to provide information on the freight traffic arriving at each of the major gateways and a summary of the published tariffs for freight handling. In addition, contact information on the companies providing freight transport and freight handling services would be provided.

Monitoring performance at the gateways (dwell times), borders (crossing times, opening hours, closures), and corridors (transit times, congestion points including construction sites).

This project would have three components:

- (i) Develop an agreement on the sourcing of public data for gateway traffic and performance data;
- (ii) Design the system design including information exchange protocols; and
- (iii) Collect data on businesses and regulations.

These activities are expected to require 8-12 months with the latter two being performed simultaneously. The cost for development is estimated to be \$250,000.

## CHAPTER V. BUSINESS MOBILITY

### Background

The goal of the Business Mobility component of the *Strategic Framework for Action on Trade Facilitation and Investment in the GMS* (SFA-TFI) is to facilitate the movement of individuals involved in promote the growth of trade among the GMS countries and between the GMS countries and the rest of the world. There are three distinct demands for business travel: cross-border trade, business development and business operations. Traders to border towns accommodate the first type through permits for day trips. The second use tourist visas or single-entry business visas while the third uses either single or multiple-entry business visas.

The challenge is to develop a harmonized system for application and issuance of business visas. The system should include a simplified and transparent procedure that provides sufficient scrutiny to meet the requirements of immigration and security. A harmonized system will require additional effort on the part of the business traveler, which would be offset by additional conveniences provided when entering and exiting a country.

### Current Arrangements for Business Travel

The type of business travel and corresponding visa requirements can be divided into three categories. The first category is demand from small-scale traders for cross-border day trips to buy and sell goods in the markets along the border. This demand has been addressed through bilateral arrangements allowing for the issuance of daily permits for movement within a restricted area near the border. Travelers from countries without such bilateral arrangements require single or multiple-entry visas.

The other categories are the demand from manufacturers, retailers, traders and other businessmen traveling between the centers of commercial activity in the GMS countries. The first of these involves travel for business development. Such trips involve meeting a variety of people for the purposes of establishing business relationships. The trips are often opportunistic in nature and usually do not follow a regular schedule. As such they are similar in nature to trips for tourist purposes. Most of this travel is currently conducted utilizing tourist visas. This practice can be formalized by extending the type of activities covered in tourist visas to include conferences, business negotiations, trade fairs, technical consultations, etc. Of the current efforts to simplify the application procedures for these visas, the most attractive is the ASEAN visa exception program in which Lao PDR and Vietnam are participants (Table 5.1). Thailand provides a comparable arrangement but based on multiple bilateral arrangements. Less attractive, but acceptable, are efforts to introduce e-visas or visas on arrival.<sup>40</sup>

The third category is travel for ongoing business operations. These trips involve working with the same group of people in a more formal arrangement and require more frequent visits and a more regular schedule. These can be facilitated by providing multiple-entry visas that allow

---

<sup>40</sup> Visas on arrival have the disadvantage that they generally create queues in the airport, reduce the throughput of airport terminals and cause passenger delays during a time that is already stressful for travelers.

longer stays and are valid for a longer period. For these visas, it is necessary to develop an application procedure that is simpler and less time-consuming. The primary difficulty is to determine the appropriate documentation and means for expediting the processing of the application. The current systems used in the GMS are summarized in Table 5.2. This is some consistency in documentation requirements and the time limits for individual trips, but there is significant variation in period of validity and in procedures for application. For the latter, the most problematic are the procedures for Cambodia and Lao PDR, where it is necessary to enter the country using a single entry business visa and then apply for a multiple-entry visa while there. In contrast, the other GMS countries permit applications and supporting documents to be submitted at their embassies and consulates abroad.

**Table 5.1: Participation in On-going Regional Initiatives**

|          | <b>ASEAN<br/>Visa exception</b> | <b>ACMECS<br/>regional</b>   | <b>APEC business<br/>traveler card</b> | <b>Visa on Arrival</b> |
|----------|---------------------------------|------------------------------|--|------------------------|
| Cambodia |                                 | Negotiation<br>with Thailand |  | √                      |
| China    |                                 |                              | √                                      | √*                     |
| Lao PDR  | √                               |                              |  |                        |
| Myanmar  |                                 |                              |  |                        |
| Thailand |                                 |                              | √                                      |                        |
| Vietnam  | √                               |                              | √                                      |                        |

\* Selected gateways

The duration of these visas varies between six months and five years. China offers the longest duration, but limits the number of five-year visas that can be issued. A period of three years seems to be a reasonable compromise. All the GMS countries require that the traveler have a passport with an expiration date extending beyond the period of validity of the visas. This is a reasonable requirement but the amount of time beyond the visa's termination date need not be more than one month.

All of the GMS countries require a letter of invitation from a local enterprise and, in some cases, documentation that the traveler is employed by a registered company. An alternative would be for government to certify the legitimacy of its business travelers working through professional associations such as the Chambers of Commerce. This would require building greater trust among countries as well as agreeing on an appropriate organization to provide the certification. It should be possible to use the GMS-IP to expedite the verification of the travelers' and employers' bona fides.

The period for approval of a visa should be limited to a reasonable time, one or at most two weeks. However, there should be provision for expedited service. China and Vietnam explicitly offer expedited service for a fee. The provision of expedited services should be left to the discretion of each country but the basic processing time should be harmonized among the countries.

**Table 5.2: Comparison of Requirements for Multiple-entry Visa**

|                      | <b>Cambodia</b>                            | <b>China</b>                                      | <b>Lao PDR</b>                                    | <b>Myanmar</b>       | <b>Thailand</b>   | <b>Vietnam</b>                               |
|----------------------|--|---|---|----------------------|---|--|
| Designation          |  | F   | B2*   | SR 4/7               | B   | A-2/3, B-1/2/3/4                             |
| Application          | Immigration Dept in Phnom Penh             | Embassy or Consulate                              | Embassy or Consulate                              | Embassy or Consulate | Embassy or Consulate  | Mission or Consul                            |
| Supporting Documents | Letter of Invitation**                     | Letter of Invitation                              | Letter of Invitation                              | Letter of Invitation | Letter of Invitation<br>Letter of Employment<br>Corporate financial documents | Letter of Invitation<br>Letter from Business |
| Period of Validity   | One year                                   | Five years  | One year+   | Five years           | One and three years++   | Six months+                                  |
| Visit Restrictions   |  | 90 days   | 30 days   | 10 weeks             | 90 days   |  |
| Fee                  | \$180                                      | Varies by country                                 | Varies by country                                 | \$180                | \$130 and \$300   | \$150  |
| Re-issue             |  |   |   |                      |   | Upon request                                 |
| Approval Agency      | Ministries of Foreign Affairs and Interior | Ministries of Foreign Affairs and Public Security | Ministries of Foreign Affairs and Public Security |                      | Ministry of Foreign Affairs   | Dept of Police, Immigration Section          |

\* Single entry visa required to enter the country in order to apply for multiple entry visa

\*\* From locally registered company or from CDC for planned investor

+ Passport valid at least one month longer than period of visa

++ Passport valid at least six months longer than period of visa

## Risks to Issuing Country

The design of an effective system requires that it address immigration and security risks. The first risk is the potential use of the multiple-entry visas to circumvent restrictions on employment by foreign nationals. There is a general concern (associated with any visa) that a foreign national, once admitted, will remain in the country illegally. In the case of a multiple-entry visa, there is the additional concern that a company will recruit a foreign national to work as an employee without proper clearance. Some of the countries have addressed this problem by developing a myriad set of visas for different travel purposes and narrowly defining the activities that can be undertaken. This process increases complexity, reduces transparency and adds little value other than protecting selected segments of the work force. This problem can be better addressed by limiting the time in country per visit and visits per year.

The security risk is that the visa-holders can enter the country frequently without adequate oversight. This problem can be addressed initially through a more stringent approval procedure for the multiple-entry visa. This can be complemented through a better system for monitoring

the movement of visa holders. The approval procedure can be strengthened by using a central database accessible to the issuing agencies that contains data from the black lists of each GMS country and other information concerning GMS citizens that represent a potential security risk. The database could also be used to collect data on entries and exits of visa holders. As with any visa, the issuing country would retain the right to cancel the visa for cause.

### **Multiple country, Multiple entry Visa**

From a GMS perspective, the goal should be to introduce a multiple-entry visa that applies to business travel throughout the GMS. This requires a substantial improvement in inter-governmental coordination as well as harmonization in application procedures and documentation. Once an agreement on supporting documentation and visa terms have been reached, it is necessary to develop a common platform for submission and evaluation of visa applications. This could be accomplished using the GMS-IP with each GMS country having direct access to the information regarding visa holders, including their past itinerary of travel within the GMS countries.

Since this arrangement is similar to that used by APEC and the three largest economies in the GMS, i.e. China, Thailand and Vietnam, already participate in this APEC scheme, there is potential for eventual collaboration. The APEC program would provide an opportunity for establishing a GMS multiple-entry business visa for business travelers from outside the region. At present, participation in the APEC Business Travelers Program is limited. Most notably, the US does not fully participate. However, efforts are underway to expand this participation and these efforts are likely to have been completed before the GMS can establish a multiple-country visa program.

### **Proposed System**

In order to develop a system to facilitate business travel within the GMS countries, it is necessary first to devise a framework for harmonizing the existing multiple-entry visas and then to introduce a multiple-country version. The framework would be used to modify individual country regulations for the multiple-entry visa and to structure bilateral agreements for the multiple-country visa. The core feature would be the harmonized procedures for issuing the multiple-entry visa and the protocol for exchanging information regarding persons entitled to this visa. The framework would also specify a standard set of visa terms including: the period of validity, the procedure for renewal, the length of stay permitted with each entry, the maximum number of visits per year, special passport requirements and fee structure. The initial proposal for these services is summarized in Table 5.3. The framework would also include procedures for facilitating the arrival and departure of the business travelers, i.e. special lanes and rapid scan technology. These types of services are already provided through special programs such as the APEC Business Traveler Program and the ASEAN Visa-less Travel Program (Annex 4).



The framework should identify the mechanism for exchanging information between the country of the applicant and the authorities in the issuing country. It should also identify the nature of the organization that would be formed to issue multiple-country visas, and the organizations that would be responsible for certifying business travelers who apply for this program.

Based on existing practices, it is proposed that applications for a single country, multiple-entry visa would be submitted to the local consulates or embassies. The supporting documents would include a letter of invitation from a registered company in the issuing country and a letter of introduction from the registered company at which the applicant is employed. Both documents would include sufficient information about the companies to allow the issuing country to verify their status. The application would be evaluated by the agencies responsible in the country of application. The time for processing an application would be a maximum of one week.

The transition to a multiple-country, multiple-entry visa would require that the application be submitted to a central organization and reviewed simultaneously by all the participating countries. Since it would not be possible to obtain multiple letters of invitation, the method of verifying the business traveler's credentials would have to depend on documentation from the applicant's country, either an official document or a reference from a certified organization.

Initially the procedure for multiple-entry visas would involve paper submission, but this should be converted to electronic submission within one year. Electronic submissions would include the application, digital photographs and scanned copies of the supporting documents as well as an electronic payment. Each country would maintain a website that would provide information on the procedures and a gateway for the electronic submission once it is operational. The systems of the relevant agencies in the participating countries could be linked through a regional virtual network. The application and supporting information would be automatically passed on to each of the countries for evaluation in the same way a single-country visa is evaluated. Based on this evaluation, a visa would be issued allowing travel in all countries that have approved the application. The financial transaction involving the visa fee would be managed through the platform, with the fee divided among those countries approving the application.

**Table 5.3: Proposed Standards for Multiple Entry Visa**

|                      |   |
|----------------------|---|
| Application          | Embassy or Consulate<br>(Electronic submission)               |
| Supporting Documents | Letter of Invitation<br>Letter from Business<br>Digital photo |
| Duration             | Three years   |
| Passport             | Machine-readable<br>Valid for at least 3 years, one month     |
| Visit Restrictions   | 90 days per visit,<br>120 days per year                       |
| Points of Entry      | International airports, Major border crossings                |
| Privileges           | Special immigration lane                                      |
| Fee                  | \$200 (electronic payment)                                    |
| Processing Time      | One week maximum<br>Expedited processing available            |
| Renewal              | Same procedure  |

Another consideration is the level of identification technology to be used. Initially the visa would be a traditional paper visa placed within the passport but eventually this would be converted to a special travel card or a document produced with other technology. It must be decided if the visa will be backed up by biometric data such as a photo, fingerprint or retinal scan, and whether it should be accompanied by a passport that is machine-readable or has embedded biometrics.

Initially, the multiple-entry visa would be a traditional visa pasted in the passport but the passport would be machine-readable. Once at least three of the GMS countries have implemented a multiple-country, multiple-entry visa, a GMS business traveler card should be introduced. This would be a physical card linked to a biometric entry in the passport. It is important that any specification for the identification technology be open-ended because of the rapid evolution in this area. Once the multiple-country card has been introduced, the GMS countries should seek to integrate their system with those of APEC and ASEAN to facilitate travel with these regions.

### **Proposed Initiatives**

A number of initiatives were proposed at the meeting on business mobility held in Nanning in December 2006 in collaboration with UNCTAD (Annex 4). These are summarized below.

- Create a GMS common database on visa procedures and regulations;
- Standardize the visa application procedures (documentation, types, fees, timing);
- Simplify visa procedures and harmonize visa regulations;
- Implement a single GMS visa scheme; and
- Implement a single GMS scheme for 3rd countries.

Most of these were presented as long-term initiatives. It is proposed to accelerate this process by combining the first three and introducing the last two under a framework for transition from single-country to multiple-country visas.

### **Action Plan**

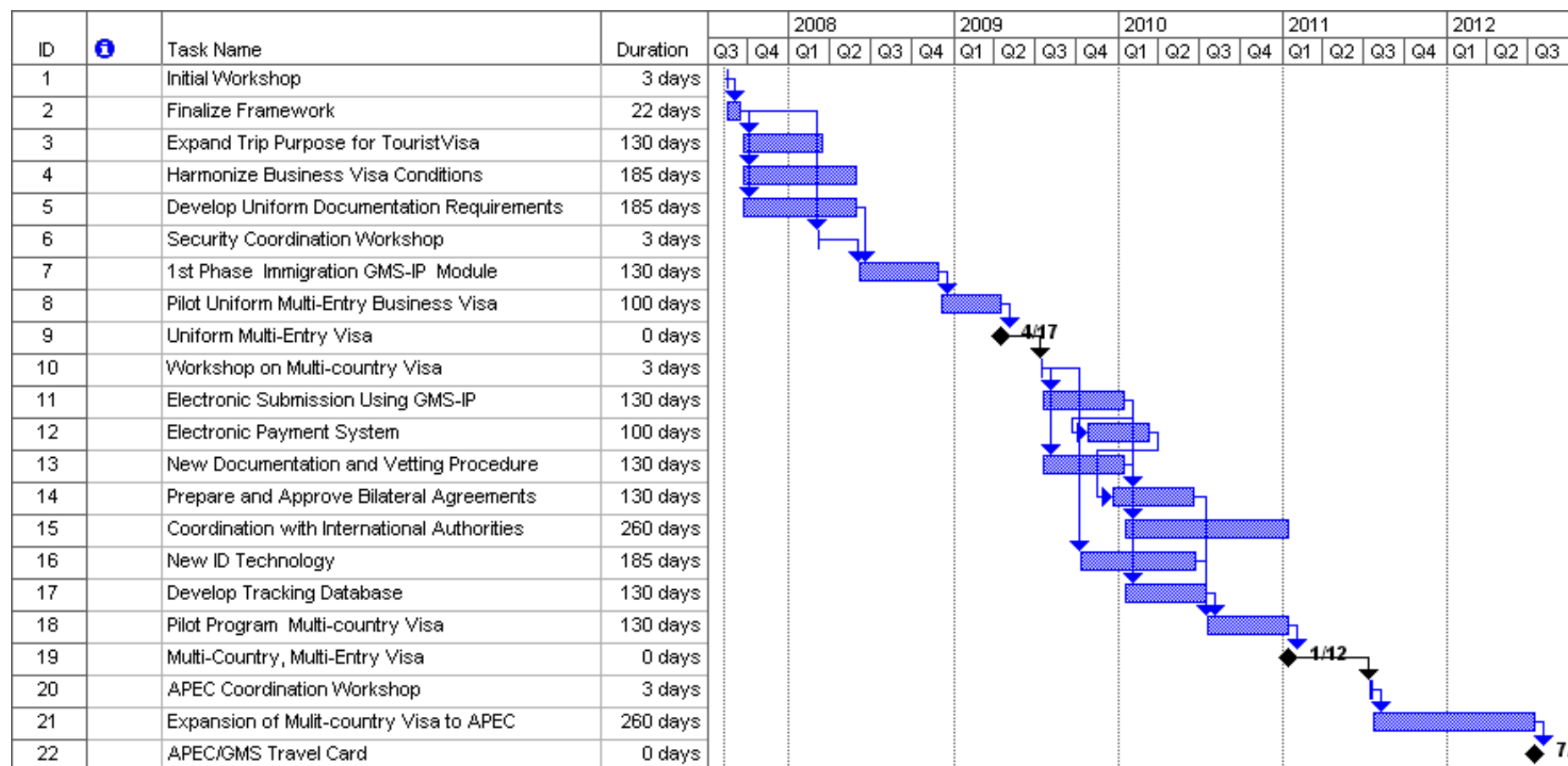
The process involved in introducing a harmonized multiple-entry business visa followed by a multiple-country business traveler card and then a regional travel card is summarized in the Gantt chart in Figure 5.1. The milestones would be four workshops to coordinate activities among the GMS countries followed by pilot programs for the three travel documents. The first workshop would develop the framework for harmonization. The second would resolve specific security issues. The third would develop the mechanism for coordinating the application process for the multiple-country visa. The final workshop would explore the integration of this GMS business visa with the APEC traveler card.

The activities that must occur between the milestones include:

- Expand the applicability of tourist visas to include short business development trips;
- Change regulations for multiple entry business visa according to the regional model;

- Develop a uniform format and verification procedure for supporting documentation;
- Develop an immigration module in the GMS-IP for providing information and forms to applicants and for providing a path for data exchange among GMS security, immigration and justice authorities;
- Introduce a new system for vetting business travelers based solely on information from the applicant's country;
- Select the technology to be used for the ID and arrival verification for the multiple-country visa;
- Introduction of new ID cards; and
- Develop a database for tracking the movements of visa holders.

**Figure 5.1: Schedule for Implementation of Multiple country, Multiple-entry Visa**



It is projected to take about 18 months to introduce a harmonized multiple-entry visa, and another two and a half years to introduce a multiple-country visa. Technical assistance would be needed in organizing this effort and donor support should be mobilized for development of the immigration module in the GMS-IP that would be used for centralizing the application process.

## Workshop

There are two activities necessary to move forward in the area of business mobility. The first is a meeting among the GMS countries to decide on the common features of a multiple-entry visa. Representatives of the Ministries responsible for foreign affairs, immigration, and security should attend this meeting. The starting point for this workshop will be the model presented in Table 5.3. The purpose of the workshop is to reach consensus on this model or some variation agreed to among the countries. The output should be a framework that can serve as a guideline for regulations to be introduced by each GMS country for issuing a harmonized multiple-entry business visa. The timing of the workshop is at the discretion of the countries, but should take place early in 2008.

Following the workshop, the countries should develop a timeline for introduction of a harmonized multiple-entry visa similar to that shown in Figure 5.1. There would be subsequent technical meetings to resolve problems of cooperation, particularly with regards to the exchange of information used to review applications. This would include verifying the documents submitted by applicants' employers and the companies providing letters of invitation and determining whether there were any security or other concerns with regards to the applicant.

Once a uniform multiple-entry visa has been introduced, preparation can be made for the multiple-country visa. Activities would begin with a workshop to develop agreement on the common procedures for evaluating the applications and for monitoring the use of these visas.

## Information Sharing Module

The second activity would be the development of a mechanism for efficient exchange of data related to visas among countries and their use. Initially this could be done through bilateral exchanges within a matrix of separate national agency systems, but eventually it would be more effective to use a centralized system. For this reason it is proposed to develop a module for the GMS-IP that would support the exchange of information related to the processing of visa applications. At the beginning, the platform would act as a post office for transmitting queries to the authorities in the applicant's country and as a website at which applicants could download instructions and application forms. Once these functions are operating satisfactorily, the model would be enhanced to provide a direct link through which an application and supporting documents could be uploaded to the authorities in the country issuing the visa.

The module would also include a database of those currently holding multiple-entry visas together with the supporting information submitted by the applicants. Once the GMS countries agree to a multiple-country, multiple-entry visa, this system would provide the mechanism for joint review of each application to identify any irregularities that might preclude an applicant from receiving this visa. The system would facilitate the review by the authorities in each of the participating countries as well as by appropriate international authorities, e.g. Interpol. The system would also manage the transaction including authorizing the issue of the travel card and distribution of the fees collected. Subsequently, this module could be used to monitor the movements of visa holders by maintaining a record of the entrances to and exits from all GMS countries by the visa holders. Each of these enhancements would require additional levels of security for the system and more elaborate agreements regarding how the data would be collected and used.

The development of this module would be done in phases. It would begin with support for a harmonized, single-country, multiple-entry business visa and continue for a number of years until a system for multiple-country, multiple-entry visas has been reached. Development would be done by the GMS-IP staff working together with the relevant authorities in each participating GMS country. The initial phases would be funded in part through a \$350,000 grant covering a period of two years.

## Project Risks

There are various risks that might limit the impact of this project. The basic risk is that not all countries would be able to agree on a common process. In this event, the countries should be willing to proceed on a unilateral or bilateral basis. The same applies to the sharing of data between authorities regarding potential applicants. If the authorities of a GMS country are reluctant to share data, then it would be necessary to proceed without the participation of that country. Another risk is that the countries would use this project as an excuse to develop an even more elaborate set of visa categories, each one serving a narrowly defined group. Some countries are currently reviewing their numerous visa categories with the goal of developing an even more elaborate system with an increased number of visa categories.

There is also the risk that the attempt at harmonization would fail and that the multiple-entry visas would continue to be issued on the basis of bilateral agreements. It is for this reason that a workshop to build consensus is seen as an essential initial step in this process. Even with an agreement, it is expected that individual countries would implement the system at different rates. However, during this process, it is important to avoid requirements for reciprocity or for numeric limits on the potential number of multiple-entry visas that can be issued.