

# **REPUBLIC OF GHANA**

# **MINISTRY OF FINANCE**

# **GHANA ECONOMIC TRANSFORMATION PROJECT (GETP)**

# **TERMS OF REFERENCE**

# RECRUITMENT OF A CONSULTING FIRM TO DEVELOP A FUNCTIONAL WEB-BASED TRADE INFORMATION PORTAL

# 1 Introduction

The World Bank (WB) is providing funding support to the Government of Ghana (GOG) for the implementation of the Ghana Economic Transformation Project. The overall development objective of the Project is to promote private investments and firm growth in non-resource-based sectors. The guiding principle of the Project is to promote and strengthen a growth model that is conducive to economic transformation, to achieve higher rates of investment and productivity growth across the economy, especially in non-resource-based sectors. The Project has four components, as follows:

**Component 1 - Enabling investments**: This Component focuses on improving the enabling business environment, investment attraction capacity, and the quality infrastructure support system for companies that want to invest and grow their businesses in Ghana. It further seeks to address gaps in trade policy and harness the opportunities and benefits of multilateral, regional and bilateral trade to enhance Ghana's industrial transformation.

**Component 2 - Crowding-in investments:** Promoting spatial and industrial planning and development: This Component focuses on enhancing the Government's programs in investment promotion and spatial development (including Special Economic Zones), thereby addressing the constraint to access quality industrial land in the country.

**Component 3 - Accelerating Entrepreneurship and Micro Small and Medium Enterprise (MSME) growth:** This Component supports entrepreneurship and MSME growth in non-resource-based sectors, addressing specifically the limited development of the MSME and entrepreneurship support ecosystem, including early-stage financing.

**Component 4 – Project Management and Evaluation:** This Component finances project management activities including fiduciary responsibilities, procurement, safeguards, communication and dissemination, as well as monitoring and evaluation of project implementation and its impact. This includes capacity building for the Project Coordinating Unit (PCU), the Economic Transformation Unit and the Resource Mobilization and Economic Relations Division (RMERD) within the Ministry of Finance (MOF

# 1.1 Background

International trade plays an important role in the economic development of Ghana and the Government of Ghana (GOG) is set to create the necessary environment to enhance trade. As part of efforts to make trade easier for the business community and in furtherance of Component 3 above, the GOG has decided to develop and implement the Ghana Trade Information Portal (GTIP). The GTIP aims to provide a single point of access for all information related to international trade. This portal will facilitate traders, exporters, importers, and government agencies in accessing real-time information on trade regulations, tariffs, duties, procedures, and other relevant resources to ensure compliance and ease of doing business. The development of this portal is a key step toward enhancing transparency, improving trade facilitation, and promoting the country's competitiveness in international trade.

The objective of the GTIP is to make all regulatory trade-related information and other information useful to Ghana importers and exporters easily and readily available on a single integrated website. The aim is to provide transparency and predictability of trade regulations and procedures and, in doing so, increase the compliance level and reduce the cost of doing business for the trade.

In this regard, the core functionality of the proposed trade portal is to provide the business community with complete, timely, and up-to-date information relating to trade from a single website that is comprehensive in its scope, user-friendly, interactive, and easily accessible by using a single search engine.

The trade portal is expected to initially store information relating to existing trade regulations and procedures, including but not limited to, laws, administrative procedures, guidance notes, applicable fees, forms licenses, permits, and penalties applicable in case of breach. In addition, the portal should catalogue international, regional, and bilateral trade agreements to which Ghana is a party, including the applicable rules and requirements as well as the benefits devolving therefrom. It is envisaged that, in the future, the GTIP will be linked to a National Single Window to expand its coverage and use.

This project will require the cooperation of all the government agencies involved in the trade process and border management while the Ministry of Trade & Industry leads and play a collaborative role in the development and implementation portal.

Procurement of a qualified firm will be carried out by the Project Implementation Unit (PIU) for the GETP on behalf of the Ministry of Trade & Industry, also referred to in this document as "the Client".

To this end, the PIU is seeking to engage a consultancy firm (the Consultant Firm) to carry out the data collection and upload to the website of all the information required to populate initially the GTIP.

The Consultant Firm will be contracted by the PIU who will be acting for and on behalf of The Ministry of Trade & Industry (MTI) in ensuring that the Client's requirements are met.

# 2. Objective

The main objective is to design, develop, and deploy a web-based Ghana Trade Information Portal (GTIP), based upon the WB software toolkit (TK3)<sup>1</sup>, that provides accurate, up-to-date, and accessible trade-related information for stakeholders involved in import and export activities. This will require the collection,

<sup>&</sup>lt;sup>1</sup> See Section 3: Scope of Work below. The TK3 software toolkit will be licensed for use to the MTI free-of-charge, including the source code, upon acceptance of the standard Terms and Conditions of Use.

analysis, formatting and uploading to the software all the data required to populate initially the GTIP which will aggregate and integrate all of the trade related information, including that available on individual ministries' and agencies' websites, in an easily accessible manner.

The portal must also focus on providing data and information with particular reference on the African market within the framework of AfCFTA including the AfCFTA Protocol summaries on (i) Trade and Goods; (ii) Trade in Services; (iii) Women and Youth; (vi) Intellectual property; (v) Competition Policy; (vi)Dispute Settlement; & (vii) Investment Policy.

A Trade Information Portal is a recognized international good practice standard for transparent publication of trade information, aimed at fulfilling a country's obligations under Article 1 of the WTO's Trade Facilitation Agreement (TFA). This standard is published in UN/CEFACT's Recommendation No. 38. The Consultant Firm must make reference to this standard's guidelines and ensure that the GTIP is substantially aligned, to the extent possible, with its recommended requirements.

# 3. Scope of Work

The Consultant Firm will facilitate intensive stakeholder engagements, including consultations with government officials and other stakeholders on the development of the GTIP. The scope of work for the development and implementation of GTIP includes the following:

## i. Inception Phase: Information Gathering and Analysis:

The Consultant Firm will develop an Implementation Plan for the project having taken into account the current situation in Ghana with regard to institutional arrangements for the project, availability of sources of information, availability of resources, and other local constraints.

- Conduct consultations with key stakeholders, including government agencies<sup>2</sup>, the private sector, and international bodies.
- Identify critical features required for the GTIP, such as trade regulations, tariff information, and a procedural guide for traders.
- Confirm the functional requirements for the portal as des cribbed in annex B
- Describe the methodology for analyzing the procedures within each agency for obtaining licenses or permits, the procedures for clearing goods for import or export for all regimes at the border with Customs and the other border authorities, and any other procedures relating to interactions between traders and the agencies.

## ii. Design & Development

Within the framework of the WB's software toolkit (TK3) design the architecture of the portal, ensuring it is intuitive, mobile-responsive, and meets accessibility standards ensuring the platform integrates relevant data sources such as customs databases, national trade regulations, and international trade agreements. Ensure that the robust search engine within the portal software allows users to quickly access specific trade information.

 $<sup>^{2}</sup>$  An indicative list of these agencies is provided at Annex A. This list is enclosed for information only. Only those government agencies or bodies that currently carry out a regulatory function in relation to import/export/transit need be included in the scope.

- Prototype GTIP fully demonstrating all key functions and appearance etc. for review and agreement by MTI
- An indicative summary catalogue of all required items of information to be collected, analysed, formatted and loaded and related work effort.

## iii. Training and Capacity Building:

Ensure all stakeholders are fully enabled to undertake their role is supporting and/or using the Portal as appropriate.

- Propose, agree and provide training sessions for government officials and stakeholders on how to use and manage the portal as necessary. It is noted that the Portal is expected to be highly intuitive in use for "end-user" stakeholders and require a low level of end user training.
- Develop a Policy & Procedures Manual, a User Manual as a knowledge base for self-service support.

# iv. Collection & uploading of all relevant data and information:

Make the GTIP Ready for Validation. The Consultant Firm may utilize personnel made available, by agreement, by The Ministry of Trade & Industry or other stakeholders for this task but should not entirely rely on them in order to accomplish it. It will be the Consultant Firm's responsibility to ensure that adequate resources are dedicated to this task. The Consultant Firm should not rely entirely on obtaining information that they have identified as relevant directly from The Ministry of Trade & Industry or from the other agencies. Where, for whatever reason, information may be difficult to obtain the Consultant Firm should endeavor to identify other potential sources, e.g. the private sector, sectoral organizations, other websites, etc.

- Identify and agree all contributing regulatory agencies and private sector organisations
- Identify all laws and other regulatory documents that constitute the regulatory regime relating to export, import and transit.
- Identify all non-tariff measures stipulated by the above legal documents
- Identify all procedures relating to the above non-tariff measures, including any forms and other relevant documentation.
- Upload and/or link all the above information to the TK3 software<sup>3</sup> provided by WB for validation and verification by stakeholders.

Note: It is anticipated that GTIP will accommodate the facilities and classes of information listed at <u>Annex A</u> along with guidelines on Content uploading.

## v. Validation of GTIP Content

Make the GTIP Ready for Launch

- Work closely with regulatory agencies and private sector stakeholders to ensure the completeness and accuracy of uploaded information
- Review and revise uploaded information to reflect confirmed regulatory requirements

 $<sup>^{3}</sup>$  The software toolkit (the "*TK3*") created by the WB is pre-defined to accommodate all the required classes of information. The software will be licensed to the Ministry of Trade & Industry. For the avoidance of doubt, this project will not involve any software development.

• Facilitate the acceptance of the uploaded information by GOG.

# vi. Design of Publicity Campaign

Propose and agree a GTIP publicity campaign to accompany the Portal's launch creating widespread awareness of the trade portal and encouraging its use by the private and public sector.

- The Consultant Firm will engage with The Ministry of Trade & Industry in order to define a suitable publicity and awareness program leading up to the launch of the live website.
- The program should be aimed at maximizing awareness among the trading public, both in Ghana and abroad, of the imminent launch of the trade portal and to encourage its use.
- The Consultant Firm will provide content and advice in relation to any publicity materials (e.g. brochures, press releases, video, seminars, etc.) as defined and agreed in the program.
- The Consultant Firm will provide logistic support to The Ministry of Trade & Industry in organizing the publicity campaign.

# vii. Design of Evaluation Tools

Develop and agree an Evaluation Strategy and develop Evaluation Toolkit. Undertake Pre GTIP Launch Benchmark Survey.

- The Consultant Firm will design and recommend a package of evaluation methods and tools aimed at measuring the effectiveness of the trade portal and the benefit to trade.
- These methods are expected to focus on establishing a baseline before the launch of the trade portal to be compared with the situation at various stages after the launch of the trade portal and on an ongoing basis.
- The methods may include automated facilities such as website analytics as well as direct surveys of the trade. The Consultant Firm shall design the tools required to conduct the initial surveys and the ongoing evaluation. In as much as possible, the methods will include measurable indicators or performance, e.g. time to complete procedures, time to release goods, time dealing with enquiries, etc.

## viii. Integration:

Enable access to relevant information on related websites.

- Integrate/link the portal, to the extent possible, with other trade-related systems, including customs systems, licensing bodies, and trade facilitation platforms in Ghana
- Scope out if it is possible to enable real-time updates from relevant databases (e.g., World Trade Organization, ECOWAS, AfCFTA ).
- In line with Ghana's objective to boost intra-African trade under the AfCFTA, the Trade Information Portal must have a clearly defined framework for collecting and disseminating information for continental trade and making it available to Ghanaian businesses, entrepreneurs and stakeholders.

## ix. Security and Compliance:

• Ensure the portal complies with local and international cybersecurity standards.

• Implement user authentication and secure data exchange protocols to protect sensitive information.

## x. Hosting, Testing and Quality Assurance:

- Propose and agree with MTI arrangements for hosting and related service provisions both during the development project and after the Portal's launch<sup>4</sup>.
- Conduct testing to ensure the portal functions across different devices and browsers.
- Implement load testing to ensure the portal can handle high traffic volumes, especially during peak trade periods. It is noted that any perceived inadequacy of local internet services cannot be the responsibility of the Consultant Firm

#### xi. Fully Functional Trade Information Portal

Drawing upon all the above activities the Consultant Firm will confirm that the Portal is ready for launch.

## xii. Management, Maintenance and Support:

- In accordance with established arrangements with the subcontractor; propose, agree and provide for post-launch maintenance services, including bug fixes, performance enhancements, and regular updates.
- Ensure a support system for end-users to report issues and get assistance.
- The portal must be user-friendly, scalable, secure, and integrated with relevant governmental agencies and international trade databases

#### xiii. Management Reporting

Following the Inception Report the Consultant Firm will submit to MCI, PIU and WB:

- A short concise **Monthly Report** at the end of each calendar month of throughout the project. This will highlight progress, identify issues and risks and set out actions for the coming month.
- A **Final Report** at the conclusion of the project detailing the development process, outcomes, and recommendations for future improvements.

<sup>&</sup>lt;sup>4</sup> Support for the software for the duration of the project will initially be provided by the WB's designated subcontractor, Cyberia Ltd of 110/3 Samsenethai Road, Vientiane, Lao PDR (the "*Subcontractor*"), engaged by the PIU directly. The Subcontractor will provide hosting for the website during the project until a key decision is made by The Ministry of Trade & Industry about a permanent hosting solution which may be in-house or outsourced either in-country or off-shore. The Consultant Firm will assist The Ministry of Trade & Industry with making this decision at an early stage of the project taking into account local considerations of capacity and availability of infrastructure as well as any other relevant factors.

# 4. Deliverables

The selected Consultant Firm will deliver the following:

| S/No.      | Deliverables   | Delivery Dates                                  |
|------------|--|---|
| S/No.<br>I | <ul> <li>Deliverables</li> <li>A detailed inception report outlining the approach, timeline, and work plan needed to undertake the assignment. To include:</li> <li>A Project Plan based on the detailed estimate of effort and with a narrative description of each activity</li> <li>A description of the methodology that the Consultant Firm will follow to gather the data and format it for publication. This should include a description of the methodology for analyzing the procedures within each agency for obtaining licenses or permits, the procedures for clearing goods for import or export for all regimes at the border with Customs and the other border authorities, and any other procedures relating to interactions between traders and the agencies</li> <li>A Training Plan for at least five (5) designated staff to build capacity within The Ministry of Trade &amp; Industry to maintain the website and keep it up to date with information on an on-going basis.</li> </ul> | Delivery Dates<br>4 weeks after<br>commencement |
| II         | Design and Development: Prototype GTIP and Indicative Content Catalogue  | 6 weeks after commencement                      |
| III        | Training Materials, User Manual and Policy & Procedures Manual to guide users and administrators in operating the portal.  | 15 weeks after<br>commencement                  |
| IV         | Collection & uploading of all relevant data and information: Initial update of regulatory Content substantially complete and ready for validation  | 28 weeks after<br>commencement                  |
| V          | Validation of GTIP Content: Validation report to MTI indicating validation substantially complete and content verified   | 34 weeks after<br>commencement                  |
| VI         | Design of Publicity Campaign: Publicity Strategy Report  | 34 weeks after commencement                     |
| VII        | <ul> <li>Design of Evaluation Tools:</li> <li>Evaluation Strategy Report</li> <li>Benchmark Report &amp; Evaluation Toolkit</li> </ul>   | 34 weeks after<br>commencement                  |
| VIII       | Integration: ability to access relevant information on related websites  | 34 weeks after commencement                     |
| IX         | Security & Compliance: Report to MCI on GTIP Security Measures   | 34 weeks after<br>commencement                  |
| Х          | Hosting, Testing Quality Assurance: ensuring compliance with functional, security, and performance standards.  | 36 weeks after<br>commencement                  |
| XI         | Fully Functional Trade Information Portal meeting the agreed-upon requirements and including all agreed regulatory information and ready for launch.   | 36 weeks after<br>commencement                  |

| XII  | Management, Maintenance and Support: Support Report to MTI identifying | 39 weeks after |
|------|--|----------------|
|      | support arrangements in place and required areas for attention.        | commencement   |
| XIII | Management Reporting detailing the development process, outcomes, and  |                |
|      | recommendations for future improvements.                               |                |
|      | Monthly Reports throughout project                                     |                |
|      | • Final Report)  | 39 weeks after |
|      |  | commencement   |

# 5. Payment Schedule

The Consultant Firm shall be paid based on the submission and acceptance of the following deliverables:

| S/No | Deliverables  | Submission   | Timelines   | Payments (%) |
|------|---|--|---|--------------|
|      |   | Details  |   |              |
| Ι    | Inception Report     Design and Development   | An electronic<br>copy shall be<br>delivered to the<br>MoTI (Trade<br>Facilitation Unit),<br>PCU & WB<br>Demonstration to | 6 weeks after<br>commencement:<br>upon submission and<br>acceptance of the<br>Final Inception<br>Report | 30%          |
|      |   | Stakeholders   |   |              |
| II   | Collection & uploading of<br>all relevant data and<br>information                                       | Demonstration to<br>Stakeholders at<br>Validation<br>Training<br>Workshop  | 28 weeks after<br>commencement:<br>Upon availability of<br>GTIP with sufficient<br>Content uploaded to  | 40%          |
|      | Training Materials and User<br>Manuals  | An electronic<br>copy shall be<br>delivered to the<br>MoTI (Trade<br>Facilitation Unit)<br>and PCU                       | enable validation,<br>complete with<br>training and user<br>manuals                                     |              |
| Ш    | • Fully Functional Trade<br>Information Portal  | Demonstration to<br>and freely<br>available to<br>stakeholders   | 36 weeks after<br>commencement:<br>Upon submission<br>and acceptance of<br>the Final Report             | 20%          |
| IV   | • Final Report detailing the development process, outcomes, and recommendations for future improvements | An electronic<br>copy shall be<br>delivered to the<br>MoTI (Trade  | 39 weeks after<br>commencement  | 10%          |

|  | Facilitation Unit), |  |
|--|---------------------|--|
|  | PCU & WB            |  |

# 6. Duration

The entire project is expected to take a period 39 weeks from the date of Mobilization. Mobilization is expected to take a period of up to 4 weeks from contract signature.

# 7. Supervision and Reporting

The Consultant Firm will work under the supervision of the Chief Director (CD) of the Ministry of Trade and Industry and will be supported by the Trade Facilitation and AfCFTA NCO Working Group and any other focal person(s) nominated by the CD. The Consultant Firm will also provide brief monthly reports as identified in Sections 3 and 4 above.

## 8. Responsibilities

The Consultant Firm's team will be required to work in close cooperation with key stakeholders involved in trade facilitation in Ghana and representatives of the private sector through sectoral organizations such as the national or local Chambers of Commerce.

The Ministry of Trade and Industry will:

- Organise and facilitate meetings with stakeholders
- Provide office space and furniture as required at The Ministry of Trade & Industry in Accra.
- Provide the Consultant Firm with access to documents relevant to the assignment, including
  previous studies, legal texts and regulations, etc. and will assist in facilitating meetings with key
  counterparts.

The Consultant Firm will:

- provide any computer and telecommunication equipment, stationery and other materials required for the project.
- be responsible for providing transport for its employees within the city of Accra for official business.
- be responsible for covering the cost of visits for its employees to regional offices of main government organizations etc, that may be required.

Contractual arrangements will be managed by the PIU.

# 9. Qualification and Staffing

- i. The firm or consortium required for the assignment must have at least five (5) years experience in developing and maintaining interactive web-enabled portal(s) and enterprise systems with a dynamic back-end Content Management System and User Management Interfaces.
- ii. The firm must have successfully completed at least two (2) similar assignments in the last ten (10) years in Ghana or West Africa.
- iii. Out of the two similar assignments, at least one should have been with a government agency with the similar National E-Government platforms.
- iv. Vendor Certification required in respective field of Server Administration, Networking, Security and Data Centre

# Key Expert 1: Team Leader

The Team Leader should:

- Have led similar assignments in countries other than the country of residence
- Have experience of managing teams in a cross-cultural environment
- Have, as a minimum, a post graduate degree qualification in economics, trade, law or a relevant discipline or equivalent qualifications/experience
- Have at least 10 years' experience in the field of international trade, trade facilitation and regulatory reform in developing countries
- Be experienced in working closely with Customs and/or other trade related authorities in developing countries as part of efforts to support private sector development and trade
- Have good written and verbal communication skills in English
- Demonstrate strong methodological project management skills. Formal project management qualifications, such as PRINCE2, PMP would be desirable
- Have experience of similar assignments within the West Africa region or comparable economies would be an advantage.

# Key Expert 2: Trade Specialist

The Trade Specialist should:

- Have, as a minimum, graduate degree qualifications in economics, trade, law or a relevant discipline
- At least 6 years' experience in the field of international trade either in the private or public sectors
- Good written and verbal communication skills in English
- A knowledge of the legal landscape of Ghana, especially in relation to trade, would be highly desirable
- Experience of similar assignments with Customs or relevant trade related agencies would be an advantage.

Two above (2) consultants should have some familiarity of Business Process Analysis (BPA) methodology, preferably obtained in the trade related sector, e.g. simplifying or harmonizing business processes in the issuance of permits, licenses, certificates and permissions necessary for import, export and transit of goods.

# Key Expert 3: Business Analyst/s

The Business Analyst/s should:

- Have, as a minimum, a Graduate Degree or Diploma in Business Analysis or a relevant discipline or appropriate equivalent professional qualifications
- At least 6 years of professional experience in business process analysis
- Good knowledge of business process mapping, including drafting business process maps using MS-Visio or similar software products
- Experience of undertaking similar assignments that includes business process analysis and reform through structured methodologies in the public sector
- Knowledge of business processes in operation at respective Customs organizations, SPS and related trade agencies where they relate to processing of Customs clearance and related certificates, licenses, permits and other authorizations for import and export of regulated goods would be an advantage
- Good written and verbal communication skills in English

# Key expert 4: IT Specialist

The IT Specialist should:

- Have a Graduate Degree or Diploma in Computer Science, Information Technology or a relevant discipline.
- Have 6+ years of experience in the field of Information Technology

- Have ideally worked in the domain of Trade Facilitation and have experience with supporting solutions' architectures for publication of regulatory information with good understanding of the issues involved.
- Have at least 6 years of professional experience in the design and installation of physical computing infrastructure for the delivery of information systems, with extensive knowledge of server and communications technologies and related equipment.
- Demonstrate experience in developing trade information portals and managing geo-referenced database and mapping solutions.
- Have sound experience of security devices, especially Firewalls and VPN networks, intrusion detection devices is required.
- Experience with data replication services and systems for ensuring business continuity is required.
- Hands-on experience of delivering similar assignments that includes undertaking hardware infrastructure equipment design, development, installation and commissioning for Government Agencies.
- Knowledge of IT systems and infrastructure in place at respective Customs organizations, SPS and related trade agencies would be an advantage.
- Good written and verbal communication skills in English.

# ANNEX A: GTIP Guidelines, Facilities and Classes of Information

#### **Guidelines on Content Upload**

It is envisaged that, *inter alia*, the following information will be collected:

- All relevant information on trade, including laws and regulations, standards, procedures, guidance notes, fees, forms, licenses and permits on a product by product basis where applicable;
- All information relating to International, Regional and Bilateral Trade Agreements to which Ghana is a party, including the applicable rules, regulations and requirements and the opportunities for Ghana on a product by product basis
- Tariff (organized by HS<sup>5</sup> Code) and any special measures (e.g. SPS, TBT) applicable to specific commodities, information about applicable fees, forms, licenses, permits and penalties applicable in case of breach
- All procedures required to apply for licenses, permits, border clearance or other regulatory obligations relating to import, export or transit of goods
- An initial collection of publications (leaflets, booklets, guidebooks, newsletters) relevant to trade
- Links to Ministries/Departments, other Authorities, Regulatory bodies and Private Institutions involved in trade and trade promotion, banks and other financial institutions, business news in Ghana, and other relevant institutions
- Links to relevant international organizations, e.g. WTO, WCO, FAO, EU, etc.
- If not already available, the Consultant Firm will engage with Stakeholders in order to develop sets of plain language instructions about various trade related topics

The information collected should be formatted and loaded onto the GTIP as follows:

- The text of all the laws, regulations and legal instruments, if available in electronic format (e.g. Word), should be formatted in a consistent manner, indexed (at least at the level of each article or section), converted into HTML<sup>6</sup> and loaded onto the GTIP database. Cross-references to other pages of the website should be included where applicable. If the text is not available in electronic format, it should be scanned using OCR<sup>7</sup> and converted to HTML. If OCR scanning is not possible, the text should be created by data entry.
- The HS Code table and related tariff/s should be loaded onto an electronic spreadsheet in a prescribed format
- Any measures related to specific commodities should be loaded using the software's interactive facilities
- All procedures required to apply for licenses, permits, border clearance and other regulatory obligations relevant to import, export or transit should be catalogued and analyzed. Annotated flowcharts, using a simple BPA<sup>8</sup> notation, should be developed for each procedure detailing all the steps that the public needs to take in order to fulfill the requirement
- All forms used in the current procedures should be collected, scanned and loaded
- Publications should be scanned into PDF format and uploaded
- For each of the above categories of information, a summary description (where applicable) and related links (e.g. responsible agency, category of information, etc.) must be created
- An initial set of "Guided Journeys", i.e. using the Toolkit pre-set facility, a series of procedures collated into a sequential narrative, for at least the major traded commodities (imports or exports) in Ghana

<sup>&</sup>lt;sup>5</sup> HS: Harmonized System

<sup>&</sup>lt;sup>6</sup> HTML: Hyper Text Mark-up Language

<sup>&</sup>lt;sup>7</sup> OCR: Optical Character Recognition

<sup>&</sup>lt;sup>8</sup> BPA: Business Process Analysis

## The TK3 Software includes the ability to capture and structure the items listed below:

- Multiple language capabilities<sup>9</sup>
- Generic web pages with capability for flexible design layout and support for pictures or animation
- An interactive tariff enquiry facility for commodity codes and associated tariffs, measures and procedures
- List of legal texts (e.g. laws, regulations, etc.). A search facility is provided to find legal texts by various parameters, e.g. issuing agency, date of issue, general category (e.g. SPS<sup>10</sup>, TBT<sup>11</sup>, Import, Export, Transport, etc.) and keywords within the text
- Ability to cross-link pages or specific lines of text through the use of anchors and hyper-links
- Ability to attach and download PDF copies of specific documents
- List of measures (e.g. licensing or permit requirements, SPS or TBT measures, technical regulations, non-tariff fees or charges, restrictions or prohibitions, etc.)
- Detailed step-by-step description of procedures for obtaining licenses, permits, Customs clearance, etc. in graphic format and with sample copies of the forms to be used
- Downloadable forms
- Interactive enquiry facility linking measures, procedures and forms to the specific commodity codes to which they apply
- List of Technical Standards
- Facilities for publishing news, announcements, articles or publishing material such as booklets, brochures, reports, etc.
- Specialized facilities for publishing information about Free Trade Agreements (FTA)
- Facilities for uploading via API<sup>12</sup> different sets of statistics and present them in graphic format
- Calendar of future events
- Frequently Asked Questions facility
- Contact form for submitting queries
- Feedback facility
- Help pages
- Survey facility with the ability to customize the questions and to be switched on or off for random pop-up
- Topic specific user feedback and related analytical tools
- Links to other useful sites, e.g. latest Customs exchange rates
- Registration and login facilities for subscription services
- Subscription services to provide customized alerts by email or SMS<sup>13</sup> about items of specific interest to a subscriber
- Search facilities to search for keywords throughout all contents of the website
- User friendly administrator facilities for maintenance of reference codes and other database tables
- Facilities to optimize searches by Google and other search engines by using keywords/metawords
- Website traffic analytics (e.g. number of hits, demographics, dwell time and bounce rate analysis, etc.)
- Distributed update to allow different agencies to upload content directly
- API for exchanging data with external systems (e.g. NSW<sup>14</sup>)

<sup>&</sup>lt;sup>9</sup> It is expected that the website will initially operate in English only. However, basic translation facilities are available on the website via Google Translate as a standard

<sup>&</sup>lt;sup>10</sup> SPS: Sanitary-Phytosanitary

<sup>&</sup>lt;sup>11</sup> TBT: Technical Barriers to Trade

<sup>&</sup>lt;sup>12</sup> API: Application Programming Interface

<sup>&</sup>lt;sup>13</sup> SMS: Short Messaging Service

<sup>&</sup>lt;sup>14</sup> NSW: National Single Window

The website comprises a full-features CMS<sup>15</sup> with normal screen editing and content management facilities for uploading and editing information. However, use of standard office automation tools such as Word, Visio, Adobe Photoshop will also be required in order to prepare and format the information prior to uploading.

<sup>&</sup>lt;sup>15</sup> CMS: Content Management System