

**FURTHER DEVELOPMENT OF THE PROCESS OF THE BULGARIAN CUSTOMS
ADMINISTRATION COMPUTERISATION AND DEVELOPMENT OF A NATIONAL SYSTEM
FOR ADMINISTERING THE EXCISE DUTY ENTIRELY BY THE CUSTOMS ADMINISTRATION**

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Standard Project Fiche

1. Basic Information

1.1 CRIS Number (Year 3): 2006/018-343.08.02

1.2 Title: Further Development of the process of the Bulgarian Customs Administration Computerisation and Development of a National System for Administering the Excise Duty Entirely by the Customs Administration

1.3 Sector: Customs and Finance

1.4 Location: Bulgaria, National Customs Agency (NCA)

1.5 Duration:

Phase 1: Programming year 2004

Sub-project 1 Further Development of the process of the Bulgarian Customs Administration Computerisation:

Duration of Component 1.1 - 31 months (6 months contracting, 24 months period of execution and 1 month closure; after the end of the period of execution there will be a 12-month warranty period);

Duration of Component 1.2 - 31 months (6 months contracting, 24 months implementation period and 1 month closure);

Sub-project 2 Development of a National System for Administering the Excise Duty Entirely by the Customs Administration:

Duration of Component 2.1 – 33 months (12 months call for proposals, selection of partner and drafting of Twinning Contract and 21 months legal duration within which 18 months implementation);

Duration of Component 2.2 – 8 months (4 months contracting, 3 months implementation and 1 month closure; after the completion of delivery there will be a 12-month warranty period);

Duration of Component 2.3 – 31 months (6 months contracting, 24 months period of execution and 1 month closure; after the end of the period of execution there will be a 12-month warranty period).

Phase 2: Programming year 2005

Duration of Component 1.3 - 15 months (8 months contracting, 6 months for delivery and 1 month closure; after the completion of delivery there will be a 12-month warranty period).

Phase 3: Programming year 2006

Duration of Component 2.4 – 33 months (8 months contracting, 24 months period of execution and 1 month closure; after the end of the period of execution there will be a 12-month warranty period).

Duration of Component 2.5 – 12 months (8 months contracting, 3 months period of execution and 1 month closure; after the end of the period of execution there will be a 12-month warranty period).

2. Objectives

2.1 Overall Objective(s):

Computerisation of the customs business at the national level in line with the targets identified in the NCA Strategic documents in order to meet the accession criteria in accordance with the acquis.

Implementation of the acquis in the field of excise duties and automation of the activities related to administering the excise duties.

2.2 Project purpose:

Sub-project 1, Components 1.1 “Extension of the BICIS functionality” and 1.2 “Technical assistance for evaluation and quality control”

Improvement of the standardisation, modularity and scalability of BICIS, as well as adaptivity of the main system modules to the changing legal basis, business logic and,

DG TAXUD requirements and standards in order to achieve higher efficiency and quality of customs activities, enhancement of the collection of duties and taxes, trade facilitation and in support of the fight against customs violations.

Sub-project 1, Component 1.3 “Supply of equipment for modernisation of the infrastructure supporting BICIS”

Improvement of the extensibility and scalability of BICIS in order to improve the performance, and reliability of the system after the start of all the main BICIS modules, the full security system, and the opening of BICIS for unlimited work with BCA customers online.

Sub-project 2

To support the NCA in developing and further strengthening of a system for administering excise duties in compliance with the European legislation and EU best practice.

Purpose of Component 2.1 “Development of legal and administrative capacity for administering the excise duties entirely by the customs administration”

Drafting legislation implementing the new Excise Act that is to introduce the excise bonded warehouses system:

establishing the basis for introduction and operation of excise bonded warehouses system and control on excise products under excise duty suspension arrangements and supporting the NCA modernisation for administering excise duties entirely by customs, i.e. in the territory of the country as well as excise duties on imports (only the latter being currently administered by customs) through implementation of the recommendations for best practice of the Member States customs administrations.

Accomplishing full harmonization of the Bulgarian legislation with the *acquis*, taking into account the negotiated arrangements for transitional periods and derogations under negotiations chapter 10 “Tax policy”. Strengthening the NCA administrative capacity for implementation of the legislation in the field of excise duties.

Purpose of Component 2.2 “Supply of specialised equipment”

Enhancement of the operational capacity for carrying out of efficient control on fuels for motor vehicles.

Purpose of Component 2.3 “Development of information system for administering excise duties”

Development of an information system as a part of the BICIS for automation of the activities related to the administering of excise duties, including excise bonded warehouses and control on excise products in line with the EU standards and requirements in this field.

Purpose of Components 2.4 “Extension of the Excise management system (EMS.1) including all EMCS requirements” and 2.5 “Supply of equipment for the EMS IT infrastructure”

Completion of the developments under Component 2.3, which are focused on national requirements, with all the EMCS 2&3 interconnectivity requirements and ensure the necessary IT infrastructure for the successful realisation of both components 2.3 and 2.4.

Remark: Further details on the BCA EMS project and its elements are presented in Annex 4.

2.3 Accession Partnership (AP) and NPAA priority:

In the annex of COUNCIL DECISION of 19 May 2003 on the principles, priorities, intermediate objectives and conditions contained in the Accession Partnership with Bulgaria (2003/396/EC) is stated:

Under point 4 Priorities, Customs union:

“Upgrade customs laboratories as well as infrastructure and equipment at customs clearance points.

Enhance the application of risk analysis method and post-clearance control. Strengthen the operational and administrative capacity of the customs administration, particularly as regards information technology and human resource policy”.

Under point 4 Priorities, Taxation:

Continue alignment of tax legislation in excise duties.

Strengthen administrative capacity and control procedures including administrative cooperation and mutual assistance between different parts of tax and customs administration, with a view to increasing tax compliance and improving the collection of revenues. Develop IT systems so as to allow for exchange of electronic data with the Community and its Member States.

Roadmaps for Bulgaria and Romania, Brussels, 13 November 2002.

COM (2002) 624

Chapter 25: Customs Union

Medium term

Strengthen operational and administrative capacity of customs administration and ensure a satisfactory level of IT.

Chapter 10: Taxation

Medium term

Complete the alignment of tax legislation, except where transitional arrangements were agreed.

2.4 Contribution to National Development Plan:

Not Applicable

2.5 Cross Border Impact:

Not Applicable

3. Description

3.1 Background and justification:

Sub-project 1 Further Development of the process of the Bulgarian Customs Administration Computerisation

A priority area during the period 1998 – 2002 has been the **computerisation of the BCA**, with the main objective being the development of the Integrated centralised information system that shall serve as an instrument for the implementation of the BCA's Business Strategy, shall facilitate the trade and ensure optimum efficiency and profitability of the invested resources in performing Customs activities.

The IT Strategy of the NCA has been developed in 1999 and it has been maintained up to date.

Phase 1 of the Bulgarian Integrated Customs Information System (BICIS) has been developed with the funding provided by the State Budget funds, under the Phare program and other financial sources. The BICIS 1 was operational in the whole territory of Bulgaria since the beginning of 2001. In addition, hardware and communication equipment for the BICIS have been delivered; and in the Customs Statistics and Automation Directorate at the Central Customs Directorate of the NCA a team has been established to manage the BICIS 2&3 project.

In the middle of 2003 the web based BICIS 2.1 became operational. This system involved the re-engineering of the BICIS Stage 1 applications to a web based approach following OMG specifications and using RUP development methodology standards. This

sub-phase also included the development of BTMS Phase I, representing NCTS requirements at the national level.

In 2003 the implementation of a project between the German and the Bulgarian customs administration started with a sub-project “Building of the **“Post-Clearance Control Service”**”. In order to ensure the efficient operation of the post-clearance control a specialised Directorate “Post-Clearance Control” has been created at the Central Customs Directorate. Administrative units at national and regional level had been created and the administrative structures at regional level are currently being staffed. The training of the customs employees, including as trainers within BCA, on the Post-Clearance Control activities is being carried out.

The supply of equipment for **modernisation of the infrastructure supporting BICIS** is needed to support the development and exploitation of BICIS. Further justification is given in **Annex 4** of the Project Fiche.

The BCA plans for BICIS future development have been presented by BCA during the Interoperability monitoring mission in November 2003 and received the support of the monitoring team.

The main findings of the Interoperability monitoring mission are reflected in the updated Country status report. They are the following:

BCA has a clear strategy for Interoperability which is well documented and has financial plans in place to ensure that future projects will be adequately funded. At the current rate of progress, it is very likely that the BCA will meet the Interoperability requirements, and reach a satisfactory level of IT Operational Capacity in time for EU Accession.

Sub-project 2 Development of a National System for Administering the Excise Duty Entirely by the Customs Administration

According to the current Bulgarian national legislation in force, excise duties are administered on imports by the National Customs Agency and on the transactions with excise products in the territory of the country - by the General Tax Directorate while in the majority of EU Member States excise duties are administered entirely by the customs administrations.

The Republic of Bulgaria is in a process of harmonising the national tax legislation with the *acquis* and the EU best practice.

As from 1 January 2003 amendments in the tax legislation concerning the payment of excise duties on imports to customs administration accounts have been introduced in view of harmonisation with the EU Member States practice.

In the context of the process of harmonisation of the legislation with the *acquis* and the EU best practice actions should be taken related to the drafting of legislation for establishment of conditions for introduction of the general rules for production, warehousing, storage, movement and control on excise products under excise duties suspension arrangements, including the introduction of excise bonded warehouses system whereas Bulgaria has undertaken the commitment to accomplish this not later than 1 January 2006 (negotiations position on Chapter 10 “Tax Policy”).

In line with the commitments undertaken a draft new Excise Act has been developed by the inter-ministerial Working group established for the purpose and consulted by Mr. Fred Hemelsoet – an expert from the Dutch Ministry of Finance working under Twinning project BG00/IB/FI/06. The draft new Excise Act is harmonised with the whole EU *acquis* in the field of excise duties - not only with Directive 92/12/EEC on the general rules for warehousing, movement and control on excise products, but with the other directives in the field of excise duties as well (Directive 92/79/EEC, Directive 92/80/EEC, Directive 92/81/EEC, Directive 92/82/EEC, Directive 92/83/EEC, Directive

92/84/EEC, Directive 95/59/EEC and Directive 95/60/EEC) and foresees the excise duties to be administered entirely by the customs administration.

After promulgation of the new Excise Act compliant to the EU practice, i.e. the excise duties to be administered entirely by the customs administration, a national system should be developed for this purpose.

The activities would comprise drafting of second and third level legislation, establishment of administrative capacity, supply of specialised equipment and automation. These activities are in line with the recommendations made under Twinning project BG00/IB/FI/06 more details on which are provided in point 3.5 Linked activities.

Legislation:

The adoption of the new Excise Act would impose the drafting of regulations for its implementation in the shortest possible terms and in line with the EU best practice.

Administrative capacity:

Establishment of organisational structure for administering excise duties entirely by the customs administration including development of functional descriptions for the relevant structural units and definition of the necessary administrative capacity for the performance of these tasks would be pending. Training modules would have to be developed and customs officers would have to be trained in the field of administering excise duties.

Specialised equipment for the customs laboratories would have to be delivered. A detailed needs assessment for the specialised equipment is provided in **Annex 4**.

Automation:

Development of information system for automation of the activities for administering of excise duties in line with national and interconnectivity requirements would be necessary. A detailed needs assessment is provided in **Annex 4**.

A precondition for the implementation of the proposed Sub-project is the adoption of new Excise Act with which the Bulgarian Customs Agency will be endowed with the entire administration of excise duties at national level.

The new Excise and Tax Bonded Warehouses Act passed the first reading at the 40th National Assembly on 20 September 2005. The Excise and Tax Bonded Warehouses Act was adopted by the Parliament on 2 November 2005.

3.2 Sectoral Rationale

Not applicable

3.2.1 Identification of projects

Not applicable

3.2.2 Sequencing

Not applicable

3.3 Results:

3.3.1 Sub-project 1 “Further development of the process of the Bulgarian Customs Administration computerisation”

3.3.1.1 Purpose

Purpose of Sub-project 1, Components 1.1 and 1.2

Improvement of the standardisation, modularity and scalability of BICIS, as well as adaptivity of the main system modules to the changing legal basis, business logic and, DG TAXUD requirements and standards in order to achieve higher efficiency and quality of customs activities, enhancement of the collection of duties and taxes, trade facilitation and in support of the fight against customs violations.

Purpose of Sub-project 1, Component 1.3

Improvement of the extensibility and scalability of BICIS in order to improve the performance, and reliability of the system after the start of all the main BICIS modules, the full security system, and the opening of BICIS for unlimited work with BCA customers online.

3.3.1.2 Results

Results Sub-project 1, Components 1.1 and 1.2

Component 1.1: “Extension of the BICIS functionality”

Sub- component 1.1.1 “BICIS Kernel extension”

The following BICIS elements created:

- Adaptive Software Architecture.

- Constructive Design Framework.

- Full set of standard interfaces of components.

- Standards for communications between components.

- System kernel.

- Operational and legal DBs.

- National BICIS modules on the basis of the above elements, the EU standards and accession requirements.

- Interface between the customs laboratories and the different BICIS modules for initiation of laboratory activity and delivery of the laboratory expertise results for implementing further tariff and non-tariff measures for the purposes of the customs clearance process.

Operational and turnover to maintenance tasks completed.

Remedial work, if necessary, performed during the warranty period in order to ensure operational efficiency of the software.

Sub- component 1.1.2: “Development of information system for automation of the post-clearance control activities”

Developed and functioning information system for the post clearance control, including:

- Data base “Card index of companies”.

- Risk analysis and selectivity control module for the needs of the post clearance control.

- Analytical module for management of the checks being carried out.

- Interface connections module with internal and external information sources.

- A module for analysis of the results from the checks carried out.

- All reports necessary for the functioning of the sub-system.

- A module for regulation of the rights for access and work with the sub-system.

Users and system administrators trained.

Operational and turnover to maintenance tasks completed.

Remedial work, if necessary, performed during the warranty period in order to ensure operational efficiency of the software.

Component 1.2:”Technical assistance for evaluation and quality control”

Proper performance of Components 1.1, 1.3 and 2.3 through adequate evaluation of the quality of the Components 1.1, 1.3 and 2.3 activities and deliverables concerning the whole software engineering life cycle, and especially evaluation of:

- Business modelling activities and deliverables.

- Analysis and Design activities and deliverables.

- Implementation activities and deliverables.

- Testing activities and deliverables.

- Infrastructure establishment activities and deliverables.

Results Sub-project 1, Component 1.3

Component 1.3: “Supply of equipment for modernisation of the infrastructure supporting BICIS”

The following types of equipment and, software, upgrades, and updates delivered:

- Hardware for the extension of the Intranet storage, processing and backup capabilities and Deployment of Internet System component

- DB storage extension

- Application servers

- Communication server

- Web Portal Servers

- Central backup server.

- Software for Customs Business and Information Systems Integration.

- Tools for modelling of Workflows

- J2EE Software Development CASEs

- UML Software Development CASEs

- Business Integration Application Servers

- Web Portal Management Systems

- Network and data traffic security equipment: Firewalls, routers.

- Standard and mobile workstations.

The delivered equipment and software integrated and customised.

BCA staff trained.

Sub-project 2 “Development of a national system for administering the excise duty entirely by the customs administration”

At Sub-project level

Sub-project purpose

To support the NCA in developing and further strengthening of a system for administering excise duties in compliance with the European legislation and EU best practice.

Sub-project Results

Achieving a maximum compliance of the Bulgarian legislation with the acquis in the field of excise duties.

Established administrative units dealing with authorisation of warehouse keepers and storage, movement and control on excise products.

Specialised equipment for control on fuels for motor vehicles delivered, installed and operational and customs officers trained to work with the equipment.

Customs officers trained in view of carrying out effective control on excise products according to their duties.

Developed business model of the process of administering excise duties.

Developed information system for automation of the activities related to administering of excise duties, including excise bonded warehouses, control on excise products, etc. and users and system administrators trained.

Purpose

Component 2.1 Development of legal and administrative capacity for administering the excise duties entirely by the customs administration

Drafting legislation implementing the new Excise Act that is to introduce the excise bonded warehouses system:

establishing the basis for introduction and operation of excise bonded warehouses system and control on excise products under excise duty suspension arrangements and

supporting the NCA modernisation for administering excise duties entirely by customs, i.e. in the territory of the country as well as excise duties on imports (only the latter being currently administered by customs) through implementation of the recommendations for best practice of the Member States customs administrations.

Accomplishing full harmonization of the Bulgarian legislation with the *acquis*, taking into account the negotiated arrangements for transitional periods and derogations under negotiations chapter 10 “Tax policy”. Strengthening the NCA administrative capacity for implementation of the legislation in the field of excise duties.

Component 2.2 Supply of specialised equipment

Enhancement of the operational capacity for carrying out of efficient control on fuels for motor vehicles.

Component 2.3 Development of information system for administering excise duties

Development of an information system as a part of the BICIS for automation of the activities related to the administering of excise duties, including excise bonded warehouses and control on excise products in line with the EU standards and requirements in this field.

Components 2.4 “Extension of the Excise management system (EMS.1) including all EMCS 2&3 requirements” and 2.5 “Supply of equipment for the EMS IT infrastructure”

Completion of the developments under Component 2.3, which are focused on national requirements, with all the EMCS interconnectivity requirements and ensure the necessary IT infrastructure for the successful realisation of both components 2.3 and 2.4.

Remark: Further details on the BCA EMS project and its elements are presented in Annex 4.

Results

Component 2.1 Development of legal and administrative capacity for administering the excise duties entirely by the customs administration

Conditions in place for the introduction and operation of the excise bonded warehouses system and for carrying out of relevant control by the customs administration.

Second and third level legislation developed comprising: Draft Implementing Provisions of the new Excise Act, Draft Regulation on the specific conditions for granting, amendment and suspension of authorization of warehouse keepers, Draft Regulation on excise labels for tobacco products and alcohol beverages, Draft Regulation on marking of gas oil and kerosene, Draft Regulation on the norms of the marginal extent of excise products natural wastages and shortages and the admissible norms of technological waste, Draft Regulation on the accompanying administrative document, Drafts for amendments and supplements of the legislation concerning the introduction of provisions on the movement of excise products between Member States under excise duty suspension arrangements.

Developed administrative capacity for administering excise duties, including authorisation of warehouse keepers, collection of excise duties and control on excise products as well as control on the movement of excise products between Member States under excise duty suspension arrangements.

Customs officers trained theoretically and practically in administering excise duties.

Developed business model of the process of administering excise duties.

Component 2.2 Supply of specialised equipment

Specialised equipment for control on fuels for motor vehicles delivered, installed and

operational and customs officers trained to work with the equipment.

Component 2.3 Development of information system for administering excise duties

Developed information system for automation of the activities related to administering excise duties, including excise bonded warehouses, control on excise products, etc. comprising:

Business requirements analysis and assessment made and system functional specification prepared.

Prepared technical specification for development of information system for automation of the activities related to administering excise duties including control on excise products, excise duty bonded warehouses, etc.

Developed software architecture of the information system for automation of the activities in the field of excise duties in line with NCA IT Strategy.

Databases for the purposes of the system at central and local level.

Prepared and deployed Excise business module prototype, including functionality for preliminary evaluation and tests of the adopted business logic.

All System modules and components implemented.

Users and system administrators trained.

Operational and turnover to maintenance tasks completed for the whole system.

Remedial work, if necessary, performed during the warranty period in order to ensure operational efficiency of the software.

Component 2.4 Extension of the Excise management system (EMS.1) including all EMCS 2&3 requirements

Developed and functioning information system for excise management, including the following groups of functions:

Registers Managements System extension;

Accompanying Administrative Document Processing;

Connection with Customs procedures such as export and import of goods, etc.;

Processing of Losses;

Recording of reports of Controls;

Risk Assessment;

Automatic Recalls;

Movement Verification and Mutual Assistance;

International Exchange of EMCS Messages;

Excise system administration functions;

Excise Consultation Module.

The developed information system will support more effective control of the movements and the detection of most likely causes of fraud and of incidents.

The realisation of these groups of functions shall be achieved through:

Business requirements analysis and assessment and development of the system functional specification prepared.

Prepared technical specification for implementation of the information system.

Developed software architecture of the information system in line with NCA IT Strategy.

Established databases for the purposes of the system.

All system modules and components implemented and documented.

Users and system administrators trained.

Operational and turnover to maintenance tasks completed for the whole system.

Remedial work, if necessary, performed during the warranty period in order to ensure operational efficiency of the software.

Component 2.5: “Supply of equipment for the EMS IT infrastructure”

The following types of equipment and software delivered:

Hardware for the establishment of the EMS Demilitarized zone:

Firewall

Web Server for traders

Application Server for traders

Data Base Server for traders

Software for Customs Business and Information Systems Integration.

Content management software

Business Integration Application Servers

Web Portal Management Systems

Network and data traffic security equipment.

The delivered equipment and software integrated and customised.

BCA staff trained.

3.4 Activities:

Sub-project 1

Activities Phase 1

Component 1.1: “Extension of the BICIS functionality”

Sub- component 1.1.1 “BICIS Kernel extension”

Development of an adaptive BICIS software architecture following the rapidly changing business environment.

Creation of the Constructive Design Framework for the development of all BICIS system and business modules.

Definition of the full set of BICIS modules and components standard interfaces.

Definition of the standards for communication between the BICIS modules and components.

Development of the BICIS kernel architecture (i.e. editors and generators of business and legal business rules and constraints editors and generators, editors and generators of BICIS GUIs, and workflows, search engine, messaging system, Single Integrated Services, Knowledge editors, Struts Controller, Business actions controller, Internal and External interfaces, etc.).

Construction of BICIS operational and legal DBs in the terms of the major European data structure standards.

Re-engineering and extension of the national BICIS modules on the basis of the above components, the EU standards and accession requirements.

Development of Interface between the customs laboratories and the different BICIS modules for initiation of laboratory activity and delivery of the laboratory expertise results for implementing further tariff and non-tariff measures for the purposes of the customs clearance process.

Complete the operational and turnover to maintenance tasks.

Perform remedial work, if necessary, during the warranty period in order to ensure operational efficiency of the software.

Sub- component 1.1.2: “Development of information system for automation of the post-clearance control activities”

Development of an information system for automation of the activities of the post clearance control, which includes:

Creation of a data base “Card index of companies”, which will provide data for assessment of the trade operators.

Development of a risk analysis and selectivity control module for the needs of the post clearance control.

Development of an analytical module for management of the checks carried out.
Development of a module for interface connections with internal and external information sources.
Development of a module for analysis of the results from the checks carried out.
Development of all reports necessary for the functioning of the sub-system.
Development of a module for regulation of the rights for access and work with the sub-system.
Training of users and system administrators.
Complete the operational and turnover to maintenance tasks.
Perform remedial work, if necessary, during the warranty period in order to ensure operational efficiency of the software.

The activities under **Component 1.1** will be implemented through a Service contract with clearly stated deliverables

Experts with experience in:

- Project management and Quality Assurance management following RUP;
- Analysis and design using UML, MDA and J2EE;
- Software implementation with J2EE and XML;
- System architecture development with XML and application servers;
- System engineering.

Component 1.2 “Technical assistance for evaluation and quality control”

Evaluation of Business modelling activities and deliverables.

Evaluation of Analysis and Design activities and deliverables.

Evaluation of Implementation activities and deliverables.

Evaluation of Testing activities and deliverables.

Evaluation of Infrastructure establishment activities and deliverables.

These activities will be implemented by the use of short-term expertise under a Technical assistance contract.

Experts with experience in:

- Business modelling using UML;
- Analysis and design using UML, MDA and J2EE;
- Software implementation with J2EE and XML;
- System architecture development with XML and application servers;
- System engineering.

Activities Phase 2

Component 1.3: “Supply of equipment for modernisation of the infrastructure supporting BICIS”

Delivery of the following types of equipment and, software, upgrades, and updates:

- Hardware for the extension of the Intranet storage, processing and backup capabilities and Deployment of Internet System component

- DB storage extension
- Application servers
- Communication server
- Web Portal Servers
- Central backup server.

- Software for Customs Business and Information Systems Integration.

- Tools for modelling of Workflows
- J2EE Software Development CASEs
- UML Software Development CASEs
- Business Integration Application Servers
- Web Portal Management Systems

Network and data traffic security equipment: Firewalls, routers.

Standard and mobile workstations.

Customisation of the delivered equipment and software.

Training of the BCA staff for installing, and support of the delivered equipment and software.

These activities will be implemented through Supply contract with clear technical specifications.

A detailed needs assessment and justification is provided in **Annex 4** of the Project fiche.

Sub-project 2

Activities Phase 1

Component 2.1 Development of legal and administrative capacity for administering the excise duties entirely by the customs administration:

1. Analysis of the current situation in Bulgaria concerning:

The new draft Excise Act which is considerably harmonised with the acquis and introduces the excise bonded warehouses system, development of the respective legislative amendments stemming from it concerning the regulation of the extended functions of the customs administration;

The activity of excise products producers and traders in view of developing accurate criteria for authorisation of warehouse keepers, who are not producers of excise products and determining the needs of administrative capacity related to the authorisation of warehouse keepers;

The administrative capacity of the tax and customs administrations and determining the necessary legal, administrative and operational capacity for administering excise duties by types of excise products in view of establishing conditions in Bulgaria for the introduction and operation of the excise bonded warehouses system and for carrying out of relevant control by the customs administration and in view of development of administrative capacity for administering excise duties.

2. Analysis of the Member States best practice concerning:

Administering excise duties by types of excise products;

Marking of gas oil and kerosene;

Control on fuels for motor vehicles

in view of establishment of conditions for carrying out of relevant control on excise products by the Bulgarian Customs Agency.

3. Identification of the gaps between the new Excise Act that introduces the excise bonded warehouses system and the relevant acquis;

4. Drafting of second and third level legislation:

Draft Implementing Provisions of the new Excise Act

Draft Regulation on the specific conditions for granting, amendment and suspension of authorization of warehouse keepers

Draft Regulation on excise labels for tobacco products and alcohol beverages

Draft Regulation on marking of gas oil and kerosene

Draft Regulation on the norms of the marginal extent of excise products natural wastages and shortages and the admissible norms of technological waste

Draft Regulation on the accompanying administrative document

Drafts for amendments and supplements of the legislation concerning the introduction of provisions on the movement of excise products between Member States under excise duty suspension arrangements.

The second and third level legislation can be changed and complemented in the process of its drafting.

5. Preparation for adoption and implementation of procedures for:

Authorisation of warehouse keepers;
 Movement of excise products in the territory of the country under excise duty suspension arrangements;
 Marking of gas oil and kerosene;
 Control on fuels for motor vehicles;
 Movement of excise products between Member States under excise duties suspension arrangements;
 Reimbursement of paid excise duties under certain circumstances for products which have been released for consumption in a Member State when they are not intended for consumption in that Member State;
 Excise duties exemption and
 Carrying out of relevant control on excise products.

6. Training of Bulgarian customs officers in EU MS and organisation of seminars in Bulgaria in the field of administering excise duties including:

Warehouse keepers authorisation;
 Control on excise products including administrative, physical and road control;
 Excise duties exemption and exemption by reimbursement;
 Procedures on samples taking, field tests, safety rules and other operational procedures in line with the provisions in force in the field;
 Control on the excise products movement between Member States;
 Authorisation of registered trader, unregistered trader and tax representative;
 Training of customs chemists in working methods with regard to excise products analysis.

7. Creation of a business model of the process of administering excise duties.

These activities will be carried out through a twinning arrangement.

Tasks of the Resident Twinning Advisor (RTA):

- administrating, co-ordinating, monitoring and advising all the foreseen measures.
- Short-term expertise will be required for the performance of tasks as described under Component 2.1.

Profile of the RTA:

- At least 5 years experience in the Customs Administration of a MS which has adopted the practice of administering excise duties entirely by customs;
- Experience in the legislative process – drafting of first level legislation and amendments and supplements to first level legislation;
- Experience in drafting second and third level national legislation (implementing regulations and working instructions) in the field of administering excise duties;
- High-level officer in the customs administration;
- Good communication and organisational skills;
- Fluent in the working language of the project.

Profile of the short-term experts:

- At least 5 years experience in the Customs Administration of a MS which has adopted the practice of administering excise duties entirely by customs;
- Experience in drafting second and third level national legislation (implementing regulations and working instructions) in the field of administering excise duties;
- Good reporting skills;
- Fluent in the working language of the project.

Duration of the assignment of the RTA:

The RTA is supposed to be seconded to the Bulgarian Customs Agency for a period of 18 man/months.

The NCA will support the implementation of the proposed component by assuring the necessary organisational environment, making available the necessary personnel and providing the required facilities.

The existing Training centres in Sofia, Plovdiv and Russe will be used for the organisation of seminars.

An office will be provided for the RTA and the assistant of the RTA.

PCs, network printer, copy- and fax machines will be procured under the national co-financing budget.

Component 2.2 Supply of specialised equipment:

Delivery, installation and putting into operation of the delivered specialised equipment for control on fuels for motor vehicles and training of officers to work with the equipment.

This activity will be carried out through a supply contract (investment project).

The NCA will support the implementation of the proposed component by assuring the necessary organisational environment and making available the necessary personnel.

Component 2.3 Development of information system for administering excise duties:

Development of information system for automation of the activities related to administering excise duties, including excise bonded warehouses, control on excise products, etc. comprising

Business requirements analysis and assessment and development of the system functional specification.

Development of the technical specification for implementation of information system for automation of the activities related to administering excise duties including control on excise products, excise duty bonded warehouses, etc.

Development of the software architecture of the information system for automation of the activities in the field of excise duties in line with NCA IT Strategy.

Establishment of databases for the purposes of the system at central and local level.

Development and deployment of Excise business module prototype, including core functionality.

Implementation of all system modules and components.

2. Training of users and system administrators.

Complete the operational and turnover to maintenance tasks for the whole system.

Perform remedial work, if necessary, during the warranty period in order to ensure operational efficiency of the software.

These activities will be implemented through a service contract with clearly stated deliverables.

Experts with experience in:

- Project management and Quality Assurance management following RUP;
- Analysis and design using UML, MDA and J2EE;
- Software implementation with J2EE and XML;
- System architecture development with XML and application servers;
- System engineering.

Activities Phase 3

Component 2.4 Extension of the Excise management system (EMS.1) including all EMCS 2&3 requirements:

Development of information system for excise management, including the following

groups of functions:

Registers Managements System extension;

Accompanying Administrative Document Processing;

Connection with Customs procedures such as export and import of goods, etc.;

Processing of Losses;

Recording of reports of Controls;

Risk Assessment;

Automatic Recalls;

Movement Verification and Mutual Assistance;

International Exchange of EMCS Messages;

Excise system administration functions;

Excise Consultation Module.

The developed information system will support more effective control of the movements and the detection of most likely causes of fraud and of incidents.

The realisation of these groups of functions shall be achieved through:

Business requirements analysis and assessment and development of the system functional specification.

Development of the technical specification for implementation of the information system.

Development of the software architecture of the information system in line with NCA IT Strategy.

Establishment of databases for the purposes of the system.

Implementation and documentation of all system modules and components.

Training of users and system administrators.

Complete the operational and turnover to maintenance tasks for the whole system.

Perform remedial work, if necessary, during the warranty period in order to ensure operational efficiency of the software.

These activities will be implemented through a service contract with clearly stated deliverables.

Experts with experience in:

- Project management and Quality Assurance management following RUP;
- Analysis and design using UML, MDA and J2EE;
- Software implementation with J2EE and XML;
- System architecture development with XML and application servers;
- System engineering.

Component 2.5: “Supply of equipment for the EMS IT infrastructure”

Delivery of the following types of equipment and software:

Hardware for the establishment of the EMS Demilitarized zone:

Firewall

Web Server for traders

Application Server for traders

Data Base Server for traders

Software for Customs Business and Information Systems Integration.

Content management software

Business Integration Application Servers

Web Portal Management Systems

Network and data traffic security equipment.

Customisation of the delivered equipment and software.

Training of the BCA staff for installing, and support of the delivered equipment and software.

These activities will be implemented through Supply contract with clear technical specifications.

Experts playing the following roles:

System engineers.

System Analysts.

System Architects.

Trainers.

A detailed needs assessment and justification is provided in **Annex 4** of the Project fiche.

3.5 Linked activities:

NATIONAL PHARE PROGRAMME

BG 98/IB/FI-03 “Harmonisation of Bulgarian Customs Legislation” – twinning with the German Customs Administration. The project was aimed at:

- conducting a review to assess the impact of the Bulgarian customs legislation viz. the associated national legislation;
- proposing and drafting the necessary amendments and the additional supporting legislation in accordance with European Union directives and Member States best practice;
- developing, documenting and implementing procedures and associated instructions for operational and HQ staff in accordance with European Union norms and Member States best practice in order to correctly and efficiently control the import and export of goods under the new customs legislation.

An analysis of the experience (practices) of the EU Member States customs administrations in defining the competencies for collection of VAT and excise duties was made under the project.

BG 9806.02.02 “Computerisation of the Bulgarian Customs Administration”.

The sub-projects involved major hardware improvements for the BICIS project assisted NCA in interconnectivity requirements assessments with the EC systems, as well as in Project, Quality and Contracts Management and IT training.

BG01/IB/FI/02&03 “Strengthening the NCA” (Twinning project with German Customs Administration)

One of the sub-projects was “Building of the Post-Clearance Control Service”. As a result of the project, a Strategy for establishment and development of the post clearance control was developed and approved by the NCA as part of the Final Report. Work instructions were drafted under the sub-project.

BG 0203.08 “EU standards and practices legal basis, implementing procedures and computerisation at national level, in relation to DG TAXUD systems”. The project is aimed at:

assisting the National Customs Agency in creating the system of rules and preparing the conditions necessary for the uniform implementation of measures introduced in accordance with the agricultural, trade and other policies integrated in TARIC of the EU, developing the necessary draft Legal Instructions at national level aligned with the EU and including all the preconditions necessary to administer and apply TARIC as well as Tariff Quotas, Binding Tariff and Origin Information, Tariff suspensions, ECICS, TCO and Surveillance data. (component BG0203.08.01 had a duration of 8 months and was completed in June 2004)

finalising the Bulgarian Transit Management System (BTMS) computerisation as a subsystem of BICIS. (the Contract was concluded for a duration of 14 months, which, after an extension of the disbursement period granted on 19 November 2004, has been extended with 7 months to a total duration of 21 months)

allowing the trade to prepare and send to the BICIS system automatically all the necessary declaration work. (the Contract was concluded for a duration of 12,5 months which was extended twice to a total duration of 19,5 months)

A component for management, co-ordination and evaluation assistance is also included in the project. The component started in the beginning of June 2004. The Contract was concluded for a duration of 18 months, which, after an extension of the disbursement period granted on 19 November 2004, has been extended with 6 months to a total duration of 24 months.

2003 National Phare Programme

BG2003/004-937.09.01 “Further Development of National Customs Laboratory Network” Project.

The project is aimed at the further development of National Customs Laboratory Network to achieve the operational capacity, which includes legal basis, management policies, analytical equipment, analytical methods, training programmes and working methods, required to perform the full range of duties in line with the EU best practice.

BG2003/004-937.09.02 “EU standards and practices computerisation of the Bulgarian Customs Agency (BCA) in relation to DG TAXUD systems (ITMS)” Project.

The project is aimed at computerising BCA Integrated Tariff Management System (ITMS) and other applications that serve as reference data to the system. The specific applications affected by the computerisation are: Taric and national Tariffs, Quotas, Ceilings and other surveillance measures, Tariff suspensions, Binding tariff and origin data, ISPP, ECICS and TCO (SMS).

Projects with beneficiary General Tax Directorate:

Twinning project BG00/IB/FI/06 “Reform and Modernisation of the Tax Administration”

Benchmark 1.3. under the project is the development of a draft new Excise Act. An intergovernmental working group has been established for the purpose consulted by Mr. Fred Hemelsoet – expert from the Dutch Ministry of Finance.

The activities carried out under the project were: review of the Bulgarian excise legislation, preparation by the Dutch experts of a report on the compatibility of Bulgarian excise legislation with the European legislation including identification of problems and proposing draft solutions according to the best practice of the EU Member States, preparation of a first and second draft of the first level legislative changes by the Bulgarian team and comments on them by the Dutch experts, development of a program for the gradual transposition of the proposed changes into the Bulgarian legislation (first level).

In the process of implementation of the Twinning project a decision has been taken to draft a new Excise Act instead of modifying the current excise legislation. The first draft of this new first level excise legislation has been discussed article by article with representatives of the several tax and customs departments in the Ministry of Finance and with representatives of the Ministry of Economy. The concurrence of excise and customs procedures and the responsibilities of the Ministry of Economy in granting licenses have been important issues. Apart from that discussions have been held with representatives of the trade on the one hand to inform them about the new legislation and on the other hand to have their agreement on the new system for levying excise duties.

Two workshops on the consequences of the new excise legislation have been organised. Participants in the workshops were representatives of the Ministry of Finance, the Tax administration, the Customs administration, the Ministry of Economy and representatives of the trade in excise products.

The draft of the Excise Act, to come into force before accession, is according to the European excise legislation at the time of drafting the new Excise Act. Upon accession more amendments are necessary to cover intra-community movement of excise goods. The benchmark has been achieved in an impressive way with participation of all parties involved in the legislation drafting and with full cooperation of the Trade. Nevertheless some proposals have been made under the Twinning project in relation to the implementation of the new Act.

Draft Regulation for the implementation of the Excise Act;

Develop the necessary forms for the implementation of the Excise Act and the Regulation;

Develop a functional structure of the administration for the implementation of the excise legislation;

Upon accession the excise legislation will have to be amended to introduce all provisions related to the intra-community movement of excise goods, including the future excise movement and control system (EMCS).

These are areas, which have not been covered by the twinning on reform and modernization of the customs administration and are planned to be covered by the proposed Sub-project 2.

The present proposal for Sub-project 2 would be a follow-up (continuation) of Twinning project BG00/IB/FI/06.

NATIONAL PROJECTS

BICIS Stage 2 computerisation project

This project covers the Customs Clearance functions and Transit Phase I developments representing NCTS requirements at the national level. It also includes the computerisation of Enforcement, Customs Debt and Authorisations sub-systems.

MF Communications project

This project was related to the establishment of BICIS communication environment, and BICIS security communications rules. The project is basis for reliable, secure, and stable exploitation of BICIS information exchange.

3.6 Lessons learned:

The 2004-2006 Phare Programming exercise places particular emphasis on the activities to be carried out for modernisation of the Bulgarian Customs Administration in connection with the future membership of Bulgaria in the European Union.

In previous programming years it has been noted that the programme design should be improved.

With reference to the process of further BCA computerisation:

System design should be further improved in order to fully achieve object-oriented BICIS model;

Pre-defined methodology standards should be strictly followed and especially RUP as well as business modelling and testing methodologies;

The Bulgarian authorities should adhere in a timely manner to the conditionalities to the project. This includes timely start of projects BG2003/004-937.09.01 and BG2003/004-937.09.02, adoption of relevant legislation and provision of national co-financing. Appropriate corrective actions should be taken in cases of delays or other problems, whereas one of the mechanisms can be the process of regular monitoring and evaluation of Phare projects.

4. Institutional Framework

The project beneficiary institution will be the National Customs Agency (NCA).

The NCA is a part of the Ministry of Finance and is responsible for the collection of Customs duties, Excise duties and VAT on imports and the prevention of illegal imports

and exports. It collects about 48 % of the revenues of the state budget. About 3,900 staff is employed by NCA. The organisational structure of NCA is presented in detail in the attached IT Strategy Section 3.

The NCA is structured in four hierarchical levels:

- Central Customs Directorate;
- 5 Customs Regions coordinated by Regional Customs Directorates;
- 17 Customs houses;
- 99 Customs bureaus and Customs posts.

The NCA currently has two customs laboratories – Central Customs Laboratory in Sofia and Regional Customs Laboratory in Rousse. There are infrastructure facilities for establishing a Regional Customs Laboratory in Plovdiv.

The NCA has supported, from the very beginning the Commission's Pre-accession Strategy for the Customs and Taxation Sector.

The new Customs Act and Implementing Regulations have been enforced since 01.01.1999. The Law on Amendment of the Customs Act has been adopted by the Parliament in April 2003.

For many years the NCA has been beneficiary of Phare support whereas considerable experience has been gained in the programming, management, implementation and monitoring of Phare projects and relevant structures are in place and functioning.

The NCA has established a special organisational structure for the technical management and monitoring of the project, which comprises a Computerisation Steering Committee (CSC), Project Implementation Unit (PIU), and dedicated Project Implementation Teams. The NCA Computerisation Steering Committee (CSC) will monitor, supervise and co-ordinate the overall progress and implementation of the Project and will be responsible for approving the project deliverables. The CSC is chaired by the Director General of NCA. The CSC meetings will be held every three months (and more frequently, if necessary). Representatives of the EC Delegation to Bulgaria, the CFCU, the National Aid Coordinator (NAC), "European Integration and Monitoring" Directorate within the Ministry of Finance and Consultants representatives will be invited as observers to the CSC meetings. Representatives of other institutions will be invited to the CSC meetings, if the agenda requires.

The day-to-day project management will be carried out by the NCA Project Implementation Unit (PIU) on the base of the decisions made by the NCA CSC.

Project Implementation teams have been established.

The Project Implementation teams comprise experts from the Directorates responsible for the relevant component as follows:

<i>Component</i>	<i>Directorate/s</i>
1.1	CSA and all business directorates
1.2	CSA
1.3	CSA
2.1	CRP, TP, ALIS, FEAPM, CSA
2.2	CRP, CCL
2.3	CSA, CRP
2.4	CSA, CRP
2.5	CSA

Abbreviations: CSA - Customs Statistics and Automation Directorate, CCL - Central Customs Laboratory Directorate, TP - Tariff Policy Directorate, CRP - Customs Regimes and Procedures Directorate, ALIS - Administrative-Legal and Information Service, FEAPM - Finance - Economic Activities and Property Management Directorate.

Furthermore the IT Projects organisation is presented in **Annex 7** of the Project Fiche.

The CC Project Leader for Component 2.1 will be the Deputy Director General of NCA responsible for the "Customs Regimes and Procedures" Directorate.

The NCA will support the implementation of the proposed project by assuring the necessary organisational environment and making available the necessary personnel. The existing Training centres in Sofia, Plovdiv and Russe will be used for organising of training courses and seminars. The co-financing will be provided by the state budget.

5. Detailed Budget

Year 2004 /Phase 1	Phare	Support				
	Invest- ment Support	Institution Building MEUR	Total EU (=I+IB) MEUR	National Co- financing *	IFI*	TOTAL MEUR
Contract 1 Service contract <i>Component 1.1</i> <i>“Extension of the BICIS functionality”</i>	4.575		4.575	1.525		6.10
<i>Sub- component 1.1.1</i>	3.900		3.900	1.300		5.20
<i>Sub- component 1.1.2</i>	0.675		0.675	0.225		0.90
Contract 2 Service contract <i>Component 1.2</i> <i>“Technical assistance for evaluation and quality control”</i>		0.500	0.500			0.500
Contract 3 Twinning Contract <i>Component 2.1</i> <i>Development of legal and administrative capacity for administering the excise duties entirely by the customs administration</i>		1.100	1.100	*		1.10
Contract 4 Supply contract <i>Component 2.2 Supply of specialised equipment</i>	0.187		0.187	0.063		0.25
Contract 5 Service contract <i>Component 2.3</i> <i>Development of information system for administering excise duties</i>	0.825		0.825	0.275		1.10
Grand total 2004	5.587	1.600	7.187	1.863		9.05

2005	Phare/Pre- Accession Instrument support	Co-financing	Total Cost
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€M		National Public Funds (¹)	Other Sources (²)	Total Co-financing of Project	
Year 2005 - Investment support jointly co funded					
Contract 1 Supply contract Component 1.3: "Supply of equipment for modernisation of the infrastructure supporting BICIS"	2.775	0.925	N/A	0.925	3.70
Investment support – sub-total	2.775	0.925	N/A	0.925	3.70
% of total public funds	max 75 %	min 25 %			

Total project 2005	2.775	0.925	N/A	0.925	3.70
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2006	Phare/Pre-Accession Instrument support	Co-financing			Total Cost
€M		National Public Funds (*)	Other Sources (**)	Total Co-financing of Project	
Year 2006 - Investment support jointly co funded					
Contract 1 Service contract Component 2.4 "Extension of the Excise management system (EMS.1) including all EMCS 2&3 requirements"	2.850	0.950		0.950	3.80
Contract 2 Supply contract Component 2.5 "Supply of equipment for the EMS IT infrastructure"	0.600	0.200		0.200	0.800
Investment support – sub-total	3.45	1.15		1.15	4.60
% of total public funds	max 75 %	min 25 %			

Year 2006 Institution Building support					
	N/A	N/A	N/A	N/A	N/A
IB support					

Total project 2006	3.45	1.15		1.15	4.60

(¹) contributions from National, Regional, Local, Municipal authorities, FIs loans to public entities, funds from public enterprises

(²) private funds, FIs loans to private entities

The national co-financing will be provided by the "National Fund" Directorate at the Ministry of Finance. All operational and running costs and the maintenance of the equipment will be provided by the final beneficiaries.

6. Implementation Arrangements

6.1 Implementing Agency

Programme Authorising Officer (PAO):

Ms. Gergana Beremska

State Treasurer

102, Rakovski Str., 1040 Sofia, Bulgaria

Tel.: + 359 2 9859 2495

Fax: +359 2 9859 2499

The Implementing Agency for this project will be the Central Finance and Contracts Unit (CFCU) at the Ministry of Finance. The CFCU will be responsible for the tendering, contracting and payment activities under the project.

Contact details:

Mr. Lubomir Tushanov

CFCU Director

102, Rakovski str., 1040 Sofia, Bulgaria

Tel.: +359 2 9859 2772, 359 2 9859 2777

Fax: +359 2 9859 2773

The Beneficiary will be responsible for preparing the Technical Specifications and the Terms of Reference for each of the contracts under the project.

The NCA PIU will be the main contact point for all official communications between the Consultant and the NCA concerning the implementation of the project.

Contact details:

Mrs. Milena Doncheva

Head of "Institutional Building and Phare Programme" Department

Central Customs Directorate

47, Rakovski Str.

1000 Sofia, Bulgaria

Tel.: +359 2 9859 4508

Fax: +359 2 9859 4129

6.2 Twinning

Twining is foreseen for Sub-project 2 - *Component 2.1 Development of legal and administrative capacity for administering the excise duties entirely by the customs administration.*

The beneficiary institution will be the National Customs Agency (NCA).
The contact person at the NCA is the Head of “Institutional Building and Phare Programme” Department – 47, Rakovski Str., 1000 Sofia, Bulgaria; tel.: +359 2 9859 4508; fax: +359 2 9859 4129
A profile of the RTA and the short-term experts is given under p. 3.4 of the Project fiche.

6.3 Non-standard aspects

PRAG will be followed for the envisaged supply and service contracts. The Twinning manual will be followed for the envisaged Twinning contract.

After the completion of Components 1.1, 2.3 and 2.4 there will be 12 months warranty period. Justification for the warranty period requirement is provided in Annex 8 of the Project Fiche.

6.4 Contracts

To maximise the effectiveness of the proposed components, NCA foresees the following contracts:

Phase 1: Five Contracts at the total amount of: **MEUR 9.05**

Sub-project 1 Further Development of the process of the Bulgarian Customs Administration Computerisation:

Component 1.1: Service Contract: MEUR 6.10

Component 1.2: Service Contract: MEUR 0.50

Component 1.1 comprising 2 computerisation sub-components will be tendered and contracted as a single project in order to achieve higher efficiency and better utilisation of financial resources applied for.

By combining the software development components in a single contract, BCA seeks to:

- Accomplish better integration among the various BICIS modules, as these will be developed by a single team;
- Shorten the time for inclusion of new teams in the implementation of the various modules, which translates in more efficient utilisation of financial resources;
- Reduce project management time and expenses both at project preparation and project implementation phases;

Sub-project 2 Development of a National System for Administering the Excise Duty Entirely by the Customs Administration:

Component 2.1: Twinning Contract: MEUR 1.10

Component 2.2: Supply Contract: MEUR 0.25

Component 2.3: Service Contract: MEUR 1.10

Phase 2: One Contract at the amount of: **MEUR 3.7**

Sub-project 1 Further Development of the process of the Bulgarian Customs Administration Computerisation:

Component 1.3: Supply Contract: MEUR 3.7

Phase 3: Two Contracts at the total amount of: **MEUR 4.6**

Sub-project 2 Development of a National System for Administering the Excise Duty Entirely by the Customs Administration:

Component 2.4: Service Contract: MEUR 3.80

Component 2.5: Supply Contract: MEUR 0.80

7. Implementation Schedule

7.1 Start of tendering/call for proposals

Phase 1:

- Component 1.1: "Extension of the BICIS functionality": **May 2006**
Component 1.2: "Technical assistance for evaluation and quality control": **May 2006**
Component 2.1: "Development of legal and administrative capacity for administering the excise duties entirely by the customs administration" – *call for proposals*: **July 2004*****
selection of Twinning partner: **November 2004**
Component 2.2: "Supply of specialised equipment": **April 2006**
Component 2.3: "Development of information system for administering excise duties": **May 2006**

Phase 2:

- Component 1.3: "Supply of equipment for modernisation of the infrastructure supporting BICIS": **May 2006**

Phase 3

- Component 2.4: "Extension of the Excise management system (EMS.1) including all EMCS 2&3 requirements" **January 2007**
Component 2.5: "Supply of equipment for the EMS IT infrastructure" **January 2007**

7.2 Start of project activity

Phase 1:

- Component 1.1: "Extension of the BICIS functionality": **November 2006**
– Sub-component 1.1.1 "BICIS Kernel extension": **November 2006**
– Sub-component 1.1.2 "Development of information system for automation of the post-clearance control activities": **November 2006**
Component 1.2: "Technical assistance for evaluation and quality control": **November 2006**
Component 2.1: "Development of legal and administrative capacity for administering the excise duties entirely by the customs administration": **August 2005**
Component 2.2: "Supply of specialised equipment": **August 2006**
Component 2.3: "Development of information system for administering excise duties": **November 2006**

Phase 2:

- Component 1.3: "Supply of equipment for modernisation of the infrastructure supporting BICIS": **January 2007**

Phase 3

- Component 2.4: "Extension of the Excise management system (EMS.1) including all EMCS 2&3 requirements" **September 2007**
Component 2.5: "Supply of equipment for the EMS IT infrastructure" **September 2007**

7.3 Project completion

Phase 1:

- Component 1.1: "Extension of the BICIS functionality": **November 2008***
– Sub-component 1.1.1 "BICIS Kernel extension": **November 2008**
– Sub-component 1.1.2 "Development of information system for automation of the post-clearance control activities": **May 2008**
Component 1.2: "Technical assistance for evaluation and quality control": **May 2008**

November 2008
 Component 2.1: “Development of legal and administrative capacity for administering the excise duties entirely by the customs administration”: April 2007
 Component 2.2: “Supply of specialised equipment”: November 2006**
 Component 2.3: “Development of information system for administering excise duties”: November 2008*

Phase 2:

Component 1.3: “Supply of equipment for modernisation of the infrastructure supporting BICIS” July 2007**

Phase 3

Component 2.4: “Extension of the Excise management system (EMS.1) including all EMCS 2&3 requirements”

September 2009

Component 2.5: “Supply of equipment for the EMS IT infrastructure” December 2007

**Note: After the completion of Components 1.1 and 2.3 as well as 2.4, there will be 12 months warranty period. Justification for the warranty period requirement is provided in Annex 8 of the Project Fiche.*

*** After the completion of the deliveries under Component 2.2 and 1.3 as well as 2.5 there will be a 12-months warranty period.*

**** As per the Twinning Manual the call for proposals will take effect when the National Programme for Bulgaria is submitted to the Management Committee for consultation. The approval of Bulgaria’s Financial proposal is scheduled for 15 July 2004.*

8. Equal Opportunity

Equal participation in this project of women and men will be enforced at the start of the project. All periodical progress review reports and other interim reports will include a specific chapter providing detailed explanations on measures and policies taken with respect to this equal opportunity for women and men and will provide measurements of achievement of this goal.

9. Environment

Initial environmental screening: not available

The investment components of the project should not have any negative impact on air, waters and ground. The requirements for protection of the environment will be observed while working with equipment for control on fuels for motor vehicles.

10. Rates of return

It is not possible to calculate the precise rate on the investment at this stage, but considering the improvements to be gained with the project implementation in the field of customs computerisation and laboratory control in the area of administering excise duties, it is clear that the investment will bring about considerable rates of return.

11. Investment criteria

11.1 Catalytic effect:

The Phare support is essential for the implementation of the targets identified in the NCA Strategic documents and to meet the criteria in accordance with the acquis in Chapters 10 and 25.

11.2 Co-financing:

The investment components of the project will be co-financed with 25% of the total component value. The twinning arrangements will be co-financed with up to 10% of the Twinning Contract budget. The funds will be provided by the State budget through the “National Fund” Directorate within the Ministry of Finance.

11.3 Additionality:

The Phare intervention does not displace other financiers as no alternative funds have been allocated for the proposed project.

11.4 Project readiness and size:

The detailed preparatory tasks for this project will be performed within a six-eight month period prior to the start of tendering. The work on the tender documentation will start as soon as the project fiche is approved by the Phare Management Committee. Extensive Terms of Reference and Technical Specifications will be prepared for the Invitation to Tender phase in time to meet the proposed implementation schedule.

11.5 Sustainability:

The project activities are in line with EU sector policy acquis.

Operational and maintenance costs for the requested computerisation projects will be covered from national budget.

The NCA will ensure the appropriate administrative capacity to be able to manage the maintenance of the systems and the supplies as well as ensure the continuous training of new users.

11.6 Compliance with state aid provisions

Not Applicable

12. Conditionality and sequencing

12.1 Conditionality

Sub-project 1

Specific preconditions for the sub-components under Component 1.1 are:

Sub- component 1.1.1

- Successful and timely completion of the TARIC design in the frame of the Phare 2003 ITMS project – Expected to be completed within the 4th quarter of 2005.

Sub- component 1.1.2:

- NCA structure for the post clearance control built up.
- Changes in the Bulgarian customs legislation concerning the post clearance control developed and in force.
- Internal instructions for the post clearance control developed and approved.

The expected date on which the three conditionalities listed above for sub-component 1.1.2 will be met is the end of 2004.

Sub-project 2

Component 2.1

Adoption by the Parliament of the drafted new Excise Act, which is considerably harmonised with the acquis and introduces the system of excise bonded warehouses and with which the customs administration is endowed with the entire administering of excise duties in the territory of the country. The Excise and Tax Bonded Warehouses Act was adopted by the Parliament on 2 November 2005 and entered into force as of 1 January 2006. Second and third level legislation will be developed under Component 2.1.

The requested under components 1.3, 2.2 and 2.5 IT and laboratory equipment will be installed in the existing facilities of the National Customs Agency.

12.2 Sequencing

Components 1.1 and 2.3 and 2.4

The software development will follow the Rational Unified process (RUP) methodology sequence including Inception, Elaboration, Construction and Transition Phases.

Within the phases the following standard activities/disciplines will be performed:

- Business Modelling
- Requirements
- Analysis & Design
- Implementation
- Testing
- Deployment
- Training

Component 1.3

The technical specifications prepared by NCA will be evaluated by an independent international expert under the BG0203-08-04 “Technical assistance for management, coordination and evaluation”. Based on the evaluation results, NCA will take further actions on the technical specifications if necessary before submission to the Contracting authority.

Component 2.1

The draft new Excise Act was approved by the Council of Ministers with Decision No 80/09.02.2005.

The draft Excise Act will be adopted by Parliament in the first half of 2005 with date for entry into force – 1 January 2006.

In 2005 the administration will start the preparation for administering excise duties – establishment of structures, administrative capacity, training. These activities are set in the present proposal for Component 2.1.

Component 2.1 will start first – approximately 4 months before the start of Components 2.2 and 2.3, which are planned to start at one and the same time.

Components 2.3, 2.4 and 2.5

Before the expected start date of component 2.3, preliminary analysis of the required regulations for its implementation will be made by NCA and further activities will be performed together with the Twinning partner under component 2.1.

Before the expected start date of this component the EMS 2.1 design shall be completed under component 2.3 of the project.

The sequencing of components 2.3, 2.4 and 2.5 is presented in detail in Annex 4.

The PRAG (Practical Guide to contract procedures for EC external actions valid as from the 1/02/2006) prescribed timing must be followed

Component 2.4:

Period of execution of Contract – 24 months.

Component 2.5:

Period of execution of Contract – 3 months.

Annexes to project Fiche

Logical framework matrix in standard format

Detailed implementation chart

Contracting and disbursement schedule by quarter for full duration of programme

Needs assessment

Reference list of relevant laws and regulations

Reference list of relevant strategic plans and studies

NCA IT Projects organisation

Justification for Components 1.1 and 2.3, 2.4 warranty period requirement

IT Strategy of the Bulgarian Customs Agency

ANNEX 1

Phare log frame

“Further Development of the process of the BCA Computerisation and Development of a national system for administering excise duty entirely by the customs administration”

LOGFRAME PLANNING MATRIX FOR Project:	Programme name and number	Modernisation of the Bulgarian Customs Administration in Connection with the Future Membership of the Republic of Bulgaria in the European Union
FURTHER DEVELOPMENT OF THE PROCESS OF THE BULGARIAN CUSTOMS ADMINISTRATION COMPUTERISATION AND DEVELOPMENT OF A NATIONAL SYSTEM FOR ADMINISTERING EXCISE DUTY ENTIRELY BY THE CUSTOMS ADMINISTRATION	Contracting period (year 3) expires 30 November 2008 Total budget year 3: 4.60 MEURO	End of execution of contracts (Year 3) expires 30 November 2009 Phare budget year 3: 3.45 MEURO

Overall objective	Objectively verifiable indicators	Sources of Verification	
Computerisation of the customs business at the national level in line with the targets identified in the NCA Strategic documents in order to meet the accession criteria in accordance with the acquis. Implementation of the acquis in the field of excise duties and automation of the activities related to administering the excise duties	BCA in full compliance with accession requirements and the Blueprints standards in the key areas of the Customs business addressed by this project. Legal, administrative and operational capacity of the customs administration to implement the acquis in the area of excise duties at the date of accession.	EC Regular reports. Regular Customs Administrative and Operational Capacity Reports, as part of the Screening process. Reports on the Action plan to the Strategy for acceleration of negotiations for Bulgaria's accession to the European Union, chapter 10 "Tax policy"	
Project Purpose	Objectively verifiable indicators	Sources of Verification	Assumptions
<i>Project purpose for Phase 1</i>	<i>OVI Phase 1</i>	<i>Sources of Verification Phase 1</i>	<i>Assumptions Phase 1</i>
Sub-project 1, <u>Components 1.1 and 1.2</u> Improvement of the standardisation, modularity and scalability of BICIS, as well as adaptivity of the main system modules to the changing legal basis, business logic and, DG TAXUD requirements and standards in order to achieve higher efficiency and quality of customs activities, enhancement of the collection of duties and taxes, trade facilitation and in support of the fight against customs violations.	Sub-project 1 Increased efficiency of NCA in trade facilitation and fight against fraud. Revenue collection increased. Improved operational capacity of the post clearance control services. Increased percentage of the checks resulting in breaches found after the system becomes operational.	Sub-project 1 DG TAXUD evaluation reports. Regular review of the candidate countries customs administrations blueprints in Computerisation, Customs laboratories and Border and inland control areas.	Sub-project 1 Bulgarian Government maintains consistent policy viz. the Customs Agency, in line with the AP.

<p>Sub-project 2</p> <p>To support the NCA in developing and further strengthening of a system for administering excise duties in compliance with the European legislation and EU best practice.</p> <p><u>Component 2.1</u></p> <p>Drafting legislation implementing the new Excise Act that is to introduce the excise bonded warehouses system:</p> <p>establishing the basis for introduction and operation of excise bonded warehouses system and control on excise products under excise duty suspension arrangements</p> <p>supporting the NCA modernisation for administering excise duties entirely by customs, i.e. in the territory of the country as well as excise duties on imports (only the latter being currently administered by customs) through implementation of the recommendations for best practice of the Member States customs administrations.</p> <p>Accomplishing full harmonization of the Bulgarian legislation with the acquis, taking into account the negotiated arrangements for transitional periods and derogations under negotiations chapter 10 “Tax policy”. Strengthening the NCA administrative capacity for implementation of the legislation in the field of excise duties.</p> <p><u>Component 2.2</u></p> <p>Enhancement of the operational capacity for carrying out of efficient control on fuels for motor vehicles.</p> <p><u>Component 2.3</u></p> <p>Development of an information system as a part of the BICIS for automation of the activities related to the administering of excise duties, including excise bonded warehouses and control on excise products in line with the EU standards and requirements in this field</p>	<p>Sub-project 2</p> <p>Legal, administrative and operational capacity of the customs administration to implement the acquis in the field of excise duties at the date of accession</p>	<p>Sub-project 2</p> <p>State Gazette</p> <p>Regular Customs Administrative and Operational Capacity Reports, as part of the Screening process, and reports of the EU-Bulgaria Customs Sub-committee.</p> <p>Reports on the Action plan to the Strategy for acceleration of negotiations for Bulgaria’s accession to the European Union, chapter 10 “Tax policy”</p>	<p>Sub-project 2</p> <p>Bulgarian Government maintains consistent policy viz. the Customs Agency, in line with the ‘Declaration of Endorsement of the Commission’s Pre-accession Strategy for Customs and Tax administrations’.</p>
Project purpose Phase 2	OVI Phase 2		
Sub-project 1, <u>Component 1.3</u>	Sub-project 1		
Improvement of the extensibility and scalability of	Improvement of capacity of the BICIS to		

BICIS in order to improve the performance, and reliability of the system after the start of all the main BICIS modules, the full security system, and the opening of BICIS for unlimited work with BCA customers online.	perform all required tasks.		
Project purpose Phase 3	OVI Phase 3		
Sub-project 2, Components 2.4 and 2.5 Completion of the developments under Component 2.3, which are focused on national requirements, with all new EMCS interconnectivity requirements and ensure the necessary IT infrastructure for the successful realisation of both components 2.3 and 2.4.	Improved capacity of BICIS to perform all required tasks.		
Results	Objectively verifiable indicators	Sources of Verification	Assumptions
<i>Results Phase 1</i>	<i>OVI Phase 1</i>	<i>Sources of Verification Phase 1</i>	<i>Assumptions Phase 1</i>
Sub-project 1 <u>Component 1.1: “Extension of the BICIS functionality”</u> <u><i>Sub-component 1.1.1: “BICIS Kernel extension”</i></u> The following BICIS elements created: Adaptive Software Architecture. Constructive Design Framework. Full set of standard interfaces of components. Standards for communications between components. System kernel. Operational and legal DBs. National BICIS modules on the basis of the above elements, the EU standards and accession requirements. Interface between the customs laboratories and the different BICIS modules for initiation of laboratory activity and delivery of the laboratory expertise results for implementing further tariff and non-tariff measures for the purposes of the customs clearance process. Operational and turnover to maintenance tasks completed. Remedial work, if necessary, performed during the warranty period in order to ensure operational	Quality, completeness and traceability of the project deliverables. Stability, modularity, quality and maturity of the system that is being developed. Degree of conformity of the delivered solution with the business needs in terms of functionality required.	BCA IT Strategy Implementation Progress Report. BCA Quality review reports after each iteration. Minutes of project tracking meetings.	Sufficient administrative capacity and well trained officers Availability of an adequate communication infrastructure for BICIS Close co-ordination with other initiatives in the sector.

<p>efficiency of the software.</p> <p><u>Sub-component 1.1.2: “Development of information system for automation of the post-clearance control activities”</u></p> <p>Developed and functioning information system for the post clearance control, including:</p> <p>Data base “Card index of companies”.</p> <p>Risk analysis and selectivity control module for the needs of the post clearance control</p> <p>Analytical module for management of the checks being carried out</p> <p>Interface connections module with internal and external information sources</p> <p>A module for analysis of the results from the checks carried out</p> <p>All reports necessary for the functioning of the sub-system</p> <p>A module for regulation of the rights for access and work with the sub-system.</p> <p>Users and system administrators trained</p> <p>Operational and turnover to maintenance tasks completed.</p> <p>Remedial work, if necessary, performed during the warranty period in order to ensure operational efficiency of the software.</p>	<p>Quality, completeness and traceability of the project deliverables.</p> <p>Stability, modularity, quality and maturity of the system that is being developed.</p> <p>Degree of conformity of the delivered solution with the business needs in terms of functionality required.</p> <p>Customs officers satisfaction with the training programme delivered</p> <p>Improved efficiency of the analysis performed and increased number of companies subject to analysis after the system becomes operational</p>	<p>BCA IT Strategy Implementation Progress Report.</p> <p>BCA Quality review reports after each iteration.</p> <p>Minutes of project tracking meetings.</p> <p>Training evaluation results.</p> <p>Reports of the post clearance control services on the checks carried out.</p>	<p>Sufficient administrative capacity and well trained officers</p> <p>Close co-operation between NCA business directorates (Post clearance control, Tariff policy, Customs regimes and procedures, Customs investigation and intelligence, Finance-economic activities and property management) and Customs statistics and automation directorate</p> <p>Sufficient hardware in terms of number and conformity of characteristics, capacity and configuration available at the post clearance control structure</p>
<p><u>Component 1.2: “Technical assistance for evaluation and quality control”</u></p> <p>Proper performance of Components 1.1, 1.3 and 2.3 through adequate evaluation of the quality of the Components 1.1, 1.3 and 2.3 activities and deliverables concerning the whole software engineering life cycle, and especially evaluation of: Business modelling activities and deliverables.</p> <p>Analysis and Design activities and deliverables.</p> <p>Implementation activities and deliverables.</p> <p>Testing activities and deliverables.</p>	<p>Decreased period of computerisation projects risk resolution due to timely risk identification and mitigation strategy implementation.</p> <p>Number of recommended solutions endorsed and adopted by the BCA managerial staff.</p> <p>Reliable quality assurance results of the related IT projects deliverables.</p>	<p>BCA IT Strategy Implementation Progress Report.</p> <p>BCA Quality review reports after each iteration.</p> <p>Minutes of project tracking meetings.</p>	

Infrastructure establishment activities and deliverables.	Readability, comprehensiveness and completeness of the contractual deliverables.		
Sub-project 2 <u>Results for all components</u> Achieving maximum compliance of the Bulgarian legislation with the acquis in the field of excise duties. Established administrative units dealing with authorisation of warehouse keepers and storage, movement and control on excise products. Specialised equipment for control on fuels for motor vehicles delivered and customs officers trained to work with the equipment. Customs officers trained in view of carrying out effective control on excise products according to their duties. Developed business model of the process of administering excise duties. Developed information system for automation of the activities related to administering of excise duties, including excise bonded warehouses, control on excise products, etc. and users and system administrators trained.	Sub-project 2 <u>OVI for all components</u> Degree of implementation of the acquis in the field of excise duties Stability, quality and efficiency of the national system being developed for administration of excise duties Improved administrative capacity for authorisation of warehouse keepers and for storage, movement and control on excise products Improved operational capacity for control on fuels for motor vehicles Customs officers satisfaction with the training delivered Quality, completeness and traceability of the IT component deliverables Stability, modularity, quality and maturity of the information system that is being developed Degree of conformity of the delivered software solution with the business needs in terms of functionality required.	State Gazette Rules of Organisation of the National Customs Agency Regular project progress reports Reports on the Action plan to the Strategy for acceleration of negotiations for Bulgaria's accession to the European Union, chapter 10 "Tax policy" Acceptance protocols for the equipment delivered BCA IT Strategy Implementation Progress Report BCA Quality review reports after each iteration Minutes of project tracking meetings Training evaluation results	Co-ordination between the parties involved in the development of the system for administration of excise duties Optimal administrative capacity and officers with relevant background experience

<u>Component 2.1: "Development of legal and administrative capacity for administering the excise duties entirely by the customs administration"</u> Conditions in place for the introduction and operation of the excise bonded warehouses system and for carrying out of relevant control by the customs administration. Second and third level legislation developed comprising: Draft Implementing Provisions of the new Excise Act, Draft Regulation on the specific conditions for granting, amendment and suspension of authorization of warehouse keepers, Draft Regulation on excise labels for tobacco products and alcohol beverages, Draft Regulation on marking of gas oil and kerosene, Draft Regulation on the norms of the marginal extent of excise products natural wastages and shortages and the admissible norms of technological waste, Draft Regulation on the accompanying administrative document, Drafts for amendments and supplements of the legislation concerning the introduction of provisions on the	<u>OVI for component 2.1</u> 1. With regard to the legislation. Draft Implementing Provisions of the new Excise Act Draft Regulation on the specific conditions for granting, amendment and suspension of authorization of warehouse keepers Draft Regulation on excise labels for tobacco products and alcohol beverages Draft Regulation on marking of gas oil and kerosene Draft Regulation on the norms of the marginal extent of excise products natural wastages and shortages and the admissible norms of technological waste Draft Regulation on the accompanying administrative document Developed drafts for amendments and supplements of the legislation concerning
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<p>movement of excise products between Member States under excise duty suspension arrangements.</p> <p>Developed administrative capacity for administering excise duties, including authorisation of warehouse keepers, collection of excise duties and control on excise products as well as control on the movement of excise products between Member States under excise duty suspension arrangements.</p> <p>Customs officers trained theoretically and practically in administering excise duties.</p> <p>Developed business model of the process of administering excise duties.</p>	<p>the introduction of provisions on the movement of excise products between Member States stemming from commitments undertaken by Bulgaria in the process of accession to the EU.</p> <p>2. With regard to the administrative capacity.</p> <p>Established organisational structure for administering excise duties;</p> <p>Developed functional descriptions for the relevant structural units dealing with administering excise duties;</p> <p>Developed draft instructions for the customs staff for carrying out the functions of administering excise duties till the end of 2006.</p> <p>3. Customs officers' satisfaction with the training delivered.</p>
<p><u>Component 2.2: “Supply of specialised equipment”</u></p> <p>Specialised equipment for control on fuels for motor vehicles delivered, installed and operational and customs officers trained to work with the equipment.</p> <p><u>Component 2.3: “Development of information system for administering excise duties”</u></p> <p>Developed information system for automation of the activities related to administering excise duties, including excise bonded warehouses, control on excise products, etc. comprising:</p> <p>Business requirements analysis and assessment made and system functional specification prepared.</p> <p>Prepared technical specification for development of information system for automation of the activities related to administering excise duties including control on excise products, excise duty bonded warehouses, etc.</p> <p>Developed software architecture of the information system for automation of the activities in the field of excise duties in line with NCA IT Strategy.</p> <p>Databases for the purposes of the system.</p> <p>Prepared and deployed Excise business module prototype, including core functionality for preliminary evaluation and tests of the adopted business logic.</p> <p>All System modules and components implemented.</p> <p>Users and system administrators trained.</p> <p>Operational and turnover to maintenance tasks completed for the whole system.</p> <p>Remedial work, if necessary, performed during the warranty period in order to ensure</p>	<p><u>OVI for component 2.2</u></p> <p>Improved operational capacity for control on fuels for motor vehicles.</p> <p>Customs officers satisfaction with the training delivered</p> <p><u>OVI for component 2.3</u></p> <p>Quality, completeness and traceability of the project deliverables</p> <p>Stability, modularity, quality and maturity of the information system that is being developed</p> <p>Degree of conformity of the delivered software solution with the business needs in terms of functionality required</p> <p>Customs officers satisfaction with the training delivered</p>

operational efficiency of the software.

Results Phase 2	OVI Phase 2	Sources of Verification Phase 2	Assumptions Phase 2
<p><u>Component 1.3: “Supply of equipment for modernisation of the infrastructure supporting BICIS”</u></p> <p>The following types of equipment and, software, upgrades, and updates delivered:</p> <ul style="list-style-type: none"> Hardware for the extension of the Intranet storage, processing and backup capabilities and Deployment of Internet System component DB storage extension Application servers Communication server Web Portal Servers Central backup server. Software for Customs Business and Information Systems Integration. Tools for modelling of Workflows J2EE Software Development CASEs UML Software Development CASEs Business Integration Application Servers Web Portal Management Systems Network and data traffic security equipment: Firewalls, routers. Standard and mobile workstations. <p>The delivered equipment and software integrated and customised. BCA staff trained.</p>	<p>Improvement of BICIS system performance with more than 20%</p> <p>Improvement of BICIS system reliability with 20%</p> <p>Decrease of the average workload of the equipment with 10%</p> <p>Customs officers’ satisfaction with the training program delivered.</p> <p>After the training the correct answers from tests will be more than 60%</p>	<p>BCA IT Strategy Implementation Progress Report.</p> <p>BCA Quality review reports after each delivery and installation.</p> <p>Acceptance Protocols for delivered equipment, software, updates, and upgrades.</p> <p>Training evaluation results.</p>	<p>Availability of an adequate communication infrastructure for BICIS</p>
Results Phase 3	OVI Phase 3	Sources of Verification Phase 3	Assumptions Phase 3
<p><u>Component 2.4 Extension of the Excise management system (EMS.1) including all EMCS 2&3 requirements</u></p> <p>1. Developed and functioning information system for excise management, including the following groups of functions:</p> <ul style="list-style-type: none"> Registers Managements System extension; Accompanying Administrative Document Processing; Connection with Customs procedures such as export and import of goods, etc.; Processing of Losses; Recording of reports of Controls; Risk Assessment; Automatic Recalls; Movement Verification and Mutual Assistance; 	<p>Quality, completeness and traceability of the project deliverables.</p> <p>Stability, modularity, quality and maturity of the system that is being developed.</p> <p>Degree of conformity of the delivered solution with the business needs in terms of functionality required.</p> <p>Customs officers satisfaction with the training delivered</p>	<p>BCA IT Strategy Implementation Progress Report.</p> <p>BCA Quality review reports after each iteration.</p> <p>Minutes of project tracking meetings.</p>	<p>Sufficient administrative capacity and well trained officers</p> <p>Availability of an adequate communication infrastructure for BICIS</p> <p>Close co-ordination with other initiatives in the sector.</p>

<p>International Exchange of EMCS Messages; Excise system administration functions; Excise Consultation Module. The developed information system will support more effective control of the movements and the detection of most likely causes of fraud and of incidents. The realisation of these groups of functions shall be achieved through:</p> <ul style="list-style-type: none"> Business requirements analysis and assessment and development of the system functional specification prepared. Prepared technical specification for implementation of the information system. Developed software architecture of the information system in line with NCA IT Strategy. Established databases for the purposes of the system. All system modules and components implemented and documented. <p>2. Users and system administrators trained. 3. Operational and turnover to maintenance tasks completed for the whole system. 4. Remedial work, if necessary, performed during the warranty period in order to ensure operational efficiency of the software.</p>			
<p><i>Component 2.5: “Supply of equipment for the EMS IT infrastructure”</i> The following types of equipment and software delivered:</p> <ul style="list-style-type: none"> Hardware for the establishment of the EMS Demilitarized zone: <ul style="list-style-type: none"> Firewall Web Server for traders Application Server for traders Data Base Server for traders Software for Customs Business and Information Systems Integration <ul style="list-style-type: none"> Content management software Business Integration Application Servers Web Portal Management Systems Network and data traffic security equipment. <p>The delivered equipment and software integrated and customised. BCA staff trained.</p>	<p>Improvement of EMS.1 system performance with more than 20% Improvement of EMS.1 system reliability with 20% Decrease of the average workload of the equipment with 10% Customs officers’ satisfaction with the training program delivered. After the training the correct answers from tests will be more than 60%</p>	<p>BCA IT Strategy Implementation Progress Report. BCA Quality review reports after each delivery and installation. Acceptance Protocols for delivered equipment, software, updates, and upgrades. Training evaluation results.</p>	<p>Availability of an adequate communication infrastructure for BICIS</p>

Activities	Means	Assumptions
<p><i>Activities Phase 1</i></p> <p>Sub-project 1</p> <p><u>Component 1.1 “Extension of the BICIS functionality”</u></p> <p><u><i>Sub-component 1.1.1: “BICIS Kernel extension”</i></u></p> <p>Development of an adaptive BICIS software architecture following the rapidly changing business environment.</p> <p>Creation of the Constructive Design Framework for the development of all BICIS system and business modules.</p> <p>Definition of the full set of BICIS modules and components standard interfaces.</p> <p>Definition of the standards for communication between the BICIS modules and components.</p> <p>Development of the BICIS kernel architecture (i.e. editors and generators of business and legal business rules and constraints editors and generators, editors and generators of BICIS GUIs, and workflows, search engine, messaging system, Single Integrated Services, Knowledge editors, Struts Controller, Business actions controller, Internal and External interfaces, etc.).</p> <p>Construction of BICIS operational and legal DBs in the terms of the major European data structure standards.</p> <p>Re-engineering and extension of the national BICIS modules on the basis of the above components, the EU standards and accession requirements.</p> <p>Development of Interface between the customs laboratories and the different BICIS modules for initiation of laboratory activity and delivery of the laboratory expertise results for implementing further tariff and non-tariff measures for the purposes of the customs clearance process.</p> <p>Complete the operational and turnover to maintenance tasks.</p> <p>Perform remedial work, if necessary, during the warranty period in order to ensure operational efficiency of the software.</p> <p><u><i>Sub-component 1.1.2: “Development of information system for automation of the post-clearance control activities”</i></u></p> <p>Development of an information system for automation of the activities of the post clearance control, which includes:</p> <p>Creation of a data base “Card index of companies”, which will provide data for assessment of the trade operators.</p> <p>Development of a risk analysis and selectivity control module for the needs of the post clearance control</p> <p>Development of an analytical module for management of the checks carried out</p> <p>Development of a module for interface connections with internal and external information sources</p> <p>Development of a module for analysis of the results from the checks carried out</p> <p>Development of all reports necessary for the functioning of the sub-system</p>	<p><i>Means Phase 1</i></p> <p>Service contract with clearly stated deliverables</p> <p>Experts with experience in:</p> <p>Project management and Quality Assurance management following RUP;</p> <p>Analysis and design using UML, MDA and J2EE;</p> <p>Software implementation with J2EE and XML;</p> <p>System architecture development with XML and application servers;</p> <p>System engineering</p>	<p><i>Assumptions Phase 1</i></p> <p>Enforcement module design completed.</p>

<p>Development of a module for regulation of the rights for access and work with the sub-system.</p> <p>Training of users and system administrators.</p> <p>Complete the operational and turnover to maintenance tasks.</p> <p>Perform remedial work, if necessary, during the warranty period in order to ensure operational efficiency of the software.</p>		
<p><u>Component 1.2: “Technical assistance for evaluation and quality control”</u></p> <p>Evaluation of Business modelling activities and deliverables.</p> <p>Evaluation of Analysis and Design activities and deliverables.</p> <p>Evaluation of Implementation activities and deliverables.</p> <p>Evaluation of Testing activities and deliverables.</p> <p>Evaluation of Infrastructure establishment activities and deliverables.</p>	<p>Technical assistance contract</p> <p>Experts with experience in:</p> <p>Business modelling using UML;</p> <p>Analysis and design using UML, MDA and J2EE;</p> <p>Software implementation with J2EE and XML;</p> <p>System architecture development with XML and application servers;</p> <p>System engineering</p>	
<p>Sub-project 2</p>		
<p><u>Component 2.1: “Development of legal and administrative capacity for administering the excise duties entirely by the customs administration”</u></p> <p>Analysis of the current situation in Bulgaria concerning:</p> <p>The draft new Excise Act which is considerably harmonised with the acquis and introduces the excise bonded warehouses system, development of the respective legislative amendments stemming from it concerning the regulation of the extended functions of the customs administration.</p> <p>The activity of excise products producers and traders in view of developing accurate criteria for authorisation of warehouse keepers, who are not producers of excise products and determining the needs of administrative capacity related to the authorisation of warehouse keepers;</p> <p>The administrative capacity of the tax and customs administrations and determining the necessary legal, administrative and operational capacity for administering excise duties by types of excise products</p> <p>Analysis of the Member States best practice concerning:</p> <p>Administering excise duties by types of excise products</p> <p>Marking of gas oil and kerosene</p> <p>Control on fuels for motor vehicles</p> <p>Identification of the gaps between the new Excise Act that introduces the excise bonded warehouses system and the relevant acquis;</p> <p>Drafting of second and third level legislation:</p>	<p>Twinning</p>	

<p>Draft Implementing Provisions of the new Excise Act</p> <p>Draft Regulation on the specific conditions for granting, amendment and suspension of authorization of warehouse keepers</p> <p>Draft Regulation on excise labels for tobacco products and alcohol beverages</p> <p>Draft Regulation on marking of gas oil and kerosene</p> <p>Draft Regulation on the norms of the marginal extent of excise products natural wastages and shortages and the admissible norms of technological waste</p> <p>Draft Regulation on the accompanying administrative document</p> <p>Drafts for amendments and supplements of the legislation concerning the introduction of provisions on the movement of excise products between Member States under excise duty suspension arrangements.</p> <p>The second and third level legislation can be changed and complemented in the process of its drafting.</p> <p>Preparation for adoption and implementation of procedures for:</p> <p>Authorisation of warehouse keepers;</p> <p>Movement of excise products in the territory of the country under excise duty suspension arrangements;</p> <p>Marking of gas oil and kerosene;</p> <p>Control on the fuels for motor vehicles;</p> <p>Movement of excise products between Member States under excise duties suspension arrangements;</p> <p>Reimbursement of paid excise duties under certain circumstances for products which have been released for consumption in a Member State when they are not intended for consumption in that Member State;</p> <p>Excise duties exemption and</p> <p>Carrying out of relevant control on excise products.</p> <p>Training of Bulgarian customs officers in EU MS and organisation of seminars in Bulgaria in the field of administering excise duties including:</p> <p>Warehouse keepers authorisation;</p> <p>Control on excise products including administrative, physical and road control;</p> <p>Excise duties exemption and exemption by reimbursement;</p> <p>Procedures on samples taking, field tests, safety rules and other operational procedures in line with the provisions in force in the field;</p> <p>Control on the excise products movement between Member States;</p> <p>Authorisation of registered trader, unregistered trader and tax representative;</p> <p>Training of customs chemists in working methods with regard to excise products analysis.</p> <p>Creation of a business model of the process of administering excise duties.</p>		
<p><u>Component 2.2 Supply of specialised equipment</u></p> <p>Delivery, installation and putting into operation of the delivered specialised equipment for control on the fuels for motor vehicles and training of officers to work with the equipment.</p>	<p>Supply contract</p>	

<p>Component 2.3 Development of information system for administering excise duties</p> <p>Development of information system for automation of the activities related to administering excise duties, including excise bonded warehouses, control on excise products, etc. comprising Business requirements analysis and assessment and development of the system functional specification.</p> <p>Development of the technical specification for implementation of information system for automation of the activities related to administering excise duties including control on excise products, excise duty bonded warehouses, etc.</p> <p>Development of the software architecture of the information system for automation of the activities in the field of excise duties in line with NCA IT Strategy.</p> <p>Establishment of databases for the purposes of the system at central and local level.</p> <p>Development and deployment of Excise business module prototype, including core functionality.</p> <p>Implementation of all system modules and components.</p> <p>Training of users and system administrators</p> <p>Complete the operational and turnover to maintenance tasks for the whole system.</p> <p>Perform remedial work, if necessary, during the warranty period in order to ensure operational efficiency of the software.</p>	<p>Service contract with clearly stated deliverables.</p> <p>Experts with experience in:</p> <p>Project management and Quality Assurance management following RUP;</p> <p>Analysis and design using UML, MDA and J2EE;</p> <p>Software implementation with J2EE and XML;</p> <p>System architecture development with XML and application servers;</p> <p>System engineering</p>	
<p>Activities Phase 2</p>	<p>Means Phase 2</p>	<p>Assumptions Phase 2</p>
<p>Component 1.3: “Supply of equipment for modernisation of the infrastructure supporting BICIS”</p> <p>Delivery of the following types of equipment and, software, upgrades, and updates:</p> <ul style="list-style-type: none"> Hardware for the extension of the Intranet storage, processing and backup capabilities and Deployment of Internet System component DB storage extension Application servers Communication server Web Portal Servers Central backup server. Software for Customs Business and Information Systems Integration. Tools for modelling of Workflows J2EE Software Development CASEs UML Software Development CASEs Business Integration Application Servers Web Portal Management Systems Network and data traffic security equipment: Firewalls, routers. Standard and mobile workstations. <p>.Customisation of the delivered equipment and software</p> <p>Training of the BCA staff for installing, and support of the delivered equipment and software.</p>	<p>Supply contract with clear technical specifications</p> <p>Experts playing the following roles:</p> <p>System engineers.</p> <p>System Analysts.</p> <p>System Architects.</p> <p>Trainers.</p> <p>Etc.</p>	<p>Close co-ordination between the NCA directorates</p>
<p>Activities Phase 3</p>	<p>Means Phase 3</p>	<p>Assumptions Phase 3</p>
<p>Component 2.4 Extension of the Excise management system (EMS.1) including all EMCS 2&3 requirements:</p>	<p>Service contract with clearly stated deliverables</p>	

<p>1. Development of information system for excise management, including the following groups of functions:</p> <ul style="list-style-type: none"> Registers Managements System extension; Accompanying Administrative Document Processing; Connection with Customs procedures such as export and import of goods, etc.; Processing of Losses; Recording of reports of Controls; Risk Assessment; Automatic Recalls; Movement Verification and Mutual Assistance; International Exchange of EMCS Messages; Excise system administration functions; Excise Consultation Module. <p>The developed information system will support more effective control of the movements and the detection of most likely causes of fraud and of incidents.</p> <p>The realisation of these groups of functions shall be achieved through:</p> <ul style="list-style-type: none"> Business requirements analysis and assessment and development of the system functional specification. Development of the technical specification for implementation of the information system. Development of the software architecture of the information system in line with NCA IT Strategy. Establishment of databases for the purposes of the system. Implementation and documentation of all system modules and components. <p>2. Training of users and system administrators.</p> <p>3. Complete the operational and turnover to maintenance tasks for the whole system.</p> <p>4. Perform remedial work, if necessary, during the warranty period in order to ensure operational efficiency of the software.</p>	<p>Experts with experience in:</p> <ul style="list-style-type: none"> • Project management and Quality Assurance management following RUP; • Analysis and design using UML, MDA and J2EE; • Software implementation with J2EE and XML; • System architecture development with XML and application servers; • System engineering. 	
<p>Component 2.5: “Supply of equipment for the EMS IT infrastructure”</p> <p>Delivery of the following types of equipment and software:</p> <ul style="list-style-type: none"> Hardware for the establishment of the EMS Demilitarized zone: <ul style="list-style-type: none"> Firewall Web Server for traders Application Server for traders Data Base Server for traders Software for Customs Business and Information Systems Integration <ul style="list-style-type: none"> Content management software Business Integration Application Servers Web Portal Management Systems Network and data traffic security equipment. <p>Customisation of the delivered equipment and software.</p> <p>Training of the BCA staff for installing, and support of the delivered equipment and software.</p>	<p>Supply contract with clear technical specifications.</p> <p>Experts playing the following roles:</p> <ul style="list-style-type: none"> System engineers. System Analysts. System Architects. Trainers. 	

Preconditions
<p>Sub-project 1</p> <p><u>Component 1.1:</u></p> <p><i><u>Sub-component 1.1.1:</u></i></p> <p>Successful and timely completion of the TARIC design in the frame of the ITMS project.</p> <p><i><u>Sub-component 1.1.2:</u></i></p> <p>NCA structure for the post clearance control built up.</p> <p>Changes in the Bulgarian customs legislation concerning the post clearance control developed and in force.</p> <p>Internal instructions for the post clearance control developed and approved.</p> <p>Sub-project 2</p> <p>Adoption by the Parliament of the drafted new Excise Act, which is considerably harmonised with the acquis and introduces the system of excise bonded warehouses and with which the customs administration is endowed with the entire administering of excise duties in the territory of the country.</p> <p>Necessary co-financing</p>

ANNEX 2

DETAILED TIME IMPLEMENTATION CHART FOR THE PROJECT

Further Development of the process of the Bulgarian Customs Administration Computerisation and Development of a National System for Administration of Excise Duty Entirely by the Customs Administration

COMPONENT	2004								2005								2006								2007												
	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	
Phase 1, Component 1.1: Service contract: “Extension of the BICIS functionality”								D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	C	C	C	C	C	C	C	I	I	I	I	I	I	
Sub-component 1.1.1: “BICIS Kernel extension”																															I	I	I	I	I	I	
Sub-component 1.1.2: “Development of information system for automation of the post-clearance control activities”																															I	I	I	I	I	I	
Phase 1, Component 1.2: Service contract: “Technical assistance for evaluation and quality control”												D	D	D	D	D	D	D	D	D	D	D	D	C	C	C	C	C	C	C	I	I	I	I	I	I	
Phase 1, Component 2.1: Twinning “Development of legal and administrative capacity for administering excise duties entirely by the customs administration”				D	D	D	S	C	C	C	C	C	C	C	C	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	X	
Phase 1, Component 2.2: Supply contract “Supply of specialised equipment”													D	D	D	D	D	D	D	D	D	D	D	C	C	C	C	I	I	I	X						
Phase 1, Component 2.3: Service contract: “Development of information system for administering excise duties”													D	D	D	D	D	D	D	D	D	D	D	C	C	C	C	C	C	C	I	I	I	I	I	I	
Phase 2, Component 1.3: Supply contact “Supply of equipment for modernisation of the infrastructure supporting BICIS”								D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	C	C	C	C	C	C	C	C	C	I	I	I	I
Phase 3, Component 2.4: Service contract “Extension of the Excise management system (EMS.1) including all EMCS 2&3 requirements”																												D	D	D	D	D	D	C	C	C	C

[illegible][illegible]

[illegible]

**Note: The implementation period of the Twinning component is 18 months and the legal duration is set at 21 months.*

The implementation period of Components 2.2 and 2.5 is 3 months, of Component 1.3 is 6 months and the final payments will be effected 12 months after the completion of the delivery.

The implementation period of Components 1.1, 2.3 and 2.4 is comprised of 24 months period of execution and 12 months warranty period. The final payments will be effected 12 months after project acceptance.

The first C appears in the month for which the publication of the PN is foreseen.

ANNEX 3

CONTRACTING AND DISBURSEMENT SCHEDULE BY QUARTER FOR FULL DURATION OF PROGRAMME

Project title: Further Development of the process of BCA Computerisation and Development of a National System for Administration of Excise Duty Entirely by the Customs Administration																			
Contracting	Cumulative contracting schedule by quarter in € m (provisional)																		To- tal
	2004		2005				2006				2007				2008				
	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	
Year 1																			
Component 1.1 – Service Contract										6.10									6.10
Component 1.2 – Service Contract										0.50									0.50
Component 2.1. – Twinning Contract					1.10	1.10	1.10	1.10	1.10	1.10									1.10
Component 2.2 – Supply contract									0.25	0.25									0.25
Component 2.3. – Service contract										1.10									1.10
Year 2																			
Component 1.3 – Supply contract											3.70	3.70	3.70	3.70					3.70
Year 3																			
Component 2.4 – Service contract													3.80	3.80	3.80	3.80	3.80	3.80	3.80
Component 2.5 – Supply Contract													0.80	0.80	0.80	0.80	0.80	0.80	0.80
Total contracting:					1.10	1.10	1.10	1.10	1.35	9.05	3.70	3.70	8.30	8.30	4.60	4.60	4.60	4.60	17.35

Disbursement	Cumulative disbursement schedule by quarter in € m (provisional)																						To-tal
	2004		2005				2006				2007				2008				2009				
	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	
Year 1																							
Component 1.1 – Service Contract										3.66	3.66	4.575	4.575	5.49	5.49	5.49	5.49	6.10*					6.10
Component 1.2 – Service Contract										0.30	0.30	0.375	0.375	0.45	0.45	0.45	0.45	0.50					0.50
Component 2.1. - Twinning Contract					0.55	0.55	0.55	0.80	0.80	0.80	1.10	1.10	1.10	1.10									1.10
Component 2.2 - Supply contract									0.15	0.225	0.225	0.225	0.225	0.25									0.25
Component 2.3 - Service contract										0.66	0.66	0.825	0.825	0.99	0.99	0.99	0.99	1.10*					1.10
Year 2																							
Component 1.3 – Supply contract											2.22	2.22	3.33	3.33	3.33	3.33	3.70	3.70					3.70
Year 3																							
Component 2.4 – Service contract													2.28	2.28	2.28	2.28	2.28	2.28	2.28	2.28	3.80*	3.80	3.80
Component 2.5 – Supply Contract													0.48	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Total disbursement					0.55	0.55	0.55	0.80	0.95	5.645	8.165	9.32	13.19	14.69	14.69	14.69	15.06	15.83	3.08	3.08	4.60	4.60	17.35

* For components 1.1, 2.3 and 2.4 a payment of 2 % of the maximum contract value will be effected at the end of the 12-months warranty period.

ANNEX 4

Needs Assessment

Sub-project 1: Further Development of the process of the Bulgarian Customs Administration Computerisation

The main goals of this sub-project, from the end user perspective as well as from the technical and operational perspective, are the following:

The extension of the BICIS functionality and infrastructure to cover the process of automation of all major BCA business activities planned to be realised till the beginning of 2007.

To upgrade BICIS with new features and functions in order to achieve adaptivity of the system to the rapidly changing EU and National legal basis and the dynamic market and customs users requirements.

The sub-project is split into three components: Component 1.1: “Extension of the BICIS functionality”; Component 1.2: “Technical assistance for evaluation and quality control”; Component 1.3: “Supply of equipment for modernisation of the infrastructure supporting BICIS”.

Component 1.1 includes the following sub-components:

Sub-component 1.1.1: BICIS Kernel Extension.

The proposed sub-component seeks to improve BICIS standardisation, adaptivity and scalability as well as to keep the key business modules abreast of the changes occurring in the legal basis, business logic and DG TAXUD’s requirements and standards, achieving in this way higher efficiency and better quality across all customs operations.

Sub-component 1.1.2: Development of information system for automation of the post-clearance control activities

The proposed sub-component seeks to improve the Customs Post Clearance Control (PCC) operational capacity in the terms of enlarged number and scope of the PCC checks and the reduction of time for the checks, to increase the efficiency of the PCC control in trade facilitation and fight against fraud introducing the risk analysis and selectivity criteria techniques, to increase the PCC revenue collections, introduce the DB concerning the PCC best practices and clients, etc.

Component 1.2 aims at the improvement of the technical control of the quality of project performance; the quality and completeness of the project deliverables, as well as to provide technical support of the NCA managerial staff for the management of the main project activities.

A project management team is established within the CSA Directorate, comprising Methodology Application and Technical Support Units. The team has gained experience during the performance of the large number of IT projects. The team benefits from a strong commitment of the top management.

The structure of BCA’s Customs Statistics and Automation (CSA) Directorate provides for activities limited to business modelling, testing and operation of the system, thus CSA are short of appropriately qualified personnel to oversee the contractors for the various BICIS modules across the development cycle (in particular at the time of Analysis and Design, Implementation, Testing and Integration). Please see **Annex 7** of the Project Fiche.

BCA is not in position to appoint additional technical staff only for the time of development, as these will have to be dismissed as soon as this process is over.

However, the availability of technical experts is essential for assessing the quality of the work carried out and ensure highest effectiveness of the IT components implementation.

To overcome this problem, a technical assistance component is proposed in order to finance a team of short-term experts, who will function as independent appraisers of the activities carried out under the remaining IT projects and ensure objective evaluation of project deliverables.

Component 1.3 aims at the improvement of the infrastructure supporting the development and exploitation of BICIS.

In 1999, under the Program for technological re-innovation of Ministry of Finance, the required infrastructure for BICIS was built – LAN in all customs offices, servers, workstations, printers, UPS and other equipment. This process of development of the BICIS infrastructure was complemented with the hardware, basic software and telecommunication equipment delivered under the BG 9806-02 project. All customs offices have been connected to the MF WAN, established for BCA to support the web-based BICIS 2.1.

Hence, the requirements for the normal exploitation of the operational business modules according to the current infrastructure architecture, have been ensured and will be the basis for further development.

In accordance with BCA's plans for BICIS development until and beyond 2007, BICIS shall be implemented as an integrated and centralised system comprised of a kernel and 17 business modules. The extension of the functionality of the system as well as the increased number of users shall be supported by extension and improvement of the infrastructure.

Adding new functionality in stage 4 of BICIS development will result in the following:

- Intensified information exchange between the customs information centres of DG TAXUD and BCA;

- Intensified information exchange with government and non-government organizations;

- Requirement to extend the system infrastructure from closed internal architecture to open to the public system both ways –providing information and exchanging information;

- Open the system to government and non-government organizations and public requires high level of security at the access points for the provided services;

- Two to three times increase of internal network traffic;

- Three to four times increase of the data that has to be processed and stored;

- Requirement to provide high-availability of data and services;

- BICIS shall be capable to support 3000 standard and 300 mobile workstations, organised in 150 sites.

In order to accomplish the above mentioned requirements and the quantitative and qualitative criteria underlying BICIS development and operation, BCA has planned to improve the infrastructure as follows:

Extension of the Intranet storage, processing and backup capabilities and Deployment of Internet System component

Establishing second server farm and deploying an extension of the existing one. Each server farm consists of two elements - BICIS internal processing and Demilitarized zone.

BICIS internal processing component provides the functioning of the system as a whole and consist of:

- Web Portal server
- Application server
- Database storage server

The component called Demilitarized zone has to be deployed between the internal system and Internet to:

- provide DDS and DTI services;
- provide these services for approximately 25000 users;
- apply the security rules, processing and delivery of the data to the internal system at the exact location required by the user;
- provide secure interface for the users themselves.
- Provide 24/365 availability of services and load balancing

The component mainly shall consist of:

- Web Portal server
- Application server
- Database storage server
- Firewall, router

Currently available elements for these server farms are presented on Figure 1 below.

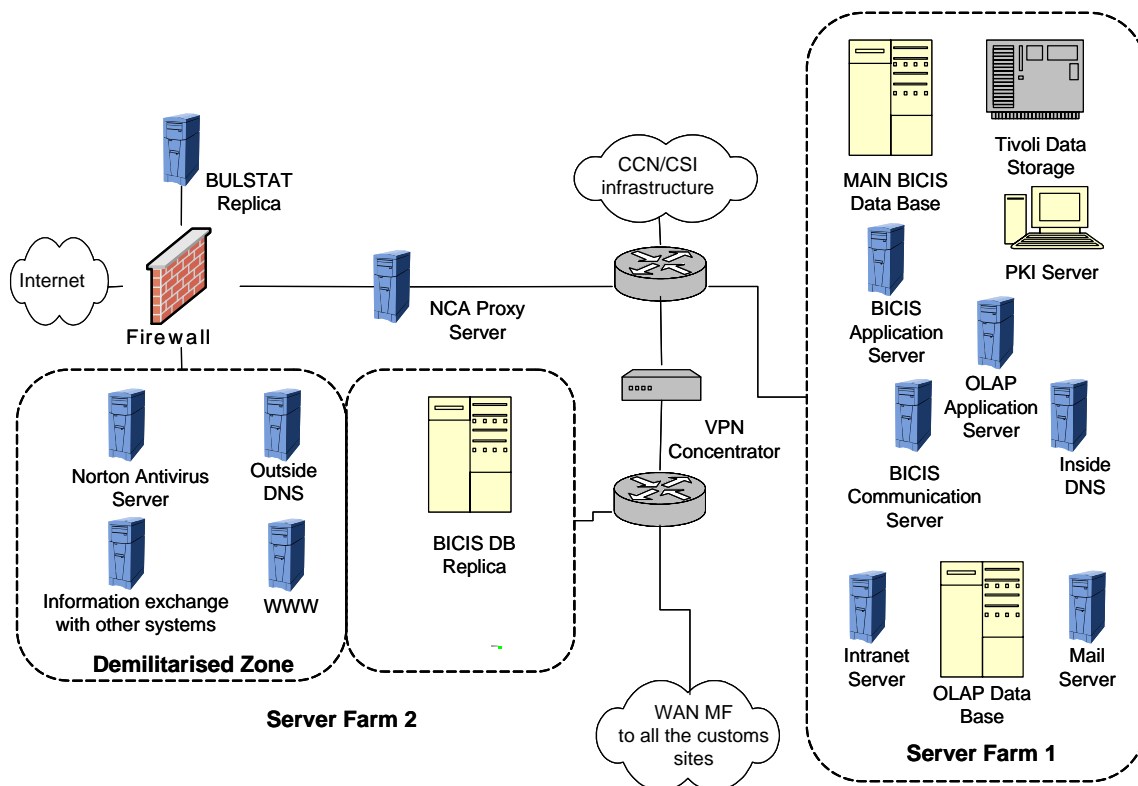


Figure 1

At server farm 1 at CCD:

- Database storage server which needs to be extended to handle the new BICIS modules
- Application server for BICIS
- Web Portal server of BICIS

At server farm 2 currently at RCD Sofia

- Database storage server which ensures the replica of the central BICIS database.

The future plans for the BICIS infrastructure are presented on Figure 2. The following elements will be added to the existing infrastructure in order to implement these plans:

- Demilitarized zone in server farm at CCD and another one at second farm
- BICIS Application server at second server farm
- BICIS Web Portal server at second server farm

Deployment of more powerful central backup server.

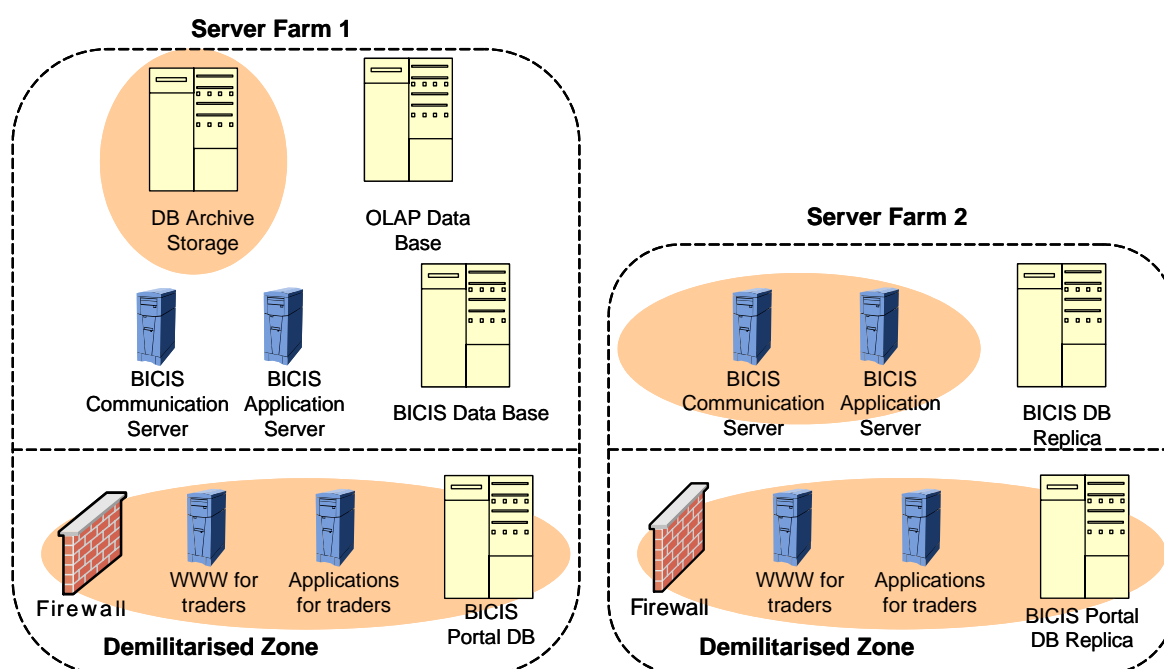


Figure 2

Supply of the needed software for design, development and deployment of Customs Business and Information Systems Integration

Network and data traffic security component

Due to the requirement to extend the system infrastructure from closed internal architecture to open to the public system both ways –providing information and exchanging information and the planned centralized architecture of BICIS a strong increase of network traffic will occur. The current software solution can handle the traffic at the moment but is limited in scalability and reliability. A hardware solution for the network centres will be deployed in order to meet the new requirements. The software routers in RCDs and Customs houses will be changed.

Workstations increase

As part of the infrastructure which is being established to support the new BICIS modules to

be implemented under this project (e.g. Post-clearance control, Excise management system, etc.), the workstations currently in use (delivered 9 years ago) shall be renovated and increased. Part of this equipment is requested under this project (1300 standard and 75 mobile workstations).

The tables below present in details the BCA plans for further BICIS Infrastructure extension under Component 1.3 of this project as regards hardware (Table 1) and software (Table 2) requirements.

BICIS Extension Type	Hardware / Software	Num
BICIS Extension from 6 to 12 modules	Application Servers	3
	Communication server	1
	Web Portal Servers	2
	DB Storage Servers	2
	DB Storage Server Extend	1
	Central BackUp Server	1
New Workstations	Workstations	1300
Mobile workstations	Notebooks	75
Reaching higher security class, strong increase of internal traffic.	Hardware security device (router) type 1	5
	Hardware security device (router) type 2	12
	Firewall	2

Table 1

Product	Num
Tool for modeling of Workflows	3
J2EE Software Development CASE	5
UML Software Development CASE	5
Business Integration Application Server	8
Web Portal Management System	4

Table 2

Sub-project 2: Development of a National System for Administering Excise Duties Entirely by the Customs Administration

In line with the commitments undertaken a draft new Excise Act has been developed by the inter-ministerial working group established for the purpose and consulted an expert from the Dutch Ministry of Finance. The draft new Excise Act is harmonised with the whole EU acquis in the field of excise duties - not only with Directive 92/12/EEC on the general rules for warehousing, movement and control on excise products, but with the other directives in the field of excise duties as well (Directive 92/79/EEC, Directive 92/80/EEC, Directive 92/81/EEC, Directive 92/82/EEC, Directive 92/83/EEC, Directive 92/84/EEC, Directive 95/59/EEC and Directive 95/60/EEC) and foresees the excise duties to be administered entirely by the customs administration.

The draft new Excise Act was approved by the Bulgarian Council of Ministers with Decision No 80/09.02.2005 and was presented to the Bulgarian Parliament for adoption.

After promulgation of the new Excise Act compliant to the EU practice, i.e. the excise duties to be administered entirely by the customs administration, a national system should be developed for this purpose.

The activities would comprise drafting of second and third level legislation, establishment of administrative capacity, supply of specialised equipment and automation.

Component 2.1

According to the current Bulgarian national legislation excise duties are administered on imports by the National Customs Agency and on the transactions with excise products in the territory of the country - by the General Tax Directorate while in the majority of EU Member States excise duties are administered entirely by the customs administrations.

The Republic of Bulgaria is in the process of harmonising the national tax legislation with the *acquis* and the EU best practice.

As from 1 January 2003 amendments in the tax legislation concerning the payment of excise duties on imports to customs administration accounts have been introduced in view of harmonisation with the EU Member States practice.

In the context of the process of harmonisation of the legislation to the *acquis* and the EU best practice actions should be taken related to the drafting of legislation for establishment of conditions for introduction of the general rules for production, warehousing, storage and control on excise products under excise duties suspension arrangements, including the introduction of excise bonded warehouses system whereas Bulgaria has undertaken the commitment to accomplish this not later than 1 January 2006 (negotiations position on Chapter 10 "Tax Policy").

Component 2.2

Purpose of the supply of specialised equipment

To ensure swift and accurate delivery of laboratory results from a large number of one-type analyses of a product, i.e. to ensure high productivity. This is necessary in order to enable the customs administration to take prompt and adequate measures in the control of excise products.

It should be taken into account that the administering of excise duties in the territory of the country would be a new task for the Bulgarian Customs Agency which has not been taken into account in the analysis of needs for equipment to be supplied under 2003 Phare Programme.

Type of the analysis and the equipment

Some technical and physico-chemical parameters of the excise products are of high importance for the control on the implementation of the harmonised regulations in the field of excise duties. Laboratory analyses are needed for verifying the compliance of these parameters. Among all types of goods that are regulated by the excise legislation the greatest amount of analyses to be done is expected in the field of fuels for motor vehicles. The big inflow of samples (7 000 - 10 000 per year) is foreseen not only in connection to the control on imports of excise fuels, but also the control on the producers of excise fuels.

For liquid fuels the main indicators to be defined for the purposes of excise duties are:

Marker presence in diesel fuel. The definition of this indicator provides information which enables the ascertaining whether the fuel used is of an excise rate lower than the standard or whether it is mixed or has been "washed".

The analysis is done by means of an apparatus, high performance liquid chromatograph (HPLC) with automatic samples feeding and analysis of samples, at defined work conditions.

Check on the type of fuel through simulated distillation.

The gas chromatography system for simulated distillation is a technique broadly applied in customs laboratories for identification of liquid fuels for the purposes of excise levying. If configured to automatically feed samples in a 24-hours work regime it will enhance productivity in times. For instance, provided the average time for processing a sample is one

hour, the monthly productivity of just this device will amount to approximately 500 analyses per month or approximately 6000 analyses annually.

Situation

Generally, the laboratory equipment which was approved for procurement under the 2003 Phare project aims at achieving a sufficiently broad scope in terms of diversity in technical equipment, which to enable the testing of more various types of goods. This would contribute for a broader basis of the laboratory services of the customs administration.

The additional equipment proposed under the current project is aimed at reinforcing a specific activity in terms of the speed and productivity of the analyses of an indicator of a defined type.

In the approved project for the customs laboratories under Phare 2003 the supply of one device of HPLC type has been foreseen. This device will be used for this type of analysis in the Central Customs Laboratory – Sofia. The procurement of two more devices of this type is necessary for ensuring a capacity for this type of laboratory control at the two regional laboratories in Russe and Plovdiv and this has been proposed under the current project on administering excise duties. We consider that this will guarantee the full capacity of the customs laboratories to process the liquid fuels samples analyses ordered throughout the territory of the country with the necessary speed, scope and accuracy.

The laboratory currently has only one instrument of the HPLC type, which is not configured for automatic feeding and analysis and is used mainly for analysis of different sugars in food and agricultural products. Its productivity is an average of 6 analyses per day. The frequent change of the working conditions for carrying out different types of analysis with this device consumes time for stabilisation under each new regime and considerably reduces productivity.

With reference to the device for simulative distillation, such a device has not been foreseen under the 2003 Phare programme. The configuration of the device is specialised and could not be used for other types of analyses.

List of the proposed specialised equipment for the support of the excise control

Item №	Type of Instrument	Quantity	Estimated unit price EUR	Estimated price total EUR	Application
1	HPLC chromatograph	2	100 000	200 000	Quantification and identification of the EU common marker Solvent Yellow 124 in diesel oil
2	Simulated distillation GC chromatograph	1	40 000	40 000	Determination of the petroleum distillates

Component 2.3

The purpose of this component is the development of a module to be integrated into BICIS for automation of the activities related to the administration of excise duties, including excise bonded warehouses and control on excise products in line with the EU standards and requirements in this field.

NCA operational capacity would be improved as the information system will enable the customs administration to effectively monitor the excise warehouses and the flow of excisable products in real time and carry out the requisite checks where necessary. As

regards customs administration and traders, the use of automated data transmission methods would simplify formalities and mean faster discharge of operations.

Components 2.4 and 2.5

The new Excise Act with which the Bulgarian Customs Agency was endowed with the entire administration of excise duties at national level was adopted on 02 November 2005. With this respect the NCA has planned the development of Excise Management System (EMS) following the national and interconnectivity requirements.

The realisation of the components proposed under Phase 3 of Sub-project 2 aims mainly at:

- giving NCA and registered economic operators access to up-to-date information on registers and authorisations;

- fighting against fraud and recover the evaded duties as much as possible through better targeted controls;

- helping honest traders in their daily work by reducing unlawful competition, and by providing them with a quick return of the discharge of their responsibility in terms of completed movements.

The information below aims to present the whole EMS computerisation project in order to demonstrate the EMS scope, general software and infrastructure architecture as well as the sequencing in developing the separate components of the system.

The EMS development will cover national as well as interconnectivity requirements. The main groups of functions of the system include:

- Licensing and registration;

- Monitoring of the excise warehouses and the flow of excisable products in real time;

- Maintaining registers required for the excise management process;

- Accompanying Administrative Document (AAD) processing;

- Risk analysis and control functions;

- International exchange of data;

- Excise declarations processing and control on payments of the excise duty;

- Consultation functions.

The diagram on Figure 3 represents the EMS general architecture

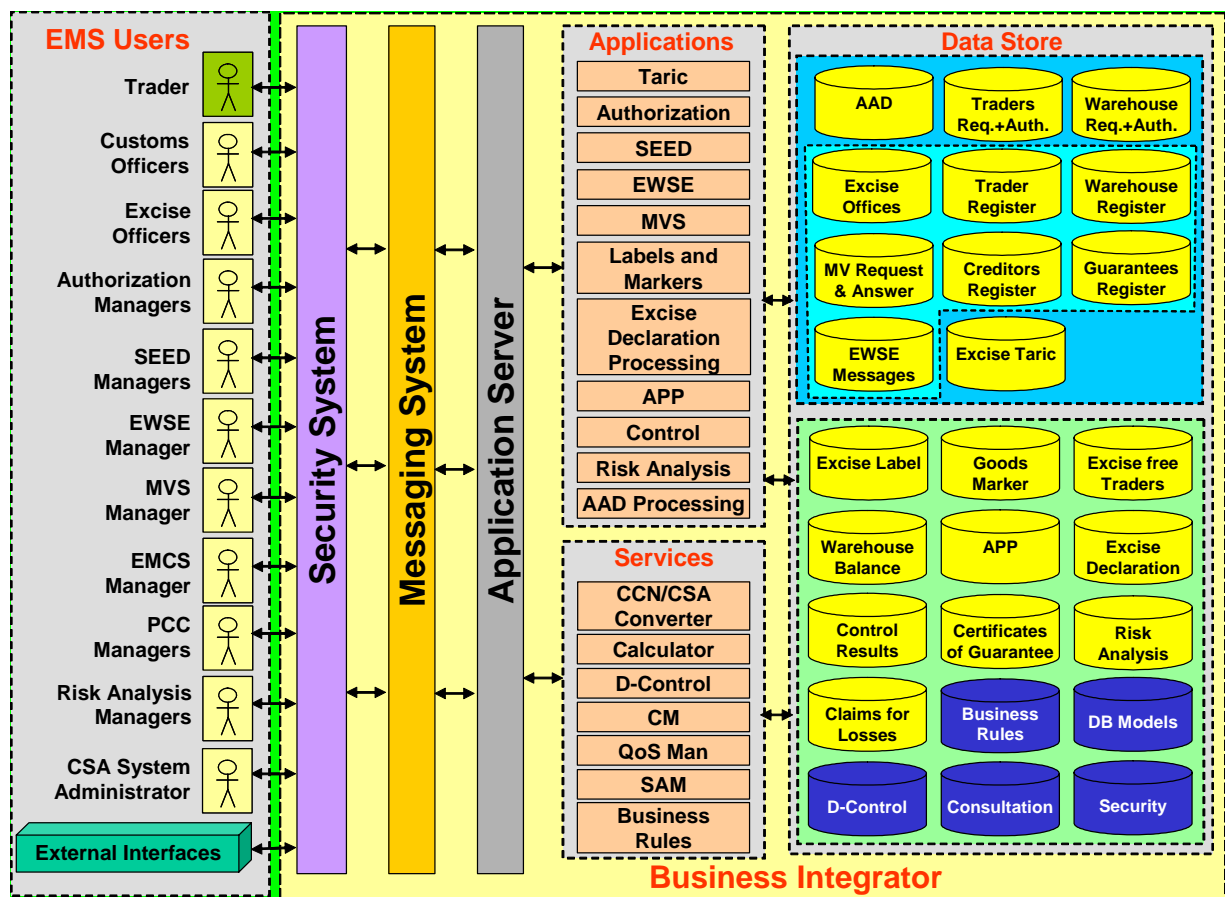


Figure 3

The EMS development will follow the architecture of the BICIS kernel (see component 1.1.1 under sub-project 1)

The main EMS modules are the following:

Security system;

Messaging system;

Application server;

Business modules (Applications);

Services used by the whole system (Services);

Data bases grouped in DBs serving the business modules and DBs serving the system information.

All six parts will be realised as three layer web-based J2EE applications or as web services which are common for the whole system.

The Services and the Data Store which support all EMS modules will be integrated as parts of the BICIS Kernel and their task is to serve not only all EMS but also all BICIS modules. The Security system, the Messaging system and the Application server will be part of the EMS integration software.

This Service Oriented Architecture (SOA) will provide flexible business process organization, easy way to add and remove business modules as well as reusability of existing software components and systems.

In accordance with NCA's plans for EMS development, the system shall be implemented as an integrated and centralised BICIS module which will use BICIS services and databases.

Development of the EMS will result in the following:

- Intensified information exchange

 - between the customs information centres of DG TAXUD and NCA;

 - with government and non-government organizations;

 - with economic operators;

- Increased internal network traffic;

- Increased amount of data to be processed and stored;

- High level of security at the access points for the provided EMS services;

In order to accomplish the above mentioned requirements and the quantitative and qualitative criteria underlying EMS development and operation, NCA has planned to establish an EMS server farm infrastructure which should consist of two elements - EMS internal processing and Demilitarized zone. The EMS infrastructure will be a component of the existing at that time server farm.

EMS internal processing component provides the functioning of the system as a whole and consist of:

- Web Portal server

- Application server

- Database storage server

The component called Demilitarized zone has to be deployed between the internal system and Internet to:

- provide Excise Data Dissemination and Excise Direct Trader Input services for minimum 5000 users;

- apply the security rules for processing and delivery of the data;

- provide 24/365 availability of services and load balancing;

- ensure minimum time to recover the interface to economic operators;

- archive information on economic operators, on duty rates;

- ensure authorization and authentication services;

- protect the EMS server sites against intrusion via external communication links;

The component mainly shall consist of:

- Web Portal server

- Application server

- Database storage server

- Firewall, router

The future plans for the EMS infrastructure are presented on Figure 4.

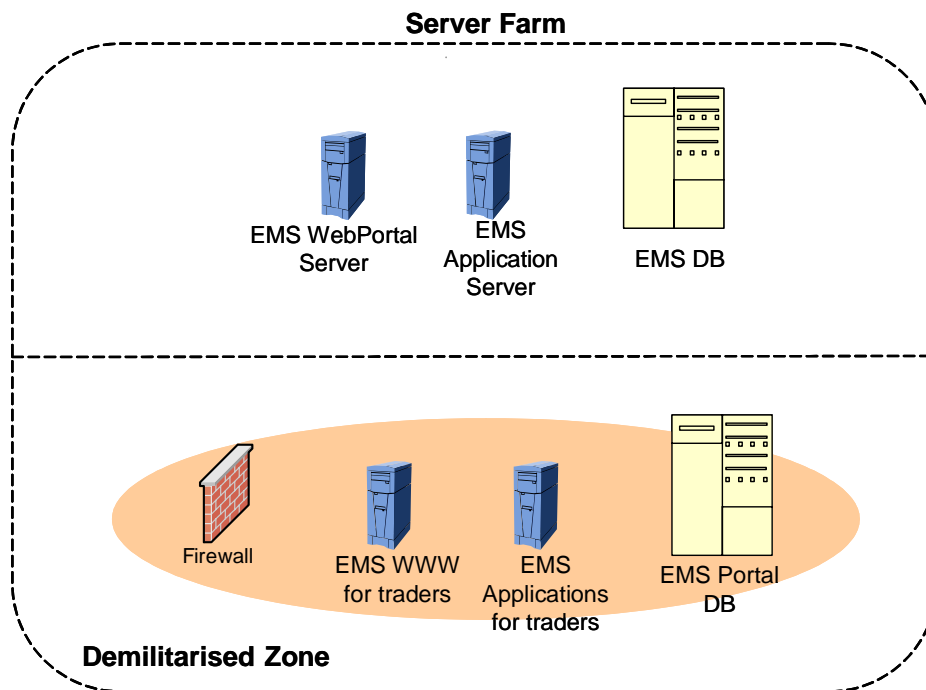


Figure 4

With development of minimal national and interconnectivity requirements, NCA has planned to establish the first element of the server farm, namely EMS internal processing.

The extension of the EMS functionalities (component 2.4) has to be met with additional hardware equipment.

In order to establish proper for the new functionality of the EMS infrastructure additional equipment in the Demilitarized zone in the server farm shall be delivered and added, including:

Web Server for traders

Application Server for traders

Data Base Server for traders

In order to create the possibility of non-interruptible EMS service provision each type of server has to be doubled. This also will provide a possibility of usage of load balancing mechanisms in case of system overloading or unplanned increase of business activities.

The hardware products that should be delivered are:

Hardware	Num
Application Servers	2
Web Portal Servers	2
DB Storage Servers	2

Table 3

The software products that should be delivered are:

Software Product	Num
Content Manager	2
Business Integration Application Server	2
Web Portal Management System	2

Table 4

The EMS project development has been planned based on identified business objectives in the area of excise management. EMS phases have been defined in a way to allow NCA to keep EMS abreast of the changes occurring in the legal basis, business logic and DG TAXUD requirements.

Taking into consideration that the selected software architecture will provide flexible business process organization, easy way to add and remove business modules as well as reusability of existing software components and systems, NCA is enabled to split the EMS into separate phases without changes to existing business functionality.

EMS breakdown into phases:

The new Excise law endowing NCA the entire management of the excise duty entered into force from 01.01.2006. In order to respond at the largest possible extent to the requirements of the business experts as regards 2006, NCA is planning to realize as **EMS 1.1** a set of priority national requirements related mainly to licensing and registration, registers management and AAD submission.

EMS functionality will be further extended with accession related requirements under **EMS 1.2**, namely realization of EMCS phase 0 including the realization of:

- International exchange of collected data with the EU MS (System for Exchange of Excise Data);
- International exchange of data based on risk analysis of registered AADs. (Early Warning System for Excise);
- Processing of enquiries on registered AADs and exchange of data (Movement Verification System).

EMS 1.2 is planned to be operational as from 01.01.2007.

The automation of the activities related to excise management as regards excise declarations processing and control on payments of the excise duty, labels and markers, extension of the licensing and registration management system, operational control, etc. as provided for in the national legislation is foreseen under **EMS 2.1** presented as component 2.3 of Sub-project 2.

EMS 2.2 will cover the development of EMCS computerization project according the Functional Excise System Specification and Technical Excise System Specification for phases 2 and 3.

EMS 1.2 will run in parallel with the development of the EMCS project up until the services it supplies are taken over by the operation of EMCS Phase 2 and/or 3.

A thorough analysis of the EMCS Functional and Technical specifications (planned by the EC to be ready in end 2006) and EMS 1.2 functionality will be performed in the EMS 2.2 pre-study phase in order to prepare detailed Terms of reference. In brief, EMS 2.2 will automate the following activities:

- Registers Managements System extension;
- Accompanying Administrative Document Processing;

Connection with Customs procedures such as export and import of goods, etc.;

Processing of Losses;

Recording of reports of Controls;

Risk Assessment;

Automatic Recalls;

Movement Verification and Mutual Assistance;

International Exchange of EMCS Messages;

Excise system administration functions;

Excise Consultation Module.

The connections with all internal modules of the system and external systems are realized through specified interfaces in the kernel.

The financial estimation for component 2.4 implementation have been calculated based on the RUP methodology and taking into consideration the resource allocation for successfully completed projects.

The RUP foresee a proportion of project resources used for each activity during the various phases of the software development cycle. The actual costs are calculated as follows:

The number of man/days utilised for implementation of the successfully completed Customs Clearance project;

Coefficients (Ratios) reflecting the ratio between the volume of functional requirements of the proposed project and that of the Customs Clearance project;

The number of man/days for the proposed project, obtained as a product of the actually used man/days for the Customs Clearance project and the ratio for the proposed project;

The sums for the various project activities, obtained as product of the man/days for implementation of the project, the Ratio for the relevant activity as set in the RUP and the estimated daily rate of the contracted staff.

An indicative plan for EMS realization is presented below:

EMS Phases	2005				2006				2007				2008				2009			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
EMS 1.1																				
EMS 1.2																				
EMS 2.1																				
EMS 2.2																				

Table 5

ANNEX 5

Reference list of relevant laws and regulations

Sub-project 1:

Customs Act

Implementing Provisions of the Customs Act

Sub-project 2

Bulgarian national legislation:

Excise Act

Implementing Provisions of the Excise Act

Tobacco and Tobacco Products Act

Implementing Provisions of the Tobacco and Tobacco Products Act

Wines and Alcohol Beverages Act

EU legislation:

Directive 92/12/EEC on the general rules for warehousing, movement and control on excise products

Directive 92/79/EEC

Directive 92/80/EEC

Directive 2003/96/EEC

Directive 92/83/EEC

Directive 92/84/EEC

Directive 95/59/EEC

Directive 95/60/EEC

ANNEX 6

Reference list of relevant strategic plans and studies

Sub-project 1

Business Strategy of the Customs Administration of the Republic of Bulgaria

IT Strategy of the National Customs Agency

Interconnectivity/operability Strategy of the National Customs Agency

Strategy for establishment and development of the post clearance control

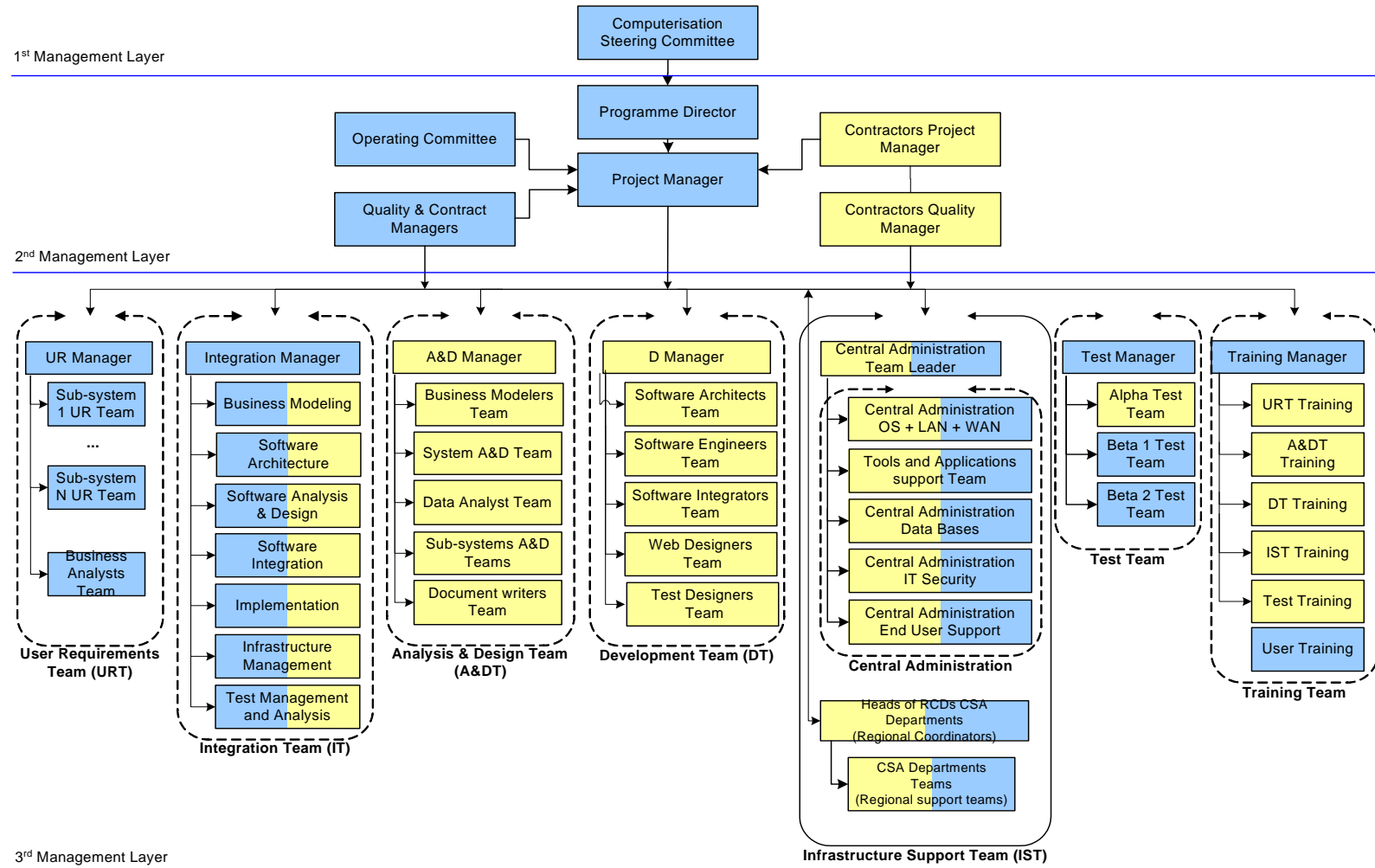
Sub-project 2

Strategy for organization and human resources management and for training and qualification

IT Strategy of the National Customs Agency

ANNEX 7

NCA IT PROJECTS ORGANISATION



Legend: Blue boxes: NCA staff; Yellow boxes: Contractors staff

All IT projects are managed mainly at the CCD level, involving the RCD IT departments and competence centres in RCD in various areas of Development and Maintenance projects. Each project is based on a request by the “Users” and is initiated by the Pre-study phase, which includes the creation of the Terms of Reference (ToR). This document is prepared by the Methodology Team, assisted by the Applications, Declaration or Central administration Team, depending on the nature of the project.

The **3rd management layer** represents the groups which track the progress of the detailed plan activities, performed under the software product lifecycle disciplines. The Project Managers group records minutes, actions, issues requiring management attention, and tasks status. It also applies and updates the detailed project plans.

The Quality group records minutes and actions within the group as well as Issues. It also organises the acceptance of the contracted deliverables.

The **2nd management layer** represents the Project Director Group and the Operating Committee. The PDG meets at least once per month and receives as an input the tasks status, the issues requiring management attention and the summary project plan. This group records minutes and actions, resolves issues and reviews the IT Strategy implementation progress report and Risk List. Issues resolution and risks assessments also involve the users and the OC. This Group is further assisted by the Operating Committee, which meets centrally once per month to discuss and assess development and maintenance issues and tasks.

The **1st management layer** represents the Computerisation Steering Committee consisted of NCA Director General, the Secretary General, the Deputy Director responsible for IT, CCD Directors of Directorates, Head of CCD IT Department, MF Director of Information Systems Directorate. This Committee meets at least once every two months. The SC is presented with the IT activities/contracts progress and is expected to assist in Risk resolution.

ANNEX 8

Justification for Components 1.1 and 2.3 and 2.4 warranty period requirement

After the developed systems under the above components have been deployed by the Consultant's teams, user acceptance tests have been completed and the systems are transferred to the BCA and/ or the system integrator for maintenance, they are put into operation in all customs sites by BCA.

Following that, Project acceptance will take place if all contracted deliverables are accepted by the Beneficiary according to the evaluation criteria set in the Iteration plan for each iteration and certified by the Beneficiary with Iteration acceptance protocols.

Whereupon project acceptance occurs there will be a 12-month warranty period.

Normally, each specially developed software has some warranty period. If some problems with the exploitation of the software occur during the warranty period, the Consultant shall be responsible for solving these problems. The following types of problems could occur during the warranty period:

System performance problems might occur during the exploitation of the system in a multi-user environment, due to uncovered inadequate product tunings during user acceptance testing. Product tunings correction might lead to changes in the software, which could generate functional errors.

If it is difficult to run the full set of test cases, defects generated from the programming code might occur during system exploitation.

If user acceptance tests are performed with a limited number of end-users, it might turn out that the product does not cover the technical requirements specified in the Vision and the Software requirements Specification during system exploitation when all potential users of the system operate with it.

Based on the above three examples, during the warranty period the Consultant will perform remedial work, if necessary, in order to ensure operational efficiency of the software and enable Bulgarian Customs Administration to continue to productively use it if any deviation of the normal exploitation according to the Vision, User requirements specification and Software requirements specification occurs.

Annex 9
IT Strategy of the Bulgarian Customs Agency

Annex 9

Owner: BCA	Issue Date: 31/10/2003	Version: 7.0
BULGARIAN CUSTOMS AGENCY IT STRATEGY		

Created by: BCA CSA Directorate
Approved by: BCA BICIS Steering Committee

REVISIONS

Ver.	Rev.	Date	Description	Action*	Pages/sections
3.	0	07/11/01	First Version	I	All
3.	1	15/11/01	Additional info	I	1.2
3	2	20/01/02	Updates	R	5
3	3	25/01/02	Updates	R	5, Plan
4	0	07/03/02	Updates of deadlines	R, I	3, 5, Plan
4	1	15/03/02	Transit changes	R, I	5, Plan
4	2	16/05/02	Border control project – Information exchange and border crossing facilitation between BG and RO	I	5.2.5.2.5, Plan
5	0	28/05/02	Update and fine-tune the Strategy in all sections with more information to make it more explanatory	I	All, except 4.4 and 4.5
6	0	01/11/02	Update the status of the future applications development preparation activities CCL system, CCA system and Post Clearance Control System	R, I	5.4.1, 5.4.2, Plan
7	0	15/10/03	Update and fine-tune the Strategy in all sections	R, I	All

* Action: I = Insert, R = Replace

DISTRIBUTION LIST

TITLE/DEPARTMENT	TITLE/DEPARTMENT
Director General of NCA	Director of Post-Clearance Control Directorate
Deputy Directors of NCA	Director of Customs Statistics and Automation Directorate
Secretary General of NCA	Director of Central Customs Laboratory Directorate
Director of Tariff Policy Directorate	Head of Inspectorate
Director of European Integration and International Cooperation Directorate	Director of Information Systems Directorate, MF
Director of Finance-economic Activities and Property Management Directorate	DG TAXUD, Head of Directorate D
Director of Administrative-legal and Information Service Directorate	EC Delegation Task Manager
Director of Customs Intelligence and Investigation Directorate	

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1. INTRODUCTION

PURPOSE AND SCOPE OF THE DOCUMENT

The purpose of this document is to define the overall IT strategy of the Bulgarian Customs Agency, locally called National Customs Agency (NCA) as the Customs Business Strategy requires it. The Strategy defines the organisation structure of the NCA IT projects, applied IT standards, scope of the NCA IT programme, infrastructure and applications realisation and plans. The Strategy defines the framework for the development of a fully centralised BICIS to function in accordance with the National Business and EU Business requirements.

This document will be updated on a regular basis and the updates will be recorded in the Revisions table above.

DOCUMENT STRUCTURE

This document has been structured into seven sections, which are divided into sub-sections.

Section 1. INTRODUCTION – describes the purpose and the scope of this document

Section 2. ABBREVIATIONS AND ACRONYMS – contains the abbreviations and terms used in this document

Section 3. NCA ORGANISATION – divided into three main sub-sections where the general organisation of the Bulgarian Customs Administration, the levels of the IT Organisation and the IT Projects Organisation are described.

Section 4. IT UNIFIED PROCESS DEFINITION – in the subsections are defined the IT methodology framework as well as summaries of the NCA policies in the domain area.

Section 5. IT PROGRAMME FUNDAMENTALS – in the subsections are defined the main principles, software development standards and technologies as well as the general system architecture and the development environment.

Section 6. TECHNICAL ENVIRONMENT – this section is divided in two main sub-sections: Current environment subsection which describes the current status of the technical infrastructure, currently used operating systems and database, communications infrastructure and Future environment subsection which describes the trends in the future development of technical and communications infrastructure.

Section 7. APPLICATIONS – this section is divided in three main sub-sections. An overview of the BICIS stages and modules is presented in the first subsection. The CURRENT APPLICATIONS subsection describes the functions of the modules currently into operation or under development. The FUTURE APPLICATIONS subsection describes the functions of the future applications.

2. ABBREVIATIONS AND ACRONYMS

AFIS	Anti-Fraud Information System
AIS	Automated Information System - the first Customs system
ASYCUDA	A Declaration Processing System developed by the United Nations (UNCTAD)
BCA	Bulgarian Customs Administration
BICIS	Bulgarian Integrated Customs Information System
BICIS Steering Committee	Steering Committee for establishment, implementation and development of BICIS
BTMS	Bulgarian Transit Management System
CCD	Central Customs Directorate
CCL	Central Customs Laboratory
CH	Customs House
CORBA	Common Object Request Broker Architecture
CPU	Central Processing Unit

CS	Customs site
CSA	Customs Statistics and Automation
CSS	Cascading Style Sheets
CWM	Common Warehouse Meta-model
DAO	Data Access Object
DB	Data Base
DG TAXUD	European Commission General Directorate of Taxation and Customs Union
DDS	Data Dissemination System
DHTML	Dynamic HTML
DTI	Direct Trader Input
EC	European Commission
EJB	Enterprise JavaBeans
EU	European Union
Europe agreement	EU - Bulgaria association agreement
HDD	Hard Disk Drive
HR	Human Resources
HTML	HyperText Markup Language
IT	Information Technologies
IT department	“Implementation and Development of Information Systems” department within the CSA Directorate
IT Strategy	Information Technologies Strategy
ITMS	Integrated Tariff Management System
ITT	Invitations to Tender
Java VM	Java Virtual Machine
JMS	Java Messaging System
JNDI	Java Naming and Directory Interface
J2EE	Java 2 Enterprise Edition
LAN	Local Area Network
LDAP	Lightweight Directory Access Protocol
MF	Ministry of Finance
MOF	Meta Object Facility
MS	Microsoft
NCA	National Customs Agency
NCTS	New Computerised Transit System
OC	Operating Committee
OLAP	On-line Analytical Processing, an application that allows reporting on all customs data, usually for statistical purposes.
OMG	Object Modelling Group
PDG	Project Directors Group
PID	Project Initiation Document
PM	Project manager
PQP	Project Quality Plan
RAM	Random Access Memory
RCD	Regional Customs Directorate
RDBMS	Relational Data-Base Management System
RUP	Rational Unified Process
SAD	Single Administrative Document

TEMPO	DG TAXUD Electronic Management of Projects Online
ToR	Terms of Reference
UML	Unified Modelling Language
UPS	Uninterrupted Power Supply
UR	User requirements
URL	Uniform Resource Locator
WAN	Wide Area Network
XML	eXtended Mark-up Language
XSLT	Extensible Stylesheet Language Transformations

3. NCA ORGANISATION

GENERAL CUSTOMS ORGANISATION

3.1.1. DEVELOPMENT OF THE BCA

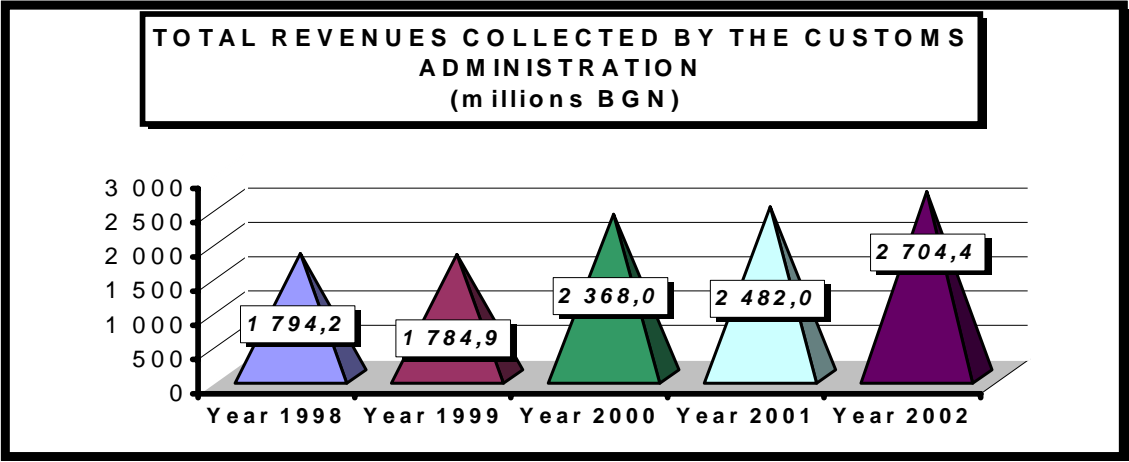
The Bulgarian Customs Administration is established in 1879 and it is one of the oldest Bulgarian public institutions. It is centralised system with 3826 employees, who are structurally allocated in Central Customs Directorate, five Regional Customs Directorates, 17 Customs Houses and 102 Customs Bureaux and Customs Points.

The new direction in the BCA development is related with the willingness of our country to become a full member of EU.

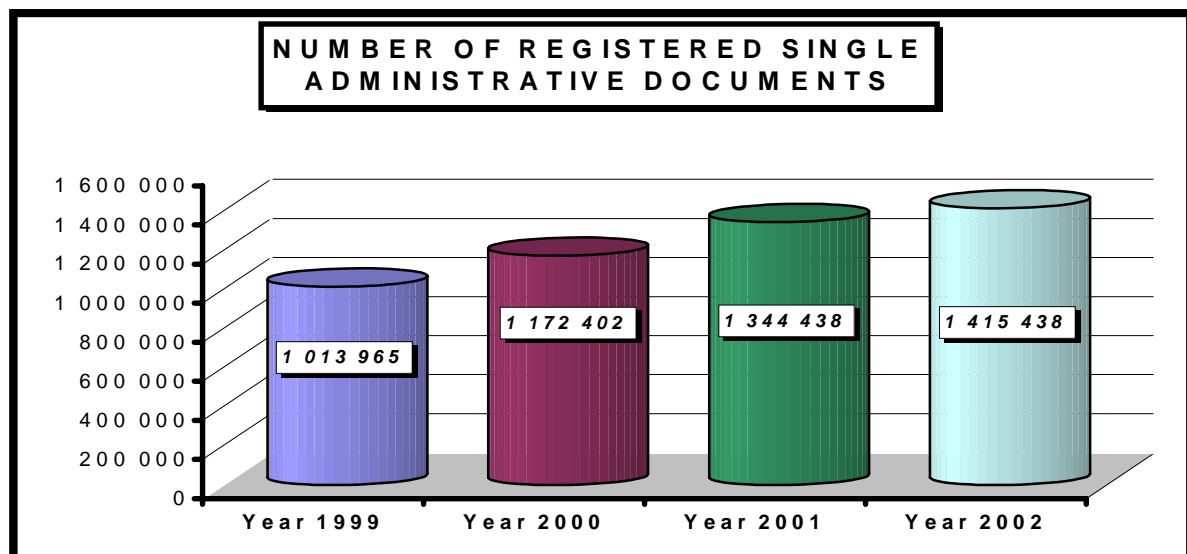
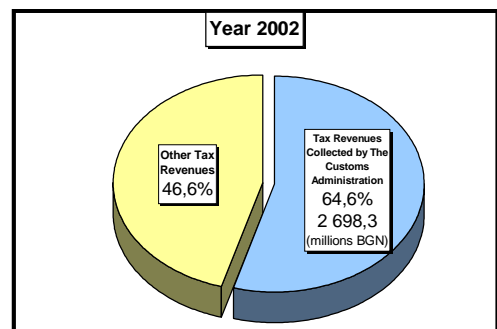
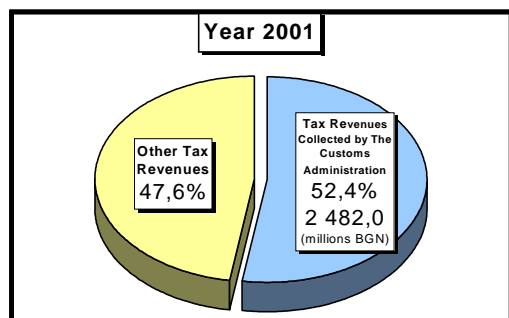
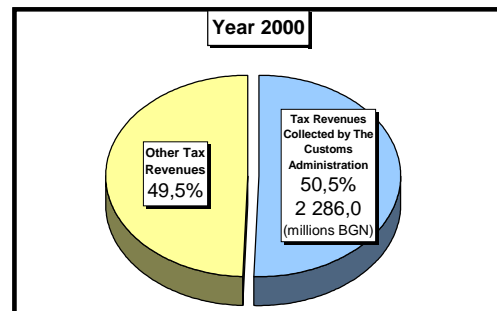
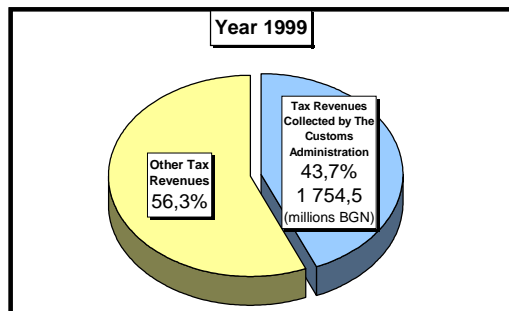
Regarding the Customs Union area, in its negotiation position Bulgaria declares that accepts the “*acquis communautaire*” and will be able to implement it in full by its accession. Concerning the customs field, this process includes the fulfilment of the EU requirements within 13 areas, specified by the European Commission (the Customs Blueprints). The ambition of the Customs Administration to take this policy was declared in the *National Strategy for Preparation of the Customs Administration for Membership in EU and its Implementation Program*. The Bulgarian Government approved the European Commission’s *Declaration of Endorsement of the Pre-Accession Preparation Strategy for Customs and Tax Administration in Bulgaria* with special decision.

Considering the present conditions and the leading role of our country as future external border of EU, the ambition of the BCA is to become more effective and efficient, as changing itself during its pre-accession period to ensure to the fullest harmonisation of the legislation, operational and technological compatibility with the operative customs systems in the EU members. In this respect, a Customs Tariff harmonised in 1992 with the Harmonised System and with Combined Nomenclature in 1996 was adopted. In 1999, the SAD version was completely harmonised. In 1995, the BCA officially applied for accession to the Common Transit Convention and Convention for Simplification of Formalities in trade in goods. In 1996 the accession procedure to this convention was started.

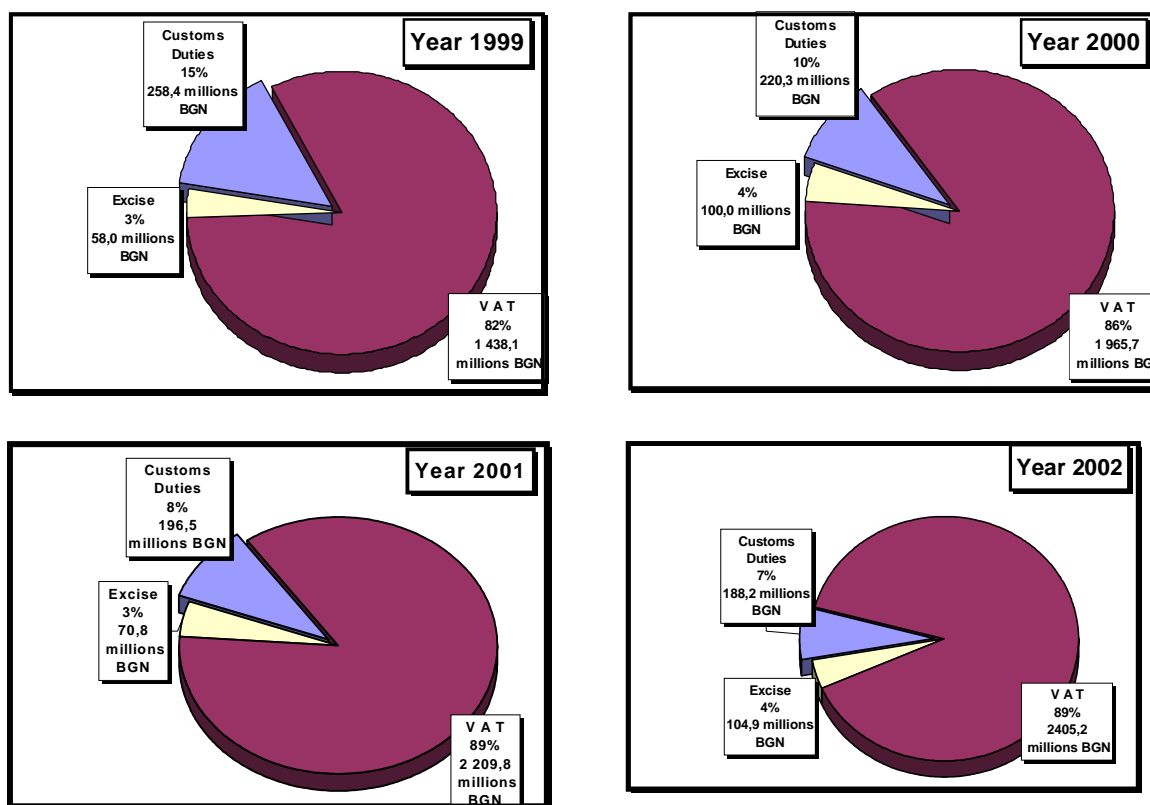
3.1.2. REVENUE COLLECTION STATISTICS



TAX REVENUE COLLECTED BY THE CUSTOMS ADMINISTRATIONS AS A PERCENTAGE OF THE TOTAL BUDGET TAX REVENUE



TAX REVENUES COLLECTED BY THE CUSTOMS ADMINISTRATION



3.1.3. CUSTOMS STRUCTURE AND FUNCTIONS

The Bulgarian customs administration is a centralised administrative structure, organised within National Customs Agency (NCA) under the Minister of Finance. NCA is a legal person financed by the state budget. NCA is managed and represented by a Director General who is assisted by four Deputy Directors.

The overall function of NCA is the performance of customs supervision and control of the customs territory of Bulgaria. NCA consists of a four-layer structure:

- The Central Customs Directorate (CCD), located in Sofia, currently divided in two physical locations. During 2003, both NCA offices will move to a new Customs Headquarters building.
- The Regional Customs Directorates (RCD), currently five (5), located in the main cities of the country.
- The Customs Houses (CH), currently seventeen (17), which handle the majority of the clearance processing (approximately 60-70%).
- Customs Offices and Border Points, currently hundred and two (102).

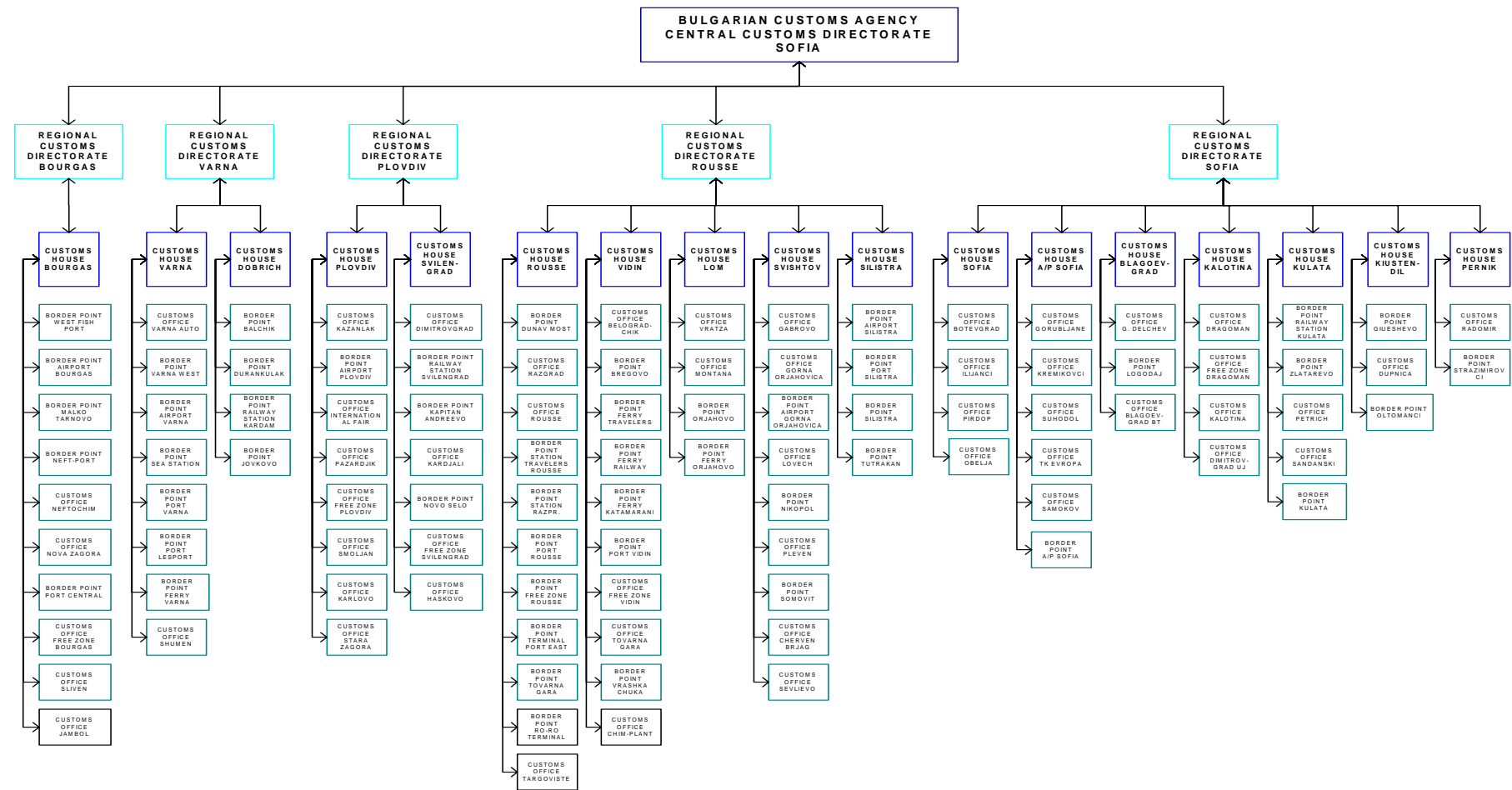
NCA currently employs 3,826 Customs officers and supporting staff. The functions and structure at each layer are as follows:

- CCD – overall functions of CCD are to organise, manage, control and report about the activities of the customs administration. To cover these functions CCD consist of Customs regimes and procedures Directorate, Tariff Policy Directorate, Post Clearance Control Directorate, Central Customs Laboratory Directorate, Customs Intelligence and Investigation

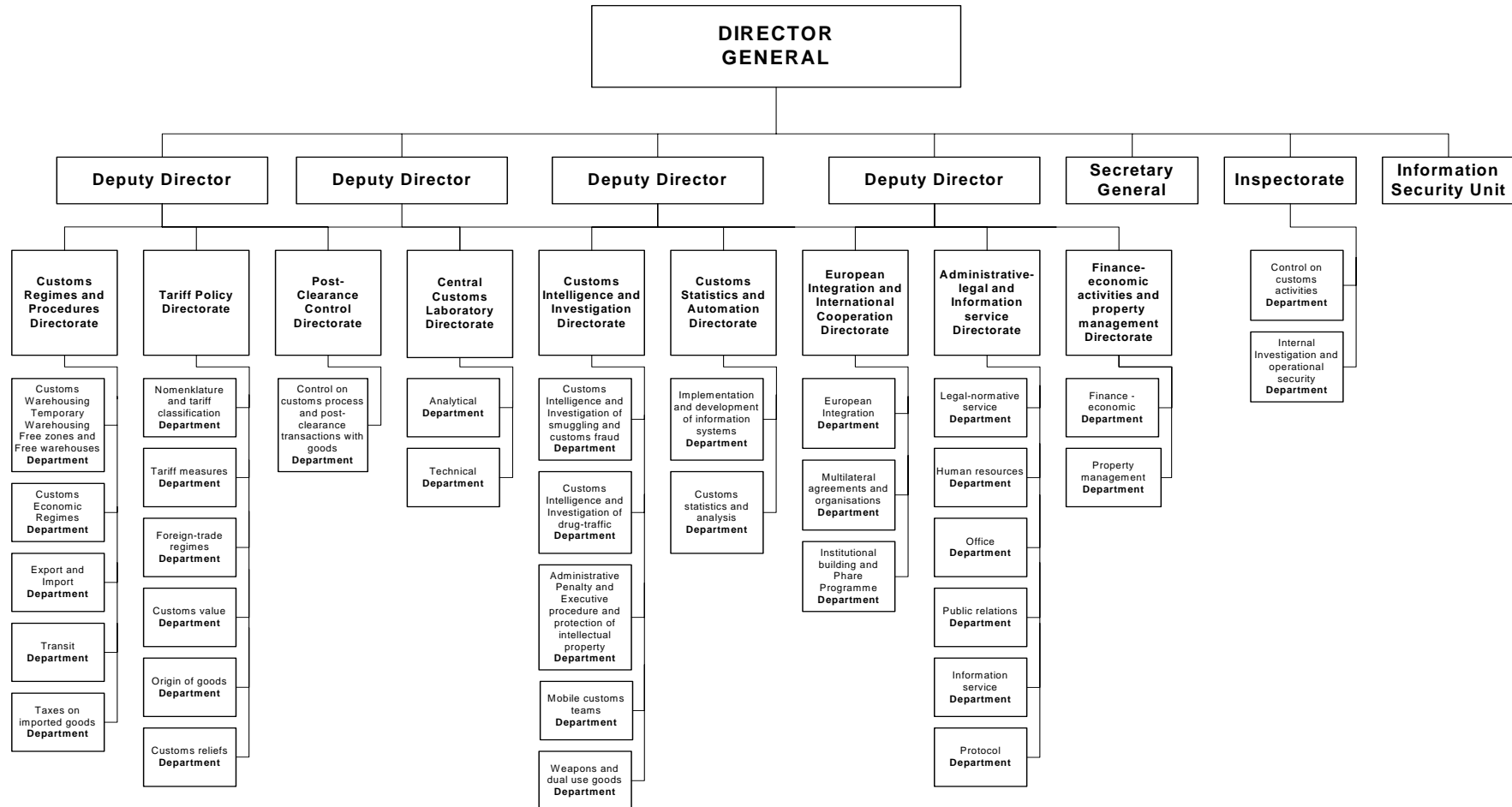
Directorate, Customs Statistics and Automation Directorate, European Integration and International Cooperation Directorate, Administrative- legal and Information Service Directorate, Finance- economic activities and property management Directorate, Inspectorate, Information Security Unit.

- RCD - overall functions of RCD are to organise, manage, control and report about the activities of the customs houses included in RCD structure. To cover this functions RCD consist of Customs regimes and procedures department, Tariff Policy department, Post Clearance Control department, Customs Intelligence and Investigation department, Customs Statistics and Automation department, Administrative- legal and Information Service department, Finance- economic activities and property management department, Inspectorate. There is a Regional Customs Laboratory department within RCD Plovdiv and RCD Rousse.
- Customs Houses - overall functions of CH are to organise, manage, control and report about the activities of the customs offices and border points included in CH structure and together with them to perform customs supervision and control. To cover these functions Customs Houses consist of the following departments: Customs regimes and procedures, Tariff Policy, Customs Statistics and Automation, Customs Intelligence and Investigation, Administrative- legal and Information Service, Finance- economic activities and property management.
- The Customs Offices and Border Points are operative units performing customs supervision and control.

3.1.4. NCA ORGANISATION CHART



3.1.5. CENTRAL CUSTOMS DIRECTORATE ORGANISATION CHART



CUSTOMS IT ORGANISATION

3.1.6. BACKGROUND

The computerisation is one of the strategic objectives of BCA and also an important pre- requisite for achieving the required administrative capacity for adoption of Acquis. In the time the process of BCA computerisation progressed in two directions – Program Phare and Program for technological re-innovation of Ministry of Finance. As result of both programs the following results were achieved:

In 1996 the system AIS Customs 1.0 was developed and implemented in Customs House Airport Sofia. This was the first system in BCA based on new technologies – client server, UNIX, Informix. At this time a lot of legacies were used in different customs offices.

With Government Decision № 1186/96 the software product Asycuda was selected as a core of the Bulgarian customs information system. The decision was taken in relation with the approved Phare project BG 9305 “Computerisation of BCA”

By reason of dynamic development of the information technologies and the forthcoming legislation harmonisation in 1997 BCA made an analysis of Asycuda, which finished with the conclusion that Asycuda is not meeting the requirements of BCA in technological, functional, organisational and financial aspects. In general the reason for this conclusion is that Asycuda is based on old information technologies, some important functionality is missing and the implementation of the product requires a lot of time and unclear amount of financial resources. As result of the above mentioned analysis the Decision № 1186/96 for selection of Asycuda as a core of the Bulgarian customs information system was abolished with a government Decision № 522/99. The decision to create an own system was taken.

After the decision to create an own system BCA continued to develop and improve AIS Customs

In 1998 the Program for technological re- innovation of Ministry of Finance started. Under this program until May 1999 the required infrastructure for BICIS was built – LAN in all customs offices, servers, workstations, printers, UPS and other equipment

In October 1998 the BCA IT organisation structure was created – in addition to directorate “Customs statistics and automation” in CCD, departments “Customs statistics and automation” were created in Regional customs directorates and in Customs Houses

The development of AIS Customs continued under the Program for technological re-innovation of Ministry of Finance. In relation with the new customs legislation (in force from 1999) AIS Customs 3.0 was developed and implemented in 9 customs offices at the beginning of 1999.

In December 1998 the Ministry of Finance selected the BICIS system integrator.

In the middle of 1999 the BICIS Steering committee was established.

BCA IT strategy was developed and approved by the BICIS Steering committee. According to this strategy AIS Customs 3.0 was selected as core of BICIS.

In November 1999 the European Commission initiated a mission targeted to evaluate the BICIS development. As result of the positive evaluation the European Commission decided to continue the implementation of the Phare project BG 980602 “Computerisation of BCA”

In January 2000 the European Commission initiated a short term technical assistance project, targeted at the preparation of all the documentation required for the implementation

of the project BG 980602 “Computerisation of BCA” – project fiche, BICIS Project Initiation Document and tender documents. All the documents were developed by May 2000 and approved by the BICIS Steering committee

In the final Project fiche for the project BG 980602 “Computerisation of BCA” the following sub- projects were defined – “Technical assistance for the implementation of BICIS and IT training”, “Customs functional training”, “Communication equipment” and “Additional hardware and system software for BICIS”. These sub-projects were successfully completed in 2002 and involved major hardware improvements for the BICIS project, assisted NCA in interconnectivity requirements assessments with the EC systems, as well as in Project, Quality and Contracts Management and IT training.

3.1.7. CCD CSA ORGANISATION

The CCD IT Department is one of the two Departments under the Directorate of Customs Statistics and Automation (CSA). It is consisted of 3 Units: Methodology, Applications and Technical Support Units. The Structure of the Department provides the minimum staff required for the best possible preparation and management of IT projects and adequate User support. It includes profiles to manage Technical Environment and Application Development projects as well as Maintenance contracts. It is currently employing 20 staff.

The Director of the Directorate also acts as the IT Department Director supported by an Administrative Assistant and the following Units:

3.1.7.1. methodology support unit

This Unit mainly deals with Quality Assurance and Control and Contract Management. It is consisted of a Quality manager and a Contracts Manager and aims to support the Developments and Maintenance projects managed by the other two Units. The main tasks of this Unit are as follows:

Quality Management

- Adopts, Implements and Maintains a complete IT Methodology to be applied internally were applicable and by the contractors.
- Participates in all the Pre-Study/Analysis phase.
- Evaluates the contractor’s Quality Plans.
- Performs Quality Assurance activities by following the projects life cycles and ensure that developments occur according to the predefined standards and guidelines.
- Performs Quality Control activities by periodically checking the contractor deliverables and participate in the evaluation and acceptance of contracted deliverables.
- Evaluates Maintenance plans and ensure that maintenance activities perform according to the plans.

Contract Management

- Participates in the Methodology implementation related to Contract Management
- Participates in the Pre-Study/Analysis phase.
- Prepares the Tender Dossiers
- Participates in the tenders evaluation
- Manages the contracts from the payments and financial reporting/control aspects

3.1.7.2. applications support unit

This Unit is consisted of IT experts with Project management and Customs business skills. The Unit deals with the Customs Business Applications. The staff under this Unit is responsible for the following tasks:

Applications Development overall Project Management plus:

- User Liaison

- User Requirements

- Pre-Study/Analysis phase

- Partial involvement in the Analysis and Design process

- Testing

- Training

- System deployment/roll-out activities, mainly logistic activities from the NCA part

- Acceptance activities

- Quality control activities within the above areas supporting the Methodology Unit.

Applications maintenance overall management as part of the Maintenance structure and ensuring the proper process of maintenance tasks in relation to the applications only:

- Fault report management

- Change Request management

- Enhancements development management

- Training new Customs officers

- User support on Applications issues.

3.1.7.3. technical support unit

This Unit is consisted of IT experts specialising in technical environment areas and able to manage IT infrastructure deployment and maintenance projects. The Unit is comprised of two Sections: the Systems and Operations sections. The Systems Section deals with main Hardware Operating Systems, with Database(s) and Networks and Environment Security (Hardware, Networks, etc.). The Operations Section deals with all the Hardware activities, Standard Software such as PC S/W, e-mail, etc. and the Internal Help-Desk for Maintenance co-ordination. The main responsibilities of this Unit are:

Technical Environment deployments overall Project Management plus:

- Pre-Study/Analysis phase

- Implementation management

- Testing management

- Site Acceptance

Technical Environment maintenance projects

- Internal Help-Desk for co-ordination of maintenance with the contractor(s) and tracking all types of maintenance documentation

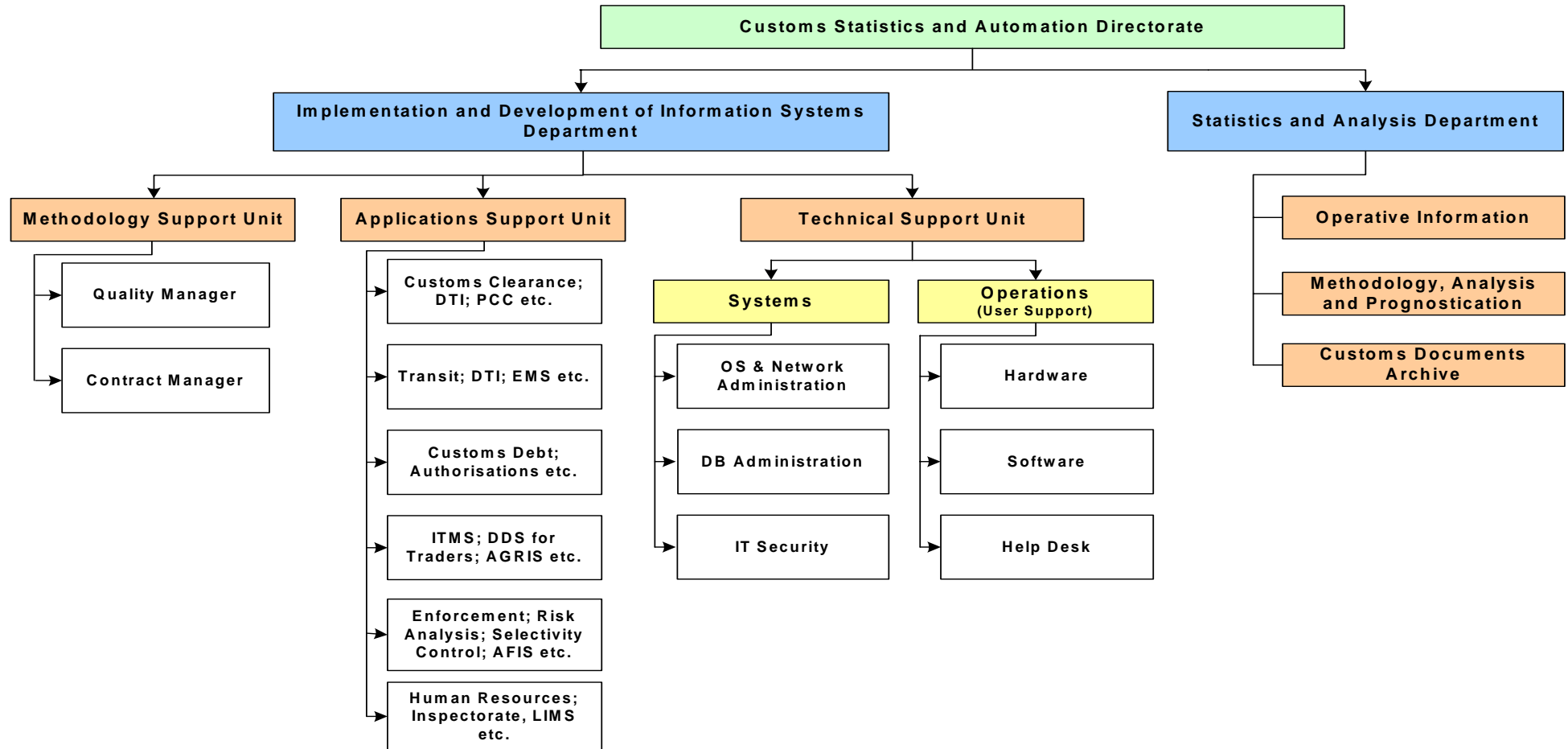
- Warranty management

- Inventory management

- Day to day operations (Reports, back-ups, data replication, etc.)

- Performance of actual maintenance tasks when the contractor is the system integrator as part of the contractor maintenance structure.

3.1.8. CCD CSA ORGANISATION CHART



3.1.9. REGIONAL IT ORGANISATION

The Regional Directorates and Customs houses include a Department of Customs Statistics and Automation. The Customs Offices and Posts include a System Administrator, represented by a Customs Officer with IT experience.

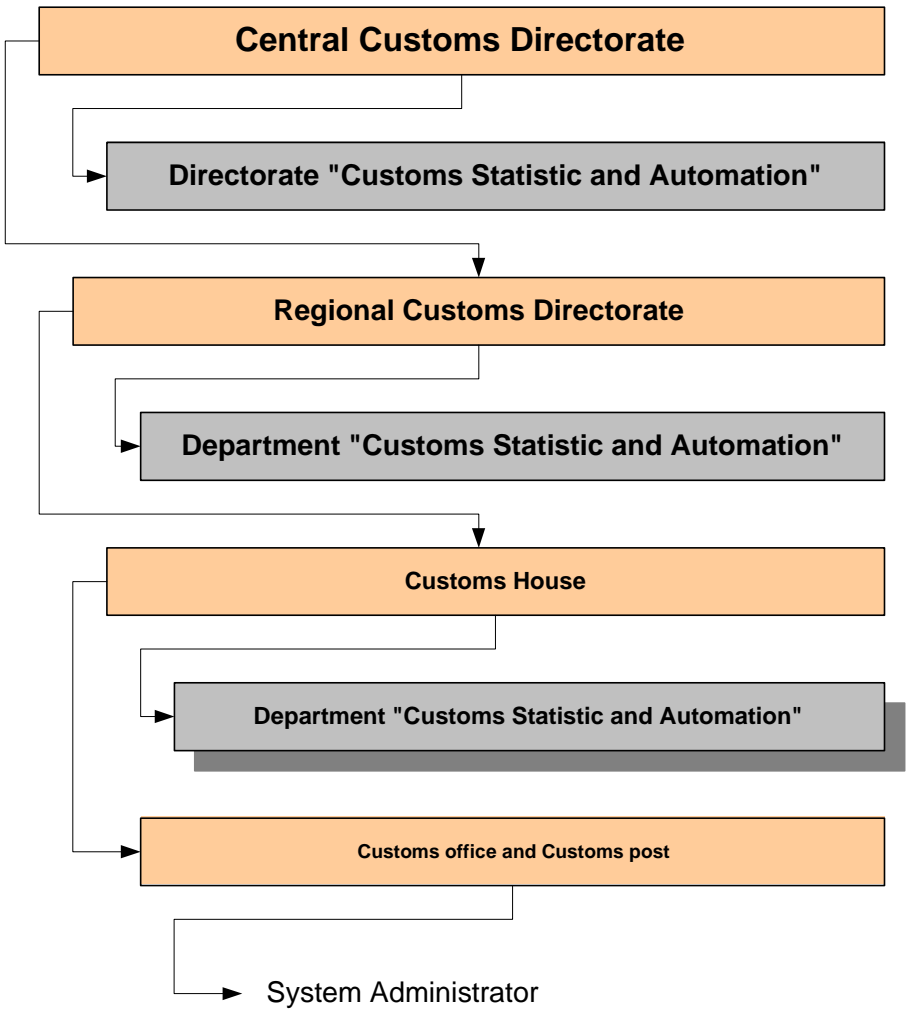
The CCD IT Directorate does not directly manage the Departments and Administrators. They are part of the Structure of the Regions and Customs Sites and are managed by the local Regional and Customs Sites Directors. Strong co-operation exists between the CCD Directorate of Statistics and Automation and the Regional Structures. The Directors of the RCD's IT Departments form the **Operating Committee (OC)** and participate in various tasks during Development and Maintenance life cycles.

In summary the Regional and Customs Houses IT departments are responsible to:

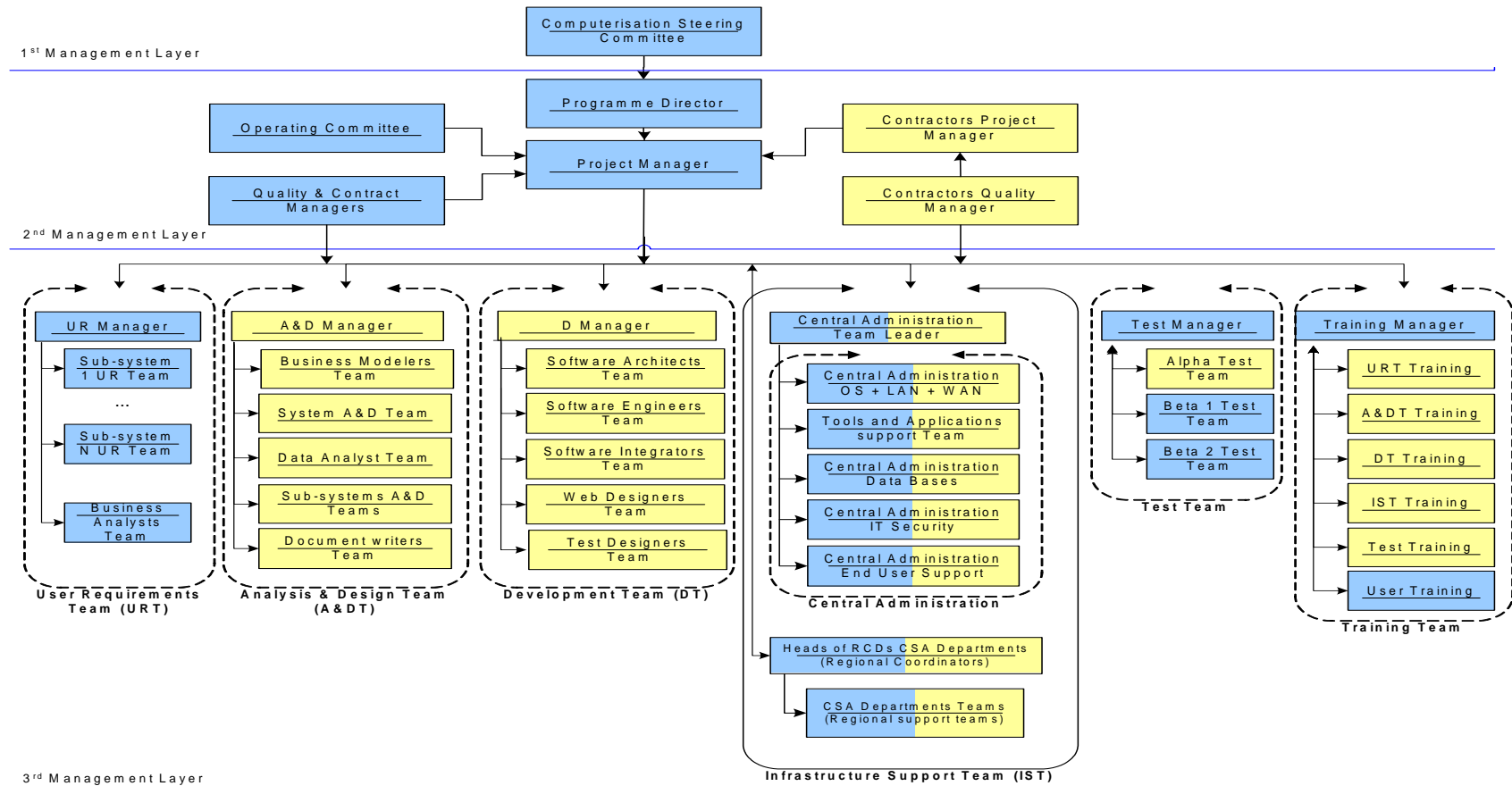
- Organise, manage and control the provision of BICIS information for the department;
- Organise, manage and control the implementation of new information, communication and management technologies;
- Control the condition of Program and IT equipment
- Plan and monitor the performance of the information projects and the relevant changes
- Search the information needs of the department, analyse and offer to the CCD IT and Statistics department of the National Customs Agency projects for development of the information systems in the regional directorate
- Organise, manage and provide the customs statistic activities on regional level
- Develop analysis reports, which are presented every three months to the IT and Statistics department of the National Customs Agency

The System Administrators of the Customs Offices and Posts provide technical and application support to the users and are supported by the IT and Statistics Departments of the Regions and Customs Houses.

3.1.10. NCA IT ORGANISATION CHART



IT PROJECTS ORGANISATION



Legend: Blue boxes: NCA staff; Yellow boxes: Contractors staff

All IT projects are managed mainly at the CCD level, involving the RCD IT departments in various areas of Development and Maintenance projects.

Each project is based on a request by the “Users” and is initiated by the Pre-study phase, which includes the creation of the Project Initiation Document (PID) and Terms of Reference (ToR). These documents are prepared by the Methodology Support Unit (MSU), assisted by the Applications Support Unit or the Technical Support Unit, depending on the nature of the project.

The ToR follows specific standards, mainly drawn by the Phare and DG TAXUD (TEMPO) guidelines.

The **3rd management layer** represents the Groups which track the progress of the detailed Plan activities, performed under the software product lifecycle disciplines. The PM group records minutes, actions, issues requiring management attention, and tasks status. It also applies and updates the detailed project plans.

The Quality group records minutes and actions within the group as well as Issues. It also organises the acceptance of the contracted deliverables.

The Contract Management group tracks payments following deliverables acceptance. This group also meets with the MF IT and the system integrator counterparts and assists in the implementation of contract procedures based on Phare experience as well as TEMPO standards.

The **2nd management layer** represents the Project Director Group, the main Users Group and the Operating Committee consisted of Regional IT Directors. The PDG meets at least once per month and receives as an input the Tasks Status, the Issues Requiring Management Attention and the Summary Project Plan. This group records Minutes and Actions, resolves Issues and reviews the IT Strategy implementation progress Report and Risk Management Plan. Issues resolution and Risks assessments also involve the Users and the OC. This Group is further assisted by the Operating Committee, which meets centrally once per month to discuss and assess development and maintenance issues and tasks.

The **1st management layer** represents the Steering Committee consisted of NCA Director General, the Secretary General, the Deputy Director responsible for IT, CCD Directors of Directorates, MF Director of Information Systems Directorate. This Committee meets at least once every two months. The SC is presented with the IT activities/contracts progress and is expected to assist in Risk resolution.

4. IT UNIFIED PROCESS DEFINITION

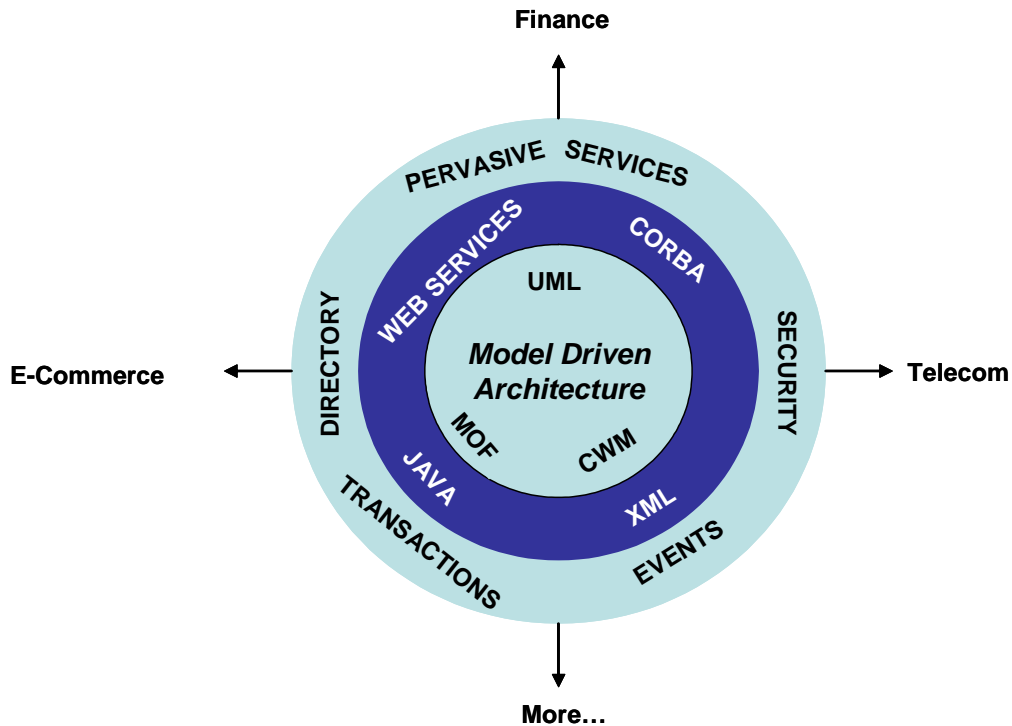
Adopted International IT Standards

The customs information system is build of multiple modules, which automate various business processes. The integration of these modules into BICIS is a complex process. The maintenance of BICIS and its modules is performed by different external or internal teams. Due to the long exploitation period of the separate modules, continuity between team members and teams shall be ensured.

As a main mechanism to overcome potential problems in developing and maintaining such complex system, BCA adopted international standards for system development and unified IT process for all internal and external IT teams.

4.1.1. Standards Framework

The international IT products development standards, defined by Object Management Group (OMG) for the development of Model Driven Architecture are used as a basis for standardisation of the IT processes within NCA.



NCA adopted the three main OMG standardisation levels as follows:

Level 1: defines the **design framework** and includes the following standards:

Meta Object Facility (MOF) – defines the rules and standards for model/metadata interchange and interoperability.

Unified Modelling Language (UML) – defines the rules and standards for business and process modelling.

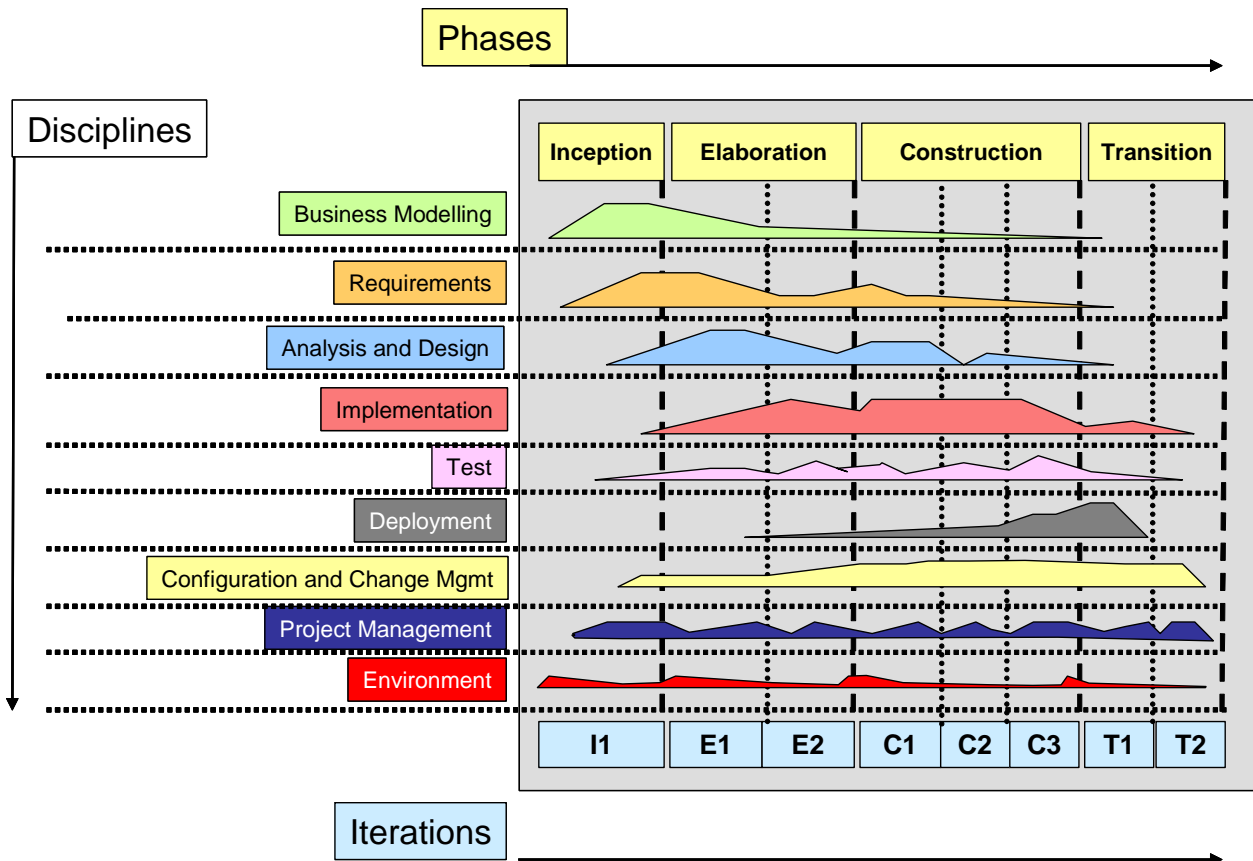
Common Warehouse Meta-model (CWM) – defines the rules and standards for information conversion from operational to warehouses DBs, report queries processing, as well as for data presentation.

Level 2: defines the **implementation framework** of the software development process. The following technical standards are used: J2EE, XML, CORBA, Web Services.

Level 3: defines the **system support framework** of the software applications. The following standards are used: transaction mechanism, security mechanism, Events mechanism, Directory Service, Pervasive services.

4.1.2. IT Unified Process Framework

The management and performance of all NCA IT projects strictly follow the Rational Unified Process (RUP).



In accordance with the NCA practices, the management and performance of the IT processes is organised in Phases (Inception, Elaboration, Construction, Transition), which can be split into iterations. The main purpose of the iterations is to achieve iterative development, testing and deployment of the applications. Each iteration within each of the phases includes one or more disciplines (Business modelling, Requirements, Analysis and Design, Implementation, Test, Deployment, Configuration and Change Management, Project Management, Environment) of the software products development lifecycle.

Defined Internal IT Regulations

4.1.3. IT Regulations Framework

Internal CSA activities, the CSA teams management and control activities on external projects, as well as activities on projects performed jointly with external contractors, are regulated by three types of internal documents as follows:

- Strategies

The main purpose of the strategies is to define the short-, medium- and long-term objectives of the CSA projects. The strategies define:

- Organisation structure for the realisation of the activity;
- Applied standards, policies, and regulations for the realisation of the specified activities;
- The main principles and the scope of the NCA IT Programme;
- Detailed description of the NCA IT infrastructure realisation and plans;
- Detailed description of the NCA IT programme modules realisation and plans;

- Policies

The purpose of these documents is to define all main concepts in the different domain areas of the CSA activities and to define the scope and the framework of these activities. The policies:

- Define the types of objects in the domain area;
- Define the roles and profiles performing the different CSA activities;
- Define the type of activities in the domain area;
- Describe in detail all specified CSA activities;
- Define the sets of regulations and restrictions concerning the domain area objects, roles, profiles, and operations.

- Procedures

The purpose of these documents is to describe in detail each CSA activity at the different stages of the project performance. The development of the procedures aims also at the improvement of the efficiency and the quality of the work, increase of the possibilities to work in a team, as well as decrease of the time for training of new CSA staff. The procedures define as follows:

- The workflows presenting the sequence of the activities performed within CSA;
- The conditions and synchronisation points for conversion of workflows in several parallel workflows and vice versa;
- Types of roles and profiles together with their responsibilities for realisation of the activity;
- The types of tools used for the execution of the defined activities;
- The types of input and output documents necessary for the execution of the defined activities.

The following table defines the NCA IT Regulations Documents Hierarchy.

Strategies	Policies	Procedures
IT Strategy	Project Management Policy	Project planning procedures
		Project management procedures
		Project control procedures
		Documents management procedures
		Configuration management procedures
		Change management procedures
		Tendering and contract procedures
	IT Human Resources Policy	Planning procedures
		Recruitment procedures
		Performance appraisal and remuneration procedures
		Training procedures
	Development Policy	Development standardisation Procedures
		Business Modelling procedures
		User Requirements procedures
		Analysis and Design procedures
		Implementation procedures
		Testing procedures
		Deployment procedures
		Development process management procedures
	Security Policy	Authentication and authorisation procedures
		Data protection procedures
		Information confidentiality procedures
		Communication security procedures
		Procedures for protection of the intellectual and property rights
	Maintenance Policy	Infrastructure maintenance procedures
		System software maintenance procedures
		Applications maintenance procedures
		Communications maintenance procedure
		Help desk maintenance procedures
		Support teams activities procedures
		Data maintenance procedures

BCA plans for achieving interoperability status with the EC and MS business and technical requirements are described in detail in the BCA Interconnectivity/ interoperability Strategy which is an extract of the BCA IT Strategy.

Following the adopted methodology, the required NCA quality standards are defined in the following two documents:

Project Quality Template (PQT) – a document prepared by NCA comprising rules and practices extracted from the NCA IT policies which are mandatory for external contractors.

Project Quality Plan (PQP) – a document prepared by external contractors which extends the PQT rules and practices with specific rules if required.

The unification of all business and IT processes within NCA in accordance with ISO standards is planned for completion in 2006.

4.1.4. IT Regulations Scope

The IT regulations scope is defined by the following policies which were or are being prepared and regulate the activities for the NCA IT projects realisation:

Project Management Policy

The goal of this Policy is to define the regulations for all activities for realisation of the following CSA types of projects: Development projects (including development of software modules, or Customisation and integration into NCA IT environment of third party software products); Supply

projects (including delivery, installation, and tuning of the NCA IT equipment); Maintenance projects (including system, communication, applications and infrastructure support); Supporting projects (staff training, user help desks, etc.); and Management activities (Quality assurance, Contract Management, Planning, Change Management, etc.).

Human Resources Policy

The main goal of this Policy is the definition of the regulations for the activities concerning the CSA Human resources, including: staff employment, staff career development, staff training, connections with universities, staff extension plans, etc.

Development Policy

The main goal of this Policy is to define the regulations for the activities concerning the CSA IT Modules development process, including: definition of the standards used in the all RUP disciplines, description of the all major activities during the development cycle, definitions of the technology used for the documents preparation process, collaboration rules between different teams and different team parts, describing the activities for the IT Modules tests, specifying the deployment process, and the specification of the important key indicators verifying the acceptable IT modules functionality, etc.

Security Policy

The main goal of this Policy is to define the regulations for the activities concerning the system and information security, and especially: rules for profiles definition, NCA policy for authentication and authorisation procedures, NCA policy for communications security, definitions for information confidentiality, rules for documents classification, questions concerning intellectual and property rights, etc.

Maintenance Policy

The main goal of this Policy is the definition of the regulations for the activities concerning the hardware, communications, system software, applications and user data maintenance. The document defines also the activities and responsibilities of the NCA IT Support teams. The mechanisms for the end users support services (as Help Desk, Hot Lines, Web sites, etc.) are also defined.

5. IT PROGRAMME FUNDAMENTALS

Main user requirements

- Implement BICIS as an integrated and centralised Web-based multi-layer architecture;
- Implement BICIS as a system consisting of a kernel (including the common systems and information resources of the application as a whole) and a set of business modules, capable of being replaced, independently of each other and independently of the kernel, without affecting the functionality of any other module;
- Implement BICIS as a platform-independent system;
- Class C must be ensured as the minimum security class of BICIS;
- Provide a versatile mechanism ensuring rapidly changeable and flexible scalability of the system;
- Use development technologies ensuring high automation level of the development process in order to achieve minimum system maintenance and upgrade times.

Main technical requirements

- **Centralisation:** this aspect of the system provides for much cheaper maintenance;

- **Integration:** allows for huge savings of resources in terms of repeated development of modules, activities for integration of next versions, human resources for maintenance of data stores, etc.;
- **Standardisation:** Uniform system architecture and communication standards ensure much easier system maintenance in terms of both adding new business module versions and new version developments, all this owing to the standardised communications and the shared use of common system resources;
- **Reusability:** The multiple usability of certain modules makes it possible, after an initial software resource build-up, new modules to be developed or the existing ones to be upgraded within tight deadlines;
- **Automation:** The possibility to automate the technological process along the whole software development cycle allows much shorter timelines for modifying the business functionality and aligning the software to the changing primary and secondary legislation.

Software development standards and technologies

5.1.1. Software development standards

- Business modelling standard: UML.
- Implementation standard: J2EE.
- Messaging standard: XML.
- Graphic interface development standard: ebXML.
- Project management standard: RUP, Tempo.

5.1.2. Software development technologies

- Business modelling, design and test tool: Rational Rose Enterprise Suite (in operation).
- Graphic interface design and implementation tool: Web Sphere Developer Studio (planned).
- System performance monitoring tool: Tivoli (in operation).
- Database development tool: Informix (in operation).
- Application management tool: Web Sphere Application Server (planned).

General architecture

The BICIS software architecture is based on the four layers solution as follows:

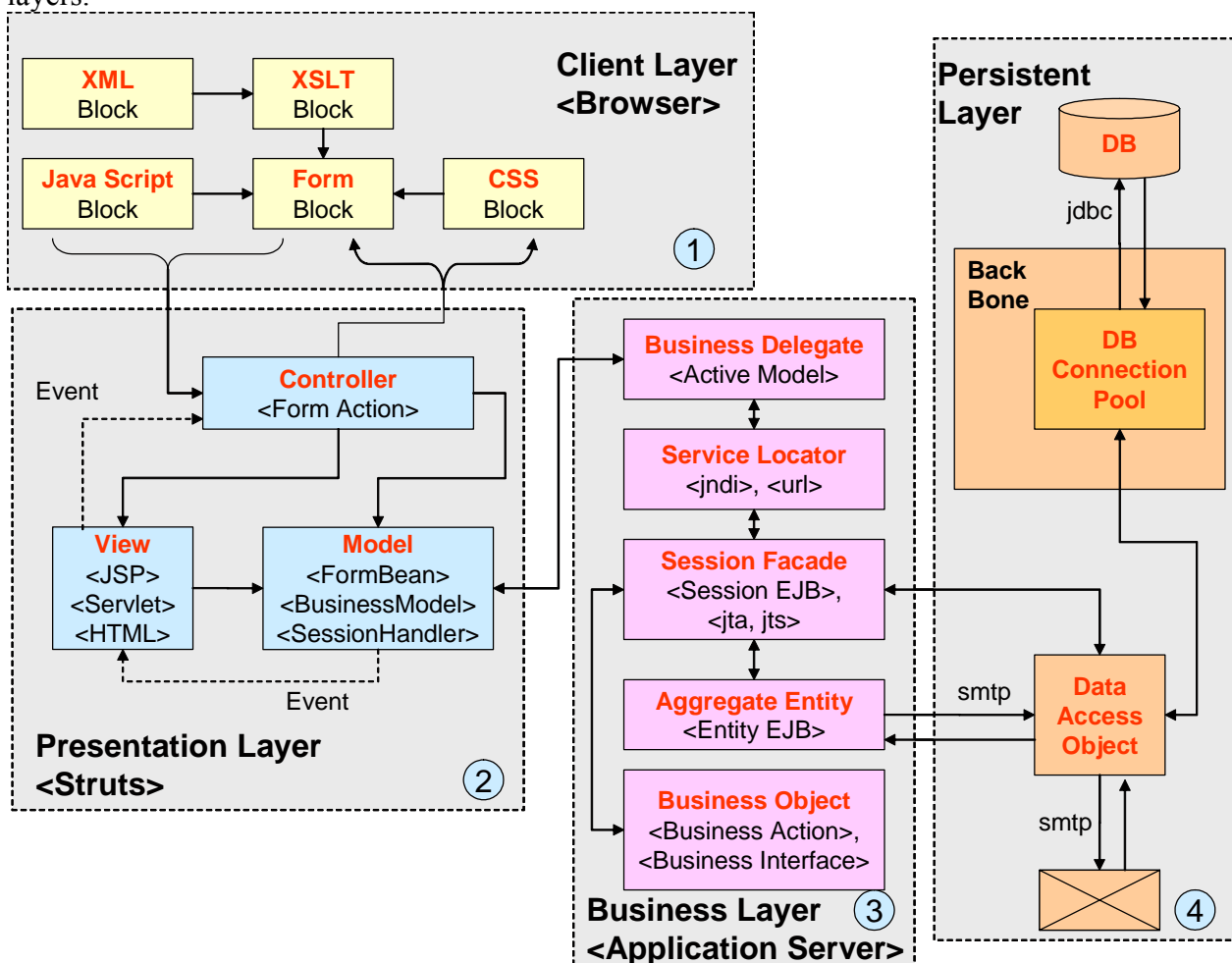
- Client layer – visual presentation of HTML forms
- Presentation layer – realised are the presentation and the collection of data from the client
- Business layer – in this layer is realised the application business logic
- Data storage layer

The main development technologies used by the different layers are as follows:

- Client layer
- DHTML
- XML, XSLT

- JavaScript
- Presentation layer
- Struts Framework (Controller – Model – View)
- Business layer
- Business Delegate (EJB Session Statfull Beans)
- Service Locator (LDAP, JNDI, URL)
- Session Facade (EJB Stateless/Statefull Session Beans)
- Aggregate Entity (EJB EntityBeans)
- Buisness Object (JavaBeans with capsulated system business logic)
- Data storage layer
- DAO (transparent access to data)
- BackBone (asynchronous data processing by EJB components)
- Domain Data (group of data storage servers - data bases, mail, ftp, etc.).

The following Figure shows the technologies and techniques used at the each of the architectural layers.



Development infrastructure

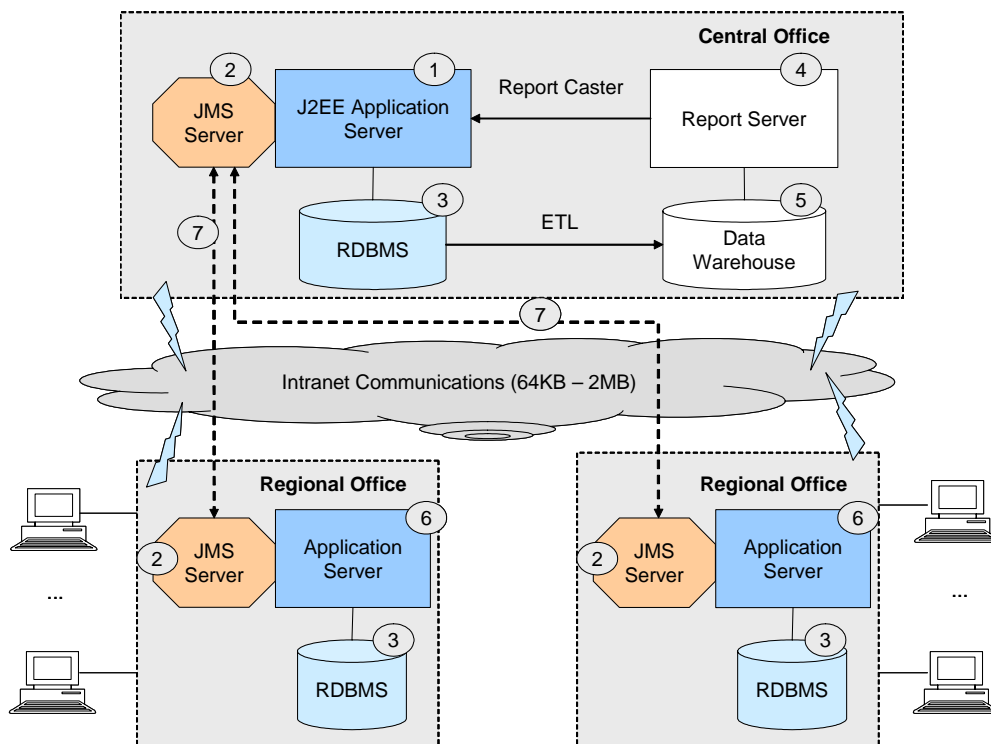
The main components (used or planned for use) of the Development environment are as follows:

- Modelling tool - Rational Rose
- CASE Automated Developer – Web Sphere Developer Studio.
- Application Server – current: JBoss, future: Web Sphere.
- Test product - Rational Rose test tools
- Configuration Management - Rational ClearCase
- Defect and change tracking - Rational ClearQuest
- Browser - MS Internet Explorer + MS Java VM
- Operating System - Windows

Deployment infrastructure architecture

The following 2 charts attempt to express the current and future architecture.

5.1.3. CURRENT (CLUSTERED) INFRASTRUCTURE ARCHITECTURE



Legend:

J2EE Application Server

JMS Server

RDBMS

Report server - OLAP

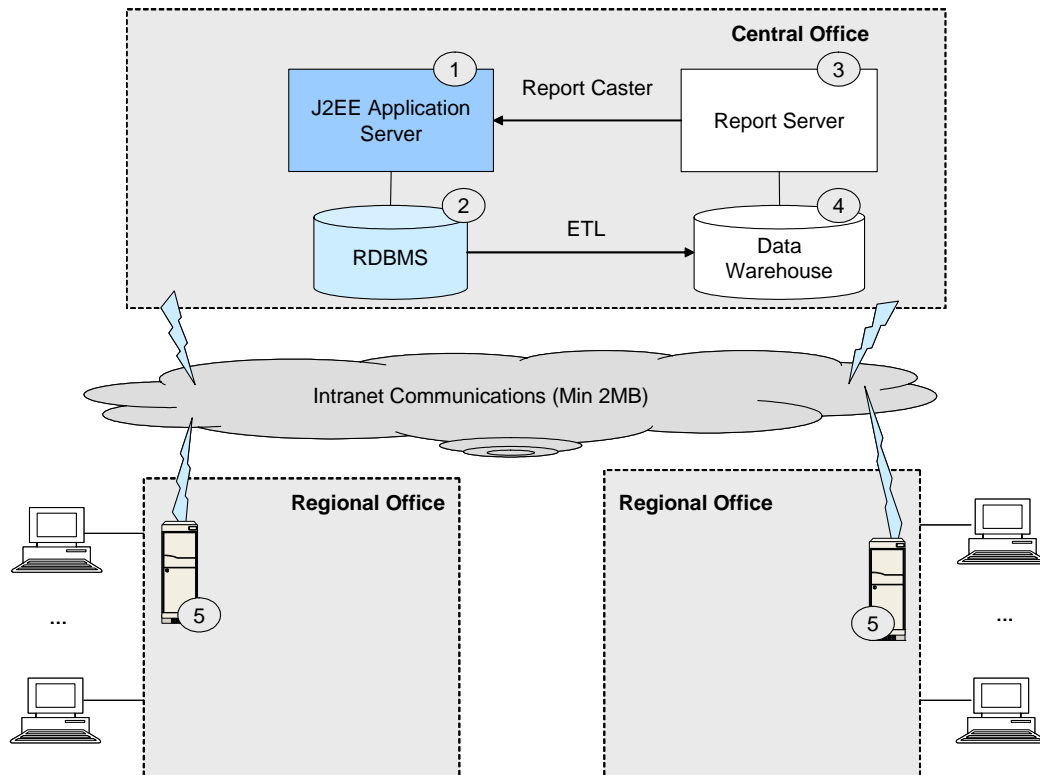
Data Warehouse

Application server

JMS asynchronous communication – Data replication and broadcast of reference data.

Regional Offices in the chart represent all 124 Customs Sites

5.1.4. FUTURE (CENTRALISED) INFRASTRUCTURE ARCHITECTURE



Legend:

J2EE Application Servers

RDBMS

Report server - OLAP

Data Warehouse

Communication servers

Regional Offices represent all 124 Customs Sites

6. IT INFRASTRUCTURE

CURRENT IT INFRASTRUCTURE

6.1.1. HARDWARE

Workstations at BCA are approximately 2000. They are mainly 5 types with following characteristics:

IBM PC 300 GL:

CPU: Celeron 333 MHz
RAM: 160MB SDRAM
HDD: 3,2 GB

IBM PC 300 PL

CPU: PENTIUM II 400 MHz or PENTIUM III 450 MHz
RAM: 192 or 256MB
HDD: 6,4 GB ULTRA ATA – 33 with S.M.A.R.T.

IBM NetVista

CPU: Celeron 600MHz
RAM: 192 SDRAM
HDD: 10 GB

IBM IntelliStation

- CPU: Pentium III 800MHz
- RAM: 256 SDRAM
- HDD: 1 x 10 GB and 1 x 14GB

Servers that are used at BCA are mainly two groups according to their architecture:

PC based servers – data base servers and application servers.

RISC servers

PC based servers are with following parameters:

Low Class

- IBM Netfinity 5000 8659-22Y
CPU: PENTIUM II – 400 MHz – Upgradeable to 2CPU
RAM: 128MB SDRAM ECC Memory Upgradeable to 1GB
HDD: 9,1 GB Wide Ultra SCSI

Middle class

IBM Netfinity 5000 8659 –31Y with RAID

CPU: PENTIUM II – 450 MHz - Upgradeable to 2CPU
RAM: 256MB SDRAM ECC Memory Upgradeable to 1GB
HDD : 3x 9,1 GB Wide Ultra2 SCSI

IBM Netfinity 5100 with RAID

CPU: PENTIUM III – 800 MHz
RAM: 256MB SDRAM ECC Memory Upgradable to 1GB
HDD: 6 x 9,1 GB

Application servers:

CPU: PENTIUM IV – 2.4 GHz
RAM: 512MB – 1GB
HDD: 40 GB

RISC servers are IBM RS6000 family models.

Customs Points/Customs Bureaus: workstations used – IBM PC 300GL and IBM PC NetVista, servers- 1 x IBM Netfinity 5000 22Y (low class), in heavy loaded IBM Netfinity 5000 31Y (middle class) as well as application servers.

Customs Houses: workstations used – IBM PC 300 GL/PL, IBM NetVista, servers – mainly middle class PC based IBM Netfinity 5000 – 31Y and IBM Netfinity 5100. At Customs House Sofia Airport as heaviest loaded site there is IBM RISC 6000-F80 as well as application servers. Regional Customs Directorates: workstations used – mainly IBM PC 300 PL and IBM PC NetVista. For system administration needs IBM IntelliStation are used. Servers – IBM RISC 6000-F80, F50, E20. as well as application servers

Central Customs Directorate: workstations used – IBM PC 300 PL and IBM PC NetVista. For system administration needs IBM IntelliStation are used. Servers: as well as application servers.

- 1 for replication and I/F w/other systems (Bulstat etc.),
- 1 central data base server - IBM RISC 6000-S7A, 4 processors, 1GB RAM, 4x9GB HDDs SSA in RAID and second RAID massive 10x36 GB,
- 1 for storing consolidated data - IBM RS/6000 model 7017-S85, 4 CPU, 16 GB RAM
- 1 for Internet services which is IBM Netfinity 5000 31Y and 1 IBM Netfinity 5000 22Y for proxy services,
- 1 IBM Netfinity 5000 31Y for File services at CCD level,
- 1 IBM PC based server for centralised anti-virus protection, which is at CCD level.
- 1 IBM RISK 6000 B50 model for e-mail and DNS services

6.1.2. OPERATING SYSTEM

The operating systems used on workstations, are basically Windows NT4 and some Windows2000/XP. Old PC's are using Windows 98.

PC Based Servers are on SCO UnixWare 7.0.1 and Red Hat Linux 7.3. At CCD there is one Netfinity running Novell 5.0 because it is used as fileserver.

All RISC servers at BCA are running AIX 4.3.3.

6.1.3. DATABASE

Currently the main RDBMS used is Informix 7 on UNIX platform.

Each Customs site supports its own DB instance for processing documents. The data moves to CCD level through the messaging sub-system supporting the web application business functions. It also ensures information integrity by confirmation messages.

6.1.4. COMMUNICATIONS

The communication infrastructure supporting BICIS 2.1 is based on the Ministry of Finance WAN network.

TIVOLI products are in process of deployment for centralised management and monitoring.

The physical infrastructure provides main routes between two points. At CCD level Cisco technology is used for communication and security. The logical part of the infrastructure provides information flows adequate to the real customs processing and assure opportunity for easier management and monitoring. For security reasons a strong encryption is realised in communications between the CS. For encryption processing is used IBM RS/6000 model B50 and customised Linux solutions distributed between the CS.

All communications are TCP/IP based.

At present in each Customs Site there is a TCP/IP based LAN. Between the CCD and the RCDs Sofia, Plovdiv and Burgas there is Fibre optics lines with 2Mb throughput. The communication to RCD Ruse and Varna is ensured by Leased lines which are with lower throughput capacity. The communication to customs bureaus/points is ensured mainly by leased lines, but there are some customs offices which need improvement in terms of reliability and security as their line is based on wireless or analogue lines.

FUTURE IT INFRASTRUCTURE

In accordance with BCA's plans for BICIS future development till 2010, BICIS must be implemented as an integrated and centralised system comprised of a kernel and business modules. This involves an increase of workstations because of the new functionality added to BICIS. It is planned that during the above period the system must be capable of supporting 3000 standard and 300 mobile workstations, organised in 150 sites. Furthermore, it is foreseen to open the system to trade operators through DDS and DTI.

This period will see a strong increase of data traffic, information flows and data volumes, because of the intensified information exchange between the customs information centres of DG TAXUD and BCA as well as between BICIS and other government and non-government organisations.

With regard to the increased number of users and the ever tightening IT security requirements, it is planned to reach a higher security class during this period. This substantiates the need for appropriate system monitoring and administration equipment, as well as equipment designed to guarantee the availability and functionality of the services provided by the system.

6.1.5. HARDWARE

Workstations

BCA is currently planning the renovation of the workstations in order to facilitate the work of the customs officers with the centralised web-based BICIS.

Servers

Due to the growing need of capacity and performance in processing data at customs sites, some of the servers will be upgraded with more RAM, additional disk space and CPU capacity, while new servers will be needed for building a server farm to support the centralised web application.

6.1.6. OPERATING SYSTEM

Operating systems used for the servers mainly will remain the same – AIX and SCO Unix Ware and Linux.

Concerning the workstations Windows 2000/XP will be used.

6.1.7. DATABASE

For the time being no change of RDBMS is planned. RDBMS will remain the same – Informix. However NCA is planning to move on an upper version of the Informix RDBMS.

The RDBMS change will be possible after pre-analysis, which has to include: detailed report for technical advantages and financial conditions. If such change will be undertaken, it has to take into account the trends of the information technology markets.

6.1.8. COMMUNICATIONS

The physical infrastructure is intended to provide alternative routes between two points through the implementation of the VSAT back-up solution.

7. IT APPLICATIONS

BICIS stages and modules

The BICIS development and implementation in the period from 2000 to 2009 is split in 5 stages. Stages are pillars built in parallel following the requirements for the system.

Stages 1, 2 and 3 (2000 - 2003) include the development of the basic national components of the system.

Stage 1 (year 2000) – including sub- systems: Customs clearance, Reference data, Report and System control.

Stage 2 (year 2001- 2003) – including stage 1 systems plus: Transit – national level, Customs debt (financial sub- system), Enforcement, Authorisations.

Stage 3 (year 2002- 2004) – Human resources management and Inspectorate.

Stages 4 and 5 (2004 – 2009) include the development of a fully centralised BICIS to function in accordance with the National Business and EU Business requirements in the fields of interconnectivity, extension of BICIS, new business functions of BCA as well as planning, management and infrastructure.

Stage 4 (2004-2007) will focus on the implementation of the main requirements for interconnectivity with the EU. BCA plans for achieving interoperability status with the EC and MS business and technical requirements are described in detail in the BCA Interconnectivity/ interoperability Strategy which is an extract of the BCA IT Strategy. Stage 4 includes:

- implementation of the CCN/CSI communication centre;
- development of BTMS-2 which will cover the common/ community transit requirements;
- trade facilitation developments.
- development of ITMS;

This Stage will involve also the migration from distributed to centralised BICIS architecture and infrastructure, based on further analysis and design activities.

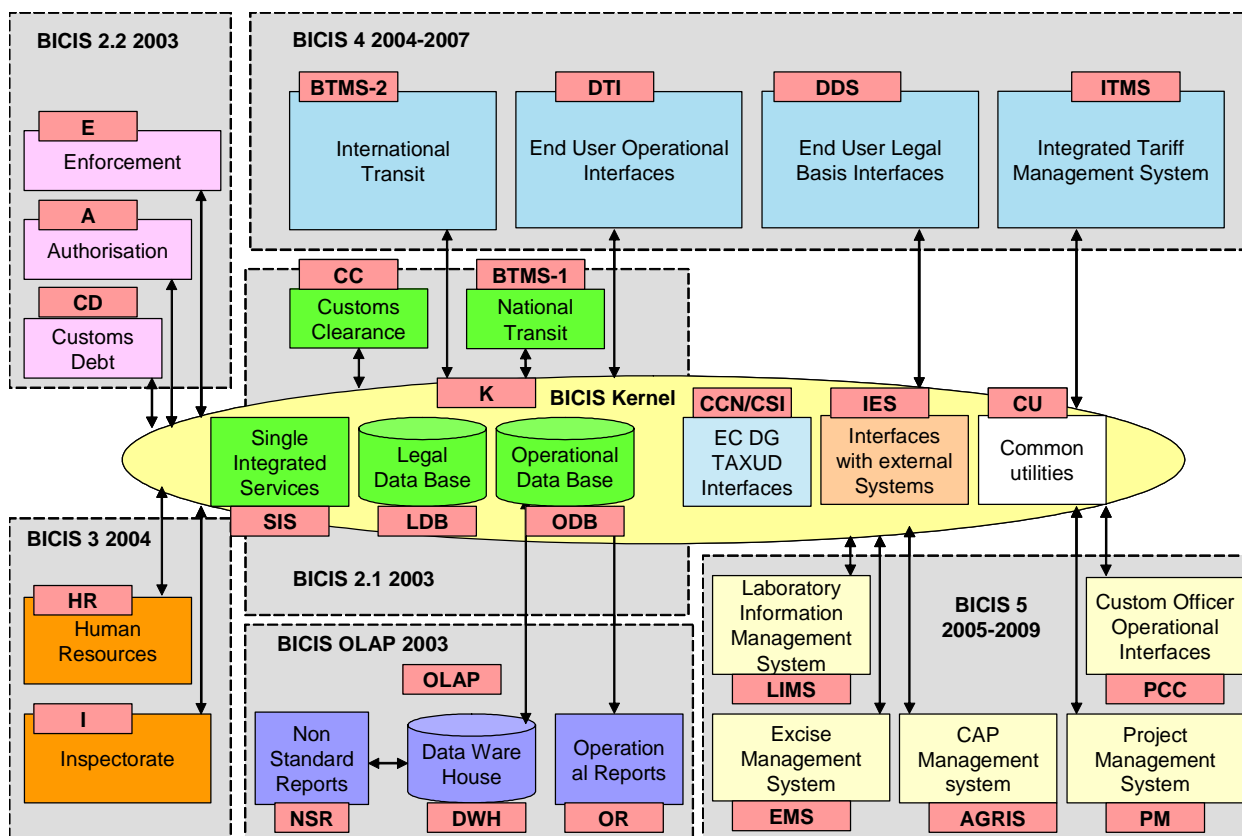
Stage 5 (2005-2009) will cover the computerisation of the new business functions of the customs administration provided for in the national legislation in relation to:

- administration of the excise duty;
- management of the laboratory activities;
- post clearance control;
- control over the export and import of agricultural goods in accordance with the Common Agricultural policy;
- facilitation of the activities of the customs administration connected with the projects management;

Stage 5 will also involve improvement of the infrastructure supporting the development and exploitation of BICIS.

In the frame of Stage 5 an extensive analysis of the remaining requirements to the system will be performed in order to establish detailed Stage 6 plan.

In the frame of the different stages, it has been planned to develop the following three types of modules:



System Kernel, containing system or user functionality supporting all other BICIS modules.

OLAP, a module that allows reporting on all customs data, usually for statistical purposes

Business Modules, being logically completed and autonomous realisations of the various BCA business activities.

Remarks:

Any change to the functionality of the kernel form a new version of the module, including changes to the kernel components as well as all necessary modifications to the business modules due to these changes. The kernel notation will be K-<version number>.A new version of the kernel is not graphically presented on the figure above.

Any change to the business functionality of a business module form a new version of the module. A new version of a business module is graphically presented on the figure above, while the old graphical presentation remains.

The notation for all types of modules will be <module name>[-<module version>]

Current BICIS modules

7.1.1. Kernel-1

- Legal Data Base functions
 - o Tariff system
 - o Tariff and non-tariff measures
 - o Legislative information
 - o Codes and nomenclature
 - o Company info received from BULSTAT.
- Monitoring and control of the messaging system.
- Control of Party server.
- Control of the switching from distributed to centralised system and vice versa.
- Management of BICIS security system.
- System functions such as centralised reference data update and automated distribution to the customs offices.
- A Reporting module handling the report generation and support of the registration documents provided for in the national customs legislation.

7.1.2. OLAP

The OLAP functionality is characterised by dynamic multi-dimensional analysis of consolidated enterprise data supporting end user analytical and navigational activities including:

- calculations and modelling applied across dimensions, through hierarchies and/or across members
- trend analysis over sequential time periods
- slicing subsets for on-screen viewing
- drill-down to deeper levels of consolidation
- reach-through to underlying detail data
- rotation to new dimensional comparisons in the viewing area

7.1.3. Customs clearance (CC)

The Customs Clearance module support all types of Customs approved treatment and use of goods according to the law and its' implementing provisions. The system handles the following functions:

- Manifest procedures;
- Customs procedures using SAD and incomplete SAD
- Currency declarations.

The CC module is operational in all customs sites from the 30th of June 2003.

7.1.4. Bulgarian Transit Management System 1 (BTMS-1)

The functions covered by BTMS-1 developments handle all types of transit at national level (SAD Transit, TIR Carnet, ATA Carnet, CIM and CMGC Transit, TR Transit, Cargo Manifest Transit (air and sea), Postal Transit) and are supported by a messaging sub-system to effectively control transit movements. All reports, registers, statistic data and working documents that concern national transit procedure are automated. They include:

- National Functionality at OoDep
- National Functionality at OoDes

- National Diversions
- Amendments at OoDep
- Process Cancellation at national level
- Central National Transit Data Management
 - o Traders Data Management
 - o National Transit Reference Data
- National Statistics
- Comprehensive Guarantee Registration

The BTMS module is operational in all customs sites from the 30th of June 2003.

7.1.5. Customs Debt (CD)

The module will automate the activities related to:

- Incurrence of customs debt /with SAD or other customs document/;
- Entry in the accounts;
- Extinction or guarantee of customs debt;
- Confirm of payments;

7.1.6. Enforcement (E)

The module will automate the business processes in relation to:

- Administrative penalty and executive procedure;
- Prevention and detection of illegal traffic of drug substances and precursors;
- Risk management including risk analysis and selectivity control.

7.1.7. Authorisation (A)

Automation of all authorisations related to the enforcement of the customs regulations:

- Processing of the requests for authorisations;
- Registration of authorisations;
- Control on authorisations.

7.1.8. Human resources 1 (HR-1)

The module will automate the activities related to:

- Storage and management of personnel details;
- Salaries calculation and management;
- Processing and tracking of personnel leave;
- Selection and recruitment process;
- Management of the administrative structure, vacancies, training requirements.

7.1.9. Inspectorate (I)

The module will automate the activities related to:

- Processing and storage of the inner control results;
- Processing information on special means ensuring authenticity of the customs documents and prevention in the customs offices;
- Control on the implementation of the security policy;
- Control on employee realty.

7.1.10. interfaces with external systems (IES)

This project will be implemented under the Phare Cross-Border Co-operation programme between Bulgaria and Romania.

The main request of the Business Strategy (Border Control Strategy) involves an application development to facilitate the needs of the Customs and Border Police of Bulgaria and their Romanian counterparts and will do the following:

- Extract data from the main systems

- Format the data and forward to the counterpart systems as per the counterpart request.

- Request data from the counterpart system based on a specific request form(s).

- Comply to the technical architecture of the main systems

- Comply with the legal basis in respect to the security requirements for information exchange.

The development of this application with its' environment infrastructure aims at facilitating the prompt exchange of information between the parties involved and support the prompt and correct application of the requested business.

The application will extract the predefined data from the BICIS system, format it accordingly and use it for information exchange between the parties involved.

Future BICIS modules

Stages 4 and 5 (2004 – 2009) include the development of a fully centralised BICIS to function in accordance with the National Business and EU Business requirements in the fields of interconnectivity, extension of BICIS, new business functions of BCA as well as planning and management.

7.1.11. Kernel-2

It consists of two phases comprising of the following main activities:

1. Modelling, Design and Methodology Phase for the establishment of overall BICIS Business model, System model and software architecture in accordance with the whole BICIS functionality identified in the BCA IT Strategy.

- Business model (User Requirements, Software Requirements, Use Case Models, and Workflows Models);
- System Model (User Requirements, Software Requirement, Use Case Models, and optionally Use Case Realisations);
- Software Architecture (Component Model, Components Structure, Presentation Layer architecture and Constructive Design Framework, Business Layer architecture and Constructive Design Framework, Persistent Layer architecture and Constructive Design Framework, Conventions and protocols for Data presentation and Data transfer, Conventions, and Languages for presentation of Business knowledge, Conventions for GUI presentation and updates, etc.)
- Methodology for BICIS development and maintenance to cover the whole lifecycle of the system including creation of Business/System Models, extension of Software Architecture, Components and System Upgrades, Creation of Constructive Design Frameworks, Components Implementation, Components/System testing, System Exploitation, etc.

2. Implementation Phase comprising of the following main activities:

- Development of an adaptive BICIS software architecture following the rapidly changing business environment.
- Update of the Constructive Design Framework for the development of all BICIS system and business modules.
- Definition of the full set of BICIS modules and components standard interfaces.

- Definition of the standards for communication between the BICIS modules and components.
- Development of the BICIS kernel architecture (i.e. editors and generators of business and legal business rules and constraints editors and generators, editors and generators of BICIS GUIs, and workflows, search engine, messaging system, Single Integrated Services, Knowledge editors, Struts Controller, Business actions controller, Internal and External interfaces, etc.).
- Construction of BICIS operational and legal DBs in the terms of the major European data structure standards.
- Re-engineering and extension of the national BICIS modules on the basis of the above components, the EU standards and accession requirements.

7.1.12. ccn/csi

The CCN/CSI gateway has been estimated to start functioning on 01/01/2004 and no later than 01/07/2004.

One pair of CCN/CSI gateways will be installed in Bulgaria to be shared between the BCA and the GTD. It will be provided through the Phare Networking Programme.

The Ministry of Finance took the decision to install the CCN/CSI communication centre at BCA premises. BCA was entrusted the responsibility for the implementation of the CCN/CSI gateway as the first business requirement for CCN/CSI has been identified with the BTMS, which requires testing with the EC and the counterpart Convention Member States.

The co-ordination of this activity will be performed by BCA with the cooperation of the MF.

7.1.13. Bulgarian Transit Management System 2 (BTMS-2)

BTMS-2.1 will cover the integration of the NCTS 3.1 functionality into BICIS, based on a gap analysis of what is currently covered under the national BTMS-1 project and what remains to be developed, in order to bring the National transit level to the NCTS 3.1 level. BTMS-2.1 developments will cover:

- International Exchange of Messages between OoDep and OoDes
- Management of OoTra, including international IE
- International Diversions, including international IE
- External Domain Information Exchange
- Conversion between XML and EDIFACT and CCN/CSI Configuration
- Central System Reference Data (CS/RD) for Common domain

Phase 2.2 activities will finalise the development including the extension of the BTMS with the future minimal requirements for the NCTS 3.2 functionality:

- Guarantee Management
- Enquiry Handling
- Authorised Consignee Query
- Risk analysis
- Common Transit Statistics
- DTI for the Traders.

7.1.14. Integrated Tariff Management System (ITMS)

The ITMS development will change the current BICIS ITMS in order to align BICIS with the DG TAXUD requirements and will cover the development of the following business:

- Integrated Community Tariff (TARIC).
- Tariff Quotas and Surveillance (TQS).
- European Binding Tariff Information (EBTI).
- Specimen Management System (SMS).

- Information System for Processing Procedures (ISPP).
- European Customs Inventory of Chemical Substances (ECICS).
- Binding Origin Information (BOI).
- Tariff Suspensions.

7.1.15. Anti-fraude information system (AFIS)

The Status of AFIS implementation at the moment in NCA is at the initial phases. So far one workstation has been implemented in CCD and a second one is expected. Unfortunately, OLAF does not provide yet Technical Assistance to Bulgaria in the same form as DG TAXUD and the AFIS implementation is not managed with the same approach as the Interoperability with DG TAXUD systems.

NCA IT has requested from OLAF a suggestive Implementation Plan, which is expected in the near future.

7.1.16. Excise management system (EMS)

Currently the Customs administration has the authority to collect Excises for imported goods. The legal framework for Excises, inland Excises collection and overall legal application control are within the competence of the Tax Administration. In accordance with the EU Member States practices, as from January 1st 2003 changes in the taxation legislation, concerning the payment of the excise duty on imported goods into BCA accounts, had been implemented. In most of the EU Member States the excise duty is registered and administered by the customs administration.

A draft Law on the excise duty and excise warehouses is being prepared and is planned to enter into force in 2005. This legal act is expected to regulate the administration of the excise duty entirely by BCA. Therefore, BCA intend to initiate the development of the EMS based on this assumption and taking into consideration the EC EMCS computerisation project progress.

7.1.17. Direct trader input (DTI)

The Direct Trader Input application will cover the declaration input by Traders into the system, by allowing access to BICIS via a browser for Manifest and SAD entry, data check and data calculation. A summary of the features are listed below:

- Enter manifests/ declarations into the system.
- Check the manifest/ declaration data.
- Track the status of the manifest/ declaration.
- Register personalised data.
- Provide authentication, authorisation and security.
- Implementation of e-signature and usage of certificates for the authentication, authorisation and security aspects of the application.

7.1.18. Data dissemination system (DDS)

The national Data Dissemination System will provide the trade with structured tariff information which will be extracted from the BICIS system. It will also provide tariff quotas and ceilings consultation information based on the criteria defined on the “Europa” site under the “Taric” and “Quota” options and/or the BCA specific requirements.

7.1.19. Laboratory information management system (LIMS)

The following main activities have been identified to be implemented under this project:

- Development of BICIS module for management of the information flows and CCL activities from NCA staff external to the CCL directorate including:
 - management and optimisation of the information flows among the NCA structural units and the CCL.

- automation and synchronisation of the functional flows Customs Clearance and Customs Control of the substances Online from every BICIS point.
- Development of BICIS module for management and optimisation of the CCL activities including:
 - management of the samples movement,
 - planning of the CCL activities,
 - management of the samples inventory,
 - management of the samples archive,
 - management of the chemical laboratory automata,
 - automation of the laboratory staff activities – planning of their activities and preparation of recipes and methodologies for chemical analysis of the samples,
 - optimisation of the laboratory automata workload with the aim to reduce the time for sample analysis.

7.1.20. post clearance control system (PCC)

The following main activities have been identified to be implemented under this project:

- Creation of a data base “Card index of companies”, which will provide data for assessment of the trade operators.
- Development of a risk analysis and selectivity control module for the needs of the post clearance control.
- Development of an analytical module for management of the checks carried out.
- Development of a module for interface connections with internal and external information sources.
- Development of a module for analysis of the results from the checks carried out.
- Development of all reports necessary for the functioning of the sub-system.
- Development of a module for regulation of the rights for access and work with the sub-system.

The business preparation activities are performed with the assistance of the Twinning project under Phare 2001 programme, which is currently being implemented.

7.1.21. CAP management system (AGRIS)

This project foresees the development of an Information system for automation of the activities for administration of the measures and mechanisms of CAP, including an operational system for exchange of information and cooperation with the other bodies competent in implementation and control of CAP.

It will cover the development of functional modules of BICIS, enveloping the procedures and control on the CAP, as well the Nomenclature of export refunds developed and implemented thought:

- Development of an adaptive CAP software architecture according to the quickly changing business environment;
- Creation of a Constructive Design Framework for the development of the whole CAP system and business modules;
- Definition of full set of CAP modules and components for standard interfaces;
- Definition of standards for communication between the CAP modules and components;
- Development and implementation of CAP modules and components;
- Development of CAP operational and legal DBs in the terms of the basic European standards for data structure;

Development of an Electronic system, providing operational connection between bodies responsible for implementation and administering of the CAP, aiming at harmonisation of the acts on implementation and control.

7.1.22. human resources system 2 (HR-2)

This Activity will finalise the development of the Human Resources System, which will cover the connection of all the Customs Sites with the Central System.

7.1.23. project management system (PM)

The project aims at improvement of the organisation, planning, management, reporting, and documentation of all BCA internal and external projects.

The following main activities have been identified to be implemented:

Create/customise the Automated project management module (APMM)/ Automated project management tool (APMT) components (i.e. Task management, team working management, Resource management, Risk and Change management, Workflows management, Knowledge base and Search engine, Document and templates management, etc.).

Integrate APMM/APMT in BICIS (including integration with Single Integrated Services, Security system, Data Dissemination Systems, BICIS kernel etc.).

Establishment of APMM, or APMT Knowledge base.

ANNEXES

ANNEX 1 - IT STRATEGY PLAN