



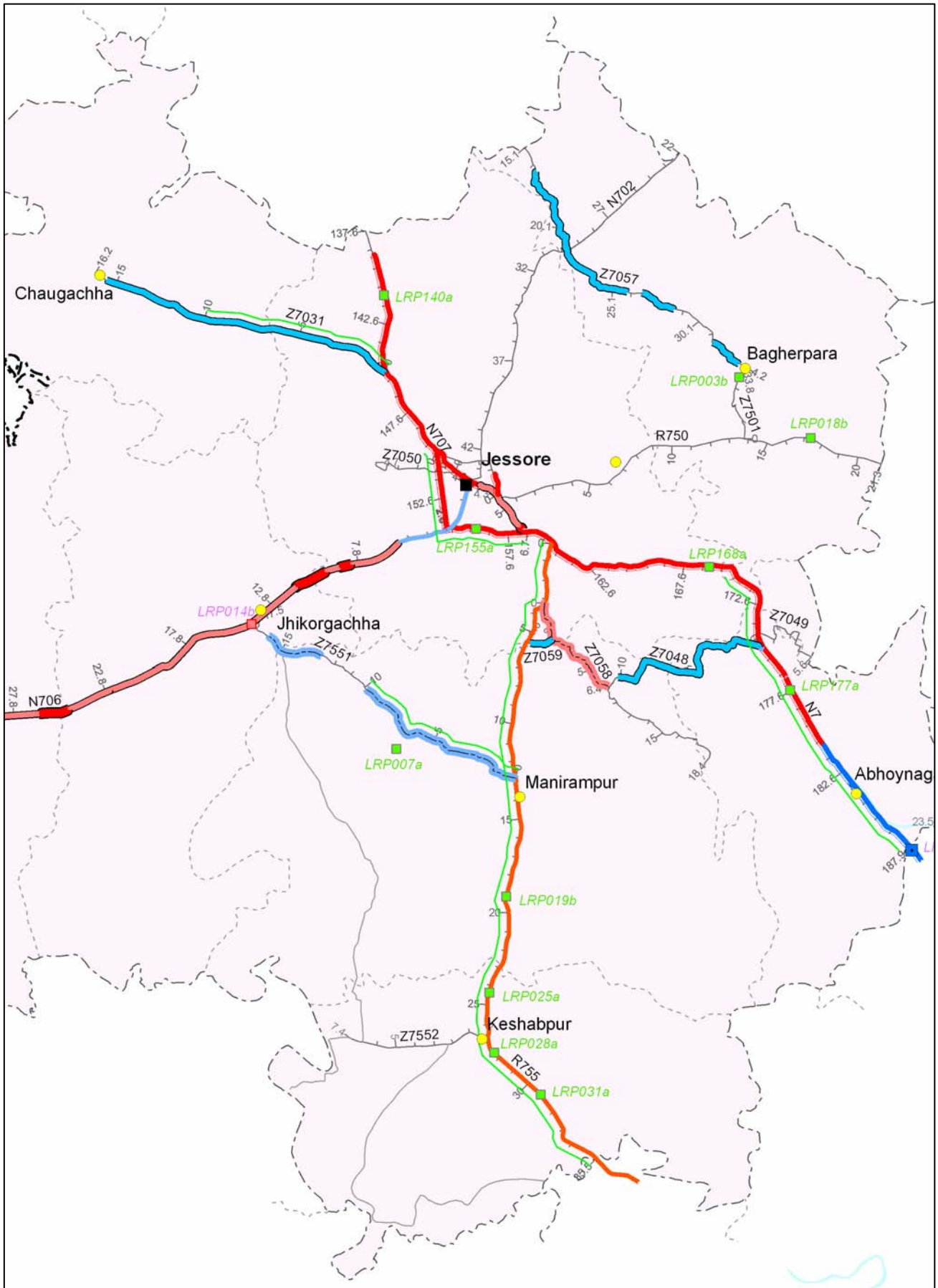
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF
BANGLADESH

MINISTRY OF COMMUNICATIONS

ROADS AND HIGHWAYS DEPARTMENT

RHD Management Systems
Users' Guide

September 2007



RHD's information and communication systems were set up as part of technical assistance funded by the UK Department for International Development through the Institutional Development Component (IDC) programme, from 1994 to 2006. The current project in this sequence the Transport Sector Management Reform (TSMR) project, started in 2006 and is still involved in the further development and maintenance of all systems.

Why this Users' Guide

Overview

This Guide is an introduction to the two essential management systems that are in use at the Roads and Highways Department:

- An asset management system, called RAMS
- A central monitoring and management system, called CMS

It also describes the process of Financial Management reform, which is centred around the establishment of the RHD Financial Management Unit FMU.

The aim of these management systems is to improve the efficiency and effectiveness with which RHD can deliver its responsibility in managing the network of roads and bridges.

To put these systems into context, this Guide begins with a brief overview of the RHD information and communication systems.

Management Responsibility of RHD

The Roads and Highways Department under the Ministry of Communications is responsible for the development and maintenance of the network of the main roads and bridges of Bangladesh.

The total value of these assets is estimated at over Tk 40,000 crore (excluding the main bridges). The value of this asset will rapidly decrease – at a rate of some 8% per year – if it is not maintained. This represents a loss to the Bangladesh economy of Tk 10 crore per day. The economic loss, for instance because of more difficult access to health and education facilities, or lost access to local and global markets, is far greater.

The performance of RHD in maintaining its assets therefore has a direct effect on the welfare of the population and the growth of the national economy.

In order to effectively manage and maintain the assets under its responsibility, RHD has established advanced management information systems. Most of these can be accessed through the RHD website. It is important that the systems are continuously updated and actively used.

RHD's Management Information Systems

The main management systems are based on a set of databases which form part of the **management information system** that has been developed by RHD and which are all accessible through the RHD website www.rhd.gov.bd. An advanced network of radio links and local area networks connects the main offices of the Ministry of Communications and the Department within Dhaka. Local area networks have also been established in all the main RHD field offices, throughout the country.

These RHD communication systems and the databases are described in this guide. A more detailed account of how to use these databases and communication systems is provided in a separate training manual "RHD Website and databases".

Officers from MoC and RHD are encouraged to use the information contained in these websites and databases, to assist them in the effective delivery of their responsibilities.

Road Network of RHD

Category	
National Highway	3,508 km
Regional Highway	4,119 km
Zila Road	13,251 km
Total	20,878 km

Bridge Network of RHD

Category	No. of Bridge
Box Culvert	7,420
Slab culvert	3,190
Arch Masonry	302
RCC Bridge with Slab	195
RCC Girder Bridge	1,982
PC Girder Bridge	359
Steel Beam& RCC Slab	200
Truss with Steel Deck	193
Truss with RCC Slab	28
PSB with Steel Deck	815
PSB with Timber Deck	18
Truss with Timber Deck	6
PC Box	4
Total	14,712

RHD Management Systems

Over the years, RHD has developed systems to assist it in its task of asset management, and maintenance management in particular. In recent years, these systems have been further developed and consolidated into two management systems of critical importance:



Sample of RAMS map



Sample of CMS report

- **The RHD Road and Bridge Asset Management System RAMS** was designed as a comprehensive annual programme of procedures essential for the effective maintenance management of the RHD network. RAMS brings together all RHD's current databases and analytical procedures. The special feature about RAMS is the RAMS map: a single GIS-based map which combines all relevant information and tells the decision makers where to allocate funds for maintenance and development.
- **The Central Management System CMS for RHD** was designed and implemented starting in 2004, linking for the first time physical and financial reporting, based on "earned value analysis". It aims to improve the accountability and efficiency of all RHD field divisions, by reporting directly on all physical and financial progress. Reports from CMS are accessible to all senior managers of RHD, and are being submitted to Ministry. Reports from the CMS are publicly accessible through the RHD website.

A process of financial management reform was initiated in early 2006. Centred on the new RHD Financial Management Unit FMU, the key task is to run the RHD Budget Committee and to prepare the annual submissions for the Medium Term Budgetary Framework MTBF.

Government's Policy on ICT

RHD's management information systems are consistent with the policies of the Government of Bangladesh on Information and Communication Technology (the ICT Policy 2002). The Ministry of Communications has adopted its own internal ICT Policy.

With this policy, the Government of Bangladesh has committed itself to encourage the increasing application of e-governance, as a means to "empower the people and enhance democratic values". "E-governance" is about the use of information technology to raise the quality of the services that government delivers to citizens and businesses. E-governance is intended to strengthen the connection between public officials and civic society, leading to stronger, more accountable and inclusive democracy.

ICT Coordination Committee

MoC has taken initiatives to implement these ICT policy decisions. An ICT Coordination Committee has been established, with as main objective "to provide overall leadership to formulate sector strategies for development based on ICT". It is the intention that ICT will be integrated e.g. into the transport management systems, used for traffic management, route planning, and online booking and ticketing services.

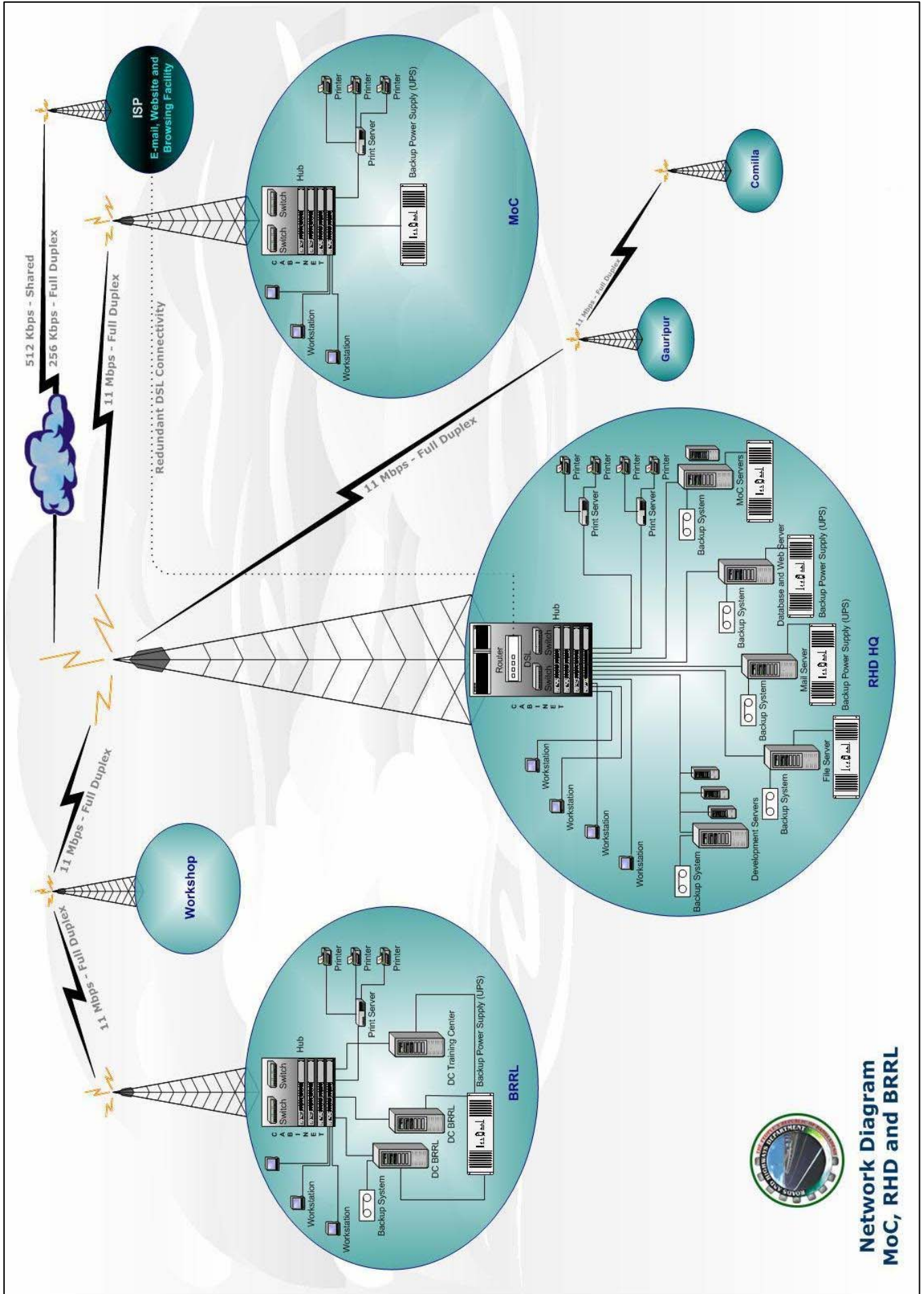
The ICTCC consists of eighteen members under the Chairmanship of Joint Secretary (Administration) working as the Focal Point for ICT and E-Governance. It was formed in October 2003, comprising at least two members drawn from every organisation within MoC.

The main achievements of the Committee are the preparation of an "Internal ICT Policy" for MoC, supported by a draft "Plan of Action". In addition, it has prepared a proposal for the set-up of ICT manpower, and taken initiatives to register and develop websites of all relevant organisations.

One of the aims of the ICT policy:
"the use of information and communication technologies to improve the efficiency, effectiveness and transparency of the government".

RHD website was judged as the best e-content in e-government category of Bangladesh for 2005 by the UN WSIS

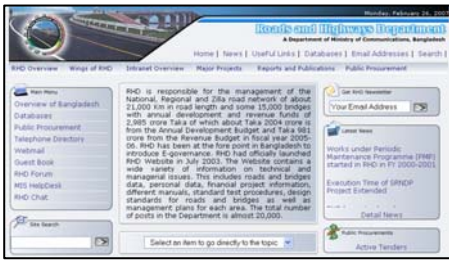




**Network Diagram
MoC, RHD and BRRL**



RHD Communication Systems



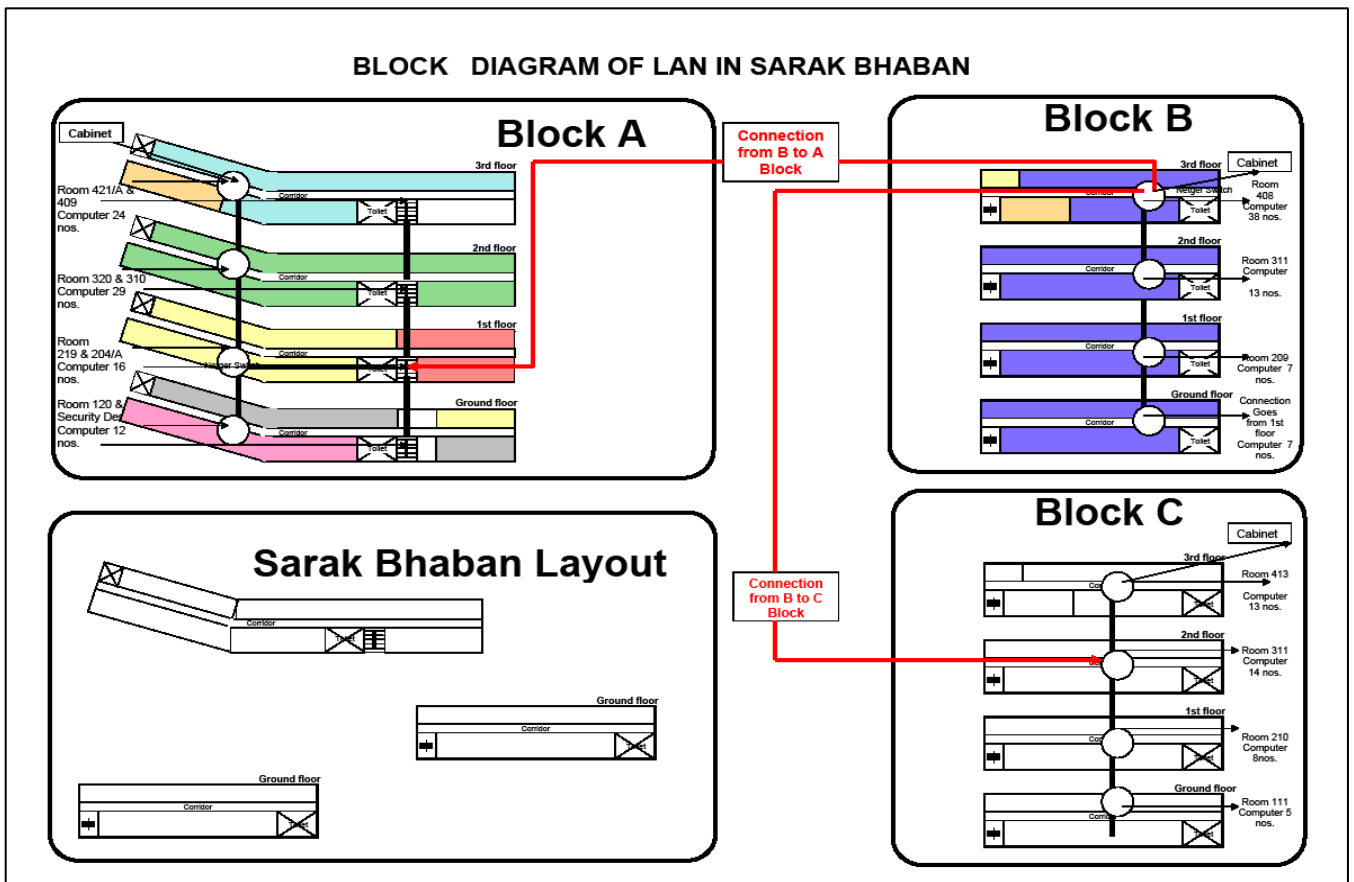
A Local Area Network (LAN) is established within the RHD Headquarters at Sarak Bhaban. At the heart of this system are the central servers connected to PCs in all areas of Sarak Bhaban through a series of network switches and hubs. Network outlet sockets are provided in all offices. The system is flexible and can easily be modified.

The central servers at Sarak Bhaban are connected to MoC and the RHD BRRL offices in Dhaka via radio links. The central servers consist of a File Server, Mail Server, Development Server, Database and Web Server, as well as a number of print servers. All have back-up systems and back-up power supplies. Separate servers are in use for the Ministry, for the BRRL and for the RHD Training Centre.

An experimental radio link is in place via Gauripur to the RHD office in Comilla.

RHD has developed an extensive website with the registered address www.rhd.gov.bd. The website gives access to RHD's databases and its main management systems. All RHD's main documents are accessible to everyone through the website and can be read as pdf files. RHD officers are encouraged to use the site on a daily basis as a source of all their information.

The central E-mail system allows registered users of RHD and MoC to communicate with each other and with anyone with an E-mail address.



RHD Website

Purpose of the Website

RHD has created an extensive website which provides information about its organisation and its activities.

The objective of the website is to provide RHD officers with the information needed to do their job effectively. An additional objective of the RHD website is to provide the public with information about the work that the Department is doing. At the centre of the website are the RHD databases, including the Central Management System CMS.

Information available on the website is extensive and varied. The website presents what the Department is and how it is organised, what it does, how it performs its duties, and what financial and human resources are at its disposal. It contains information which may be of interest to the travelling public, such as detailed maps of the entire RHD network. In the near future, the section aimed at the transport users will be extended.

A source of reference

For RHD officers, the website forms an important source of reference. It contains the full text of all RHD Management Manuals. This includes *job descriptions* for each position in the Department, making it easier for newly transferred officers to fulfil their roles. *Operational procedures* describe how a range of important activities are to be performed, with flowcharts and definitions of responsibilities.

Apart from the Management Manuals, the website contains all RHD technical standards, manuals and guidelines. These cover road and bridge design, maintenance and construction, testing and survey procedures, road signs, road safety manuals, health & safety procedures, guidelines on resettlement and compensation etc.

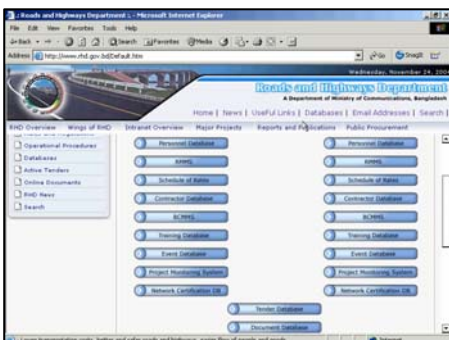
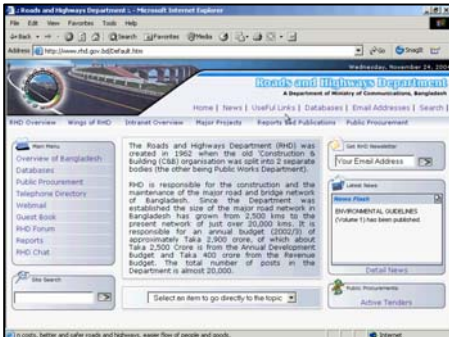
The entire RHD organisation structure is available on the website, listing all posts and current incumbents. Personal profiles of all officers and staff are on the database, although not all personal information is accessible to the public. Recruitment, vacancies and retirements can all be viewed on the database.

Effective procurement

Other sections of the website are aimed at effective procurement of government contracts. Tender notices are listed in a searchable database. Standard tender documents and contract documents can be produced through the website, together with the latest RHD Schedule of Rates.

Information about public expenditure

Through the website, anyone can check on the performance of the projects under the government's Annual Development Programme or ADP. Reports on expenditure are updated every month. The Central Management System is a more advanced version of this project monitoring system, and provides a link between physical and financial performance (see also page 9).



RHD Asset Management System RAMS

RAMS and GIS

HDM4: the Highway Development and Management System HDM-4 is a software system for investigating choices in investing in road transport infrastructure. The World Road Association PIARC is currently responsible for the global development and management of the system. HDM was initiated by major international donors under co-ordination by the World Bank.

GIS is commonly defined as “analysis that combine relational databases with spatial interpretation and outputs often in form of maps”.

The RHD Road and Bridge Asset Management System or “RAMS” is based on the RHD GIS-map. It combines information from all RHD’s databases and systems, including the Road Maintenance Management System, the Bridge Maintenance Management System and the HDM4 analytical software.

This section explain what RAMS can do, starting with an introduction to RHD’s GIS.

Geographic Information Systems in RHD

The basis of RHD’s maintenance management systems is a detailed and up-to-date map of the RHD network, available in digital computerised form. This platform is RHD’s Geographic Information System or GIS.

The GIS-base map makes the link between the information in all the RHD databases and their geographical location or coordinates. GIS maps can be produced at any suitable scale and size, showing a level of detail that fits any specific need or purpose.

Senior officers of RHD can see all information contained in RHD databases via a GIS-screen on their computer, through an inter-active GIS feature (see page 8). This means they can chose which data to display on a map.

Why does RHD need GIS

RHD has a road network of more than 21,000 km of roads and more than 14,000 bridges and culverts. The total value of RHD assets is estimated at Tk 42,400 Crore (or US\$ 7,400 million). RHD’s roads, bridges, ferries and other features have a specific location. And all these roads and bridges have data on condition, roughness and traffic. By connecting or linking the information about these assets in a GIS, it is possible to analyse, to understand and to display the impact of management decisions.

The benefits of GIS

GIS provides up-to-date mapping, which are customised and then printed at any scale. Maps can be produced for a specific purpose, such as thematic map, to highlight a chosen subject. GIS maps can easily be updated, linking GIS road data with related roads and bridges data.

GIS maps allow a graphic display to present the results from HDM analysis, and with this produce “RAMS maps”.

The databases that form part of RHD’s GIS are integrated with GIS data from other organizations, both in government and in the private sector. Possible applications are for instance for project appraisal, in integrated multi-modal transport planning, and in assessing the impact of certain flood occurrence on RHD’s network.

RAMS Map



RHD has introduced a map-based procedure to streamline the planning of its maintenance and rehabilitation works, as a critical tool to support its responsibility to actively manage the nation's network of roads and bridges.

Called "RAMS" – short for RHD Road and Bridge Asset Management System – the system brings together all RHD's current databases and analytical procedures. RAMS displays the outcome of the HDM4 analysis, which is presented in the RHD Annual Maintenance & Rehabilitation Needs Report.

RAMS maps are the definitive guide for the Executive Engineer to apply for budget and to plan his annual works programme.

The final output of RAMS is the RAMS map: a single GIS map that combines all relevant information and shows decision makers where they can most effectively allocate funds for maintenance and for reconstruction. The RAMS map can be produced at any scale: for the whole country, for a Zone, a Circle or a Division. Its greatest value is as a map for each RHD Division: it forms the definitive guide for the Executive Engineer to apply for budget and to plan his annual works programme.



The RAMS map presents the recommendations of essential works to be undertaken for the annual road and bridge maintenance programme. The presentation is in categories of economic priorities, in three levels ranked as "Critical", "Priority" and "Nil". These categories are purely on the basis of economic justification, not on magnitude or severity of treatment. For instance, works proposed as "critical" present an opportunity this year to gain maximum economic benefit from a certain type of treatment: if the works are not done this year, the opportunity is lost. A different, more costly, category of treatment will then be required at a later stage of the road deterioration process.

RAMS map: detail with LRPs

The treatment works may be periodic maintenance, rehabilitation, reconstruction or improvement. The annual programme can be selected from the map and associated table. There are five levels:

RAMS Options for 2007 in Chittagong Division						
Road Option	Road No.	Start	End	Work Length (m)	Est. Cost	Remarks
Periodic	R1000	0.000	2.000	2.000	2.000	90118
	R1001	1.000	1.000	0.000	0.000	90108
	R1002	2.000	2.000	0.000	0.000	90108
	R1003	3.000	3.000	0.000	0.000	90108
	R1004	4.000	4.000	0.000	0.000	90108
	R1005	5.000	5.000	0.000	0.000	90108
	R1006	6.000	6.000	0.000	0.000	90108
	R1007	7.000	7.000	0.000	0.000	90108
	R1008	8.000	8.000	0.000	0.000	90108
	R1009	9.000	9.000	0.000	0.000	90108
Rehab/Recon	R1010	10.000	10.000	0.000	0.000	90108
	R1011	11.000	11.000	0.000	0.000	90108
	R1012	12.000	12.000	0.000	0.000	90108
	R1013	13.000	13.000	0.000	0.000	90108
	R1014	14.000	14.000	0.000	0.000	90108
Bridge Option	R1015	15.000	15.000	0.000	0.000	90108
	R1016	16.000	16.000	0.000	0.000	90108
	R1017	17.000	17.000	0.000	0.000	90108
	R1018	18.000	18.000	0.000	0.000	90108
	R1019	19.000	19.000	0.000	0.000	90108
	R1020	20.000	20.000	0.000	0.000	90108
	R1021	21.000	21.000	0.000	0.000	90108
	R1022	22.000	22.000	0.000	0.000	90108
	R1023	23.000	23.000	0.000	0.000	90108
	R1024	24.000	24.000	0.000	0.000	90108

Feature Type	No.	Work	DBST	Carriageway	Priority	Rehab	Improve	Reconstr	Now
Road	1	DBST	Carriageway	Priority	Rehab	Improve	Reconstr	Now	
Bridge	1	DBST	Carriageway	Priority	Rehab	Improve	Reconstr	Now	
Priority	1	DBST	Carriageway	Priority	Rehab	Improve	Reconstr	Now	

RAMS map: table and legend

- **Red for Critical** – Bridges at risk of collapse or road sections where treatment if left more than two years will need much more expensive treatments, denying scarce funds from the rest of the network.
- **Blue for Priority** – Treatment of roads or bridges in this can be deferred up to four years before more expensive treatments will be needed
- **Purple for Poverty** – Roads that have been identified in the GOB Poverty Reduction Strategy Programme via cluster projects in the ADP, are flagged up in RAMS map as "poverty roads". Generally they will not show an economic return, but provide basic access that can be justified by other means.
- **Green for ongoing Projects** – showing roads and bridges that are included in projects in progress, or about to start. These are therefore not suitable for inclusion in any other new programme at this planning stage.
- **Grey for nil Priority** – showing the rest of the network on the map that is providing a good to fair level of service for the next year.

RAMS Interactive GIS

Road engineers usually select road maintenance projects using the three defining parameters of location, treatment type and quality.

RAMS maps are being introduced in an attempt to involve people without road-engineering experience in the project selection process. The RAMS maps are targeted at MPs and Minister, at interested groups in the constituencies, as well as bureaucrats and technicians in government. Such people will not be familiar with principles of road engineering.

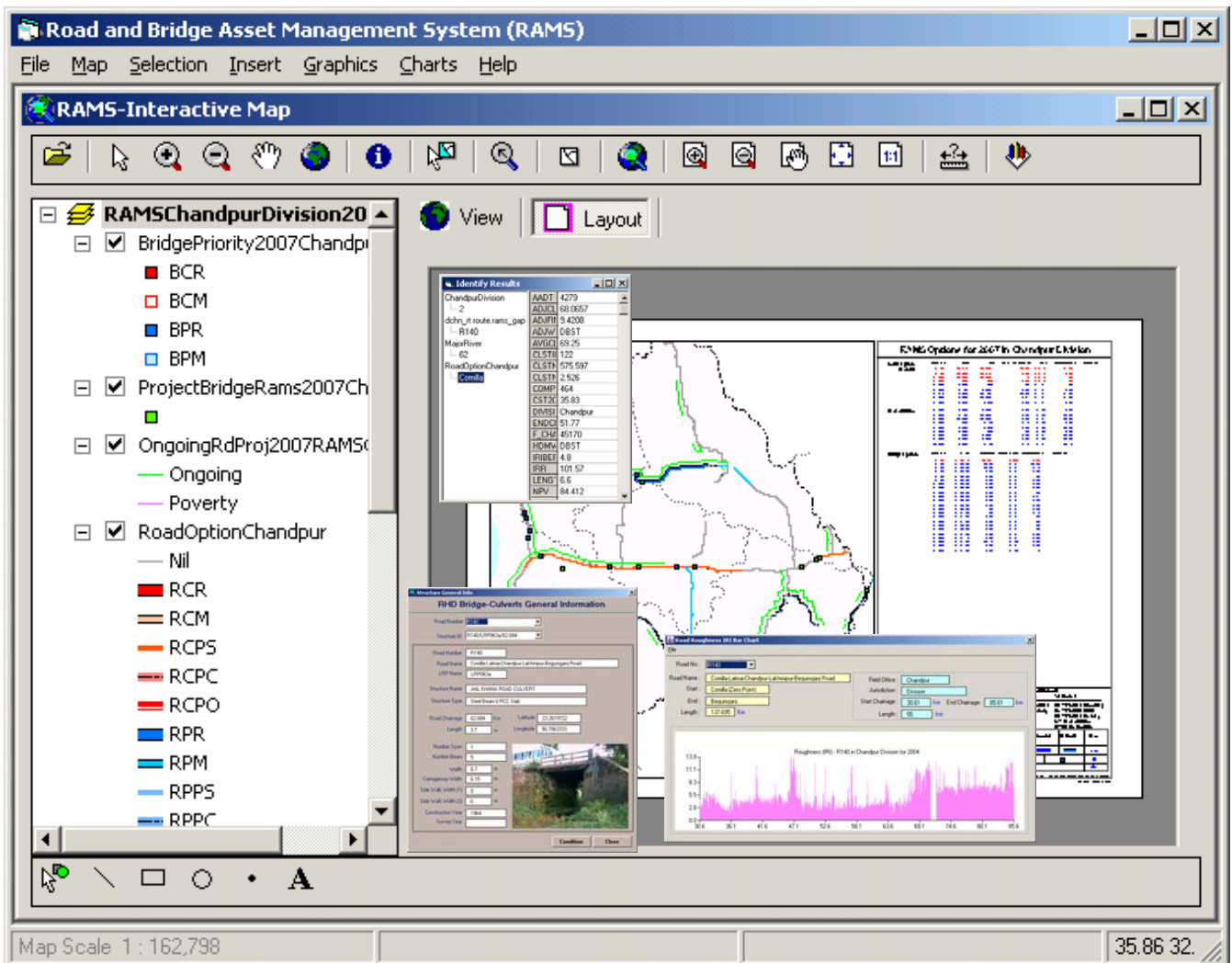
RAMS maps can assist for selecting appropriate road sections or bridges for the work programmes.

RAMS Interactive GIS is a desktop GIS program capable of preparing custom-made maps, using the base map and the information stored in the RHD databases. Any data can be linked with the GIS road features and RHD databases, and displayed on screen or as a printed map. This includes information for instance on roads, bridges, road roughness, road condition and traffic. The same program can be used to view other custom-made GIS maps.

A set of standard GIS functions and tools are part of this interactive GIS. Users can choose the required contents and scale of map, using basic database functions. Standard symbols for RHD roads and bridges can be used, modifying for instance the legend and the layout of the map. The program and its tools are designed to be used by people with only limited GIS experience.

This interactive GIS program can serve as a decision support tool at all levels of RHD road management activities. It enables engineers to use GIS maps and data more readily. Users do not need to come to GIS unit for any mapping requirements, as they can produce maps from their own desk computers.

Ten licences of this interactive GIS program are installed on the computers of selected RHD officers connected through the Local Area Network in RHD at Sarak Bhaban. Some of these work stations are for general access, in the HDM Circle and the RHD Library.



Central Management Systems CMS

Overview



CMS new home page

The **Central Management System** is an advanced management information system being used at RHD headquarters and in all 64 field divisions. CMS is a tool that can assist in the day-to-day management, control and monitoring of the works contracts and projects which RHD is implementing. CMS has been developed to improve the efficiency and effectiveness of RHD in their maintenance and management of the national road network. Using CMS will improve the transparency and accountability in relation to RHD activities and will encourage more discipline in the financial practices and performance of RHD.

CMS currently consists of four program modules:

1. the Field Module – Contracts
2. the Field Module – Finance
3. the Core Module and
4. the Web version.

Contracts Module

The **Field Module – Contracts** enables RHD field officers to:

- Prepare Engineer’s Estimates and tender documents
- Award contracts
- Record monthly measurements and field and laboratory tests
- Prepare Payment Certificates



Home page for Field Module - Contracts

CMS essentially automates and regulates the tendering and contracting process activities of RHD field officers. CMS ensures the consistency in estimates and tendering, by automating the production of tender documents and by producing Engineers Estimates from pre-defined Schedule of Rates.

The full text of all RHD Standard Tender Documents are embedded within CMS. Automated documents have been effective in regularising and enforcing Government directives and RHD’s own rules and regulations. RHD’s field divisions benefit from features to plan and execute works and to prepare payment certificates directly from CMS.

Finance Module

The Field Module – Finance is a full accounts package for the field offices. It provides a direct link to authorised Payment Certificates which are produced by the Field Module Contracts. The Finance module is an Accounts analysis of receipts and expenditure, as well as a means of preparing monthly and yearly account returns.

The Finance Module has greatly improved RHD’s internal financial control, reinforced by tailored reports – aggregated at different functional units of RHD - produced by CMS. CMS acts as a double-entry, cash-based accounting system as required by Government of Bangladesh. It records all financial transactions including all incomes and expenditures and produces a set of financial reports as required by the central accounting body (C&AG) of the government. Transactions are sent electronically to the C&AG – providing an interface with their system.

Features of Finance Module

- A full accounts package for the field offices.
- A direct link to authorised Payment Certificates which is produced by the Field Module Contracts
- An Accounts analysis of receipts and expenditure
- A means of preparing monthly and yearly account returns

Core module

The **Core module** brings the data from the field modules together and manages all development projects and revenue programmes. It records break-downs of all the projects, and it can manage budgets:

- monitors progress on physical works;
- monitors spending;
- prepares reports for external bodies such as MoC, IMED.

The core module holds records of all development activities and all revenue activities as they come from the Planning Commission and the Ministry of Finance, respectively. The projects are further broken down to manageable components from where contracts are initiated and payments are made. In that way, the Core Module provides source information to Contract Module and Finance Module.

The Core Module provides direct relationships between the budget, physical progress and expenditure. It thereby enables RHD to assess the status of a contract or a project at any point in time and to provide forecasts. It reduces the time needed for generating standard progress reports for various organisations including MoC. In addition, its flexibility allows the preparation of reports based on other analyses.

CMS web

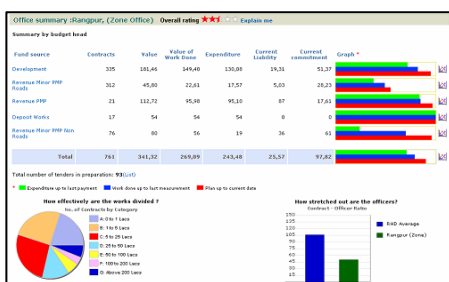
The internet-based module **CMS Web** is a current and comprehensive information resource displaying the latest performance data on all of RHD's ongoing contracts and projects. It is a powerful and versatile management and analysis tool. It is now as quick and easy to access up to date information on any RHD works contract and to get full details both on the physical work activities and progress and on the financial transactions taking place. Features of CMS Web are shown overleaf.

Benefits of CMS

- **CMS improves efficiency.** Estimates can be prepared more easily and more accurately, based on standard items and rates. Estimates can therefore be produced consistently, quickly and error-free. Complete tender documents can be prepared quicker and with less mistakes. There is less duplication of effort and less needless documentation. Hence, CMS helps RHD avoid duplication of efforts and reduces wastage.
- **CMS improves effectiveness.** CMS has eliminated many routine, iterative and non-creative tasks of RHD officers and staff. It allows RHD to concentrate on more important tasks and be more effective. CMS provides better ways to plan and execute works. It is simple and quick to produce all documents and certificates including payment certificates. In-built controls of CMS also limit the scope for erroneous contract and financial data entries.
- **CMS improves accountability and transparency.** CMS will improve governance within RHD.
- **CMS improves information access and knowledge sharing.** CMS provides RHD officers with a valuable management tool. Through the web module, CMS allows RHD to be monitored externally and remotely. MoC can access current information on all RHD works, contracts and financial activities via the internet. External auditors can conduct part of their financial auditing work from offices elsewhere.



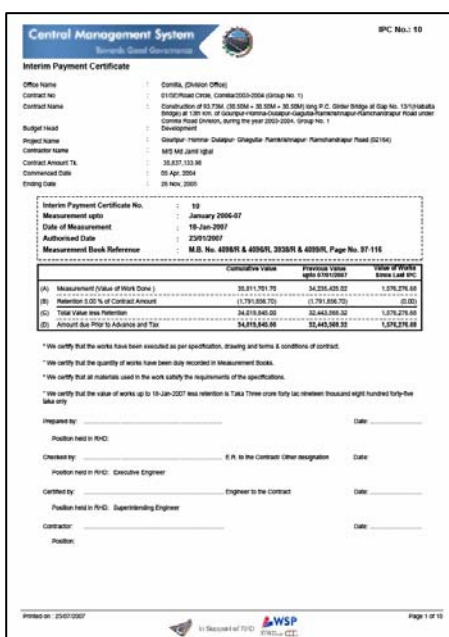
Detailed report on contract performance



Office performance at a glance



Internal Budget distribution



Payment certificates prepared instantly

Central Management System
Towards Good Governance

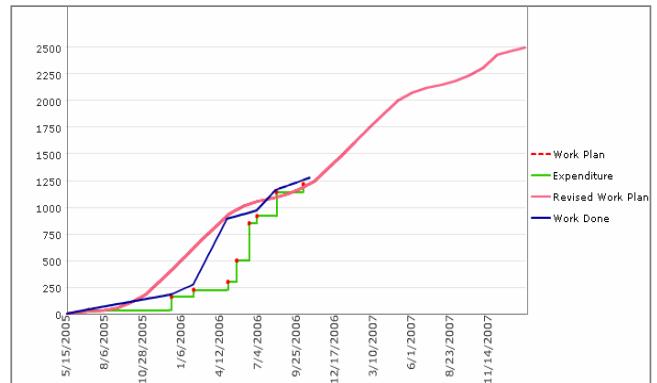


www.rhd.gov.bd/cmsweb

CMS Web is a versatile and strong management tool. It contains the latest updated information on all RHD contracts that are being handled throughout the country. It is now as easy as a click to get information on any contract and get both its physical work details and financial details.

Manage contracts

- Identify contracts that are performing well
- Identify contracts that are making slow progress
- Identify contracts that are halted
- Know liability to the contractors
- Identify contracts that are recently paid
- And many more ...



Financial progress compared with physical progress

Check performance

- Check how an office (Zone/Circle/Division) is performing
- Check how a project is performing
- See achievements
- Identify the problems affecting performance

Zone performance of RHD

Barisal, (Zone Office)	★★★★☆
Bridge Management, (Zone Office)	★★★★☆
Chittagong, (Zone Office)	★★★★☆
Comilla, (Zone Office)	★★★★☆
Dhaka, (Zone Office)	★★★★☆
Khulna, (Zone Office)	★★★★☆
Rajshahi, (Zone Office)	★★★★☆
Rangpur, (Zone Office)	★★★★☆
Sylhet, (Zone Office)	★★★★☆

Rating – based on works management

Get detailed information

- Details on contracts such as contractors, schedules, progress etc
- View vouchers, see each recipient
- View detailed measurements - bill item-wise
- Look at each bill (IPC, FPC)
- How much cash RHD generates each year and from where

Office Name : Gazipur, (Division Office)		
Contract No. : 050-001/170/2005-06/05		
Budget Head : Development		
Project Name : Flyover on Tongi - Kalganj - Chorazhal - Panchdona Roads 1st Km. Rail Crossing (05153)		
Contractor Name : Mr Akter - DIRD - JV.		
IPC No:1	Value of Works :53,79,360.85	
Voucher No : 785		
Payment Date : 29-Jun-2006		
Expense Code : 7026 (Bridges)		
Gross Amount		
37,00,000.00		
GOB		
37,00,000.00		
RPA		
0.00		
DPA loan		
0.00		
DPA Grant		
0.00		
Total	37,00,000.00	
Deductions		
Economic Code	Economic Description	Amount
0111	Taxes from other than Companies	1,48,000.00
0311	VAT on Domestic Products and Services	1,46,500.00
0391	Contractor and Supplier Security Deposit	5,00,000.00
	Total Deductions	8,14,500.00
Cheque No. N - 91446	Total Amount(Gross Amount-Deductions)	28,85,500.00

Payments can be traced to vouchers

Monitor budgets

- Know the budget for a road according to accounts head
- Know the budget for a project
- Know if you are within or exceeding the budget
- View detailed and summary expenditure information

Budget Head	Project	CoB Allocation	Fund Released	Expenditure	Percent CoB Allocation spent	Percent Fund Released spent
Development	2 - Public Priority Roads & Bridges Project (Phase 1)	10.00	5.00	2.73	27%	55%
Development	5 - Upgrading of Jessore- Benapole Road	5	2	0	0%	0%
Development	6 - Widening & Development of 5 Roads in Greater Rangpur District	7.00	6.00	1.08	15%	10%
Development	8 - 36 Feeder Roads in South- Western Region	10.00	5.00	1.43	14%	29%
Development	9 - Mymensingh Town Bypass Road	5	0	0	0%	0%
Development	11 - Development of Banani- Tongi- Joydebpur Road	14.00	4.50	0	0%	0%
Development	13 - Rehabilitation of Narrow Bridges & Culverts on National and Regional Highways	5.50	1.37	0	0%	0%
Development	14 - Gafarganj- Rami Road	1.36	68	7	5%	10%
Development	15 - Rehabilitation of major Roads in Patuakhali and Bangura District	3.05	96	74	19%	76%
Development	16 - Development Project of Ghatail- Alenga Road on Tangail- Mymensing Highway	1.00	50	50	50%	100%
Development	17 - Jamalpur- Dhanua- Kamalapur- Rouman Road	1.83	91	17	9%	19%
Development	19 - Brahmanbaria- Kalamora- Moynamati Road	1.00	25	12	12%	49%

Post-facto monitoring of budget

Financial Management Reform

Overview

RHD Budget Committee

- ACE (P & M Wing), RHD - Chairman
- Director, Audit and Accounts, RHD - Member Secretary
- SE, Maintenance, RHD - Member
- SE, Planning & Programming, RHD - Member
- SE, Planning & Data Circle (Bridges), RHD - Member
- Chief Transport Economist, RHD - Member
- Senior Financial Advisor, TSMR - Member
- Financial Consultant, TSMR - Member

RHD is in the process of strengthening its financial management procedures. An Order by the Chief Engineer issued in February 2006 established an RHD *Financial Management Unit* or FMU. The FMU is managed by the Office of Director Audit & Accounts. Another component of financial management is the operation of the RHD Budget Committee, which is to manage all aspects of a continuous budget process. Amongst its various tasks, the RHD Budget Committee is responsible for the formulation and submission of the Medium Term Budgetary Framework which is now required annually by MoF.

Financial Management Unit FMU

The main objective of financial management reform is to improve the transparency and accountability of the financial affairs of RHD. This is done by the development of (i) an efficient *budgeting* process and (ii) a clear financial *reporting* process. This reporting process measures performance and can provide up-to-date information on the activities of the RHD to Chief Engineer, other senior officers and the Ministry.

The two targets are (i) achieving an efficient budgeting process which is appropriate for the size of the Department, and (ii) the development of clear and accurate financial reporting and effective internal control which monitors actual performance against the budget and against agreed objectives.

Management decision-making can now be more meaningful using accurate, reliable and timely financial information. Greater benefit and impact can be achieved from the resources made available to RHD.

RHD Budget Committee

All decisions regarding budget submission, distribution and allocation are now taken by the Budget Committee of RHD. The Budget Committee is the principal arbiter of all budget decision-making for RHD. To achieve its objectives, the RHD Committee meets at regular intervals, as well as on an ad-hoc basis when circumstances dictate.

It must ensure that all decision making is soundly based on objective criteria with detailed breakdowns of all budgetary amounts available for review and discussion. The Budget Committee will gradually assume its full role in departmental decision-making and management as intended in its Terms of Reference.

Medium Term Budgetary Framework

A Medium Term Budgetary Framework (MTBF) is a strategic mechanism adopted at the highest level of Government for ensuring that resources available are utilised in line with agreed government policies and priorities. MTBF is an essential tool for ensuring that all the likely future expenditure needs of an organisation are properly considered, properly measured (in both physical and financial terms) and realistically planned.

RHD has one of the largest budget allocations in all of Government. Many of its project commitments span two or more years. RHD will therefore greatly benefit from the effective operation of this MTBF approach, in which budget provisions are made for a three-year timeframe.

Some key activities of RHD Budget Committee

- Recommend on rational distribution of budget allocations
- Ensure timeliness and quality of budget submissions
- Exercise quality assurance role on departmental budget submission
- Prepare annual departmental budget strategy
- Monitor financial performance against accepted budget
- Review quarterly expenditure patterns
- Medium Term Budgetary Framework (MTBF)



RHD ROAD NETWORK BANGLADESH



LEGEND

- | | |
|---|-------------------------|
| RHD Roads | Boundary |
| — National Highway | - - - International |
| — Regional Highway | - - - Zone |
| - - - Roads Under Construction/
Not Accessible | ■ Head Quarter |
| — National Highway | ■ District |
| — Regional Highway | ■ Sea/River/Char Land |
| — Railway | ■ Sea/River/Waterbodies |
| | ■ Char Land |