



COMPUTER NETWORK SYSTEMS

For over 30 years, CNS has provided innovative and cost-effective IT products, services and solutions to the Public Sector around the world.

Digital Transformation in the Public Sector

Over 30 Years of Software Excellence.

For over 30 years Computer Network Systems Limited (CNS) has delivered Digital Transformation across the public sector for clients around the world. As a CMMi Level 5 certified company, holding ISO 27001, ISO 9001, ISO 20000 and ISO 45001 accreditation, CNS operates to the highest international standards across our domains and maintains an excellent track record of delivery.

Headquartered at the CNS Tower in Dhaka, Bangladesh, with an office in Toronto, Canada, to provide 24/7 global support coverage, CNS' over 850 members of staff are delivering software on a global scale through CNS' over 20 public sector Commercially-Off-The-Shelf (COTS) software solutions.

Our Clients



MINISTRY OF REVENUES
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Ethiopian Ministry of Revenues



Costa Rican Ministry of Finance



Bangladesh Roads and Highways Department



BISDP Ministry of Finance



BISDP Ministry of Finance



Bangladesh Road Transport Authority

Our Certification



Decades of Public Sector Delivery.

2002	On-Line library Management System, BCISR.	Highway Electronic Toll Collection System for the Roads and Highways Department	2014 Present
2002 2009	Development, operation and maintenance of the Telephone Billing System, BTCL.	Holding Tax Software, Data Entry, Voucher Entity, Training, Bill Book printing and other works for Dhaka North City Corporation.	2015 2017
2002 2022	Online Rail Ticketing System for Bangladesh Railways.	Online Application Management System for the Department of Textiles.	2016 2018
2003	Student Assesment System for the Bangladesh Army.	Land Registration Fees Collection for the Ministry of Law, Justice and Parlaimentary Affairs.	2019 Present
2003 2004	Student Stipend System, Secondary Education Sector Development Project.	Automation & Management for Chittagong Port Authority.	2019 Present
2006 2018	Development, Implementation and Maintanance of the Electricity Billing System for Local Government.	Archiving for Bangladesh Road Transport Authority.	2020 Present
2010 Present	Fee Collection for Bangladesh Road Transport Authority.	Enterprise Resource Planning Solution with Grievance Management System and Email System for Insurance Development and Reform Authority, Ministry of Finance.	2022 Present
2011 Present	Vehicle Registration System for Bangladesh Road Transport Authority.	Consultancy Service for Procurement Development for the Ethiopian Ministry of Revenues, The Federal Democratic Republic of Ethiopia.	2022 2023
2011 Present	Online Tax Collection System for the National Board of Revenue.	Implementation of integrated Financial Information Management System and Human Talent System at the Ministry of Finance of Costa Rica.	2023 Present
2002 2014	Computer based management information system (CBMS) software for the Department of Cooperatives.		
2002 2019	Modernization of BTCL		



Implementation of integrated Financial Information Management System and Human Talent System at the Ministry of Finance of Costa Rica.

Meeting between His Excellency President Rodrigo Chaves Robles of Costa Rica and CNS Managing Director Munir-Uz-Zaman Chowdhury.

Roundtable discussions between CNS and the EU Delegation to Bangladesh on Cybersecurity (2024) at the CNS Tower.



The CNS-FreeBalance team in Costa Rica

Consultancy Service for Procurement Development for the Ethiopian Ministry of Revenues, The Federal Democratic Republic of Ethiopia.

The CNS Team presenting to the Ethiopian Ministry of Revenues.





Visit by the U.K. Foreign, Commonwealth and Development Office Economic Policy Team to the CNS Tower

Meeting between the CNS and Sinosoft Management Teams for the BISDP Project



The FreeBalance and CNS Team visiting Dhaka to promote Public Financial Management Reform



The FreeBalance Portugal Team visiting CNS in Dhaka



Our Services.

Digital Transformation in the Public Sector

CNS has developed a number of solutions tailored to Government, built upon CNS' over 30 years of experience in providing Digital Transformation across the public sector.

Enterprise Resource Planning Solution: —————●

CNS' Enterprise Resource Planning (ERP) Solution is a COTS product that serves to empower organisations by significantly enhancing operational efficiency.

Instituted in a number of government entities, including at the Insurance Development Reform Authority, Bangladesh Ministry of Finance, the CNS ERP provides all the key modules for operational administration and management in one effective, real time, easy-to-use platform. Through the ERP's Centralized Dashboard, the following modules can be seamlessly managed on a roles based-access basis:



Customer Relationship Management System (CRM)

Asset Management and Maintenance System (AMMS)

Complaint and Grievance Management System (CGMS)

Human Talent Management System (HTMS)

Point of Sales and Distribution Management System (POSDMS)

Procurement Management System (PMS)

Property Management System (PropMS)

Project Management System (ProMS)

Inventory Management System (IMS)

Fleet Management System (FMS)

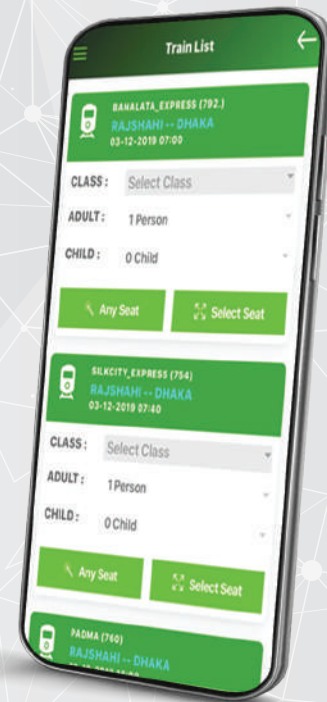
Financial Accounting System (FAS)

Training Management System (TMS)

Audit Management System (AMS)

Mass Transit Computerized Ticketing System (MTCTS)

CNS' Mass-Transit Computerized Ticketing System (MTCTS) is a proven, modern, and robust software solution for mass-transit networks. In use with Bangladesh Railway for twenty years (2002 to 2022) MTCTMS utilizes an open-ended architecture allowing for the rapid introduction of the system at the client side. In the MTCTS Tickets can be bought and sold through a real-time web-based platform and accompanying ticketing app, as well as through common POS hardware found at ticket counters, where the system can be easily installed.



With a robust monitoring and auditing system that tracks ticket sales and payment reconciliation, the MTCTS has repeatedly delivered substantial financial and operational benefits to operators.

Port Information Management System.

CNS' Port Information Management System (PIMS) is designed to meet the demands of complex, modern, high-capacity port operations. Developed during CNS' automation and modernization of Chittagong Port Authority (CPA), this robust solution has already delivered substantial real-world results and contains more than 50 modules.



From the computerization of General Cargo Berthing along with Container Management Systems through to a comprehensive Vessel Traffic Management Information System (VTMIS) as well as the automation of inventories, human resources and many other areas of port activities the CNS PIMS has all the features required to enhance modern port operations in one robust, transparent centralised software platform.

CNS Limited's Toll Management Systems.

CNS' Modern Computerized Toll Management System (MCTMS) is a revolutionary technology that has repeatedly delivered substantial revenue boosts for MCTMS clients.

First introduced in 2014, this COTS product represents some of the most effective revenue collection software that CNS has to offer. In operation at numerous toll booths, CNS' MCTMS is a real-time, web-based system with a proven track record of minimising revenue losses whilst maximising collection efficiency through a combination of key modules.



MCTMS' effectiveness is demonstrated below:

Toll Location	Revenue during final month before CNS MCTMS introduction (USD)	Revenue during first month of MCTMS under CNS (USD)	Percentage Increase on takeover with MCTMS under CNS
Ghorashal Bridge	\$83,879	\$148,761	77%
Bhairab Bridge	\$340,034	\$698,960	105%
Meghna-Gomoti Bridge	\$1,798,182	\$2,551,457	41%
Bangabandhu Bridge	\$3,748,677	\$5,055,701	34%
6th China-Bangladesh Friendship Bridge	\$61,383	\$113,316	84%
Rastampur Bridge	\$116,884	\$225,505	92%

Following the success of MCTMS, CNS was awarded the contract to develop the Unified Toll Collection Management System (UTCMS) for Bangladesh's Roads and Highways Department, a project that has further enhanced CNS' expertise in this domain.

Transport Resource Planning Solution (TRP)

The Transport Resource Planning Solution (TRP), developed by CNS, is a groundbreaking system designed to streamline and modernize the management of road transportation networks. This comprehensive system integrates key functions such as Vehicle Registration, Route Permit Issuance, Tax and Fee Collection, and Vehicle Inspections and more into a single, cohesive digital platform.

By centralizing these functions, the TRP significantly enhances operational efficiency, reduces bureaucratic red tape, and improves overall service quality in the road transportation sector. It also ensures regulatory compliance and facilitates data-driven decision-making, making it an essential tool for governments seeking to optimize the management of national transportation infrastructure.

01	Vehicle Registration Database	05	Vehicle Inspection System (VIS)
02	Ownership Tracking and Transfer Module	06	Fitness Certificate Issue / Renewal Module
03	Motor Vehicle Tax and Fee Collection System	07	Route Permit Issue / Renewal Portal
04	Tax Token Issue / Renewal Portal	08	Integration with the MCTMS Toll Solution

Functionally akin to traditional Enterprise Resource Planning (ERP) systems, the TRP takes a holistic approach to road transportation management. Addressing the complex, interconnected needs of modern transportation systems, including the management of vehicle data, enforcement of regulatory standards, as well as the efficient collection of transportation-related revenues the TRP is built upon over a decade of experience of delivering these solutions at the Bangladesh Road Transport Authority.



With a centralized database and extensive integration not only improves the accuracy and reliability of data but also enables real-time monitoring and management of transportation networks. Consequently, the TRP represents a significant leap forward in the digital transformation of road transportation management, offering an innovative solution that aligns with the dynamic needs of today's urban and national infrastructures.

Deeds Tax and Fee Collection System (DTFCS)

Building upon CNS' history of the Motor Vehicle Tax and Fee Collection System, a module of the TRP, from 2019 CNS developed and has since operated a similar system for Bangladesh's Ministry of Law, Justice, and Parliamentary Affairs. This system was designed to collect Deed taxes and associated levies, such as land registration fees, through an efficient and transparent reconciliation system. The Deeds Tax and Fee Collection System (DTFCS) achieves this by providing an end-to-end solution that integrates with Banks to allow the rapid reconciliation of funds against levied charges.

Drawing information from a central database on landowners the DTFCS tracks upcoming taxes and charges, sending out due notifications at pre-configured dates so that the taxpayer can prepare for the upcoming charge.



Once due the taxpayer can pay through their banking app or in branch, with the DTFCS debiting their account and instantly reconciling the funds to the corresponding Government account. A real-time web portal allows administrators from the Government to track collected revenue, the system also calculates due interest on outstanding charges and allows administrators to issue notices to late payees.

Financial Accounting System (FAS)

Built to provide a comprehensive view of your organisations financial landscape, CNS' Financial Accounting System (FAS) contains a number of robust features for the accurate tracking, recording, and reconciling of accounting activities. The CNS FAS solution can be deployed as part of the CNS ERP or as a stand-alone module. The system incorporates advanced cyber security features and adheres to the latest, most rigorous, data protection standards.

With a unified information architecture, comprehensive, as well as easy to use, the CNS FAS solution has already been implemented at a number of public sector clients, including at the Bangladesh Ministry of Finance's IDRA and Chittagong Port Authority among others.

CNS' FAS contains the following features:

General Ledger	Accounts Payable	Accounts Receivable
Cash Management	Fixed Assets	Loan Management
Payment Management	Advance Management	Reports and Analytics
Aging of Debtors / Creditors	Provision Control Management System	Budget Monitoring System

Project Management System (ProMS)

CNS Project Management System (ProMS) is a focused software solution that equips your organisation with an enhanced capacity to organize, plan, and manage the resources and tools involved in the delivery of company operations. The ProMS contains a range of modules such as Project Planning and Control, Costing, Billing, Resource Management, Portfolio Analysis, and a Collaboration Platform among other features.

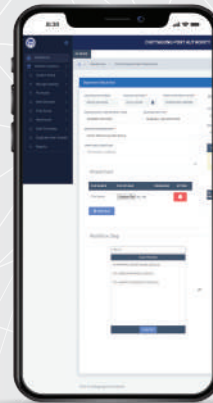
Implemented at a number of large Public Sector CNS client organisations including a seaport, the ProMS has proven its versatility in a number of dynamic environments. The ProMS can be deployed as a standalone solution or as part of either the CNS ERP or CNS HRMS solutions.



Inventory Management System

CNS' Inventory Management System (IMS) provides full visibility, in real-time, of the flow of goods across your entire organisation. Continuously improved following years of experience at Bangladesh Railway, the IMS was significantly upgraded to manage the enormous inventories and supply chains of Chittagong Port, one of Asia's most significant maritime destinations, where the system is operating on a port wide basis.

Containing modules for, but not limited to, Goods Issue /Receipt, Return Delivery, Stock Replenishment/Transfer /Transfer Posting, Distribution Management, Reservations and Physical Inventory Tracking CNS' IMS offers an end-to-end inventory solution. Like many CNS solutions the IMS is managed through a centralized, web-based, real-time dashboard that can be accessed on a roles-based basis.



CNS' IMS to date has been implemented at a number of organisations across a diverse range of industry verticals, consistently delivering cost savings for CNS clients.

Case Management System

CNS' Case Management System (CaseMS) is a legal domain software solution for streamlining case administration.

First developed to manage the extensive number of trade and employment related cases arising at a major global port (and CNS client) the CaseMS has since been further enhanced. Including modules for Case Registration, Document Management, Date Management as well as assigning lawyers and support staff, including the option of processing related invoices, among other functions.

Following further development CaseMS now represents a market leading, standalone, comprehensive legal management system. CaseMS has delivered substantial cost benefits through efficiency savings as the system streamlines a number of key activities to save hundreds of workhours over time.

Document Management System

CNS' Document Management System (DMS) is designed to provide an all-in-one-solution for a key administrative challenge faced by most organisations: timely access to information. The DMS provides a single platform for uploading, storing, categorizing, archiving, and crucially retrieving (instantly) documentation. Implemented at the Bangladesh Road Transport Authority (BRTA), the Bangladesh Ministry of Law, Justice, and Parliamentary affairs as well as a number of other clients this system has been built to handle over 50 million documents in a single installation. Furthermore, the DMS can handle tens of thousands of different information formats without a slowdown in processing times.

By providing a tool that instantly retrieves specific information from the DMS database, which can be hosted either at the CNS Tower or at the client site, a substantial number of workhours are saved. This in turn delivers significant cost benefits organisation wide.

Human Resource Management System.

CNS' Human Resource Management System (HRMS) is a comprehensive, digitally compact, and functionally robust HR System built to enhance organisational efficiency. CNS' HRMS contains modules for managing Payroll, Attendance, Overtime, Recruitment, Leave, Employee Benefits, Loans, Pensions, as well as a host of additional features. All of this data is collated into a centralized HR Management Module that provides a series of web-based dashboards to present a full organisational overview in a concise, easy to use format.

Through the HRMS administrators can be appointed on a roles-based access basis, empowering professionals with tools relevant to their areas of responsibility with the objective of streamlining existing processes. With in-built analytics and reporting modules, HR Managers can review performance over time with detailed tracking features enhancing informed, optimum decision-making. Designed to enhance the effectiveness of HR operations, CNS' HRMS is a proven, COTS solution that is built with the extensive and complex requirements of the public sector in mind.

CNS, our organisation.

As a premier service provider of software solutions for clients around the world, including for the public sector, CNS enjoys extensive experience of delivering technological innovations to a diverse range of clients. At CNS we leverage our 30 plus years of experience in delivering Digital Transformation to ensure every aspect of your project delivery is professionally handled.

Our off-the-shelf products are rooted in this longstanding experience, developed by seasoned software engineers who played crucial roles in delivering revolutionary E-Government Systems around the world. These CNS solutions have been further configured specifically to meet the needs and ambitions of Public Sector Organizations. With projects across five continents, CNS has the capacity and experience to accelerate the Digital Transformation of your organisation.

Capabilities at a glance

**30+ Years of Experience in
Software Delivery**

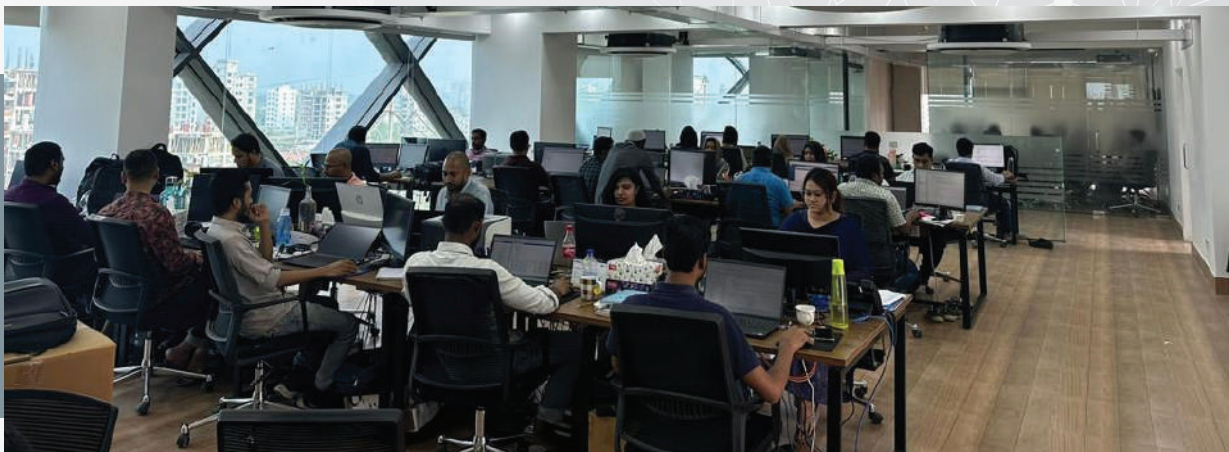
**Over 850 CNS Professionals
ready to deliver.**

**Expertise in over 20 Tech
Stacks and Languages**

**State-of-the-Art
Development Facilities**

**Public and Private Sector
Delivery over 5 Continents**

**Internationally Accredited
and Certified**



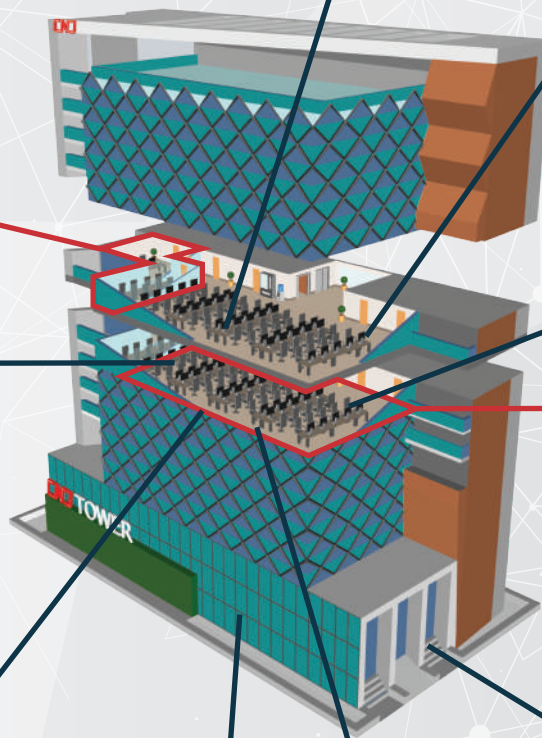
Our Location: A Global Development Center.

At CNS we took our three decades of experience and channelled it into building a state-of-the-art Global Development Centre; The CNS Tower. From here we utilize our extensive capacity to deliver Digital Transformation for CNS clients on-time, on-budget and to an internationally celebrated quality.

CNS TOWER



Conference facilities for team meetings and workshops.



Java Team.

QA Testing Lab.



State-of-the-art facilities.

PHP Team .

UI/UX Lab.



14 floors of software development and delivery.



40 development desks per floor, furnished with industry leading hardware staffed by experienced Software Engineers.

Angular Team.

Enhanced physical and cyber security measures.

Python Team.

Two secure basement levels and an in-house Tier 4 equivalent Data Center.

With its own in-house Tier-4 equivalent Data and Disaster Recovery Centre, capacity for over 1200 software professionals per day and numerous 'labs' for perfecting the development and delivery of CNS solutions, The CNS Tower is a one-of-a-kind facility that was built to deliver Digital Transformation for our valued clients.



COMPUTER NETWORK SYSTEMS



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