

# the TRAFMAN system

The **TRAFMAN™** system is a unique, user-friendly, state-of-the-art system that empowers traffic authorities to achieve excellence within the constraints of limited resources.

The **TRAFMAN™** system was developed over a period of three years with the assistance of traffic authorities. The aim of the **TRAFMAN™** system is to provide a fully integrated information system for, amongst others, accidents, contraventions and incidents. Linked to this is the capability to display this information on a computerised map. This helps to eliminate islands of information that often result from separate systems. With the introduction of the **TRAFMAN™** system, it is no longer necessary to interpret the impact of accidents from a tabular report of one system and the status and impact of traffic contraventions from a report of another system.

## Geographic capabilities

One of the outstanding features of the **TRAFMAN™** system is its geographical display capability. Traffic authorities can view a graphical display of the magnitude and type of accidents, contraventions and incidents on the same map of a particular road network. Geographical information, such as new roads or name changes, can be updated easily.

## Management approach

The five primary resources of any organisation are Human Resources, Machines, Material, Money and Methods. Traffic authorities are faced with a shortage of one or all of these resources: insufficient personnel (human resources); inadequate equipment (machines); insufficient supplies (materials); a shortage of funds (money), and not enough know-how, procedures and systems (methods). Methods are vital components of the traffic manager's ability to plan, organise, control and manage the activities of the traffic authority successfully.

The **TRAFMAN™** system is designed specifically to assist managers and personnel with optimal resource planning, organisation, control and management.

The **TRAFMAN™** system provides traffic authority managers with the necessary tools to identify shortcomings and/or problem areas, set goals and keep track of the efficiency of the authority in reaching its goals. Management-friendly reports are available at the click of a button. There is no need for the cumbersome task of extracting data from one system and importing it into another for analysis.

## Modules

The **TRAFMAN™** system currently comprises nine modules. These can be operated separately or jointly to integrate on the same database, in which case relevant data is shared between the modules. The system is continually being enhanced to keep track of the growing needs and demands of the traffic management fraternity.

The nine modules are:

- Accident Monitoring;
- Operations Management;



- Traffic Contravention;
- Goal Management;
- Offence Monitoring;
- Incident Monitoring;
- Weighbridge;
- GIS Maintenance, and
- Remote Communication.

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## GENERAL FEATURES

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### Development language

The **TRAFMAN™** system was developed in PROGRESS, a fourth generation database language. PROGRESS provides tools and facilities that can be acquired to supplement the capabilities of the **TRAFMAN™** system and to communicate with other systems written in, for example, ORACLE, SYBASE and DB2.

### Hardware platforms

As **TRAFMAN™** is a client/server application, the client version of the **TRAFMAN™** system runs on Windows 95/98 workstations, whereas the server version can reside on Windows NT, UnixWare or SCO Openserver platforms. The **TRAFMAN™** system therefore caters for all traffic authorities.

### Multiple authorities

The **TRAFMAN™** system provides for data of multiple authorities to be captured on the same database. This makes it highly suitable for metropolitan, provincial and national authorities in that they can choose to capture data separately or collectively.

### Online help facilities

An outstanding feature of the **TRAFMAN™** system is its user-friendliness. Help facilities are provided for every screen and field. Look-up and zoom-in facilities are also provided for searching nodes on specific road sections or locations that are used for referencing purposes.

### Data validation

Valid data entry is ensured by means of:

- look-up tables;
- cross-referencing between tables;
- range checking;
- date validation, and
- default values.

### Security

The **TRAFMAN™** system is a multi-user system and, if hardware permits, an unlimited number of users can be accommodated on the system. The **TRAFMAN™** system is password driven and different types of access rights can be allocated to different users for various procedures. The database engine (PROGRESS) is very stable and index rebuilds very seldom occur. In the case of power failures, the worst that could happen is the loss of the last transaction's data.

### **Record locking**

In a multi-user environment, records will not be locked while multiple reports are being generated. Therefore, no record locking problems are experienced when reports are generated during data capturing.

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## **REPORTING**

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### **Management-friendly reports**

The **TRAFMAN™** system provides users with the facility to generate and print reports directly from the system in a management-friendly format. It is not necessary to extract data from the **TRAFMAN™** system to, for example, spreadsheets or other graphical presentation software to generate graphs. The reports are designed to provide management with the necessary tools to identify problem areas easily without having to read through tables of figures. However, data can be exported directly into a spreadsheet if there are special analysis and/or reporting requirements. If the GIS Maintenance Module of the **TRAFMAN™** system is used with the other modules, the information in many of the **TRAFMAN™** system reports can be displayed on a thematic map. These features ensure that high quality reports can be obtained.

### **Flexible reports**

The system also provides a multitude of selection criteria that can be used for filtering data. Users can extract the exact range of data required for a specific analysis. The **TRAFMAN™** system enables users to view reports in various formats (e.g. graphs and ready-made management reports) on screen, before sending the output to a printer or to a clipboard.

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## COST

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The system cost depends on a number of factors and quotations will be submitted upon request. Apart from the hardware that must be furnished, the following must also be budgeted for:

### Runtime software cost

A PROGRESS runtime system is required for the operating platform on which the **TRAFMAN™** system will be installed. If the GIS Maintenance module of the **TRAFMAN™** system is installed, users need a runtime licence of the MAP-X software for the MapInfo Geographical Information System.

### Implementation and training cost

Authorities must finance the implementation and training cost for the implementation of the **TRAFMAN™** system. The total cost depends on the size of the installation as well as the location of the specific authority (which will have an impact on travelling and subsistence costs). Implementation and training costs will also depend on the number of modules of the **TRAFMAN™** system that must be implemented.

### Application maintenance cost

Maintenance cost of the application software is determined by three factors, viz:

- the size of the installation (regarding the number of concurrent users);
- the number of modules of the **TRAFMAN™** system to be installed, and
- RDMS (PROGRESS) licences needed.

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For more information on **TRAFMAN™** contact:

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# accident monitoring module

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## GENERAL FEATURES

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The Accident Monitoring Module of the **TRAFMAN™** system provides facilities to capture accident data from the various accident reporting forms used by traffic authorities. The module also provides for more than 120 different fields of data that can be customised to suit users' needs. The module provides an extensive range of accident analysis tools and a link to the Geographic Information System (GIS) Module. Should the driving licence and motor vehicle registration systems enable data exchange, links can be established to such systems to verify driver and vehicle particulars for accident data capturing.

The module also enables users to:

- identify areas or locations where accidents occur frequently (black spots);
- analyse intersections in conjunction with the GIS module;
- determine the causes of accidents;
- determine to what extent road conditions contribute to the cause of accidents;
- establish the costs of road traffic accidents to the community;
- identify and prioritise actions to be taken to improve road safety, and
- determine the success of the actions taken to reduce traffic accidents.

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## UNIQUE REFERENCE METHOD

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The data in the **TRAFMAN™** system is structured to accommodate urban and rural road definitions. Locations are referred to as nodes. Nodes can be road distance markers, bridges and junctions. A link between any two nodes is regarded as a special type of node on the system. Roads can be defined to comprise multiple road sections and these in turn can be subdivided into up to 10 000 nodes. Road sections can also be linked to routes. Nodes, on the other hand, are linked to a suburb, which is the lowest level of stratification. Stratification of accident data can be performed on a provincial, regional, metropolitan, town/city or suburban level.



Data can be extracted per route, road, road section or per node, and can also be extracted per local authority, traffic authority or police station. Provision is made to specify the coordinates of nodes or to capture the object codes of nodes should a link to a Geographic Information System (GIS) be established.

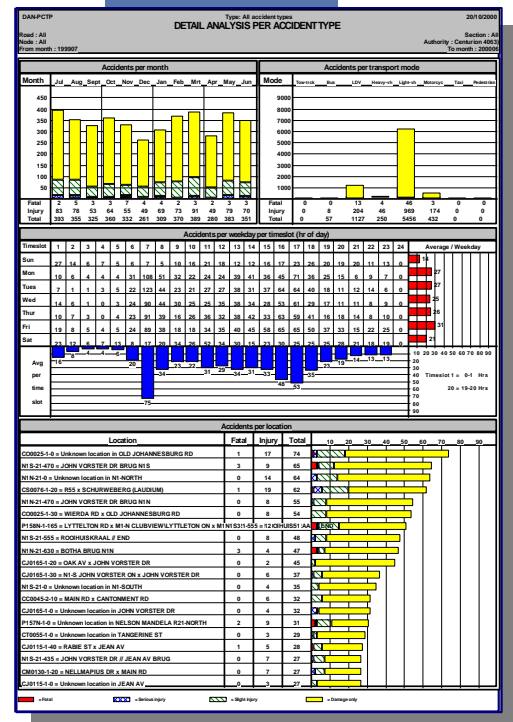
## SPECTRUM OF USERS

The **TRAFMAN™** system can be used by a wide variety of users such as local authorities, regional or provincial levels of government, as well as road safety organisations. The **TRAFMAN™** system can be used effectively by the smallest to the largest authority. Engineers can use the module to determine the road and environmental conditions at the time and place of the accident. Law enforcement professionals will be interested predominantly in the vehicle and driver particulars as well as the actions such as traffic offences that could have caused the accident.

## REPORTS

A large number of management reports are available that include, amongst others, the following:

- frequency, types, area and location of accidents;
- time (hour of the day, day of the week, as well as the “season”) when accidents occur;
- light and weather conditions at the time when accidents occur;
- environmental and road conditions at accident scenes;
- transport modes and vehicle types involved in the accidents;
- road users (i.e. drivers, passengers or pedestrians) involved in the accidents, and
- cross-tabulation of accident data (displayed in matrix format).



# traffic contravention module

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## GENERAL FEATURES

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The Traffic Contravention Module of the **TRAFMAN™** system handles all administrative tasks: from issuing a fine, prosecution or infringement notice, to the execution of the warrant of arrest. It has extensive reporting and query facilities to assist management with any online enquiry.

### Security

Full security is available for controlling access to different parts of the system by means of user IDs and passwords. Data input and changes on any transaction can be traced to a specific operator.

### User-controlled parameters

Users can specify a range of parameters that includes, amongst others, payment addresses, default notice types, court parameters, court calendars, days before payment, etc.

### Spot fines or camera notices

The Traffic Contravention Module supports handwritten spot fines or camera notices.

### Summonses

If the spot fines are not paid and if a representation has not been received, the Traffic Contravention Module can print summonses on pre-printed stationary at a pre-defined time.

### Court results and warrants

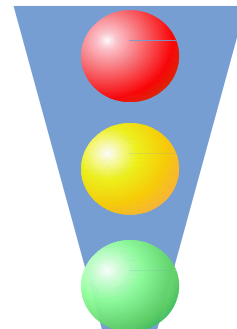
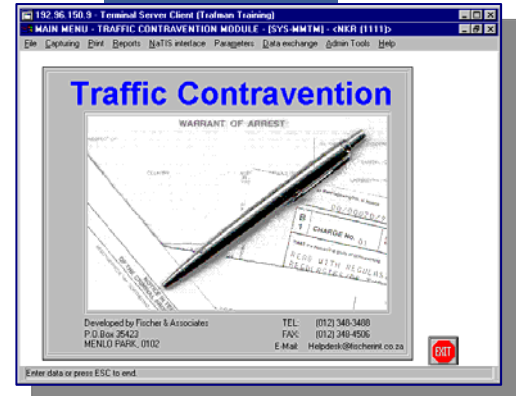
The daily court schedule of cases can be prepared and provision is made for the recording of the result of each case. Warrants are printed for all court cases and the court authorises a warrant for the arrest of the offender.

### Representations

The Traffic Contravention Module validates whether representations were submitted and notifies the offender of the result by means of standard documentation.

### Interface to the vehicle registration system

The Traffic Contravention Module can be interfaced with a vehicle registration system to validate the particulars of drivers or vehicles and to retrieve the names and addresses of vehicle owners.



**TRAFMAN**  
Traffic Authority Management  
Information System

### Identifying habitual offenders

When an offender pays the fine for a particular offence, any other outstanding or unpaid fines will also be displayed on the screen.

### Control of notices

The Traffic Contravention Module enables control over face value stationery (e.g. notices) issued to officers. It reports on outstanding notices of each officer and prevents issuing of notices to officers who have resigned.

### Bailiff issues

All the bailiff details are captured in the Traffic Contravention Module. The system keeps track of all summonses issued to different bailiffs and generates monthly reports on all summonses served (or not served) by each bailiff.

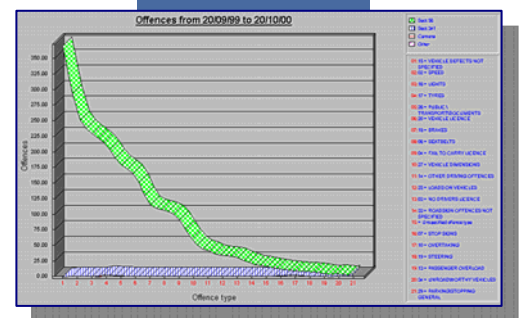
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## REPORTS

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A large number of management reports are available that includes, amongst others, the following:

- spot fine registers;
- admission of guilt registers;
- warrant of arrest registers;
- court calendars;
- blacklists;
- audit rolls;
- register of control documents, and
- criminal case registers.



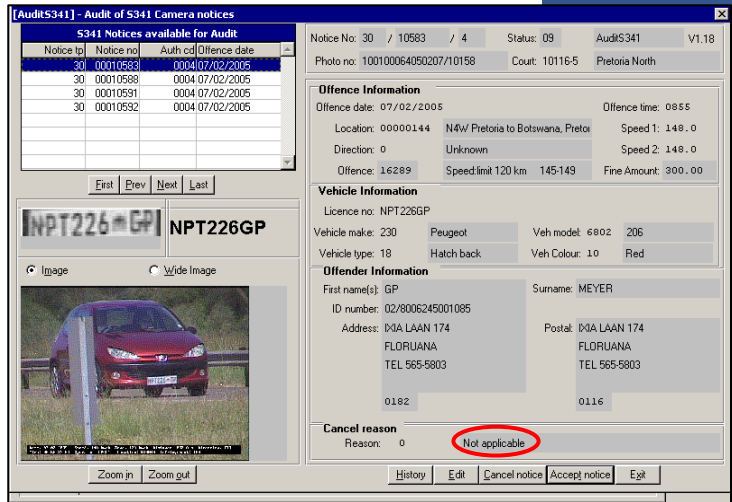


# Image processing

The **TRAFMAN™** Image processing facility allows for processing of digital images of speed and red light violations by retrieving the vehicle and owner data from eNaTIS online and printing the Section 341 notice within the shortest possible time.

Offence images can be processed in any of the following ways:

- Manual data capturing from a scanned image, original digital image or projection of the wet-film negative
- Optical Character Recognition (OCR) from the scanned image of the wet-film negative
- OCR from the original digital image of the offence. **TRAFMAN™** already makes provision for the importation of images from the LaserCam, DigiCam SmartCam and SafeTCam digital cameras.



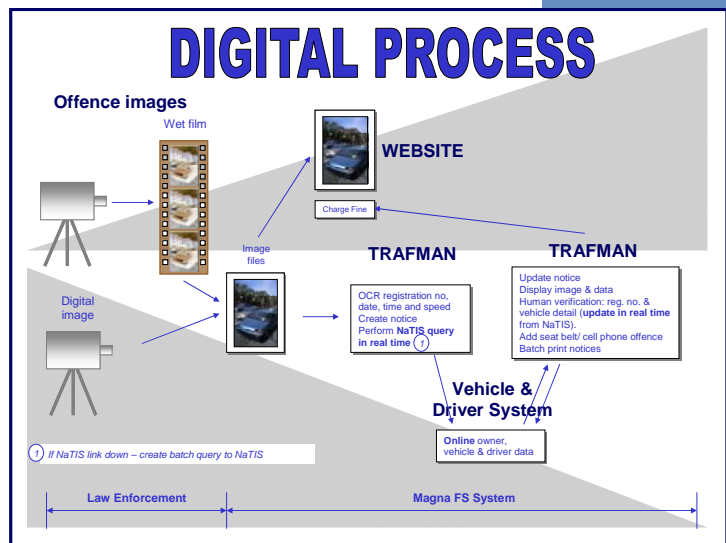
A typical **TRAFMAN™** screen layout contains a digital speed offence image with the particulars in relation to the offence (date, time, location, operator, speed, etc) incorporated in the image, the offence information, vehicle information and offender information.

## LOGISTICS

Digital images can be collected:

- Manually from the roadside location where the digital cameras are installed by transporting the disc or recording media to the office where the processing takes place or
- Transmitted from the camera to the processing system by way of wired or wireless data communication network (such as GSM).

## DIGITAL PROCESS



The OCR processes for scanning of the wet-film or for extracting the digital image from the recording media of a digital camera are similar. These two processes are depicted on the flow diagram entitled Digital Process.

Following an OCR of the vehicle number plate, offence date, time and speed from the digital image, the vehicle and owner particulars are requested from eNaTIS in real time on **TRAFMAN™** using the online interface that has been developed between the 2 systems. In the interest of efficiency, no human intervention takes place before the data has been obtained from eNaTIS.

Once the record including the eNaTIS data has been created on **TRAFMAN™**, the number plate and vehicle particulars returned from eNaTIS are verified against the image of the offence that is displayed on the screen of the workstation.



If the traffic officer designated for this function is satisfied that the vehicle particulars retrieved from eNaTIS relate to that visible on the image (using the available tools to view both the standard and wide-angled image, or zooming in to confirm the licence plate details) and that the possible use of false licence number plates has not resulted in the wrong data being retrieved from eNaTIS, the officer simply clicks on the button 'Accept notice'. This will initiate the printing of the Section 341 notice relating to the offence.


Should the OCR process result in an incorrect registration number or if no number can be established for the initial online eNaTIS query, these records are corrected. At the same time the traffic officer identifies any additional offences from the image displayed on the screen and adds the associated offence codes for notices to be generated. Typical offences include seat belt or cellular phone offences (if applicable). In terms of the **AARTO** Act the electronic notices for minor infringements are uploaded to the National Contravention Register (NCR) on eNaTIS.

## PRINTING PROCESS

The printing process uses a standard laser printer that prints the front and the back of the notice simultaneously. The front and back of the A4 sized Section 341 notice printed by the Gauteng Department of Community Safety on the **TRAFMAN™** system are shown below. Note that a colour image of the offence can be printed on the notice by simply using a colour laser printer instead of the greyscale one used by Gauteng.

Front of S341

Back of S341

GAUTENG PROVINSIALE REÏERING KEMISKUNING INKWELOE ART 341 VAN DIE STRAFPROSEDURE, NR 51 VAN 1977		LEES DIE BELANGRIKE INLIGTING OP DIE KEERSEIT READ THE IMPORTANT INFORMATION ON THE REVERSE		GAUTENG PROVINSIALE GOEWERT NOTICE IN TERMS OF SEC 341 OF THE CRIMINAL PROCEDURE ACT, NO 51 OF 1977	
VERWYSINGSNUMMER / REFERENCE NUMBER 30000017400400000002	BESONDERHEDSE VAN DOORTREDING PARTICULARS OF OFFENCE Seks. 56(4)(a) Act. 93(1)(b) exceeded the speed limit of 120 km per hour 130-134		PLAK VAN DOORTREDING PLACE OF OFFENCE NAVW-UTSANKH LANDSGROEF / MAGISTRATES COURT PRETORIA		DORTTREDINGSdatum / OFFENCE DATE TYD / TIME SPOED / SPEED 08/03/2004 12:42 150 km/h
VOERTUIG LISENSIE NUMMER VEHICLE LICENCE NUMBER MMA091GP	TAFSPOORTE VAN A SPOT FINE OF R 500.00		WAT WAARSKYNLIK DEUR DIE HOF SPEDIE SAL WORD THAT WOULD PROBABLY BE IMPROVED BY THE COURT		BETAALdatum DUE DATE 11/04/2004
GEADRESSEERDE ADRESSE SNYMAN AB PO BOX 11578 SILVER LAKES PRETORIA 0054	AAN VOOR DIE BETAALdatum BETAAL WORD BY DIE ADRESSE OP DIE KEERSEIT. MAY BE PAID BEFORE THE DUE DATE AT THE ADDRESSES LISTED ON THE REVERSE.		DIE DOOTTE WAT / WATNE DE GIE VANAF DIE OF REINIGINGSdatum BETAAL WORD, WADYKARSOND OM IN DIE HOF TE VERSTU SAL UITSEKER WORD WADYKARSOND OM IN DIE HOF TE VERSTU BETAAL. THE FINE MUST BE PAID WITHIN 30 DAYS OF THE DATE OF ISSUE. A SUMMONS TO APPEAR IN COURT IS ISSUED SHOULD THE OFFENDER FAIL TO PAY.		
<b>ONDERSTEUNENDE INLIGTING / SUPPORTING INFORMATION</b>					
DOORTREDINGSdatum / OFFENCE DATE 08/03/2004 TYD / TIME 12:42 SPOED / SPEED 150 km/h					
VOERTUIG IDENTIFIKASIE / VEHICLE IDENTIFICATION		FABRIKAAT / MAKE Snyman (Sny)			
REKSNAM / SERIES NAME W220		KLEUR / COLOUR Silver			
VERKEER / TRAFFIC		POSTAGE PAID POSSELD BETAAL			
AAN TO SNYMAN AB PO BOX 11578 SILVER LAKES PRETORIA 0054					

RETURN ADDRESS STUUR TERUG AAN STANTON ROAD, KOEDOESPOORT PRETORIA OR PRIVATE: BAG X303, PRETORIA 0001, 012 391 2000		BETALING PER FOX AAN NA HERSE ADRES GESTUUR WORD POSTAL PAYMENT MAY BE SENT TO THIS ADDRESS	
BETALINGS EN VERTOE KAN BY DIE VOLGENDE ADRESSE GEMAAK WORD PAYMENTS AND REPRESENTATIONS MAY BE MADE AT THE FOLLOWING ADDRESSES			
1. PRETORIA PROVINCIAL TRAFFIC REGIONAL OFFICE STANTON ROAD KOEDOESPOORT	2. HEIDELBERG PROVINCIAL TRAFFIC REGIONAL OFFICE 88 PRETORIUS STREET HEIDELBERG	3. BOKENHOUTSKLOOF TRAFFIC COLLEGE BETHLEHEM PLUITJE	
<b>NOMINASIE VAN BESTUURDER OF PERSOON IN BEHEER / NOMINATION OF DRIVER OR PERSON IN CONTROL</b>			
1) Ten tyde van die inwerking van hierdie kennisgewing was ek die bestuurder of in beheer van die betrokke voertuig toe.		1c) Was ek die bestuurder of in beheer van die voertuig op die tyd van die oortreding van die wet?	
2) Die voertuig was bestuur deur / onder beheer van:		2c) Die voertuig was bestuur deur / onder beheer van:	
Identifikasienommer		Identifikasienommer	
Van en adres		Van en adres	
Woonadres		Woonadres	
Postadres (indien verskillend van woonadres)		Postadres (indien verskillend van woonadres)	
Telefoonkode en nommer		Telefoonkode en nommer	
Fax kode en nommer		Fax kode en nommer	
3) 'n Foto van die bestuurder van die voertuig van die bestuurder se identifikasiekaart en of bestuurderslisensie is toegevoeg.		3) 'n Foto van die bestuurder of in beheer van die voertuig op die tyd van die oortreding van die wet is toegevoeg.	
4) Ek verklaar dat die voorgesende besonderhede waar ek aanneem is, en aanneem dat 'n vals verklaaring strafbaar is met 'n boete of tronkstraf of beide.		4) I declare that the above particulars are true and correct and accept that a false declaration is punishable by a fine or imprisonment or both.	
Handtekening van persoon in beheer Signature of person in control		Datum / Date	
BELANGRIKE INLIGTING		IMPORTANT INFORMATION	
1. Die kennisgewing is gerig op die bestuurder van die voertuig op die tyd van die oortreding van die wet. Indien die kennisgewing nie aan die bestuurder van die voertuig op die tyd van die oortreding van die wet is gerig, sal die kennisgewing nie aanvaarbaar wees nie.		1. A notice given to the driver or in control of the vehicle at the time of the alleged offence is directed to the driver or in control of the vehicle at the time of the alleged offence. If the notice is not directed to the driver or in control of the vehicle at the time of the alleged offence, it is invalid.	
2. Indien die kennisgewing nie aan die bestuurder van die voertuig op die tyd van die oortreding van die wet is gerig, sal die kennisgewing nie aanvaarbaar wees nie.		2. In terms of the provisions of section 72 of the Road Traffic Act (93 of 1989), a notice is invalid if it is not directed to the driver or in control of the vehicle at the time of the alleged offence.	
3. 'n Foto van die bestuurder van die voertuig van die bestuurder se identifikasiekaart en of bestuurderslisensie is toegevoeg.		3. A photograph of the driver or in control of the vehicle at the time of the alleged offence is attached.	
4. 'n Foto van die bestuurder van die voertuig van die bestuurder se identifikasiekaart en of bestuurderslisensie is toegevoeg.		4. A photograph of the driver or in control of the vehicle at the time of the alleged offence is attached.	
5. 'n Foto van die bestuurder van die voertuig van die bestuurder se identifikasiekaart en of bestuurderslisensie is toegevoeg.		5. A photograph of the driver or in control of the vehicle at the time of the alleged offence is attached.	
6. 'n Foto van die bestuurder van die voertuig van die bestuurder se identifikasiekaart en of bestuurderslisensie is toegevoeg.		6. A photograph of the driver or in control of the vehicle at the time of the alleged offence is attached.	
7. 'n Foto van die bestuurder van die voertuig van die bestuurder se identifikasiekaart en of bestuurderslisensie is toegevoeg.		7. A photograph of the driver or in control of the vehicle at the time of the alleged offence is attached.	

From the printer, the printed notice is fed into a sealer, which folds the A4 sheet in a Z configuration and seals the pre-applied glue on the edges of the notice, leaving the To address on the front of the sealed 'envelope' and the Return address on the back of the 'envelope'.



# weighbridge module

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## GENERAL FEATURES

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### Installation

The Weighbridge Module of the **TRAFMAN™** system is designed to be used at weighbridges. It controls the operation of legal scales and can be integrated with weigh-in-motion equipment at the roadside. This equipment is used to determine whether a heavy vehicle should be stopped and weighed on the legal scale. This module is especially useful for law enforcement of overloaded commercial vehicles.

### Generating notices

The Weighbridge Module is integrated with the Traffic Contravention Module of the **TRAFMAN™** system. It compares the readings received from the legal scale with the legislated maximum loads permitted. If a vehicle exceeds the legislated limits in any respect, personnel at a weighbridge can print the infringement notice and issue it to the driver.

The high level of integration and automation provided by this module enables large volumes of heavy vehicles to be screened, weighed and charged in an efficient manner.

### Monitoring and control

The Weighbridge Module can be used to monitor and assist in controlling overloading on specific roads, routes and weighbridges. The module assists traffic authorities to co-ordinate actions to help combat and minimise overloading. Specific operators who regularly overload their trucks can be identified. If this module is used within a network of weighbridges, specific roads or routes with high levels of overloading can also be identified.

### Co-ordinated operations

This module of the **TRAFMAN™** system can also be used to schedule and co-ordinate weighbridge activities of traffic authorities. This will prevent coverage of the same route by two or more authorities on the same date or at the same time. It also promotes the optimal utilisation of manpower and the best coverage of specific routes.



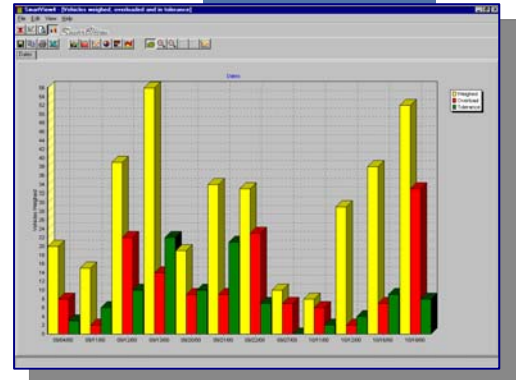
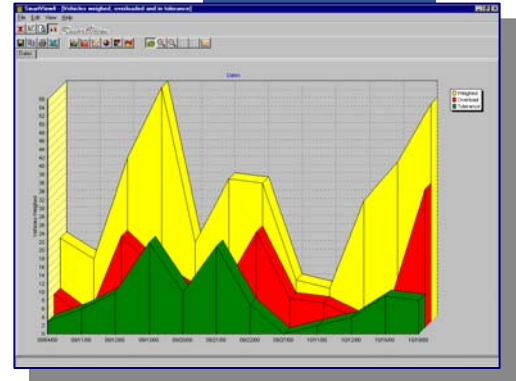
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## REPORTS

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The Weighbridge Module provides a number of options for the analysis of weighbridge activities, which include the following:

- an evaluation of the execution of weighing schedules by the officers, which will indicate the hours worked, the days worked compared to the schedules, and the percentage of scheduled days worked;
- statistics on the number of heavy vehicles weighed (reports can be compiled per province, area or specific weighbridge);
- levels of overloading observed (the same analysis per province, area or specific weighbridge is possible);
- overloading levels for the different types of overloading;
- the extent of overloading regarding mass;
- overloading trends;
- analyses regarding the operators most frequently involved in overloading, and
- routes or roads with high recorded levels of overloading.



# remcom system

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## GENERAL FEATURES

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The main purpose of the Remote Communication System (**REMCOM**) is to provide a remote query facility to the **TRAFMAN™**, **eNaTIS** or **LTPS** Systems through a single interface.

The system adds value at roadblocks by identifying offenders with outstanding fines, summonses and warrants of arrest and can issue summonses and warrants of arrest at the roadside. It also provides vehicle information by establishing an online link to a central server via the cellular communication network. The central server is linked to the local Traffic Contravention Management System, e.g. the **TRAFMAN™** System, and the **eNaTIS** to provide real-time information.

**REMCOM™** facilitates communication from any remote site and enables law enforcement officers to perform the following queries:

- the **TRAFMAN™** database for outstanding cases, summonses and warrants for a particular driver or vehicle;
- the **eNaTIS** system to determine the status of a particular vehicle, e.g. stolen, outstanding licence or registration fees;
- the **eNaTIS** system to determine the status of a driving licence (i.e. suspended, withdrawn, etc.);
- the **LTPS** system to determine the status of a permit (i.e. vehicle, route, etc.);
- in the long term (after implementation of the **AARTO**), the **eNaTIS** can be queried for outstanding fines, fees or warrants of execution of any law enforcement authority;
- scanning and decoding the two-dimensional barcode on the back of the driving licence and on the vehicle licence disc (barcode on discs from May 2001), and
- printing of summonses and warrants and incorporating rescheduled court dates in real time at the roadblock.
- processing of credit card payments at the roadblock by way of the EasyPay system; and
- addition of a video camera for registration number identification.

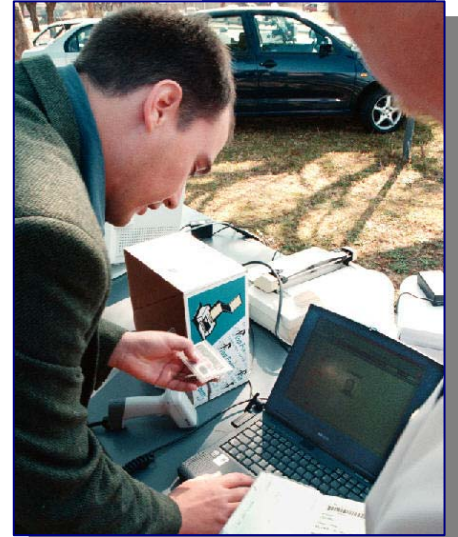
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## COMMUNICATION METHODS

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Two alternative methods of communication are available, namely:

- an officer enters the registration (or ID) number on the cell phone and sends an SMS message to a cell modem, connected to a workstation on the network.



The workstation queries the databases and sends a reply back. The operating cost of this method is equivalent to the cost of two SMS messages.

- a notebook computer connected to a cell modem to establish a dial-up connection to a **TRAFMAN™** workstation. The connection is active during a roadblock (depending on the nature of the contract with the service provider and the time of the day). The notebook can also use the SMS messages option. An online connection is not essential, but cell modems are still required.

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## UNIQUE FUNCTIONS

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### Summons printing

The system enables the printing and service of summonses at the roadside.

### Driver licence scanning

Warrants, summonses and fines are issued to drivers and not to vehicles. If a vehicle is identified as being involved in a contravention, it must be established whether the driver behind the wheel is the driver who committed previous contravention(s). This necessitates a second enquiry using the driver's identity number or driving licence number. Licence cards are scanned to extract the identification number to perform a query on **TRAFMAN™**. The photograph of the licence holder is extracted from the two-dimensional barcode on the driving licence and displayed to verify that it corresponds with the photograph on the licence.

### Management reports

The **REMCOM™** system provides users with a number of management reports regarding the number of calls received, number of calls processed, success ratios, response times, etc.

### The benefits of an online enquiry system

In a typical offline situation, information is extracted prior to a roadblock and the information is outdated by the time the roadblock takes place. Payments or case and representation results are not reflected on the database at the roadside, potentially resulting in costly consequences for the Province. The regular updating of the database becomes a costly exercise and a logistical nightmare. Law enforcement officers lose confidence in the system and are reluctant to use it.

An online system, like **REMCOM™**, ensures that current data is accessed at all times at the roadblock. It has the added advantage that new court dates can be scheduled when a summons is printed at the roadside.

### Proven concept

The system was tested at a Mobile Court during the 2001 Easter weekend and received a great deal of media attention.

ID/Reg no	D	Dtt	Sum	Var	Driver Surname	Int	ChassisNo	Engr	N Status	Lic Exp	Ref
FJC343GP	Y	0	0	0							
FZG883GP	Y	4	0	0							
BRB128GP											
BRB128GP											
FJC343GP											
FJC343GP											
730805041080	Y	1	0	0							
BRB128GP	Y	16	0	0							
FFR807GP											
6008015174086	Y	0	0	0							
4807305174082	Y	0	0	0							
5406125139016	Y	0	0	0							
KGT048GP											
VST048GP											
748125174088											