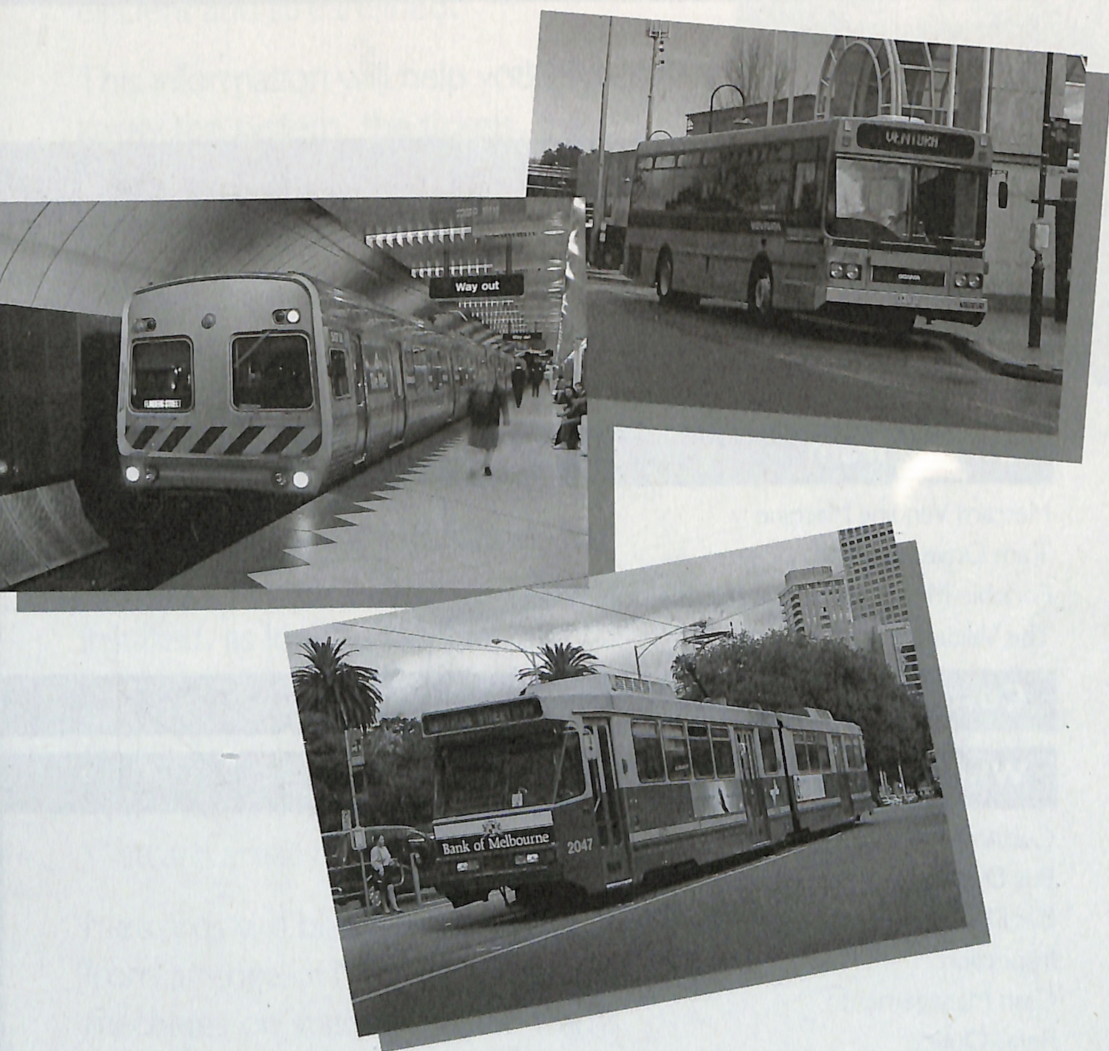


Welcome to *stanoC*  
Automated Ticketing

# Getting to Know Automated Ticketing





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# Welcome to Automated Ticketing

The Automated Ticketing System (ATS) has been carefully planned to make a smooth transition from the current system. Successfully used throughout the world, the ATS is set to make our Public Transport more efficient and streamlined.

This information will help you get to know the system, the tickets, the equipment and how it all works together.

Current paper tickets will be replaced by tickets called Metcards which are being introduced on Melbourne's bus, rail and tram network. During the introduction of the ATS, Metcards will also be accepted on transport that does not yet have the new system installed, as long as the Metcard has been 'validated' in a Metcard area.

Old style paper tickets, bought in a non-Metcard area, can be used in Metcard areas too.

Metcards will be available for purchase from a range of Metcard vending machines on stations and on trams, from drivers on buses and from an extensive network of retail outlets.





# The System at a Glance

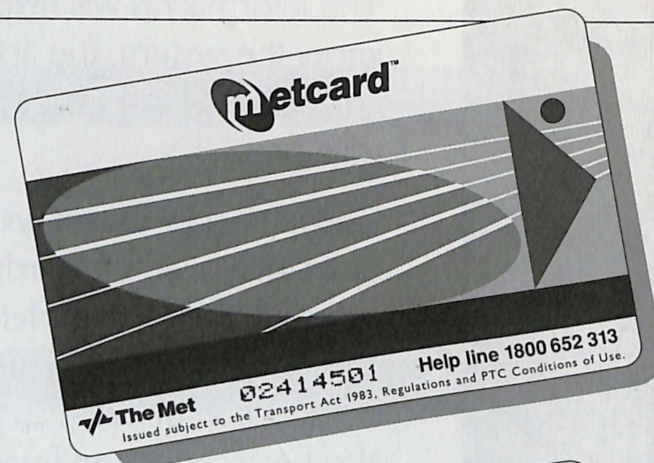
## The Multi-Modal System

The AT system is multi-modal. This means that Metcards can be used for travel on all modes - rail, tram or bus - on the metropolitan transport system. The exception is the short trip ticket on trams and buses which can only be used for a single one-way trip.



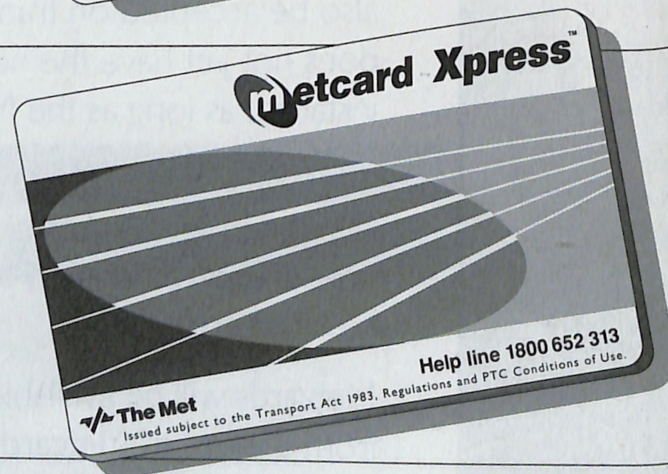
## The Metcard

The key to the AT system is the Metcard. This is the ticket to ride Melbourne's bus, rail and tram network. How and when can a ticket be used? Has it been validated? All the information you need to know is stored in the Metcard's magnetic stripe. Some of this information may also be printed on the back of the card.



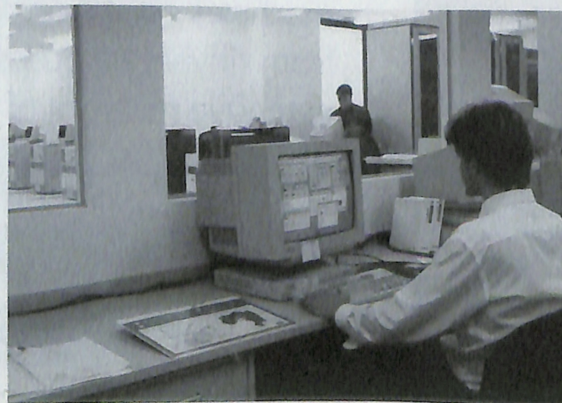
## Metcard Xpress

This is a special Metcard that looks and feels like a credit card but unlike the magnetic stripe Metcard it can be recharged. To validate the Metcard Xpress, the customer simply touches the yellow target area on the validator with the Metcard Xpress.



## The Computer System

Managing the whole operation is the Central Computer System (CCS). The CCS is connected to all of the Station Computer Systems (SCS) and Depot Computer Systems (DCS). The information collected during the operation of the AT system gets fed back to the CCS where it is stored and analysed.



# On the Bus (1)

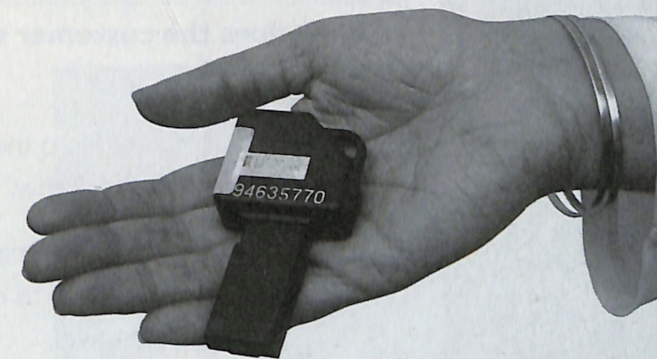
## Ticket Issuing Machine (TIM)

The TIM is installed on buses and is used by the driver to sell Metcards and paper tickets. It is also used to monitor the AT equipment on the bus. Paper tickets are available only on buses for one-way single trip travel.



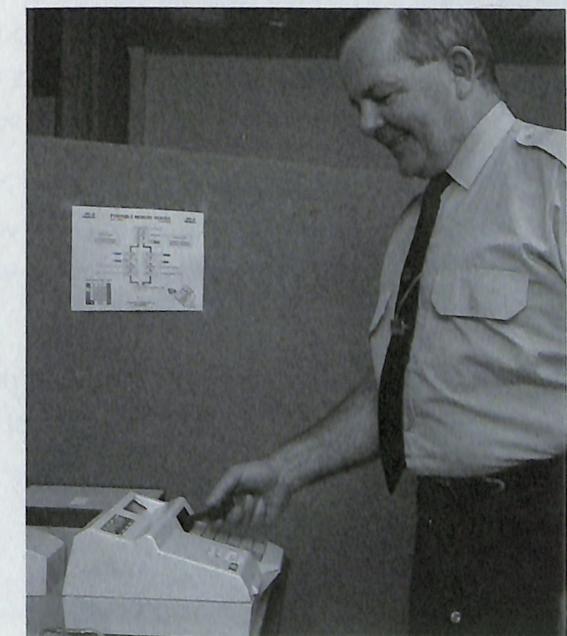
## Portable Memory (PM) and Portable Memory Reader (PMR)

The equipment installed on buses is not permanently linked to the Central Computer System (CCS) and so the system needs a method of transferring information back and forwards. This happens via a portable memory (PM).



## So...how does it work ?

1. At the depot the drivers begin a shift by inserting a Portable Memory (PM) into the Portable Memory Reader (PMR) which is connected to the Depot Computer System (DCS).
2. Information from the DCS is transferred to the PM.
3. On the bus, the driver plugs the PM into the TIM, thereby transferring the information to that machine.
4. At the end of the shift, information about ticket sales is transferred back to the PM.
5. Back at the Bus Depot, the driver plugs the PM into the PMR. This feeds information into the DCS and from there into the CCS.

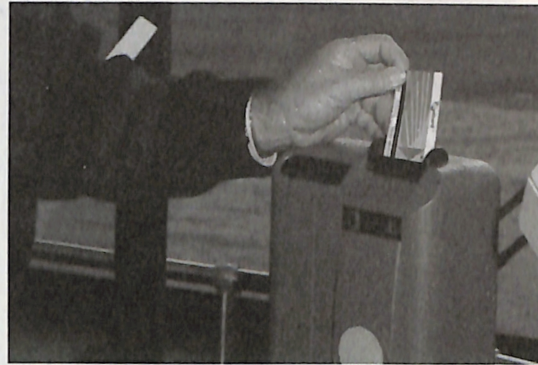




# On the Bus (2)

## The Validator (VAL)

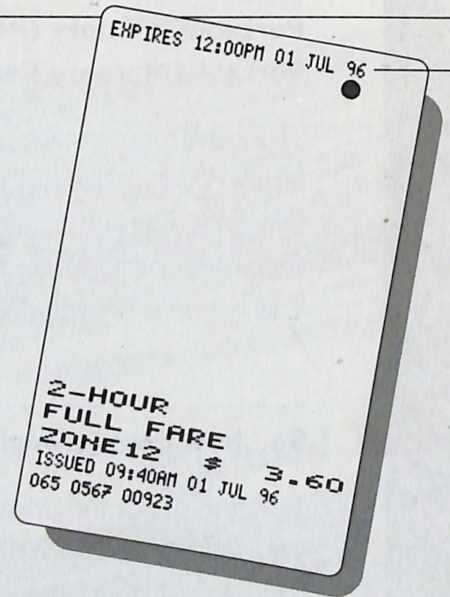
Validators (VAL) are used to check that the Metcard being used by the passenger is valid for that journey. A valid Metcard has the details encoded on the magnetic stripe and expiry details printed on the back. The VAL is located next to the bus driver and all Metcards must be validated before travel.



## How does the customer use a validator?

1. Metcard is inserted into the VAL on the bus in the direction of the arrow.
2. The VAL reads the information on the Metcard's magnetic stripe to check that the Metcard is valid for travel.
3. On first validation the VAL prints the expiry details on the back and updates the magnetic stripe. The VAL also prints ticket details for Metcards that have been sold by the driver.
4. When using a Metcard Xpress, all the customer needs to do to validate is touch the yellow target area on the validator with the Metcard Xpress.

Note: The VAL does not print information for every trip, only for the first validation.



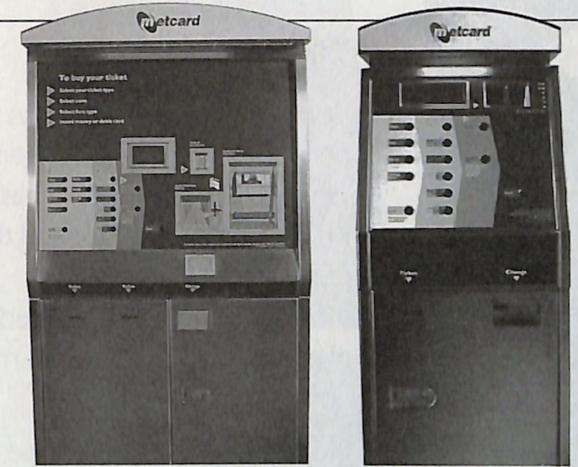
Valid Metcard features text as illustrated here

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# On Stations (1)

## Metcard Vending Machine (MVM)

Metcard Vending Machines will be installed on stations. MVM2s will accept coins, notes and all popular bank, building society and credit union debit cards and offer a wide range of Metcards. MVM1s will only accept coins and issue a range of the most popular Metcards. MVMs provide customers with easy-to-follow instructions on a display.

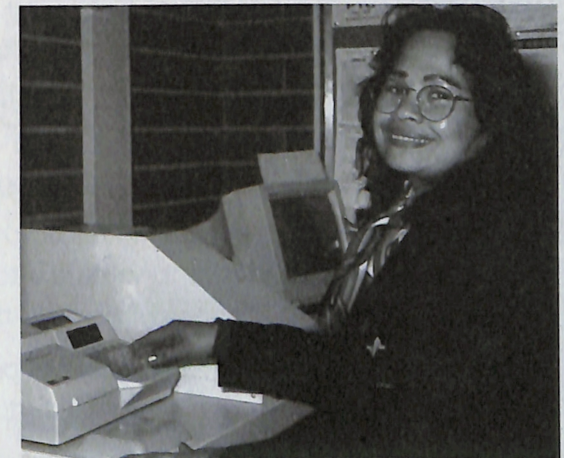


MVM2

MVM1

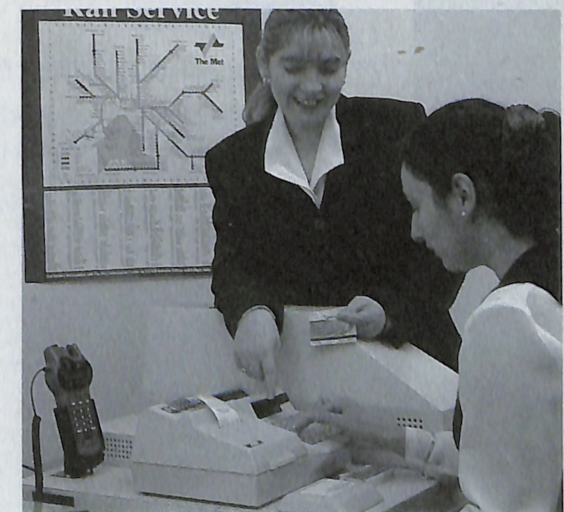
## The Booking Office Machine (BOM)

The BOM is used in station booking offices and the Customer Assistance Centre to sell Metcards. It is permanently linked to the Station Computer System and the Central Computer System. A Portable Memory is used to enable authorised personnel to access a Booking Office Machine.



## Portable Booking Office Machine (PBOM)

This is a machine that is used to sell Metcards at stations and other locations that are not connected to the Central Computer System, it is also used where there is a high customer demand such as the Melbourne Show.





# On Stations (2)

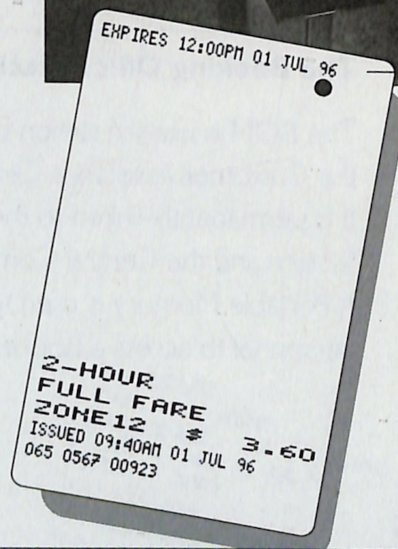
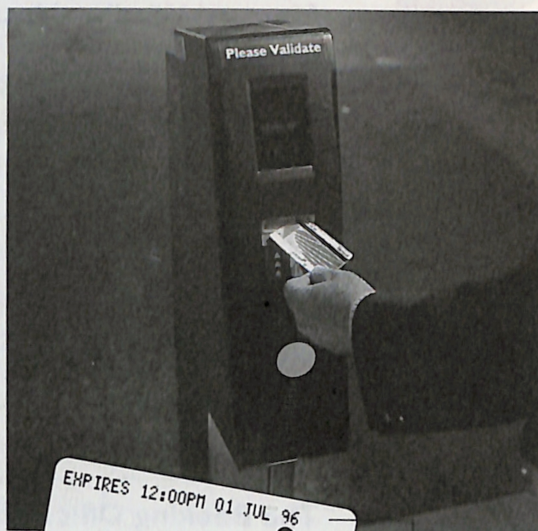
## The Validator (VAL)

Validators (VAL) are used to check that the Metcard being used by the passenger is valid for that journey. A valid Metcard has the details encoded on the magnetic stripe and the expiry details printed on the back. The VAL is located on or near to station platforms and all Metcards must be validated before travel.

How does the customer use a Metcard validator ?

1. Metcard is inserted into the VAL
2. The VAL reads information on the Metcard's magnetic stripe to check that the Metcard is valid for travel
3. On the first validation the VAL prints the expiry details on the back and updates the magnetic stripe.
4. When using a Metcard Xpress, all the customer needs to do to validate is touch the yellow target area on the validator with the Metcard Xpress.

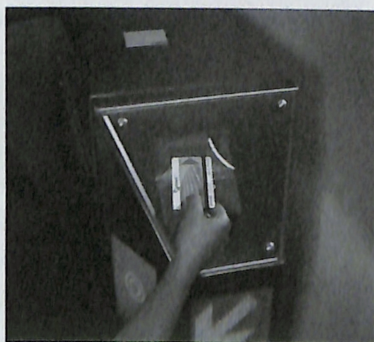
Note: The VAL does not print information for every trip, only for the first validation.



Valid Metcard features text as illustrated here

## Gates

The larger stations will be fitted with gates. These have an in-built validator and a customer with a valid Metcard and Metcard Xpress can enter or leave the station via the gates.

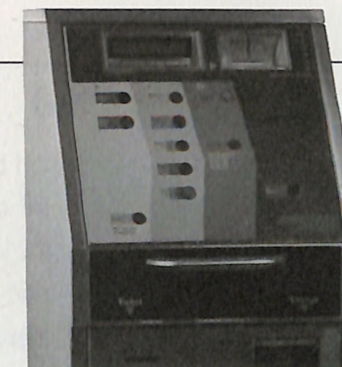


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# On the Tram (1)

## Metcard Vending Machine (MVM)

On board the tram will be a coin-operated Metcard Vending Machine known as the MVM3. Through this, customers can purchase a limited range of Metcards.



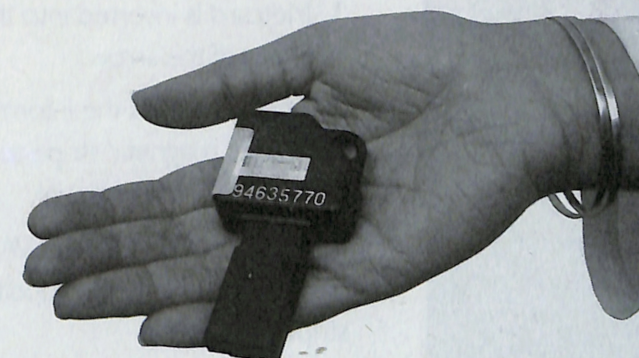
## Tram Driver Key Pad (TDKP)

The Tram Driver Key Pad (TDKP) is a machine used to gather trip and ticket sales information and to monitor the AT equipment on the tram. There is a TDKP at each end of the tram.



## Portable Memory (PM) and Portable Memory Reader (PMR)

The equipment installed on trams is not permanently linked to the Central Computer System (CCS) and so the system needs a way of transferring information back and forwards. This happens via a portable memory (PM).



## So...How does it work ?

1. At the start of each shift, the driver inserts a Portable Memory (PM) into the Portable Memory Reader (PMR) which is connected to the depot computer system (DCS).
2. Information from the DCS is transferred to the PM.
3. On the tram the driver plugs the PM into the TDKP, thereby transferring the information to that machine.
4. At the end of the shift, information about Metcard sales is transferred back to the PM.
5. Back at the Depot, the driver plugs the PM back into the PMR. This feeds information into the DCS and from there into the CCS.

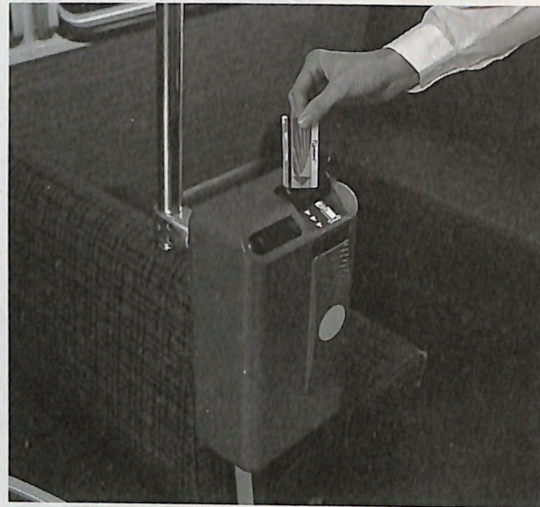




# On the Tram (2)

## The Validator (VAL)

Validators (VAL) are used to check that the Metcard being used by the passenger is valid for that journey. A valid Metcard has the details encoded on the magnetic stripe and expiry details printed on the back. There are several VALs located on a tram. Metcards purchased on a tram are automatically validated for that journey. Metcards purchased elsewhere (such as retail outlets or if transferring from another vehicle) then the Metcard must be validated before the customer travels.

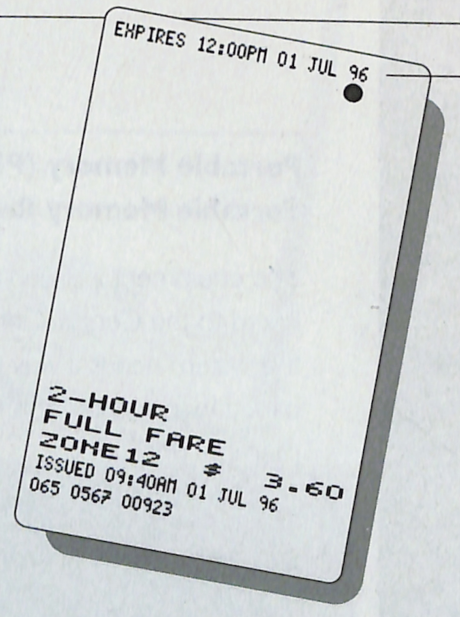


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## How does the customer use a Metcard validator ?

1. Metcard is inserted into the VAL in the direction of the arrow.
2. The VAL reads the information on the Metcard's magnetic stripe to check that the Metcard is valid for travel.
3. On first validation, the VAL prints the expiry details on the back and updates the magnetic stripe.
4. If the card is a Metcard Xpress then all the customer does to validate is touch the yellow target area on the validator with the Metcard Xpress.

Note: The VAL does not print information for every trip, only for the first validation.



Valid Metcard features text as illustrated here

# Customer Service

Customer service is of prime importance to the success of Metcard.

All employees who come into contact with our customers have received training to familiarise them with operation of the new automated ticketing system.

In addition Customer Service Employees (CSEs) will travel on all modes of transport to help answer any questions that customers might have - covering everything from timetables and fares to travel options, connecting services and tourist information - and providing other assistance where necessary. CSEs and Revenue Protection Officers (RPOs) will also check that passengers are using valid Metcards.

CSEs and RPOs have received comprehensive training in the operation of the system and how to answer the most common questions. They will be highly visible to customers as they travel the system and will work closely with Bus, Tram and Train administration staff who organise the day-to-day operations of ATS.

The CSEs travel across all zones and increasingly will use a Portable Ticket Reader (PTR) to read the magnetically encoded information on Metcards and Metcard Xpress. During the early stages of implementation the emphasis will be on education and assistance to gain widespread user acceptance of the system.



Portable Ticket Reader (PTR)





# Who does What?

## Customer Assistance Centre (CAC)

The staff at the CAC help passengers and staff with questions about using the AT system, sell Metcards, organise refunds when necessary and respond to customer feedback. The Helpline number is **1800 652 313**

## Bus Depot, Tram Depot, Station and Administrative Staff

These people organise the day-to-day operation of the AT system at their depots and stations and use the AT computer systems to manage operations and produce operational reports. Station staff also sell Metcards and help customers with their queries about using the AT system.

## Bus Drivers

Bus drivers update section and zone information so that the system can correctly interpret ticket information. Bus drivers also sell Metcards and paper tickets to customers.

## Inspection

PTC staff such as CSE's and RPO's travel the system to check that passengers are using valid Metcards and paper tickets. They use PTRs to read the magnetically encoded information on Metcards and issue infringement notices if necessary.

## Cash Management

Cash collection staff in armoured vans collect the money from MVM's, bus and tram depots and stations. They also restock Metcards at most Metcard issuing points.

## Retail Outlets

These outlets, located throughout the metropolitan area, stock a large range of Metcards to sell to customers.

## Equipment Help Desk

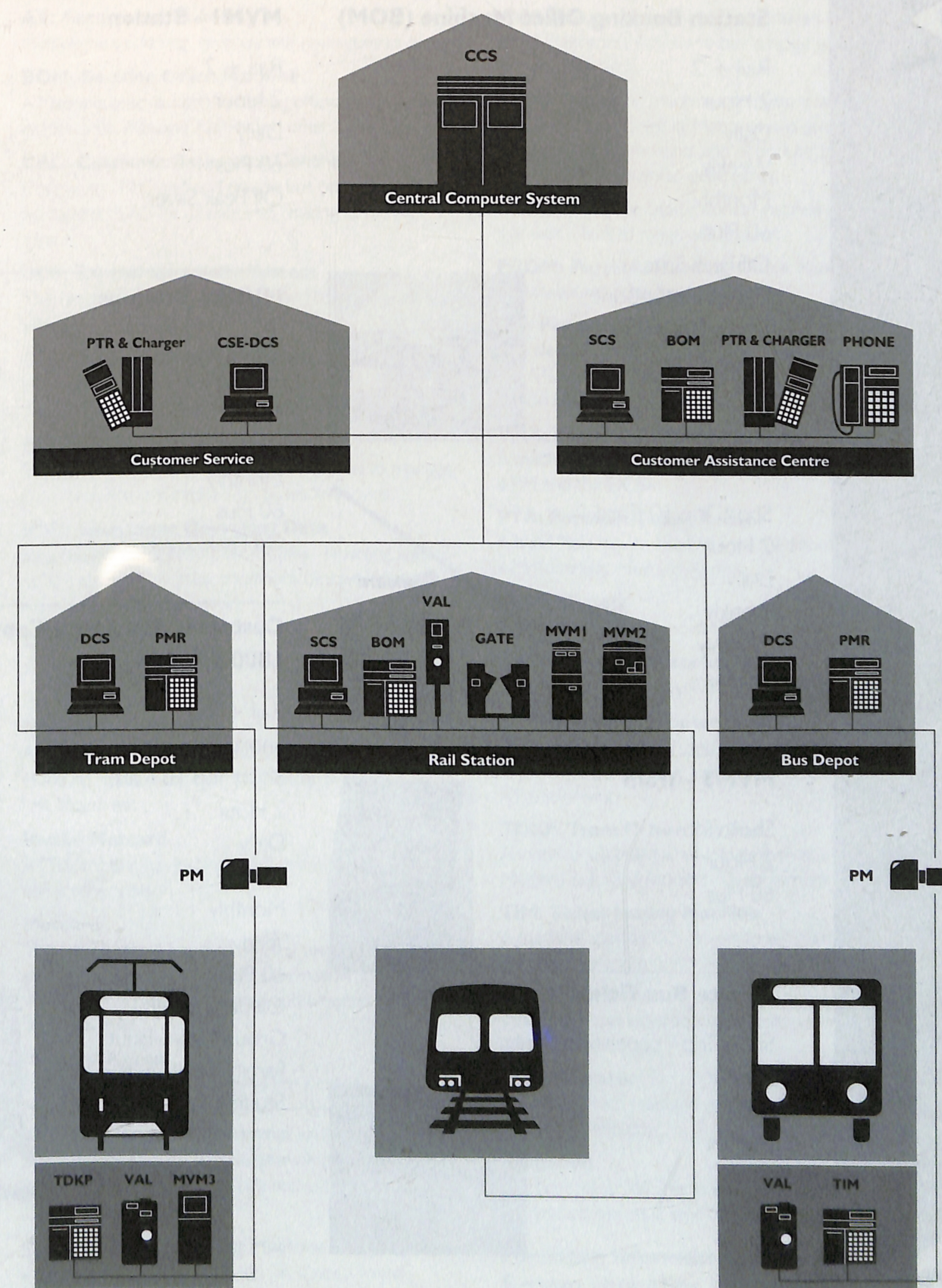
Equipment Help Desk staff monitor for equipment faults and coordinate maintenance staff

## Maintenance Staff

Maintenance staff repair, maintain and re-install AT system equipment.

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# Automated Ticketing System





# Metcard Outlets

All existing ticket types will be available under Automated Ticketing.  
Detailed below are the types of Metcards available and their issuing outlets.

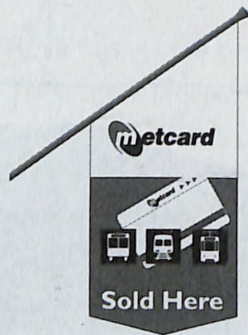
## Station Booking Office Machine (BOM)

Rail + 2  
2 Hour  
Daily  
Weekly  
Monthly  
60 Plus  
Off Peak Saver  
Group Get-a-Bout  
Family Daily  
Student Pass



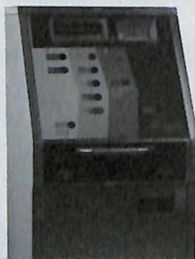
## Retail Outlets

Short Trip 10 Card  
2 Hour  
Daily  
Weekly  
Monthly  
60 Plus



## MVM3 - Tram

Short Trip  
2 Hour  
60 Plus



## Private Bus Ticket Issuing Machine

Short Trip - paper ticket only  
2 Hour  
Daily  
60 Plus



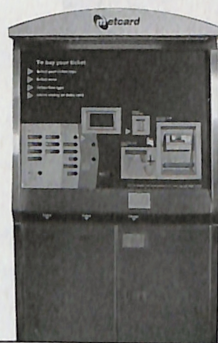
## MVM1 - Station

Rail + 2  
2 Hour  
Daily  
60 Plus  
Off Peak Saver



## MVM2 - Stations

Rail + 2  
2 Hour  
Daily  
Weekly  
Monthly  
60 Plus  
Off Peak Saver



## Customer Assistance Centre 1800 652 313

Rail + 2  
Short Trip Ticket  
Short Trip 10 Card  
2 Hour  
Daily  
Weekly  
Monthly  
Yearly  
60 Plus  
Off Peak Saver  
Group Get-a-Bout  
Family Daily  
Student Pass



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# Glossary

## AT: Automated Ticketing

Melbourne's ticketing, revenue and management system.

## BOM: Booking Office Machine

A Machine used at station booking offices to sell a range of Metcards, Metcard Xpress and other items.

## CAC: Customer Assistance Centre

Customers, PTC staff and private bus operators can contact the CAC for all enquiries relating to the AT system.

## CCS: Central Computer System

The central computer system is used to manage all aspects of the AT system.

## CSE: Customer Service Employee

PTC staff who travel the bus, tram and train services to check Metcards and help passengers with Met services.

## DCS: Depot Computer System

The system installed at bus and tram depots to manage the AT equipment installed on buses and trams.

## EOD: Equipment Operating Data

Information that is used in Automated Ticketing system equipment such as fares, conditions of travel for each ticket and route information.

## Gate

These are the barriers that will automatically allow customers with valid tickets to access and leave stations.

## Hot Listed Metcards

A process which prevents the use of certain Metcards in the AT system, for example Metcards registered as lost, stolen etc.

## Invalid Metcard

A Metcard that has expired or is not valid for travel for some other reason.

## Metcard

The 'key' to the AT system. A card with a magnetic stripe which stores all the necessary information about how and when the Metcard can be used and whether or not it has been validated.

## Metcard Xpress

Metcard Xpress looks and feels like a credit card and can store information about more than one journey. To validate the card, the customer simply touches the yellow target area on the validator or gate. This yellow area is located at a height easily accessible to customers with special needs.

## MVM: Metcard Vending Machine.

Machines installed in trams and on stations to sell Metcards. There are three different types of vending machines.

**MVM1** A coin operated machine installed on stations which customers can use to buy a range of the most popular Metcards.

**MVM2** The largest machines on stations which offer customers a full range of Metcards and give three options for payment: coins, notes and all popular bank, building society and credit union debit cards.

**MVM3** A coin operated machine installed on trams that sells a limited range of Metcards.

## PBOM: Portable Booking Office Machine

A portable machine that sells Metcards.

## PM: Portable Memory

Transfers information between a computer system and the AT equipment installed in trams, buses and allows station staff access to the BOM.

## PMR: Portable Memory Readers

A machine used to transfer information between a PM and the DCS.

## PTR: Portable Ticket Reader

A hand-held device used to read the information on a Metcard and Metcard Xpress.

## Retail Outlets

Nominated outlets who sell a full range of Metcards.

## RPO: Revenue Protection Officer

The PTC staff who travel all services to inspect Metcards

## SCS: Station Computer System

The computer system used at stations to transfer information to the CCS and control the station AT equipment.

## TDKP: Tram Driver Key Pad

A machine used to gather information about trips, Metcard sales and monitor AT equipment on trams.

## TIM: Ticket Issuing Machine

A machine used by bus drivers to sell Metcards and paper tickets and monitor AT equipment on buses.

## UD: Usage Data

Ticket sales and validation information collected by AT equipment.

## VAL: Validator

Machines which read and encode information stored on Metcards.

## Validation

The process which checks whether a Metcard or Metcard Xpress is valid for travel.

**For more information about the AT System phone the Metcard Help line on 1800 652 313**





# Notes

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