

**MEMORANDUM OF UNDERSTANDING**  
**INTEGRATED TRAFFIC MANAGEMENT FOR AUCKLAND**  
**METROPOLITAN AREA**

**1. PARTICIPANTS**

The Participants (and Parties to this MoU) are:

Auckland City Council (ACC)  
Manukau City Council (MCC)  
North Shore City Council (NSCC)  
Waitakere City Council (WCC) (together the "Local Authority Participants")

and Transit New Zealand (Transit).

**2. PURPOSE AND OBJECTIVE**

**2.1 Purpose:** The purpose of this MoU is to record the agreement of the Participants to achieve their joint objective in relation to integrated traffic management (ITM) for Auckland Metropolitan Area. This MoU defines roles and responsibilities between the Participants. It also sets out arrangements for the establishment of a transitional TMU, the appointment of representatives and the implementation of ITM initiatives.

**2.2 Objective.** The objective of this MOU is to integrate the traffic control systems of each participant with the principle objective of optimising the safe and efficient movement of people, goods and services on the Auckland metropolitan area's transport network in a manner consistent with national, regional and district strategies.

**3. DEFINITIONS**

In the context of this MoU:

**Auckland Metropolitan Area** means the urban areas of the local authority participants.

**Executive Group** means the group envisaged under 6.3 below.

**Integrated Service Agreement** means an arrangement whereby the TMU and separately contracted suppliers undertake to work collectively, possibly in shared accommodation, to deliver a full range of traffic management services in a manner that removes any real distinction between the roles of the differing employing authorities. It is possible that this will be implemented on the basis of a contractual Alliance once the best form of performance incentives, risk allocation and payments have been determined.

**ITS** means Intelligent Transport Systems as more generally defined in the Transit New Zealand, National State Highway ITS Strategy

**Objective** means the Participants joint objective in relation to integrated traffic management for Auckland Metropolitan Area as stated in 2.2 above.

**Partnering** means an arrangement where the participants, contracted parties and other stakeholders agree to establish a relationship and charter and to work together cooperatively to advance the objectives of integrated traffic flow management.

**Primary road network** means all motorways and state highways and roads defined as regional or district arterials and collector or distributor roads by the participating authorities and may include agreed critical sections such as business districts.

**Service Level Agreement (SLA)** means separate individual agreements between the participants and the TMU to establish the protocols and rules for managing traffic on the primary road network.

**TMU** means the Traffic Management Unit envisaged under section 8 below.

#### 4. **BACKGROUND**

- 4.1 The Regional Land Transport Strategy has five Objectives supported by a range of policies for the Region. Objective 3 is: **To maximise the efficiency of the transport system.** Policy 3.3 has a number of statements relating to improving the management of roads and policies 3.3.2 and 3.3.3 relate to integrated traffic management. Objective 3 and Policy 3.3 are reproduced in full in Attachment A.
- 4.2 The Local Authority Participants currently operate SCATS adaptive traffic control systems on the majority of the signalised intersections within each District. These systems are largely independent. There is a contractual relationship whereby ACC provides a systems management role for MCC. ACC operates a manned traffic control centre from Bledisloe Building.
- 4.3 Transit is currently completing a demonstration advanced traffic management system (ATMS) on the Northern Motorway from Albany to the Auckland CBD with some functionality through the Central Motorway Junction to immediately south of the Newmarket Viaduct and on the Northwestern Motorway to near Western Springs. The ATMS incorporates a new traffic management centre (ATTOMS) and a fibre optic motorway communications network covering the demonstration project area and extending south to Papakura. The communications network is available to transmit traffic data for each participant. ATTOMS is manned on a 24 hour x 7 day a week basis under contract to an external provider.
- 4.4 Benefits can be achieved by linking the systems, sharing data and resources to better manage flows on the network. To maximise potential systems benefits, it is essential appropriate resources be allocated to optimise the

operations of traffic signals and other control devices through monitoring, modelling and systems adjustment according to demand.

## **5. PROPOSALS**

In order to achieve the Objective, the Participants propose:

- 5.1** The Local Authority Participants will continue to own the SCATS regional computers and all on road traffic control hardware and will provide communications links between the field and the controller. The annual costs associated with these elements of traffic control will continue to be funded by the participants through the National Rooding Programme. Transit will own the motorway on-road assets, ATTOMS, the motorway communications network and traffic signals at interchange ramp terminals and operate these facilities as a State highway charge.
- 5.2** Under a separate agreement, the Participants will undertake functions to introduce bus priority systems that will be linked to the SCATS network. The system's computers will be installed in the ACC traffic control centre. In addition new electronic information signs will be erected at selected bus stops and on some buses.
- 5.3** Transit will continue to use the ATTOMS control room to manage traffic and incidents on the motorways and other State highways within the Auckland Region that are outside the coverage of the ATMS system. Other national services may also be monitored from ATTOMS.

## **6. AGREEMENTS**

The Participants agree to:

- 6.1** Work co-operatively and in partnership to implement Integrated Traffic Management over the Primary Road Network in the Auckland Metropolitan Area as envisaged by this MoU.
- 6.2** Invite the other District Council's within the region to join the participants in integrated traffic management.
- 6.3** Establishment a TMU with Transit as the managing participant, as outlined in section 8 below and shown in Attachment B.
- 6.4** Appoint a senior representative to an Executive Group that will:
  - 6.4.1** Provide management and policy direction to the TMU;
  - 6.4.2** Manage the reporting process for matters requiring Council and Transit approval;
  - 6.4.3** Approve the appointment of a manager for the TMU;

- 6.4.4 Provide policy oversight and maintain contacts with regional and national transport forums and organisations;
  - 6.4.5 In the event of a short fall in Transfund funding, agree a cost sharing formula for the apportionment to each participant;
  - 6.4.6 Establish a pro forma SLA as the basis for individual agreements between the TMU and each participant;
  - 6.4.7 In the event of any disagreement between the parties undertake to resolve differences in good faith.
- 6.5 Enter into individual SLA's with the TMU to establish the protocols and rules for managing arterial traffic flows within each district. In the transitional period the SLA will be generic. The participants will work together in that period to develop and agree specific SLA's that will be subject to yearly reviews. Attachment C is a contents guideline for SLA's.
  - 6.6 The TMU providing services to manage the ATMS system for Transit and the SCATS system of each Participant in accordance with an agreed SLA.
  - 6.7 Appoint a suitably experienced person who shall directly report to the nominated Executive Group member, as the first point of contact between the TMU and the Participants for all operational matters and to be a member of the technical liaison group
  - 6.8 Maintain the present SCATS regional computers, communications links and any traffic control centres in an operational condition and accessible to TMU until a long term strategic plan for regional traffic management is developed and implemented.
  - 6.9 Assign management responsibility for maintenance contracts to the TMU
  - 6.10 Integrate the bus priorities project with the general traffic flow management in the implementation and operational stages of the TMU.
  - 6.11 Use their best endeavours to obtain Transfund approval for the costs of the TMU and ATTOMS operations (including appropriate elements of bus priorities) to be accepted as a state highway charge.
  - 6.12 Adopt Partnering procedures with key stakeholders where appropriate.

## 7. TRANSIT AS MANAGING PARTICIPANT

In addition to the general agreements detailed in 6 above, Transit agrees to:

- 7.1 Work in partnership with the other participants in the transitional period to develop agreements, protocols, procedures, asset management and work plans to fully develop implementation of ITM.
- 7.2 Provide accommodation and support for the TMU at ATTOMS, Transit's regional Office or at other agreed locations.
- 7.3 Assign dedicated specialist traffic staff to the TMU and provide additional support services as required.
- 7.4 Within the agreed ISA framework, let contracts for the operation of the ATTOMS centre and for Network Management Operations consultancy services on the basis of an ISA approach and that provide flexibility to extend consultancy services to cover the local roading network as requested by the Local Authority Participants.
- 7.5 Work with ACC and MCC to agree joint staffing of the TMU and the contractual arrangements for the operations of the MCC SCATS system.
- 7.6 Work with all participants to connect the separate SCATS, CCTV and bus priorities systems to the motorway communications network and the inter-connection of ATTOMS, the ACC control room and Transit's office.

## **8. ESTABLISHMENT OF TRAFFIC MANAGEMENT UNIT**

- 8.1 To achieve better optimisation of the primary road network through the integration of traffic flow management, a Traffic Management Unit (TMU) will be established.
- 8.2 The objectives of the participants and the TMU are to:
  - 8.2.1 Integrate traffic flow management over the Auckland Metropolitan Area to optimise the safety and efficiency of the transport network.
  - 8.2.2 Provide the necessary resources to integrate traffic management through a regional traffic management centre.
  - 8.2.3 Establish agreed network performance criteria for the movement of people, goods and services to positively contribute to the social and economic wellbeing of the region and its constituent districts.
  - 8.2.4 Promote traffic management to harmonise the varying travel and access requirements of motor vehicle users, passenger transport users, pedestrians and cyclists where the need is identified.
  - 8.2.5 Liaise fully with stakeholder groups and work with emergency services to manage incident sites to reduce user delays due to adverse events

- 8.2.6 Provide timely information and communicate with user groups to facilitate good customer relationships in the delivery of transport needs on the primary road network.
- 8.2.7 Identify, develop and recommend best practice in traffic flow management, traffic control technology and asset management.
- 8.2.8 Provide advocacy and technical advice to participants for infrastructure planning and design.
- 8.2.9 Be the regional advocate for ITS development and deployment for the betterment of the transport network.
- 8.2.10 Ensure that traffic flow management is delivered in a manner that promotes consistency with national, regional and district transport strategies and corridor management plans.

8.3 The Participants acknowledge that:

- 8.3.1 The formation of the TMU has been endorsed by the Chief Executives Group and agreed to in principle by the Transit Authority.
- 8.3.2 In December 2001 a joint submission proposed that the operational costs of the TMU and regional traffic management be a full State highway output charge. Transfund's preliminary view was that *"the 100% funding proposal would need to clearly demonstrate why it would not be practical for all roading authorities to contribute to the cost of the traffic management operations."*

8.4 The parties now propose to work cooperatively to establish a "transitional" TMU with effect from the date of execution of this MOU and to develop further operational details and agree other essential procedures and plans on the basis that the participants will continue to meet their own costs in the interim. It is targeted to complete final agreements and establish a full TMU on 01 July 2003.

**9. REPRESENTATIVES**

At the date of this Memorandum, the contact details for the representatives of the Participants to this MoU for the Executive Group and the Technical Liaison group are listed in Schedule 1.

**10. TIMEFRAME**

The Participant's intended timeframe for implementation of the Integrated Traffic Management Plan for Auckland Metropolitan Area is listed in Schedule 2.

**11. REVIEW**

- 11.1 The operations of the transitional TMU and/or changes in the circumstances and institutional environment within the Auckland Region may necessitate changes to this MoU. The Participants agree to co-operate in good faith to negotiate and implement any changes to this Memorandum. Requests to amend this MoU must be made in writing to these representatives.
- 11.2 The Schedules to this MoU may be amended by mutual agreement by the MoU representatives referenced in section 9 above or their replacements.

**12. WITHDRAWAL**

- 12.1 Should any of the Participants wish to withdraw from this MoU, that party must first:
  - 12.1.1 Give notice in writing of not less than three months to all of the other Participants.
  - 12.1.2 Endeavour in good faith within this notice period to resolve the differences or reasons for the Participant's withdrawal.
- 12.2 Withdrawal this Memorandum shall not prejudice or affect the accrued rights or claims and liabilities of the Participants, nor any ongoing rights or liabilities under separate agreements entered into pursuant to this MoU.

**13. DISPUTES**

In the event of any dispute arising out of or in relation to this MoU:

- 13.1 The Participants shall, through the Executive Group, negotiate in good faith in order to achieve a suitable agreement or resolution of the dispute.
- 13.2 If no such agreement or resolution is achieved within 42 days of notification of the dispute, then any Participant may refer the dispute to the respective Chief Executives of the Participants for direct negotiation between them in order to achieve a suitable agreement or resolution of the dispute.
- 13.3 If no such agreement or resolution is achieved within 28 days of reference of the dispute to the Chief Executives, then any Participant may refer the dispute to arbitration under the Arbitration Act 1996.

**THIS MEMORANDUM of UNDERSTANDING SIGNED BY:**

Signed for Transit New Zealand by:

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Dr Robin Dunlop  
Chief Executive

Signed for North Shore City by:

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Rob Hutchinson  
Chief Executive

Signed for Auckland City Council by:

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Bryan G. Taylor  
Chief Executive

Signed for Manukau City Council

.....

Colin Dale  
City Manager

Signed for Waitakere City Council

.....

Harry O'Rourke  
Chief Executive

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 200\_.

## Schedule 1

### Current Participant Contacts as at July 2002

Auckland City Council	Joseph Flanagan (to be nominated)
Manukau City Council	Chris Freke (Bruce Conaghan)
North Shore City Council	Don Munro (Warrick Wade)
Waitakere City Council	John Dragicevich (Ross Hill)
Transit New Zealand	Terry Brown (Blair Monk)

## Schedule 2

### Implementation Timetable as at July 2002

Activity/ Milestone	Date to be achieved
Complete execution of MOU	mid August 2002
Interim cost sharing agreements	September 2002
Draft generic SLA agreed	September 2002
Appoint key management staff	September 2002
Integrate ACC/TNZ staff	October 2002
New ATTOMS manning contract let	October 2002
Network Management Operations professional services contract let	November 2002
Draft Annual Plans to participants	November 2002
Initial SLA executed by participants	May 2003
Annual plans for 2003/04 agreed	May 2003
Assign management of contracts	June 2003
Full TMU established	01 July 2003

REGIONAL LAND TRANSPORT STRATEGY

**OBJECTIVE 3: *To maximise the efficiency of the transport system***

**Efficiency relates to the effective movement of people, goods and services, and the allocation and use of resources in their most efficient manner**

***Policy 3.3***

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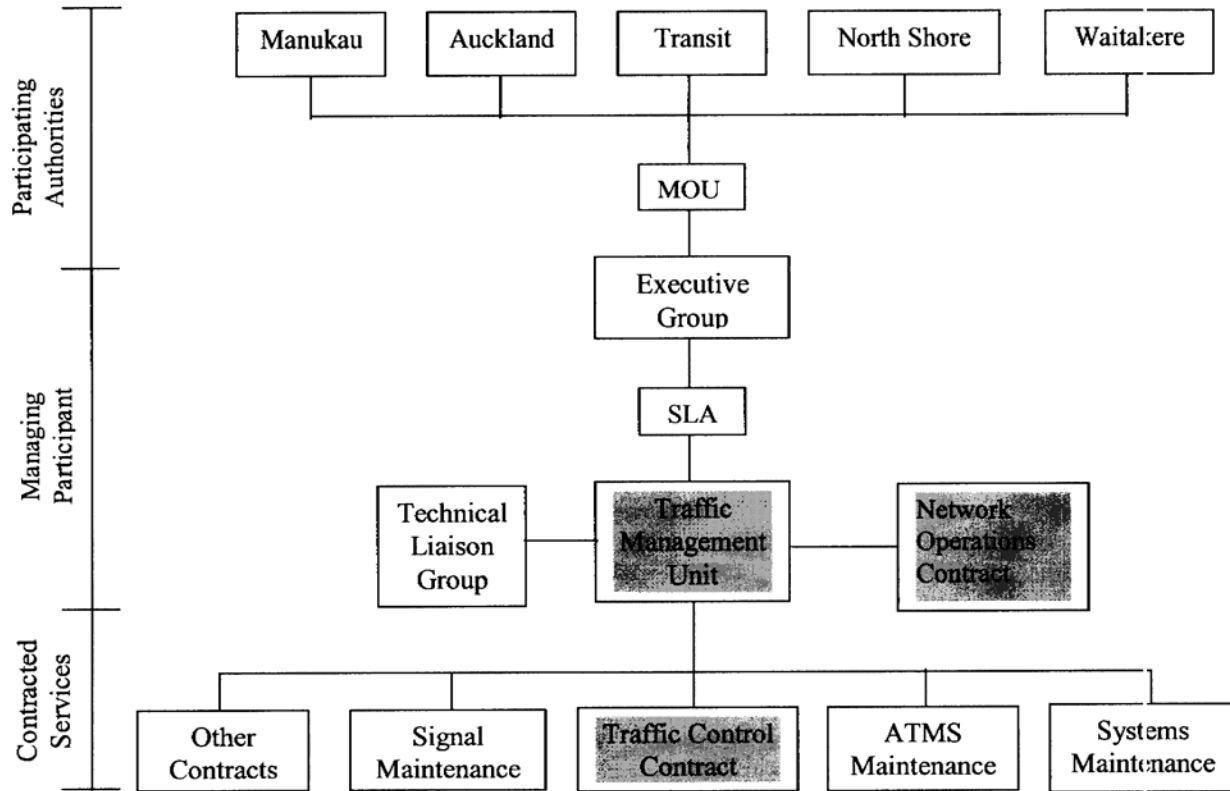
***Improve the management of roads***

- |                     |  |  |
|---------------------|--|--|
| <p><b>3.3.1</b></p> | <p>Undertake the Advanced Traffic Management system demonstration project on the Southern and Northern Motorways. This project includes a traffic management centre, variable message signs, closed circuit television and traveller information systems. Its expected outcomes are reductions in the number and severity of incidents and accidents, reductions in traveller delays, and reductions in environmental effects of vehicular travel.</p> | <p><b><i>Transit in consultation with TA's</i></b></p>     |
| <p><b>3.3.2</b></p> | <p>Investigate, and if feasible implement, integration of traffic signal control functions together with an associated policy framework.</p>   | <p><b><i>Transit and City Councils</i></b></p>             |
| <p><b>3.3.3</b></p> | <p>Upgrade and investigate integration of other traffic control measures, such as improving traffic signal co-ordination; improving surveillance and incident management of the motorway/arterial road system; providing motorists with route information and guidance systems.</p>  | <p><b><i>Transit (for State Highways) and TA's</i></b></p> |
| <p><b>3.3.4</b></p> | <p>Request Central government make legislative changes to allow more efficient enforcement of traffic demand management measures.</p>  | <p><b><i>ARC and Tas</i></b></p>                           |
| <p><b>3.3.5</b></p> | <p>Carry out minor roading improvements, such as a limited number of additional lanes, adding or removing motorway access ramps, and improving the layout of roads.</p>  | <p><b><i>Transit (for State Highways) and TA's</i></b></p> |

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- 3.3.6 Implement traffic management improvements, such as “tidal flow” lanes (more lanes in peak direction than in the opposite direction, as on the Harbour Bridge); and modifying lane arrangements to increase capacity. *Transit (for State Highways) and TA’s*
- 3.3.7 Ensure traffic management and roading improvements take into account the accessibility and safety needs of pedestrians and cyclists. *Transit and TA’s*
- 3.3.8 Ensure that roading improvements, traffic calming and other changes do not unduly disadvantage the needs of commercial traffic including goods vehicles. *Transit and TA’s*

# Attachment B

## Integrated Traffic Management Participant Relationships & Service Delivery



Shaded boxes indicate groups to work together in an integrated Service Agreement arrangement

**GENERAL CONTENTS FOR SERVICE LEVEL AGREEMENTS**

The following notes set out the range of issues that will need to be considered in Service Level Agreements (SLA) between the Traffic Management Unit (TMU) and each Participating Authority including Transit. The notes are intended as a guide to the development of SLA's and shall not form any part of the present agreements between the parties.

*The italicised items are those that should be considered in interim generic SLA's in the transitional period.*

**1. Management**

- *Set out the role of the TMU, the management structure, contact points and relationships between participant and managing participant. This is shown conceptually in Attachment B.*
- *Delegation of functions and responsibilities by participants to TMU.*
- *Technical Liaison Committee and interaction at operational levels.*
- *Report on an agreed basis to the Governance Board and the participants*

**2. Asset Management**

- *Set out the agreed principles for preparation of Asset Management Plans (AMP) and the policies with respect to asset maintenance, upgrading, replacement or renewal. This to include forward forecasts for expenditure.*
- *Allocate funds in the 2002/03 year to complete an AMP for all traffic management equipment with work to be co-ordinated through the TMU using a contracted supplier.*
- *Review of the asset management plan for signal equipment*
- *Assign contracts for maintenance activities to the TMU*
- *Agree any changes to number/area of signal maintenance contracts*
- *Traffic counting and use of data*
- *Auditing of performance of operations to ensure compliance with agreed key performance indicators (kpi).*

**3. Annual Plans and Funding**

- *Set out the process of preparing Annual Plans that will be based on AMP and will go through the Council's own planning processes for allocation of local funds and to Transfund as part of the National Rooding Programme.*
- *Set out the payment and claim processes presuming that the TMU is delegated management of signal maintenance contracts.*
- *New capital projects recommendations for draft Annual Plans and consideration by Councils.*

#### 4. **Corridor Management Plans**

- For major arterials there is a need to consider Corridor Management Plans (CMP). Ideally a CMP would deal with the total use of the road reserve and include elements listed below.
- Within an overall CMP, it is the first three bullets below that would fall within the structure of the TMU as a primary output for traffic management.
  - Carriageway management including parking, road furniture etc.
  - Traffic function and priority.
  - Utility location, access and standards
  - Land access policy.
  - Stormwater discharge.
  - Road reserve maintenance.
  - work with the TMU to identify and prioritised traffic operational conditions for corridor management plans for critical parts of the transport network.

#### 6. **Traffic Flow Management**

- *Set out protocols for the operation of the primary road network through the SCATS system. This would relate to normal traffic control practices and protocols (cycle time, lead/lag, min amber, min green etc).*
- Input into or approval of lane use on the primary road network by utilities and others.
- Work with Parking Enforcement on clearway surveillance.
- Establish agreed travel time surveys for sequencing of signals, determine capability of equipment to properly determine effectiveness to optimise flows, identify system deficiencies and then establish key performance indicators. Include review processes.
- *Agree priorities to review corridor performances and undertake optimisation studies.*
- Consider use of corridors for incident diversion.
- Where local arterials intersect interchanges consider travel demand management to optimise flows. In parallel arterial corridors consider traffic balancing.
- Scope a study to consider incident management on the major strategic and arterial network and prepare draft incident and traffic management plans for impacts on various parts of the system.
- Availability and use of microsimulation for testing traffic management plans and other functions.

7. **Capital Works/Network Modifications**

- Where material changes are to be made to the road network, agree processes for advocacy on wider impacts of changes. If changes are considered detrimental to arterial traffic flows then amended kpi's will be negotiated.

8. **CCTV Cameras**

- *Set out agreed conditions on access, use and operation of CCTV cameras owned by participants. This would include protocols for recording, priority of use, privacy issues, etc.*
- Develop strategies for the future role out of CCTV and any extensions of ATMS coverage on the motorway and major arterials

9. **Bus Priorities**

- Each participant has signed a separate agreement to institute bus priority signals. The SLA to programme for installation and set operating conditions.

10. **Relationships**

- *Establish relationships between the TMU and separate sections or divisions within participant Council's, particularly traffic enforcement, consents, and transport planning.*
- *provide and maintain an experienced traffic engineer as the point of contact with the TMU and to participate in the Technical Liaison Group (TLG).*
- *work with the TMU to review and, where desirable, rationalise the signal maintenance contracts in an agreed manner within the region.*
- *prepare SLA with the TMU that would establish the kpi's for managing traffic within the district, other matters required to effectively manage ITM and specific relationships between the participants.*
- *reimburse the managing participant on an agreed basis for payments made through the TMU for the management, operations and maintenance of participants traffic control systems.*
- *work with the TMU to prepare draft traffic operations budgets for input into Transfund's and the Council's annual planning processes.*
- *assign to the managing participant responsibility to prepare, let and manage agreed contracts for various works within financial budgets.*

11. **Costs**

- *The parties shall share the costs of traffic management in the following manner:*
  - a) ***Maintenance and operational costs*** – *Each RCA shall meet the full cost of operating, maintaining and upgrading on-road traffic control equipment, detection loops, communications, power, SCATS hardware, CCTV, VMS, LCS, etc at the appropriate financial assistance rate as agreed with Transfund.*

- b) **Capital costs** – Each RCA shall meet the full cost of any new or replacement capital works accepted by Transfund at the appropriate financial assistance rate.
- c) **Traffic Control costs** – Transit will meet the operating costs of the ATTOMS to the level of funding approved in the State highway output of the NRP. This will include the direct costs of maintaining, running and furnishing the control room, operational costs of the contracted service provider, systems hardware and software and outputs from the Network Manager Operations relating directly to the motorway and servicing roads that impact on traffic efficiency, incident management. In integrating SCATS with ATMS, the parties shall agree an apportionment of the funding approved by Transfund for the management of the SCATS systems operated by participants to the overall cost of operating ATTOMS and the other traffic centres.

## 12. Interconnections

- Transit make available on an agreed basis access to the fibre optic motorway communications network (MCN) to participants and assist with a primary connection from the SCATS hub.
- share traffic information with other participants.
- agree with each participant procedures for the management of traffic incidents and the establishment of agreed diversion routes.
- participate in executive and technical liaison groups formed to coordinate the operations of integrated traffic management and provide technical assistance for SCATS operations respectively
- connect the SCATS system to the MCN
- maintain the present SCATS operating systems and communications linkages in the present locations.
- Renumbering the SCATS intersection identification system for regional control needs.
- connect the SCATS hubs to the MCN in a manner agreed with Transit.
- connect CCTV signals to the MCN where these will assist traffic flow management and facilitate sharing of essential information.

## 13. Other Issues

- Linkage with Wellington and defined roles
- Other remote monitoring
- Connection to Website and possible commercial arrangements plus privacy issues
- Partnerships with Police
- Roles in incident management
- National role – Transit 0800 call centre
- Regional information – link to call centres
- Branding and communications