



## Project Management in WA Police

### The Perth Metropolitan Radio Network

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## Overview

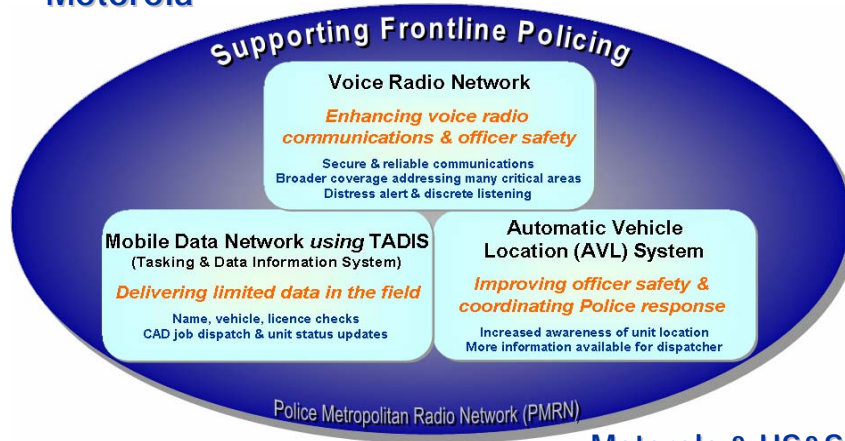
- Scope of the Police Metropolitan Radio Network (PMRN) Project
- Success of methodologies used by Western Australia Police for commercial agreements
- Developing a partnership approach with vendors
- Change Management
- Changes to WA Police frontline policing

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# The PMRN Project

Motorola



Motorola & US&S

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# Project Scope

- 1000 vehicles
  - 1000 with digital radio
  - 600/1000 with AVL
  - 400/1000 with mobile data
- 150 police stations / organisational units
  - Each with fixed radios (base station)
  - Incorporated into existing audio systems
- 1800 handheld radios
  - With configuration and encryption versions specific to general tasking, Crime and special / covert operations
- 31 radio sites
  - Voice radio and a subset with data radio components
- Integration
  - Into the Communications Centre
  - Into the existing CAD and other corporate systems
- Secondary site
  - Disaster Recovery
  - Voice, Data, Message Switch and CAD systems

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## Voice Radio Network

- WAPOL owned network
  - Designed to provide maximum coverage of the greater metropolitan area for portables – nearly 10,000 km<sup>2</sup>
  - Wide area network coverage for some specialist units enabling communication with colleagues across the metropolitan area
- Digital trunked network providing efficient utilisation of channel resources
- Encryption using “OTAR” (Over the Air Re-keying)
  - Eliminating need to manually re-key encryption codes onto each radio
- Proven and demonstrable technology already working in other jurisdictions in Australia and around the world



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## Mobile Data Network for Mobile Data Device (MDD) & TADIS

- WAPOL owned network
  - Not dependant on communications companies for service delivery
  - WAPOL use only so not impacted by public especially in emergency situations
- Separate frequency (820 to 870 MHz) and network
  - No interference with communications on the voice network
- Mobile Data Device (MDD) installed in operational vehicles
- Using the MDD and Tasking and Data Information System (TADIS) officers can:
  - receive and close CAD jobs;
  - update their status by the push of a button;
  - view CAD reports; and
  - conduct searches on
    - Name
    - Address
    - Vehicle and Firearms.



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## AVL System



- Uses Global Positioning System (GPS) technology to determine the location of tasking vehicles
- Transmits GPS coordinates to the Police Operations Centre (POC) for displaying vehicle locations on the Advanced Tactical Mapping (ATM) facility

***Officer safety  
More effective dispatch  
Better resource coordination***

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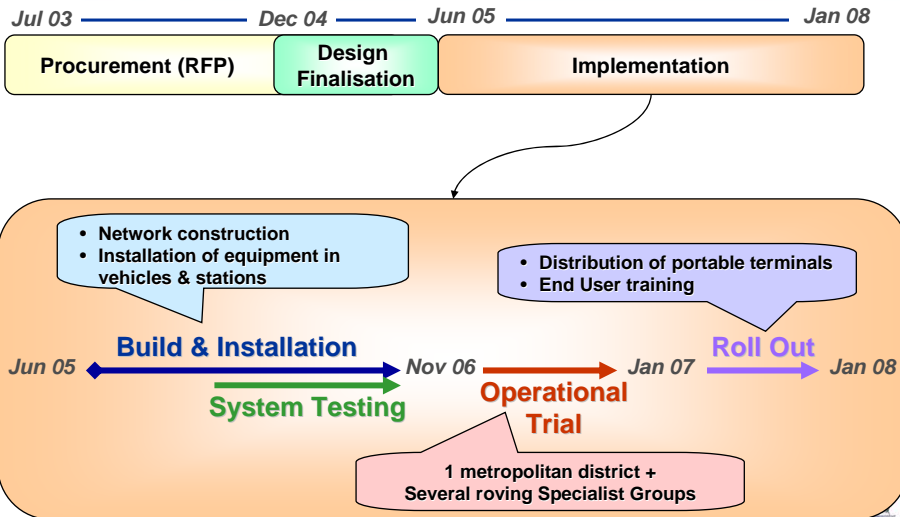
## Two Part Approach

- An RFT for multiple components which entitled the successful respondent to enter into Design Finalisation with Police.
- The Design Finalisation, incorporating the detailed design, draft contracts and commercial aspects prior to contract award.

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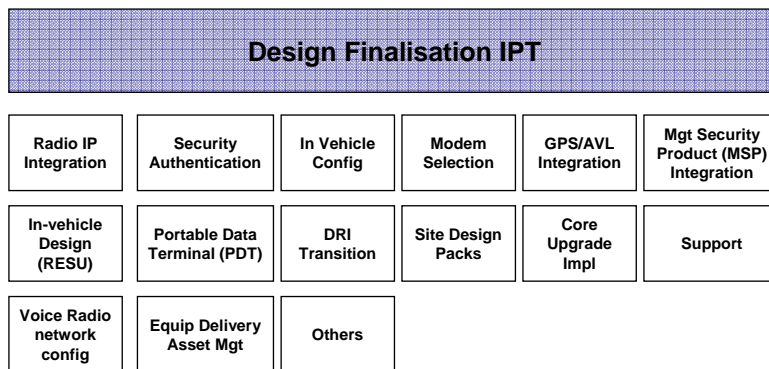
# PMRN Project Timeframe



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# Implementation of Integrated Project Teams (IPT)



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## IPT Schedule

- 25 identified IPTs of varying priority and complexity.
- Schedule dynamic and will change based on issues encountered and priorities over the coming months
- Number of IPTs running at any one time will be limited

Ref	IPT	Start	End
1	Equip Delivery and Asset Management	27/05/05	15/07/05
4	Fleetmap definition	27/06/05	27/07/05
8	SIF Build/Himalaya Implementation	20/06/05	20/07/05
12/13	Console Fitout/Telephony Interface	20/06/05	30/08/05
22	MDC Screen Layouts	20/06/05	30/07/05
24	Vehicle Installation Design	20/06/05	Ongoing as required
25	Testing and Traceability	01/07/05	TBA

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## How we achieved Design Finalisation

- **One team approach**
  - IPT approach with equal participation from all members
- **Focussed on the skills of team members**
  - Identifying opportunities for ownership across boundaries  
Decision making by the right people
  - A focus on those people with the skills and experience to make the decisions.
  - Excluding commercial discussions from the IPTs and allow the focus on the best outcome. Any commercial discussions were addressed by the Commercial Teams
- **Design disclosure**
  - No surprises and information sharing

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## WAPOL Planning Commercial Approach #1

- **Pragmatic procurement approach:**
  - Transparent, open and inclusive RFP process
  - Specifications focused on business requirements
  - Solutions had to be proven and demonstrable
  - Strict governance to manage procurement process and business risk
- **Outcome - SUCCESSFUL**
  - High quality well documented and comprehensive responses
  - Detailed business overviews worked well, majority of submissions tailored to WA Police operational environment
  - Site evaluation of actual communications systems significantly reduced risk
  - External audits of the project were successfully managed

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## WAPOL Planning Commercial Approach #2

- **Design finalisation process PRIOR to contract award:**
  - Structured and planned to reduce the delivery risk and reduce costs
  - Applied the Integrated Project Team (IPT) approach from the start fostered strong relationship with partners
  - Separate teams for contract / commercial negotiations and design activities
- **Outcome – SUCCESSFUL**
  - No surprises to any party
  - The IPT approach accelerated design and documentation process
  - Technical teams focussed on best solution, commercial teams met separately to manage implications
  - All design, scope of work and contracts for both vendors completed within 18 weeks - negligible changes required

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## WAPOL Planning Project Approach #1

- **Technical risk reduction:**
  - Adopted lessons learned from other jurisdictions
  - Focussed on 100% proven and demonstrable solution components
  - Early end-to-end testing of all integrated components; partner to partner and partner to existing WAPOL systems
- **Outcome - SUCCESSFUL**
  - WAPOL baselined design, configuration and implementation approaches based on other agencies
  - Proven and demonstrable solutions moved from high risk development approach to lower risk “Plug and Play”
  - Informal testing of end to end data solution within the first month

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## WAPOL Planning Project Approach #2

- **Radio Site acquisition:**
  - Allowed in excess of 12 months for site acquisition
  - Used a dedicated WAPOL team
  - Early escalation of problems in accessing sites
- **Outcome - UNSUCCESSFUL**
  - Whilst some sites were acquired in a shorter timeframe 12 months per site was too short from a scheduling perspective
  - Legislative change for Public Safety Communications may be a viable option
  - The project underestimated the complexity of dealing with owners, tenants, LGAs and other government authorities

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# Change Management – Process Review

## Development of Business Processes

- Based the majority of business processes on the use of the systems by other policing agencies with similar or desired task management/ work approaches
- Allowed technical staff to conceptualise system usage which was validated by operational staff

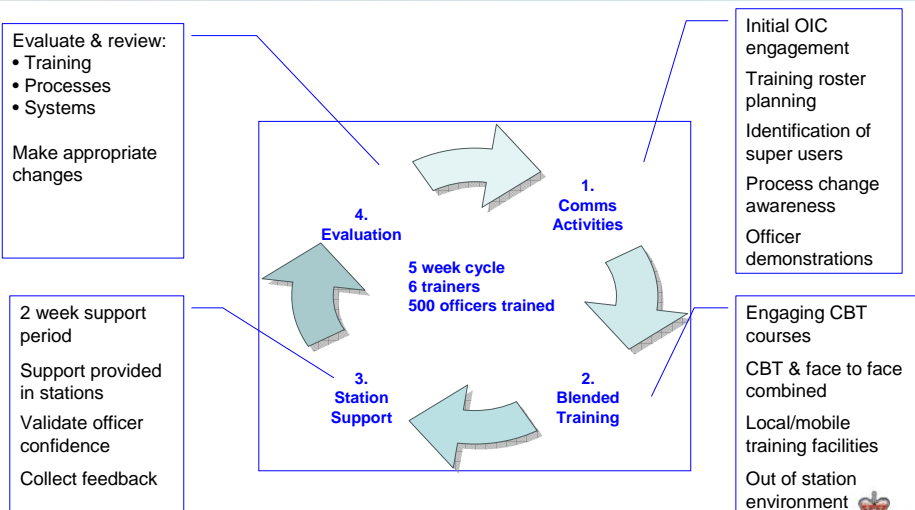


- Linked training modules to business processes, continually amending them as greater system understanding was obtained
- Linked the business related testing to training modules.



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# Change Management Training



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## Operational Trial Concept for Implementation Strategy

Limited set of users (approximately 20% of total user population) using the voice and data systems for 8 weeks prior to releasing for all users.

During the trial the following aspects were to be assessed:

- Contractual system availability / reliability in accordance with the expected service measures;
- The business processes developed by the project for operational users;
- The effectiveness of training, both technical and operational; and
- The ability of WAPOL and the vendors to provide ongoing support.

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## Changes to Frontline Policing

### • **Benefits already realised:**

- Safety in critical incidents
- Improved supervision
- More efficient dispatch
- 20% reduction in response times
- Significant savings on available transmission time
- Clearer voice communications
- Increased talk group capacity meeting operational needs
- Reduction in some manual paperwork process



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## Since PMRN

- PMRN Expansion and Department of Corrective Services Integration
- State wide Implementation of Computer Aided Dispatch
- State wide implementation of Mobile data (TADIS)
- State wide implementation of handheld Mobile data (TADISLite)



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