

# SOUND BUSINESS PRACTICES

---

To meet our commitments to the community we must implement business practices that can be benchmarked against recognised standards of excellence. This includes managing our financial and physical resources in a competent and accountable manner while maintaining a strong customer focus.

To achieve our strategic goal of continuous improvement in emergency service delivery we must:

- Provide equitable and adequate funding for prevention and emergency services, with resources matched to risk;
- Continue advancements in inter-operability, coordination and collocation of emergency services;
- Adopt an innovative approach to the application of telecommunications and information technology;
- Participate in research and accumulation of information to support evidence-based decision-making; and
- Complete a comprehensive review of legislation related to FESA and its services.

## CONTENTS

KNOWLEDGE AND INFORMATION MANAGEMENT	<a href="#">81</a>
EMERGENCY SERVICES LEVY	<a href="#">83</a>
PHYSICAL RESOURCE PLANNING	<a href="#">84</a>
CAPITAL WORKS PROGRAM	<a href="#">86</a>

# KNOWLEDGE AND INFORMATION MANAGEMENT

## KNOWLEDGE MANAGEMENT

Knowledge Management within FESA is about creating a knowledge-sharing environment in partnership with other information providers. Our new structure will assist us to ensure that information within the organisation is stored appropriately, managed effectively and made accessible to the relevant stakeholders. We are developing effective systems for capturing and integrating specialist knowledge such as geospatial information into operational planning and response, data management systems that support accurate reporting and communication technologies that support interoperability between services and agencies as well as timely sharing of information to relevant stakeholders.

## SHARED LAND INFORMATION PLATFORM – EMERGENCY MANAGEMENT

The [Shared Land Information Platform – Emergency Management](#) (SLIP-EM) will facilitate the integration of geospatial information for emergency management prevention, preparedness, response and recovery activities across all emergency service agencies. Pilot services, accessible via the Internet or in the field, have been established to provide emergency management agencies with the most current and authoritative spatial/mapping information using the SLIP infrastructure.

## GEOSPATIAL SERVICES

Our Geospatial Services section now holds approximately 1.5 terabytes of data including aerial photography of areas across Western Australia and other data of significance to emergency management.

Significant projects this year included support of the FESA Computer Aided Dispatch project, map production for the Fire Investigation and Analysis Unit to support arson reduction and map production showing proposed changes to ESL boundaries.

Other projects include the development of tools and processes to

- Support station planning, including 'modelled best location' (best spot) analysis; and
- Facilitate management of Unallocated Crown Land and Un-Managed reserves.

The section also assisted the State Coordination Centre during the major fires and cyclones throughout February and March 2007 and continues to support the SLIP-EM team.

Through representation on the Emergency Management Spatial Information Network of Australia, we are involved in resolving national spatial issues that impact on emergency management. We have also participated and contributed to the development of standardised emergency management mapping symbology for Australia and New Zealand.

## OPERATIONAL MANAGEMENT DATABASES

The issue of data quality and integrity is a high priority. Consultation with operational staff will be undertaken to improve data accuracy and timeliness in order to improve our ability to provide accurate reports to satisfy our statutory obligations.

Preliminary work has commenced on the future of replacement OMS / EM2000 systems that include an all hazards approach.

## COMMUNICATIONS TECHNOLOGY

During the past year work has continued on a number of projects to improve operational support computing and communications systems.

## Western Australian Emergency Radio Network (WAERN)

The WAERN is a \$20 million, four-year project to upgrade the State's emergency radio infrastructure. Launched in July 2005, it will dramatically improve emergency services radio communications in Western Australia by providing inter-operable communications during the management of fires, floods and other disasters.

Some infrastructure and manufacturing difficulties delayed aspects of the WAERN project, but these issues have been resolved and the project will soon be back on track.

Work has commenced in four pilot regions, the Burrup Peninsula, Esperance, Warren District and Mundaring. Installation of repeater equipment, with antenna arrays and associated equipment has been completed at fifty WAERN repeater locations throughout the State.

#### Triple zero emergency dispatch system

The software for FESA's computer-aided dispatch system (FCAD) has been re-engineered. The new system will be phased in during the coming months in readiness for the next fire season. The new and old systems will run in parallel for a short period to verify operation and ensure minimal disruption to dispatch processes.

#### Country Communication System

The Country Communication System controls and coordinates direct brigade alarms and volunteer notification in regional Western Australia.

The system incorporates:

- Direct brigade alarms.
- Group call.
- Voice overlay paging.
- Station siren operation.

All country direct brigade alarm messages can now be transmitted to our communication centre. All regional career fire stations and 30 volunteer fire stations have had the new equipment installed.

#### MEDIA AND PUBLIC INFORMATION

During major bush fire emergencies, cyclones and floods, public alerts generated by FESA are sent to ABC radio for regular broadcast throughout the duration of the incident.

This is governed by a formal Memorandum Of Understanding between the ABC and all of the Western Australian Hazard Management Agencies. In addition, for cyclones and often also for storms, the Bureau of Meteorology includes State Emergency Service (SES) alerts at the end of its forecast bulletins.

An alert is different from a media statement in that it is expected that the broadcaster will use the wording of an alert in its exact format, in the same manner in which a weather forecast is broadcast. A Memorandum of Understanding with the ABC gives effect to this protocol. In this way, there can be no conjecture about the meaning of the alert.

The alerts broadcast by radio are supported by information recorded on the FESA 1300 657 209 public information phone line, through media releases, the FESA website alert page and a community information line when activated.

#### StateAlert Public Emergency Warning System

FESA and Western Australia Police have jointly developed a new community emergency warning system, StateAlert. It is designed to assist Hazard Management Agencies to communicate timely, accurate and geographically specific information to communities that may be critically threatened by an emergency.

The system is capable of sending voice and/or text messages via landline and mobile telephones; SMS, email and fax.

The system has been two years in development and was successfully trialled in Wundowie in March 2007. All Hazard Management Agencies will have access to the system via Western Australia Police or FESA.

### ON-LINE SERVICES

We have continued to make improvements to our on-line services this year. Information management through the FESA Intranet has been significantly improved and FESA staff now have access to a dynamic, current and useful portal for storing and sharing information.

During the year we also enhanced the resources available on-line for prospective career firefighters, including the option of on-line application and encouraged SES volunteers to conduct maintenance training on-line through the SES Acticard.

Expertise gained through the development of the intranet portal will assist in the review of the FESA internet website planned for 2007-08 and development of our extranet portal for volunteers.

### Volunteer Extranet Project

Following approval of a grant from Emergency Management Australia, we engaged ISA Technologies to construct a web portal for FESA volunteers.

The initial phase of the website is scheduled for implementation in August 2007, and subsequent phases will include improved functionality and content.

The project is driven by Volunteer and Youth Service Branch with the following objectives:

- Enhance the on-line information available online to those considering becoming volunteers.
- Reduce the administrative workload in running a volunteer brigade, group or unit.
- Improve communication between our administrative staff and volunteers – underpinning the volunteers' sense of belonging, involvement and contribution to the safety of the Western Australian community.

Future developments will aid operational reporting through access to our operational management system.

### SES Acticard

The SES Training section, in conjunction with the National Education and Training Committee launched the ACSES Acticard website for use by volunteers, particularly training personnel, for continuation (maintenance) training within the emergency services across Australia.

The target group for Acticard is training personnel within SES; however we also encourage our SES and Volunteer Emergency Service (VES) volunteers to access the maintenance training options via the E-training section of the website wherever possible. Acticards can be combined to run exercises of varying degrees of complexity for training nights or weekend camps.

Until all volunteers have net access, hard copy Acticard files will be distributed to SES and VES Unit Training Managers at workshops during the next few months.

## **EMERGENCY SERVICES LEVY**

The financial reporting period ending 30 June 2007 is the fourth year of the ESL under the provision of the [Fire and Emergency Services Authority of Western Australia Act 1998](#). The ESL is a levy on properties in Western Australia and is applicable to residential, farming, commercial and industrial properties and vacant land. Commonwealth property, vacant land owned by local governments and certain mining tenements restricted to prospecting and exploratory activities are exempt from the ESL.

Processes and systems to administer the ESL are now generally working efficiently and effectively and local governments, as ESL collection agents, are continuing to operate in accordance with legislative requirements. Revised versions of the [Local Government Manual for Capital and Operating Grants](#) and the [Manual of Operating Procedures](#) were developed and issued for 2006-2007. The grants manual provides guidance to local governments in preparing annual estimates of the operating and capital requirements for their bush fire brigades and SES units. The ESL Operating Procedures Manual, coupled

with local government rates systems upgrades, was introduced to ensure that appropriate ESL billing, collection, remittance and reporting procedures are implemented by local governments.

Monitoring of these relatively new ESL accounting and administrative processes has continued during the year to ensure that property owners are correctly charged and that our reporting obligations are met.

In 2006-07 minor process and system refinements have continued:

- The *Local Government Manual for Capital and Operating Grants* was again updated (2007-08 version issued) with focus on areas where more simplified administrative approaches could be introduced and improvements in the efficiency and effectiveness of the ESL grants scheme could be made.
- Promotion of an alternative, more efficient ESL remittance arrangement for local governments continued during 2006-07. This resulted in a further 19 councils electing this option for 2007-08 (in addition to the 78 that operated under this arrangement in 2006-07).
- A review of all ESL category boundaries was conducted during 2006-07 to ensure that, in readiness for 2007-08 ESL billing, they properly reflected the service delivery available to property owners.
- A revised and more cost-effective ESL communications and marketing strategy was adopted in 2006-07 for the 2007-08 ESL billing cycle. This involved the continuing use of the ESL call centre from June to October 2007 and the development of an ESL brochure for inclusion with 2007-08 rates notices. The ESL pages on the FESA website were also updated.

## PHYSICAL RESOURCE PLANNING

Our physical resource planning incorporates the use of business-case strategies to ensure that service delivery outcomes are consistent with corporate objectives. Our approved capital works investment program is used to manage the delivery of physical resources to meet service delivery requirements.

### FLEET AND EQUIPMENT SERVICES

#### Fire appliance procurement improvements

Capacity and capability exposures were identified in the way we procured fire appliances, and the large number of contracts meant that the approach was administratively demanding. Contracts were appliance type and time and/or quantity specific. To ensure continuous manufacturing capability across the product range, the procurement arrangements were reviewed and a new procurement framework implemented. A single All Classes contract was established that relied on a panel of pre-qualified suppliers and continued our commitment to fostering local industry in regional Western Australia.

We have taken steps to increase the number of experienced manufacturers of fire appliances in Western Australia while also maintaining our commitment to fostering industry in regional Western Australia. New contracting arrangements have been made with Western Australian-based suppliers for new appliances and the refurbishment of existing appliances for a 10-year period. The total value of the contract is estimated at \$72 million. The panel arrangement allows greater flexibility in appliance manufacture and provides the opportunity to increase the capabilities of suppliers to better deliver our appliance requirements. Three regional manufacturers are included in the panel of six contracts.

#### Vehicle build program

During 2006-07, 119 projects with a value of approximately \$16.2 million were undertaken. The program includes vehicle replacement, and special projects for the vehicle and equipment needs of additional fire stations or improved response capability such as urban search and rescue.

#### Vehicle replacement program

An ongoing replacement program is critical in ensuring vehicles and associated equipment used by emergency responders are reliable and fit for purpose. 104 vehicle build projects were completed in 2006-07. This is 79% of our total program, which includes some carry-over from previous years. Vehicles completed include pumpers, tankers, special purpose trailers, personnel carriers and other specialised units.

#### Development of Hazmat, Structure, Rescue (HSR) appliances for Volunteer Fire and Rescue Brigades.

Most Volunteer Fire and Rescue (VFRS) brigades with a road crash rescue role had provided this capacity from purpose-built rescue trailers towed by light tankers. Brigades with two appliances provided structural response using light pumper appliances. Single-appliance brigades with just a light pumper carried their road crash rescue equipment on this appliance.

Initially, light pumpers were being replaced with urban tankers. However, these were only suitable for two appliance stations as they could not carry rescue equipment. The HSR appliance was designed to fill the need for a single appliance that could fulfill all response requirements.

Its development has been highly consultative with volunteers having significant input to the prototype, which has been refined in partnership with our supplier. The final design features a number of innovations that may be adopted in other appliances. It also offers many ergonomic advantages compared to previous designs and has been well received. The attention to detail, innovation, lateral thinking and fitness for purpose applied to the design of the HSR have been acknowledged by key interstate fire agency personnel.

The purpose-built HSR appliance is a multi-function appliance that meets all current requirements of VFRS brigades and will assist them to provide a quicker, more comprehensive response capability. An added benefit is reduced reliance on trailers in regional locations.

#### FLEET MAINTENANCE

Preventative maintenance programs for Fire and Rescue Service vehicles and specialised hydraulic rescue equipment continued as scheduled. A 10-year half-life inspection and maintenance schedule was completed on aerial appliance TTL03 during 2006.

#### LEASED FLEET

FESA has continued to change its leased passenger fleet to smaller four cylinder vehicles. In the past year, we increased the number of four-cylinder passenger vehicles to 68 vehicles and decreased the number of six-cylinder vehicles to 16. This change will further reduce total operating costs of our passenger fleet and future carbon dioxide emissions.

## CAPITAL WORKS PROGRAM

Our capital works program for 2006-07 of \$25.865 million comprised new works of \$6.925 million and works in progress of \$18.940 million. As part of the 2007-08 budget process, the capital works program for 2006-07 was revised to \$54.590 million, an increase of \$28.725 million, and included carry-overs from 2005-06 and additional funding for cost escalation approved during the period. Details of the capital works projects are contained in the following tables. Note that The Estimated Total Project Costs for the program have been adjusted, to reflect the latest increased budget allocations achieved through the 2006-07 Budget process for the 2007-08 year and beyond.

CAPITAL WORKS PROGRAM AS AT 30 JUNE 2007							
Program	Note	Estimated Total Project Cost	Expenditure prior to 01/07/2006	Estimated Expenditure 2006-2007	Actual Expenditure 2006-2007	Expenditure Variance 2006-2007	Estimated Cost of Balance of Program
		\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
<b><u>FIRE STATIONS</u></b>							
<b><u>Completed</u></b>							
Career FRS Belmont Fire Station	1	2,900	2,545	355	10	345	345
VFRS Kalgoorlie Fire Station	1	675	553	122	4	118	118
Volunteer FRS Broome fire station	1	1,205	485	615	720	(105)	0
<b><u>Under construction</u></b>							
Volunteer FRS station modifications	1	755	615	140	140	0	0
Station Modifications 2006-2012	1	1,970	0	470	33	437	1,937
Career FRS Perth fire station relocation	1	9,500	3,550	5,950	353	5,597	5,597
Volunteer FRS Merredin fire station	1	1,500	21	784	254	530	1225
<b><u>Planning stages</u></b>							
VFRS Albany Fire Station	1	2,514	14	1,021	2	1,019	2,498
<b><u>Land acquisitions</u></b>							
Career FRS Maddington fire station	2	320	9	311	2	309	309
Career FRS Eglinton fire station	2	4,305	0	400	0	400	4,305
FESA House Relocation	2	46,577	0	2,000	2,731	(731)	43,846
<b><u>REGIONAL OFFICES</u></b>							
FESA regional collocation – Bunbury	3	1,691	1,111	544	580	(36)	0

<b>CAPITAL WORKS PROGRAM AS AT 30 JUNE 2007</b>							
Program	Note	Estimated Total Project Cost	Expenditure prior to 01/07/2006	Estimated Expenditure 2006-2007	Actual Expenditure 2006-2007	Expenditure Variance 2006-2007	Estimated Cost of Balance of Program
		\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
<b><u>REGIONAL OFFICES (cont)</u></b>							
FESA regional collocation – Geraldton	3	1,650	212	1,163	1,413	(250)	25
SES Regional Headquarters replacement – Broome	3	921	102	819	0	819	819
<b><u>TRAINING FACILITY</u></b>							
National USAR enhancement strategy - facility	5	332	0	332	38	294	294
Forestfield Training Centre Modification	6	650	0	650	33	617	617
<b><u>FIRE AND EMERGENCY VEHICLES</u></b>							
Career FRS turntable ladder half life refurbishment	7	400	169	231	178	53	53
Career FRS combination ladder platform half life refurbishment	7	400	214	186	0	186	186
Career FRS demountable pods	8	1,685	1,419	266	0	266	266
National USAR enhancement strategy – pod carriers	9	328	0	328	0	328	328
Career FRS firefighting appliance program – 2003-2004 program	10	1,000	409	591	591	0	0
Career FRS heavy pumper replacement program	11	4,920	2	2,208	1,236	972	3,682
Career FRS North Region appliance – Eglinton	12	600	81	519	323	196	196
Career and Volunteer light pumper replacement program	13	22,250	1,4057	4,043	3,292	751	4,901
Volunteer FRS light tanker replacement program	14	3,700	3,754	84	84	0	(138)
Career FRS medium tanker replacement program	15	600	132	468	336	132	132
VES Unit Fleet 2006-12 Replacement Program	16	6,750	66	500	277	223	6,407
Career Light Tanker Replacement Program 2006-12	14	4,450	0	300	411	(111)	4,039
Volunteer Light Tanker Replacement Program 2006-12	14	8,030	0	800	580	220	7,450
<b><u>PLANT AND EQUIPMENT</u></b>							
Volunteer FRS direct brigade	18	800	297	503	284	219	219



<b>CAPITAL WORKS PROGRAM AS AT 30 JUNE 2007</b>							
Program	Note	Estimated Total Project Cost	Expenditure prior to 01/07/2006	Estimated Expenditure 2006-2007	Actual Expenditure 2006-2007	Expenditure Variance 2006-2007	Estimated Cost of Balance of Program
		\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
alarm replacement program							
Volunteer FRS hose replacement strategy 2001-2007 program	19	450	236	104	53	51	161
VMRS vessel and equipment replacement 2004-2009 program	20	1,700	225	675	378	297	1,097
<b><u>PLANT AND EQUIPMENT Cont.</u></b>							
VMRS communications network 2003-2011 program	21	850	95	305	13	292	742
WA Emergency Radio Network	22	20,000	258	14,742	1779	12,963	17,963
National USAR enhancement strategy – equipment	23	1,003	0	983	71	912	932
SES Equipment Replacement 2006-12 Program	17	5,250	0	750	750	0	4,500
<b><u>INFORMATION TECHNOLOGY SYSTEMS</u></b>							
Shared Land Information Platform	24	2,071	624	1,447	706	741	741
FESA ES-CADCOM project	25	2,500	166	2,334	351	1,983	1,983
<b><u>VOLUNTEER COLLOCATION</u></b>							
<b><u>Completed</u></b>							
FESA volunteer collocation – Manjimup	4	395	393	2	2	0	0
FESA volunteer collocation Mundaring	4	1,240	40	1,200	1,123	77	77
FESA volunteer collocation – Toodyay	4	259	259	0	0	0	0
<b><u>Under Construction</u></b>							
FESA Volunteer Collocation - Dalwallinu	4	1,363	7	913	4	909	1,352
<b><u>Planning Stage</u></b>							
FESA volunteer collocation – Esperance	4	3,006	6	1,094	61	1,033	2,939
FESA volunteer collocation – Derby	4	2,000	7	1,693	2	1,691	1,991
FESA Emergency Centre – Kununurra	4	2,300	0	1,500	5	1,495	2,295
<b>Total</b>		<b>177,765</b>	<b>32,133</b>	<b>54,445</b>	<b>19,203</b>	<b>35,242</b>	<b>126,429</b>

## NOTES TO THE CAPITAL WORKS

### LAND AND BUILDINGS:

1. Provision of new facilities to provide greater functional capacity between services and improved service delivery to the community in accordance with risk. Includes building projects completed in Belmont, Kalgoorlie and Broome. Stations due to commence construction during 2006-07 included Perth and Merredin FRS stations. Works include additions and modifications to accommodate current and new emergency appliances and/or provide training facilities on an ongoing basis.
2. Land acquisition to accommodate new facilities at Maddington and Eglinton. Relocation of the existing FESA administration building that has reached the end of its serviceable life.
3. Provision of new facilities for collocated regional offices in Geraldton, Bunbury and Broome.
4. Replacement of existing fire stations with new volunteer collocated facilities. Developments completed in Manjimup, Mundaring and Toodyay. The facility in Dalwallinu is under construction, with stations for Esperance, Kununurra and Derby in the planning stages
5. National USAR enhancement strategy – additional training facilities for USAR.
6. Forrestfield Training Centre modification – replacement of existing transportable buildings that have reached the end of their serviceable life.

### APPLIANCES AND VEHICLES:

7. Half-life vehicle refurbishments – refurbishment of specialised combination ladder platform and turntable ladder vehicles in accordance with manufacturer's requirements.
8. Demountable pods – continuation of program to provide additional functional capacity and diversity within the metropolitan firefighting fleet.
9. National USAR enhancement strategy –provision of an additional pod carrier for USAR pod.
10. Fire fighting appliance program (2003-04) – an ongoing program to replace existing firefighting vehicles that have completed their economic and serviceable life.
11. Heavy pumper replacement program – a program to replace existing heavy pumper fire fighting vehicles that have completed their economic and serviceable life.
12. FRS north west corridor appliances (Eglinton) – provision of vehicles for the new career Fire and Rescue Service facility at Eglinton, currently used for the interim facility at Nowerup (Butler).
13. Light pumper replacement program (2000-08) – ongoing replacement of existing light pumpers that have completed their serviceable life in metropolitan and country regions.
14. Light tankers replacement program – ongoing program to provide additional and replacement Fire and Rescue Service fire fighting capacity State-wide.
15. Medium tanker replacement program - a program to replace existing medium tanker fire fighting vehicles that have completed their economic and serviceable life.
16. VES unit fleet 2006-12 replacement program - ongoing program to provide additional and replacement emergency service unit fire fighting vehicles that have completed their serviceable life.

### PLANT AND EQUIPMENT WORKS

17. SES volunteer equipment – updating aged equipment at SES volunteer units.
18. FRS volunteers direct brigade alarm replacement program – replacement of existing communications infrastructure to fire stations in country regions, which has reached the end of its serviceable life.
19. VFRS volunteers hose replacement strategy – replacement of firefighting hoses that have completed their serviceable life.
20. VMRS vessel and equipment replacement program – the upgrade and replacement of vessels and equipment that has reached the end of its serviceable life.
21. VMRS communication network (2003-11) – provision and replacement of communication infrastructure to improve emergency response service delivery.
22. Western Australian Emergency Radio Network (WAERN) – Migration to VHF High Band for FESA and CALM operational radio communications. Includes the construction of approximately 300 radio repeaters and replacement of 7000 mobile radios.
23. National USAR enhancement strategy – provision of USAR equipment to meet service delivery needs.

### GEOGRAPHIC INFORMATION SYSTEMS

24. SLIP-EM –development of a spatial information system consistent across all emergency services.
25. ES CADCOM project – redevelopment of the communications and computing infrastructure for the FESA operations centre emergency dispatch area.