South Australian Country Fire Service

State Telecommunications Plan

2010

APPROVED
This document is approved for release
Name: Andrew Lawson AFSM
Title: Acting Chief Officer
Date: December 2010

Government of South Australia

Controlled Document

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Introduction

It is an important aim of the SA Country Fire Service (CFS) to establish and maintain reliable communications and related information technology (IT) systems required for the coordination of response and recovery operations.

The CFS State Telecommunications Plan is designed to ensure: -

- The effective management of communications to meet the organisation's mission statement
- A rapid and continuous flow of accurate information to all sectors of the organisation and other agencies
- Communication for all levels of response and day to day communication requirements
- To provide timely information to the public during an incident through Bushfire Watch & Act Messages (WAM), Bushfire Emergency Warning Messages (EWM), CFS Bushfire Information Hotline, Alert SA and the CFS Website.

Scope

All CFS personnel, either directly or indirectly involved with any activity, must know and be familiar with approved Telecommunications Plan that is applicable to the task being undertaken. Being familiar with the telecommunications plan will ensure that at all times personnel are able to:

- Gain tactical instructions to combat the incident
- Obtain and provide information about the incident
- Receive, acknowledge and initiate vital safety messages

General

Operational communications systems (e.g. 000, operational telephone numbers or CFS radio networks) should be used in preference to administrative systems (e.g. administrative telephone numbers, email, sms, internet) for operational messages, as monitoring administrative communications systems will be given lower priority. Wherever practicable, operational communications systems will be reserved for operational use.

The CFS operates in emergency and disaster environments that may at times, be difficult, hostile and dynamic. Equipment must have the capability and endurance to function in the following environmental conditions:

- Temperatures from -10^{o}C to 55^{o}C;
- Moist and very dry environments with exposure to rain, showers and dust;
- Exposure to wind speeds up to 120 kph;
- Elevations from sea level to 5,000 metres.

The operational characteristics of equipment used in such diverse conditions needs to incorporate features that ensure communications are:

- Immediate – *capable of being instantaneously transmitted and received*
- Ubiquitous – *capable of being transmitted and received throughout the area of operations*
- Reliable – *short term disruptions to use are minimal*
- Secure – *this is required in some cases.*

Communications equipment may need to be fixed in buildings, vehicles, aircraft and marine vessels, or be portable for personal operational use.

CFS operates in emergency or disaster situations, during which existing community infrastructure such as telephone, radio and power systems may become overloaded or disrupted. Contingency arrangements for communication systems must include system redundancy to ensure continuity of communications in the event of a failure or disruption.

Equipment

The CFS communicates in numerous ways and has a wide range of stakeholders to communicate with both internally and externally. Below is a list of the equipment and methods the CFS utilises to communicate:

AIRS
Alerts Teleconference
Call, Receipt and Dispatch
- BOMS
- SACAD (proposed)
- SAGEMS

CRIIMSON
Email
Facsimile
Internet Website
Intranet
Mobile Phones – SMS, Voice Call, GPRS and VOIP
Paging
PSTN - Public Services Telephone Network
Satellite Phones

Radio

- GRN – Trunked and Simplex
- VHF - Simplex
- HF long Distance Radio
- Aero Nautical VHF
- UHF Citizens Band (CB)

Operations Communication Systems

Operations communications covers all communications after the initial dispatch of resources to an incident. This includes mobilisation messages, fire ground command and control communications, and statewide and strategic communications.

A range of systems are used depending on local availability:

- VHF narrow band radio Simplex
- SMS / GPRS
- SA Government Radio Network
- UHF CB radio
- HF long distance radio
- 000 Emergency Number
- Alerts System
- Aeronautical VHF
- Telephone (landline, mobile, satellite)
- Facsimile
- E-mail
- SA GRN Simplex & Repeater
- SACAD

Communications Requirements

The CFS communications requirements are as follows:

- **General Communications:** Day to day business communications to effectively conduct the general business of the CFS in the Preparation and Prevention part of the framework of emergency management 'PPRR'

- **Alerting Communications:** This is the process of alerting CFS personnel of the requirement for a response to a community need. Generally this is achieved via paging through either the South Australian Government Radio Network (SAGRN) or a combination of both. Paging is the primary means of responding CFS Brigades.

  Also Refer to SOP10.14 Call Receipt and Dispatch. (Adelaide Fire)

The CFS has 2 Types of radio communications:

- Command and Control Communications
- Fireground Communications

In the initial stages the Incident Controller (I/C) (IMT – including other command & control personnel involved in the management of an incident) will generally use the SA GRN trunked network from a fire appliance, command vehicle or some other location before moving to a brigade station, group control centre or ICC.

Firefighters at the incident will generally use '**fireground VHF'** communications for hose to appliance, road traffic control and appliance to sector commander communications and short distance communications.

All Appliances must monitor incident '**Command & Control'** talkgroups at all times. This will ensure the flow of Red Flag warnings and Incident information.

When using GRN trunked talkgroups for '**Command & Control'** communications, it is imperative that GRN radios in appliances remain on the incident talkgroups at all times and that users do not select other GRN talkgroups unless directed to do so. The incident communications plan must be strictly adhered to at all times. Any variation may result in communications at the incident (and therefore your safety) being compromised.

- **Command & Control Communications:** This is described as wide area **infrastructure dependant**, incident intelligence being communicated by the Incident Controller to the Brigade Station (BS), Group Control Centre (GCC) or Incident Control Centre (ICC). Generally this is achieved through the South Australian Government Radio Network (SAGRN) – Trunked Network. However if SA GRN has aplanned or unplanned outage other communications pathways may provide '**Command & Control'** communications.

- **Fireground Communications:** This is described as a localised area infrastructure independent communication resource that is able to communicate at an incident on what is called the '*fireground*'. This could be between individual resources within a Sector, or a pump operator and a hose crew, or CABA crew and the crew leader, or traffic control points. CFS uses VHF Simplex for the majority of this type of communication, however the SAGRN simplex talkgroups may also be used for this purpose. '**Fireground**' communications are not available for use as a '**Command & Control'** pathway or wide area communication.
  Communication with Farm Fire Units will be by UHF CB and with contractors and council equipment as determined in the Regional, Group or Brigade communications plans.

EXAMPLE OF COMMUNICATIONS PLANS FOR LEVEL 1, 2 & 3 INCIDENTS

Level 1 incidents: a GRN talk group will be used for '**Command & Control'** communications and a VHF channel used for fireground communications (ie: traffic control).

Level 2 and Level 3 incidents: All appliances should select the Logistics or Regional Incident Talkgroups (as per the Regional Communication Plan, normally a GRN trunked talkgroups) en-route to the incident staging area with the Strike Team Leader only, using the logistics talkgroups to communicate with the appropriate person at the incident / staging area. All other appliances should be monitoring this talkgroups only. Appliances will use VHF to converse with their strike team leader or between appliances.

When appliances are deployed to the fireground they should use VHF to talk to their strike team leader / sector commander. Strike team leaders / sector commanders and divisional commanders will use the **'Command & Control'** talkgroups to converse with the Operations Officer and each other at the Operations Point or Incident Control Centre.

Fireground appliances will monitor only the same **'Command & Control'** talkgroups for incident information such as red flag warnings.

Inter- Regional Strike Teams:
Strike Teams responding to an incident out of their home region shall travel on a State-wide SA- GRN Talkgroups 112 or as nominated at the Regional Coordinators briefing. Only the Strike Team Leader will talk on this Talkgroup. All inter Strike Team communication will be by allocated VHF assigned at the initial briefing. Strike Teams Leaders shall change to the appropriate Incident Logistics Talkgroup as advised on the State-wide Talkgroups enroute.

Multi Agency Incidents:
When other emergency service organisations are working at the same incident, a GRN multi agency trunked talkgroup should be used so all agencies are able to communicate with each other. If required, the CFS Incident Controller may request a 'multi agency' talkgroups from the SAPOL Comcen, via GRN talkgroup 017 or Adelaide Fire dispatch talkgroup. All appliances, including Group Control Centres or ICC would then use the GRN multi agency talkgroups for '**Command & Control'** communications. The use of multi agency talkgroups should be pre planned and used in accordance with brigade and group communication plans.

Medivac Assistance:
Where a Medivac Helicopter or SAAS Ambulance attendance is called upon the Incident Controller can use SA-GRN Trunked Talkgroups 040 or SA-GRN Simplex Talkgroups 020 to communicate with the helicopter or South Australian Ambulance Service.

CFS/SA MFS Mutual Aid incidents: In line with the current Mutual Aid Plan. The **'Command & Control'** trunked talkgroups will be used as per Annex A of this document, however as the MFS does not have CFS VHF radios a GRN multi agency simplex talkgroups should be used for '**fireground'** communications. They are talkgroups 037, 038, 039, 040, & 041 and do not need prior permission from SAPOL to use.

Air Operations: will be treated as a sector and operate in accordance with the Air Operations Plan SOP 10.15.

Note: During incidents all agencies when using GRN trunked talkgroups are competing for the same limited resource on GRN sites on the network therefore it is imperative to reduce the number of GRN talkgroups at the incident, so long as the incident needs are met. Trunking 'busies' are an indication that a site is becoming congested. If appliances are listening to a trunked talkgroups outside of the incident this will compromise the communications plan and the safety of all firefighters working at the incident. Unauthorised monitoring is to be discouraged in accordance with the Standard Operating Procedures.

MFS, CFS, DENR & FSA responding into MFS Area – rural incidents only

Talkgroups to be used for rural incidents in MFS area when MFS, CFS, DENR or FSA is working with MFS Incident Controller.

- CFS Region 1 – 117 R1 INC01 (south of river Torrens)
- CFS Region 2 – 075 R2 INC01 (north of river Torrens)
- CFS Region 3 – 211 R3 INC01
- CFS Region 4 – 047 R4 INC01
- CFS Region 5 – 235 R5 INC01
- CFS Region 6 – 246 R6 INC01

If there is any uncertainty regarding the incident talkgroup, crews leaders should contact Adelaide Fire and clarify which incident talkgroup has been allocated to the rural incident.

RADIO COMMUNICATION WITH OTHER AGENCIES

GRN multi-agency talkgroups will be used by:

- Adelaide Convention Centre
- Country Fire Authority Victoria
- Correctional Services
- Court Admin Authority
- DENR, Department of Environment and Natural Resources (NPWSA) brigades
- Forestry SA brigades
- Human Services
- PIRSA
- Private forest industry (FIB) brigades
- Public Transport Board
- Royal Flying Doctor Service
- SA Ambulance Service (SAAS)
- SA Metropolitan Fire Service
- SA Water
- SAPOL
- SES

- St John Ambulance
- State Emergency Management Plan Functional Services
- State Rescue Helicopter Service
- Transport SA

Private Forest Industry Brigade's will use fireground radio systems as above, according to local arrangements set out in CFS Regional Operations Management Plans.

The CFA and DSE use CFA SMR (State Mobile Radio) and CFA (narrow band simplex) VHF channels, CFS GRN talkgroups and CFS VHF channels in some areas.

Volunteer Marine Rescue organisations use a variety of radio systems in different areas. Some CFS brigades have marine radios.

Communications with Public Via Public Affairs Section

CFS recognises the importance of information provision to the community during bushfires and other emergencies as a critical element of the community safety strategies. Bushfire Watch & Act and Bushfire Emergency Warning Messages provide information about incidents and their potential impacts upon local communities. They also provide specific information on the location and direction of travel of an incident and the actions that individuals in an affected community should take.

CFS is reliant on the electronic and print media to broadcast this information including broadcasting the 'Standard Emergency Warning Signal' when a Bushfire Emergency Warning Message is issued. CFS has a Memorandum of Understanding with ABC and 5AA which details that both radio stations will immediately break into broadcast for a Bushfire Emergency Warning Message and continue to air this information until CFS informs otherwise, and will regularly (every 30 minutes) broadcast bushfire Watch & Act Messages.
SAFECOM Public Affairs distributes this information to all other media outlets, as well as publishing this on the CFS website, and by arranging interviews for the media to get the message to the community in a timely manner.

During times of major emergencies such as bushfire, CFS also activates a call centre via the Bushfire Information Hotline number of 1300 362 361. Members of the community also contact other areas of the CFS for information.

Community Needs

- The community requires timely and accurate information about emergency events they believe may impact on them so they are able to take the appropriate action for their safety.

- Information should be factual, reliable and verifiable from authoritative sources such as the control agency, emergency services and SAPOL, or appropriate political figures such as the Premier or Ministers.
- Information about emergency events can be sourced via television, radio, CFS website and Bushfire Information Hotline.
- Telephone information should be provided as soon as possible, in a manner that provides assurance, understanding and comprehension of an emergency event's impact. Competent, accurate and timely advice should be available when requested.

Media Needs

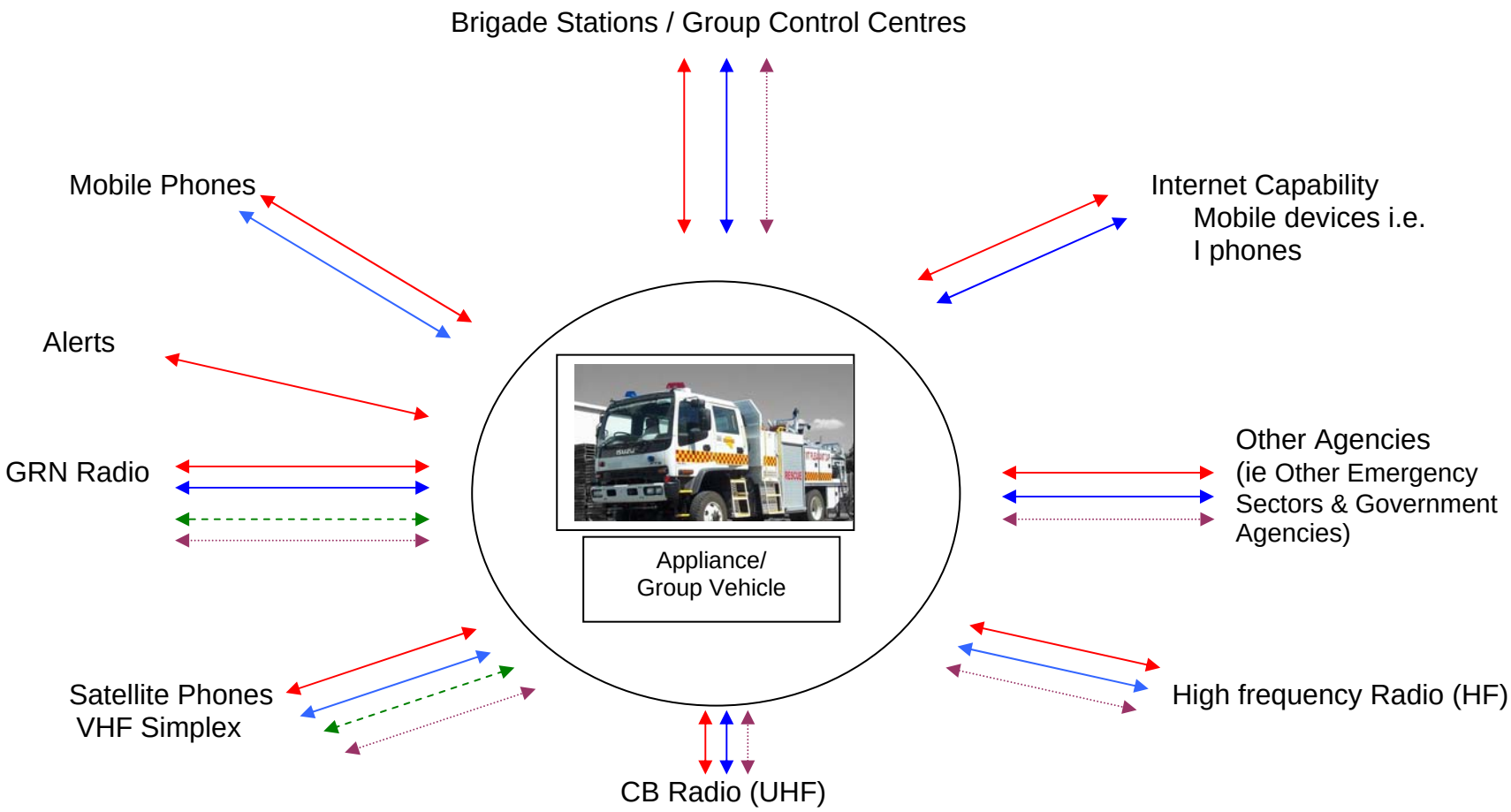
- The media requires timely and accurate information about emergency events they believe may impact on the community, their audience or clients.
- Information should be factual, reliable and verifiable from authoritative sources such as the control agency, emergency services and SAPOL, or appropriate political figures such as the Premier or ministers
- Information shall be accessible from the CFS Website, Media Inquiries Line, coordination facility or media briefing area, and shall be immediately available from a dedicated source or officer with opportunity to seek authoritative or special interest interviews of the event.
- Information provided from emergency services or requests for special broadcasts should take into account the programming demands of the media organisations.

Communication Pathways

The following Diagrams 1 to 7 define the way in which the CFS telecommunicates on a day-to-day and response basis.

Appliance/ Group Vehicle:

Diagram 1



Emergency Call Response Communication

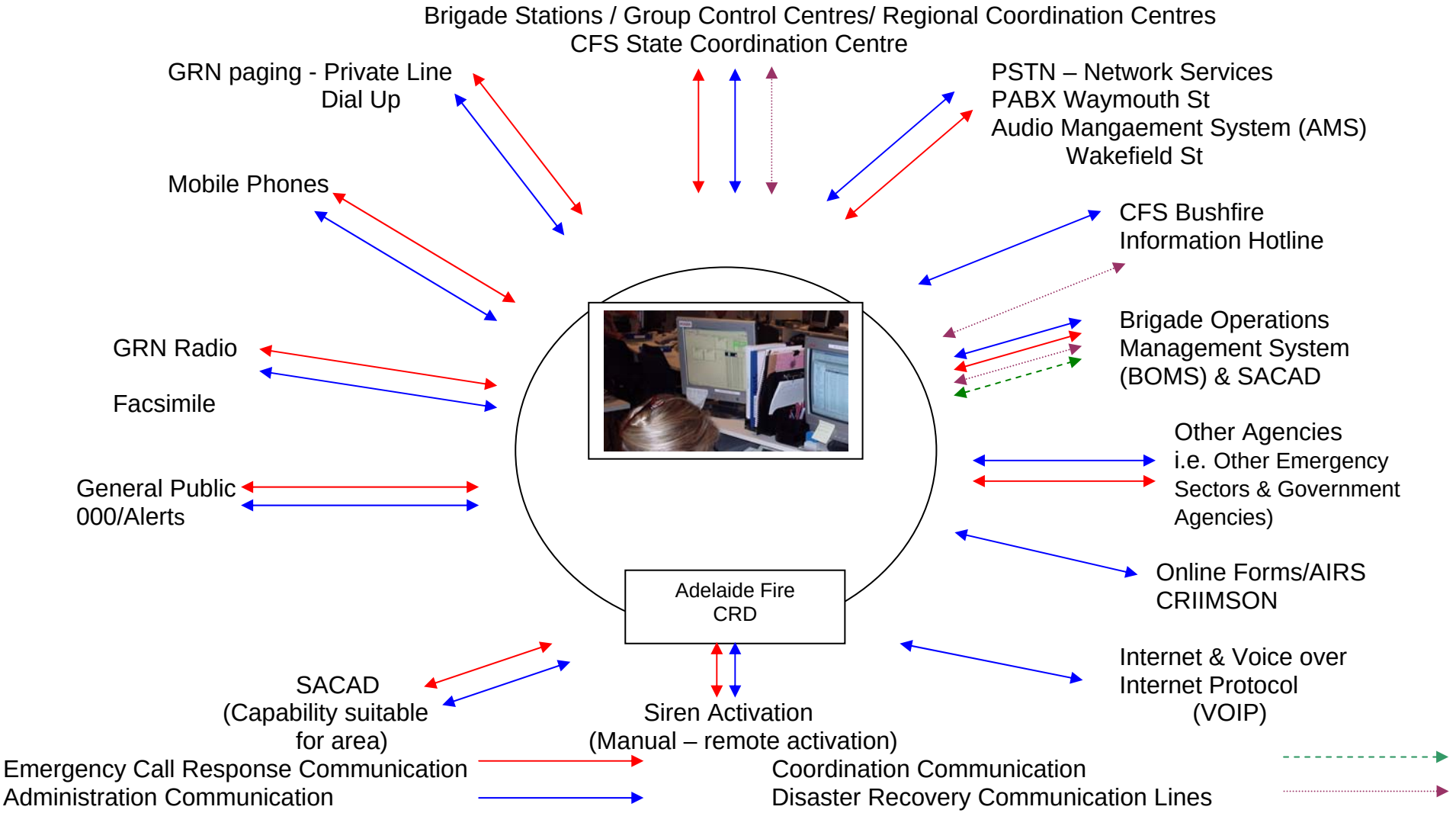
Administration Communication

Coordination Communication

Disaster Recovery Communication Lines

Adelaide Fire CRD:

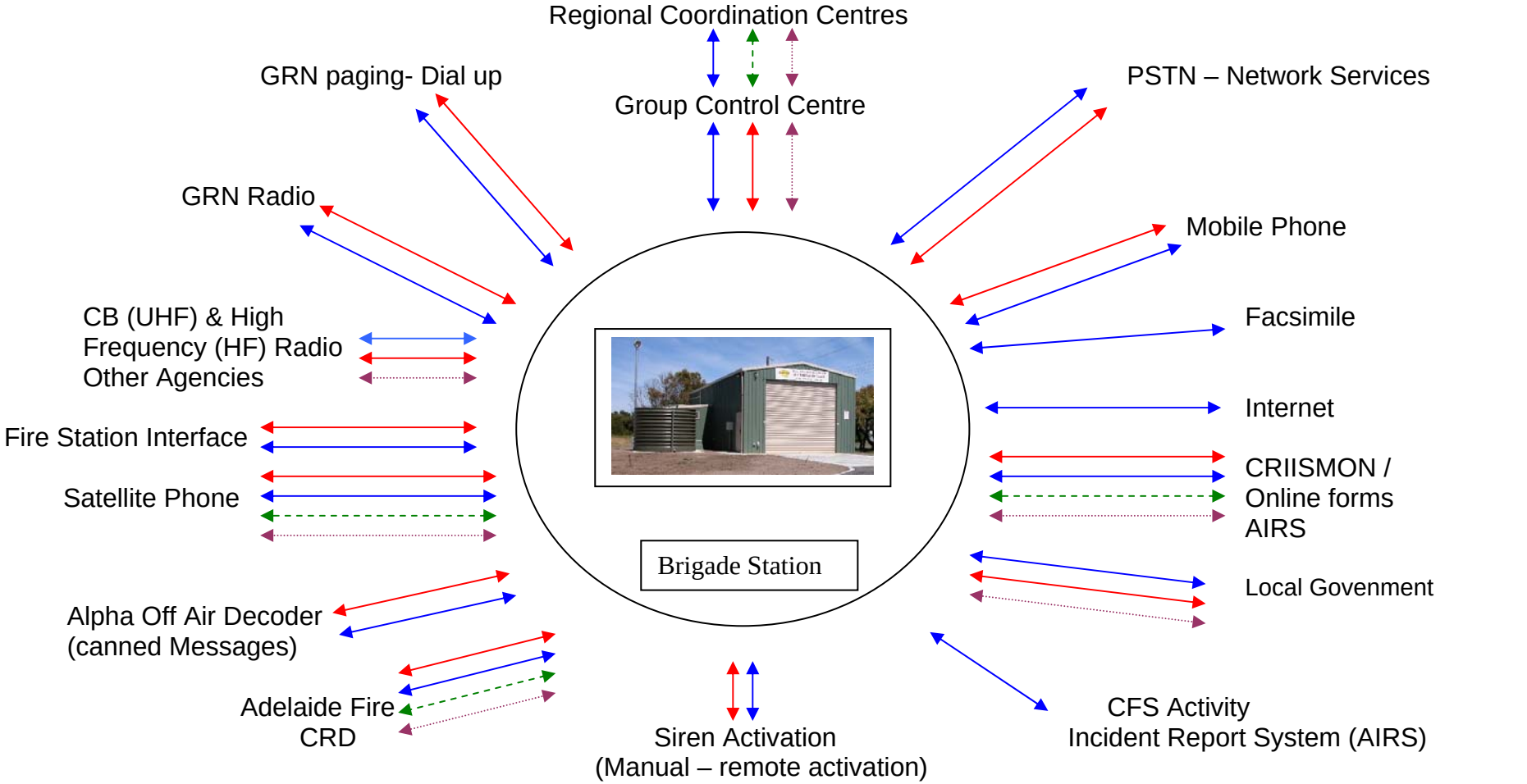
Diagram 2



Adelaide Fire CRD has a generator and UPS in case of loss of mains power.

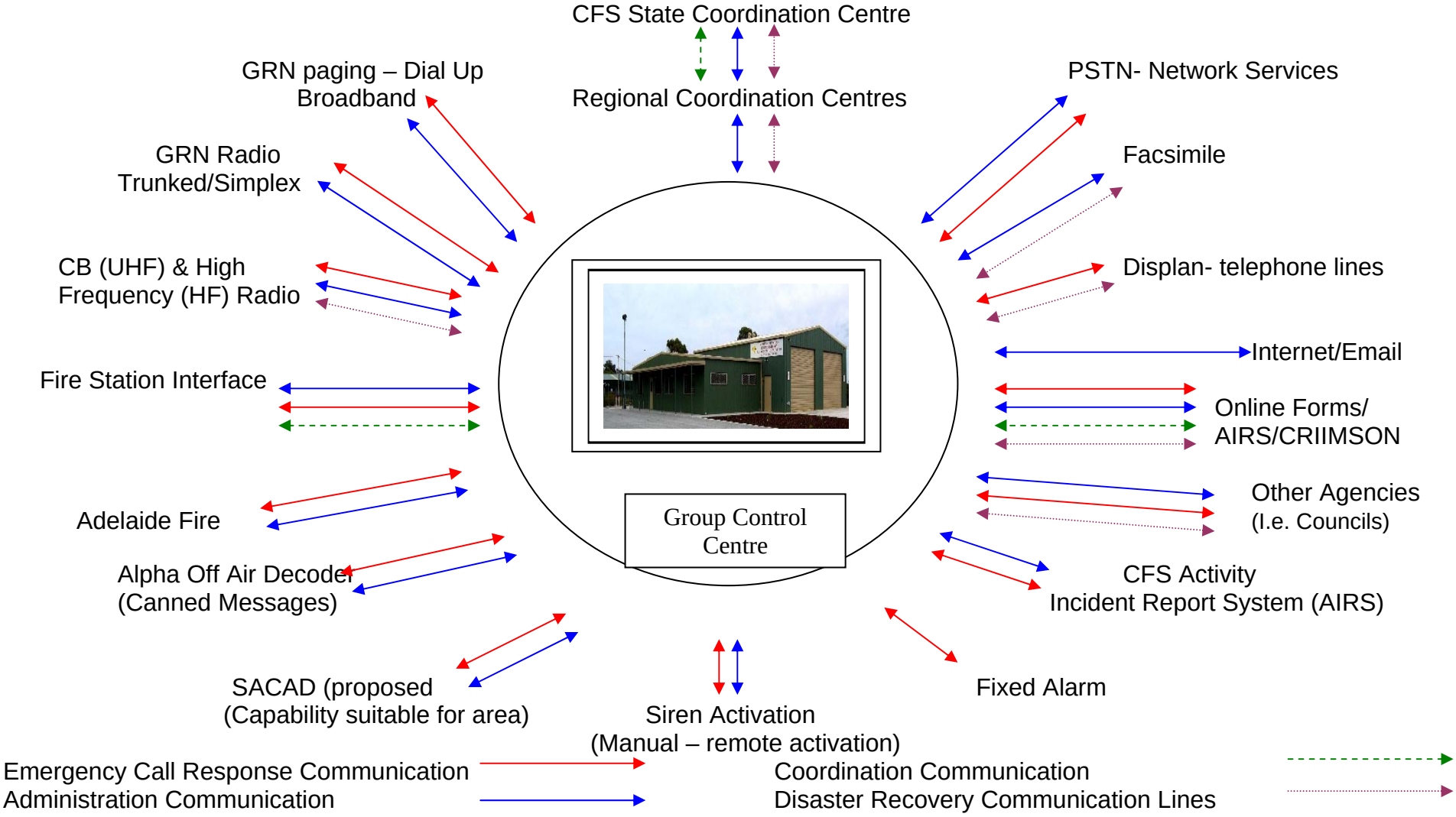
Brigade Station: -

Diagram 3



Group Control Centres: (GCC)/ Incident Control Centres

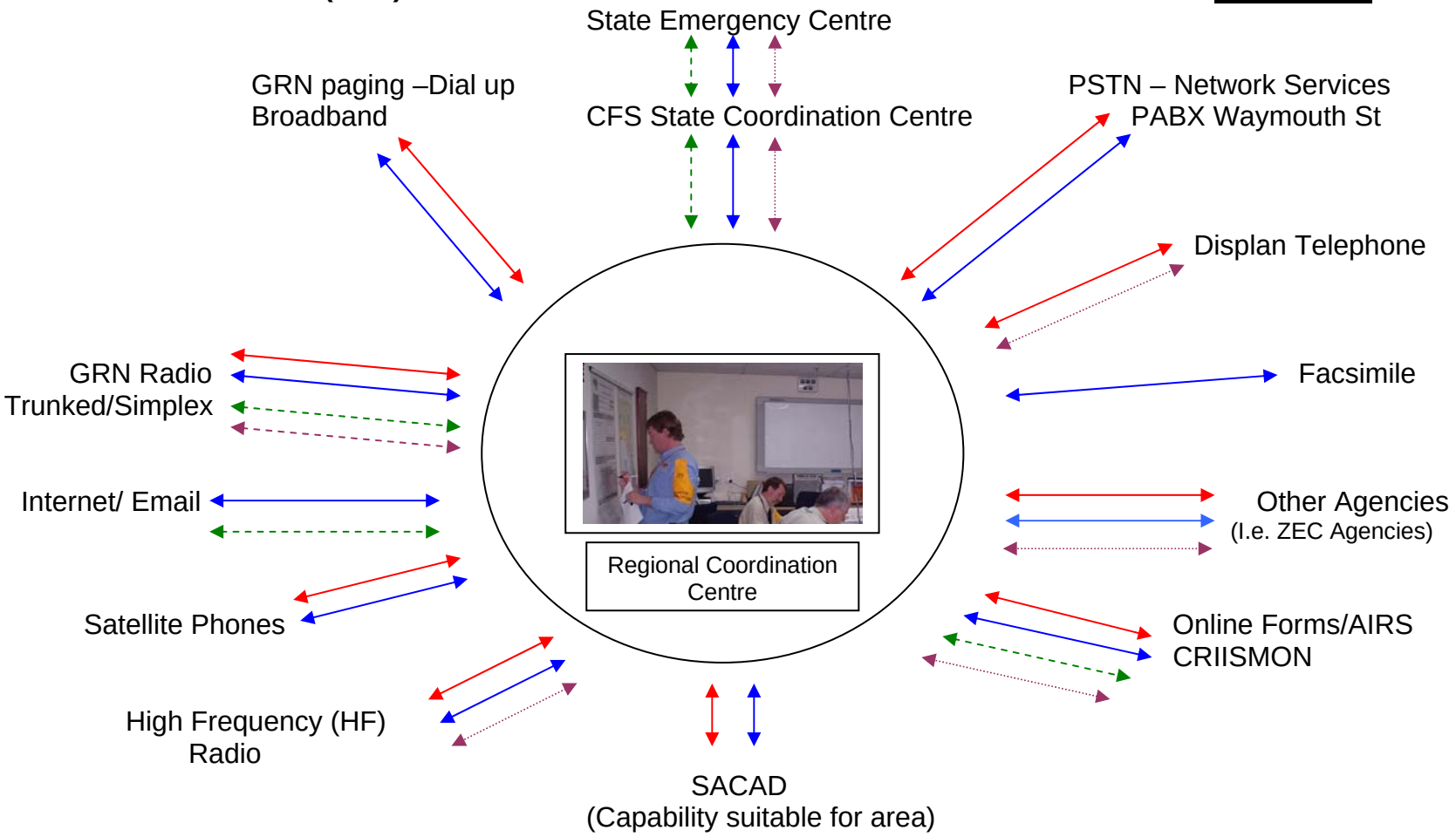
Diagram 4



Most Group Control Centres have generators in case of loss of mains power.

Regional Coordination Centres: (RCC)

Diagram 5



Emergency Call Response Communication

Administration Communication

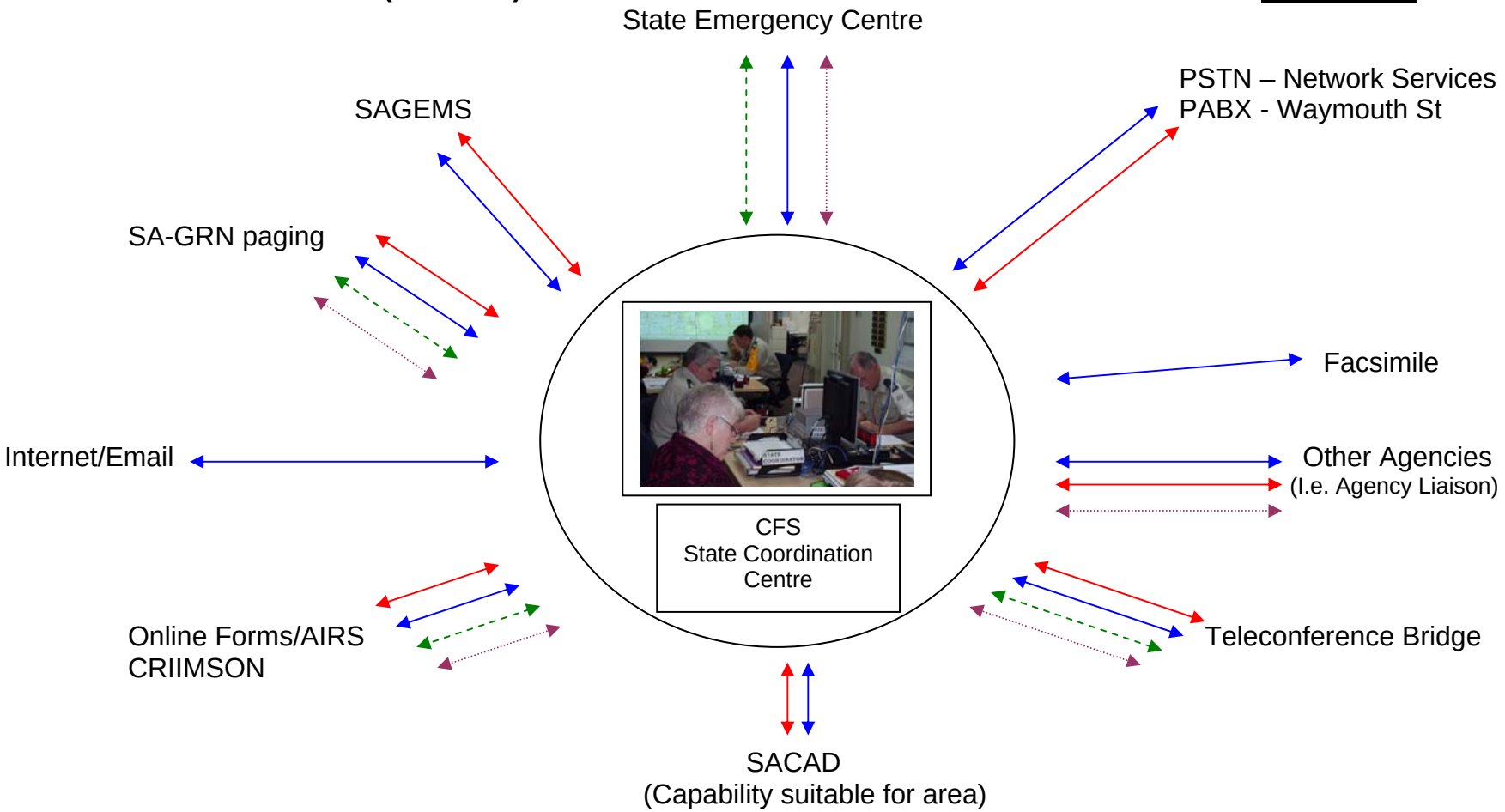
Coordination Communication

Disaster Recovery Communication Lines

Regional Control Centres have a generator in case of loss of mains power.

CFS State Coordination Centre: (CFS SCC)

Diagram 6



Emergency Call Response Communication

Coordination Communication

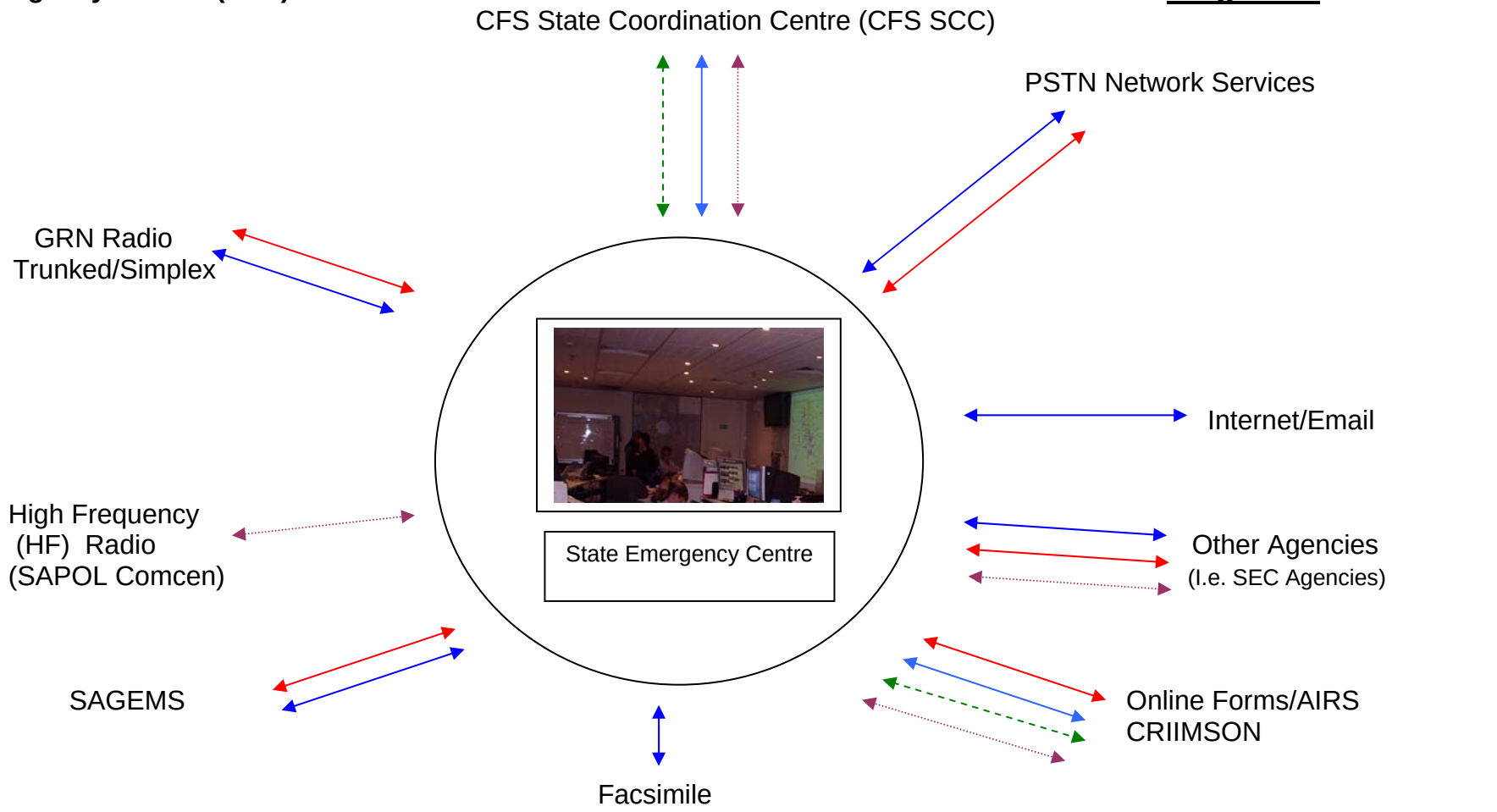
Administration Communication

Disaster Recovery Communication Lines

The CFS State Coordination Centre has a generator and UPS in case of loss of mains Power.

State Emergency Centre: (SEC)

Diagram 7



State Emergency Centre has a generator in case of loss of mains power.

Other Communications Plans

Each Regional Commander is responsible for maintaining a Regional Communications Plan.

Each Region and Group will have an Operations Management Plan and Brigades a Communication Plan that will include pre-planned communications arrangements for incidents, This will identify all communications requirements across the brigade response area.

Incident Controllers need to formulate and approve a communications plan for each incident. The Australasian Inter-Service Incident Management System, Incident Structural and Communications Chart shall be used.

Contingency Arrangements

State, Regions, Groups and Brigades plans will include contingency arrangements to provide for communications to be maintained outside of telephone/radio network coverage areas or in the event of equipment or network failure. These will include

Unavailability of the GRN: The GRN network is generally very reliable and robust, widespread unplanned outages are rare. However, a failure of the GRN network will generally result in GRN radios displaying the following message – 'site trunking'. This means that the interconnecting links between GRN sites may have failed. In this case the effected GRN sites move into 'site trunking' mode, meaning the sites will operate as stand-alone conventional repeaters, meaning resources can only talk with other resources registered on the same site. The user will loose all GRN network features including wide area communications and the emergency button activation.

Should there be a 'catastrophic' failure of the GRN network where local sites completely fail, users should invoke their communications contingency plans. These plans could include:

- VHF fireground would still be usable albeit only for short distance communication
- If appliances are within range of a fire station they could use GRN simplex talkgroups 037 to 041 to communicate with the brigade station or group control centre depending on distance, terrain and conditions
- Mobile and satellite phones can be used to communicate with a brigade station or group control centre if available and within coverage
- Establishment of radio relays, passing information to Brigade Station etc

If users have any problems with technical communications during incidents they should contact the Regional Coordinator and they will contact the State Coordinator.
Radio – plans for use of a secondary or backup system. Depending on what the primary system is for an area, the secondary system may be GRN (generally CFS talkgroups, but may also include allocation of radios and talkgroups by the State Emergency Centre), VHF, HF and UHF radios. WICEN (Wireless Institute Civil Emergency Network) or UHF CB networks may be used where no other suitable system is available.

Arrangements for access to GRN and/or VHF radios likely to be required for provision to Interstate Fire Services crews on deployment into South Australia who do not have fully

compatible equipment in their vehicles. Contact should be made via the State Coordinator for the provision of communication pathways to be established appropriate for the situation.

Local arrangements for access to portable CB radios likely to be required for local communications with private appliances I.e. Farm Fire Units (FFU) or plant (e.g. a dozer being protected by a fire appliance).

Landline telephone – As per South Australian Government Guidelines CFS use Telstra lines, which may be connected via a PABX (switchboard). Alternatives to provide route diversity include Network Services lines, lines which go via a different exchange, via a different PABX or direct to an exchange without going via a PABX.
Should the Incident Controller identify the requirements for additional telephone lines during any incident this should be actioned via the Chain of Command.

Mobile telephone – Throughout the State the CFS use a variety of Systems, GSM and 3 G. These services are provided by Telstra.

Satellite telephone - will provide coverage in areas outside of the GSM and Next G networks or radio repeater where HF radio is unavailable or unsuitable.

Generators
CFS SCC, RCC's and GCC's/ICC's should have emergency power generators able to operate for 5 days 24/7.
If the fuel capacity of the Emergency Generator cannot hold enough fuel for 5 days, alternative arrangements for fuel needs be organised.
These emergency generators need to be tested at least monthly to ensure serviceability.

Paging
Alerts Telebridge conferencing facilities are to be used when GRN Paging or voice fails.
The Telebridge enables Adelaide Fire Groups/Brigades to receive and initiate an appropriate response to an emergency.

Annex A

The following table shows the CFS Radio Talkgroups plan for all modes within voice terminal equipment.

Talkgroups Number	Talkgroups Name	Mode	Allocated Area for Operational Use	SA CFS Designated Operational Purpose
001	001_R6_INC05	Trunked Region Wide	Region 6	R6 Incident TG
002	002_R6_INC06	Trunked Region Wide	Region 6	R6 Incident TG
003	003_R6_INC07	Trunked Region Wide	Region 6	R6 Incident TG
004	004_R6_INC08	Trunked Region Wide	Region 6	R6 Incident TG
005	005_R6_INC09	Trunked Region Wide	Region 6	R6 Incident TG
006	006_R6_INC10	Trunked Region Wide	Region 6	R6 Incident TG
007	007_R6_OPS	Trunked Region Wide	Region 6	R6 Operations TG
008	008_R6_LOGS	Trunked Region Wide	Region 6	R6 Logistics TG
009	009_CEDUNA_C	Trunked Region Wide	Region 6	R6 Ceduna Group TG
010	010_CLEVE	Trunked Region Wide	Region 6	R6 Cleve Group TG
011	011_ELLISTON	Trunked Region Wide	Region 6	R6 Elliston Group TG
012	012_KIMBA	Trunked Region Wide	Region 6	R6 Kimba Group TG
013	013_LE_HUNTE	Trunked Region Wide	Region 6	R6 Le Hunte Group TG
014	014_LWR_EYRE	Trunked Region Wide	Region 6	R6 Lower Eyre Peninsula Group TG
015	015_STREAKY	Trunked Region Wide	Region 6	R6 Streaky Bay Group TG
016	016_TUMBY_BA	Trunked Region Wide	Region 6	R6 Tumby Bay Group TG
017	017_DIS01_MA	Trunked State Wide	State wide	State Disaster
018	018_DIS02_MA	Trunked State Wide	State wide	State Disaster
019	019_DIS03_MA	Trunked State Wide	State wide	State Disaster
020	020_DIS04_MA	Trunked State Wide	State wide	State Disaster
021	021_DIS05_MA	Trunked State Wide	State wide	State Disaster
022	022_DIS06_MA	Trunked State Wide	State wide	State Disaster
023	023_DIS07_MA	Trunked State Wide	State wide	State Disaster
024	024_DIS08_MA	Trunked State Wide	State wide	State Disaster
025	025_DIS09_MA	Trunked State Wide	State wide	State Disaster
026	026_DIS10_MA	Trunked State Wide	State wide	State Disaster
027	027_SA01_MA	Trunked State Wide	State wide	Multi-agency North/South/Metro/ADL Air/Para Air/Sea
028	028_NT02_MA	Trunked State Wide	State wide	Multi-agency North/South/Metro/ADL Air/Para Air/Sea

Talkgroups Number	Talkgroups Name	Mode	Allocated Area for Operational Use	SA CFS Designated Operational Purpose
029	029_NT03_MA	Trunked State Wide	State wide	Multi-agency North/South/Metro/ADL Air/Para Air/Sea
030	030_ST04_MA	Trunked State Wide	State wide	Multi-agency North/South/Metro/ADL Air/Para Air/Sea
031	031_ST05_MA	Trunked State Wide	State wide	Multi-agency North/South/Metro/ADL Air/Para Air/Sea
032	032_ME06_MA	Trunked State Wide	State wide	Multi-agency North/South/Metro/ADL Air/Para Air/Sea
033	033_ME07_MA	Trunked State Wide	State wide	Multi-agency North/South/Metro/ADL Air/Para Air/Sea
034	034_AA08_MA	Trunked State Wide	State wide	Multi-agency North/South/Metro/ADL Air/Para Air/Sea
035	035_PA09_MA	Trunked State Wide	State wide	Multi-agency North/South/Metro/ADL Air/Para Air/Sea
036	036_SR10_MA	Trunked State Wide	State wide	Multi-agency North/South/Metro/ADL Air/Para Air/Sea
037	037_SPX_1_MA	Simplex	State wide	Multi-agency Simplex
038	038_SPX_2_MA	Simplex	State wide	Multi-agency Simplex
039	039_SPX_3_MA	Simplex	State wide	Multi-agency Simplex
040	040_SPX_4_MA	Simplex	State wide	Multi-agency Simplex
041	041_SPX_5_MA	Simplex	State wide	Multi-agency Simplex
042	042_RPT_1_MA	Repeater	State wide	Multi-agency Repeater
043	043_RPT_2_MA	Repeater	State wide	Multi-agency Repeater
044	044_RPT_3_MA	Repeater	State wide	Multi-agency Repeater
045	045_RPT_4_MA	Repeater	State wide	Multi-agency Repeater
046	046_RPT_5_MA	Repeater	State wide	Multi-agency Repeater
047	047_R4_INC01	Trunked Region Wide	Region 4	Black Rock Group Secondary TG
048	048_R4_INC02	Trunked Region Wide	Region 4	R4 Incident TG
049	049_R4_INC03	Trunked Region Wide	Region 4	R4 Incident TG
050	050_R4_INC04	Trunked Region Wide	Region 4	R4 Incident TG
051	051_R4_INC05	Trunked Region Wide	Region 4	R4 Incident TG
052	052_R4_INC06	Trunked Region Wide	Region 4	R4 Incident TG
053	053_R4_INC07	Trunked Region Wide	Region 4	R4 Incident TG
054	054_R4_INC08	Trunked Region Wide	Region 4	R4 Incident TG

Talkgroups Number	Talkgroups Name	Mode	Allocated Area for Operational Use	SA CFS Designated Operational Purpose
055	055_R4_INC09	Trunked Region Wide	Region 4	R4 Incident TG
056	056_R4_INC10	Trunked Region Wide	Region 4	R4 Incident TG
057	057_R4_INC11	Trunked Region Wide	Region 4	R4 Incident TG
058	058_R4_INC12	Trunked Region Wide	Region 4	R4 Incident TG
059	059_R4_INC13	Trunked Region Wide	Region 4	R4 Incident TG
060	060_R4_INC14	Trunked Region Wide	Region 4	R4 Incident TG
061	061_R4_INC15	Trunked Region Wide	Region 4	R4 Incident TG
062	062_R4_OPS	Trunked Region Wide	Region 4	R4 Operations TG
063	063_R4_LOGS	Trunked Region Wide	Region 4	R4 Logistics TG
064	064_BLK_ROCK	Trunked Region Wide	Region 4	Black Rock Group TG
065	065_BLYTH/SN	Trunked Region Wide	Region 4	Blyth/Snowtown Group TG
066	066_BUNDALEE	Trunked Region Wide	Region 4	Bundaleer Group TG
067	067_BURRA_C	Trunked Region Wide	Region 4	Burra Group TG
068	068_FLINDERS	Trunked Region Wide	Region 4	Flinders Group TG
069	069_HALLETT	Trunked Region Wide	Region 4	Hallett Group TG
070	070_LAKE_TOR	Trunked Region Wide	Region 4	Lake Torrens Group TG
071	071_MELROSE	Trunked Region Wide	Region 4	Melrose Group TG
072	072_NE_R4	Trunked Region Wide	Region 4	North East Region 4 TG
073	073_PASTORAL	Trunked Region Wide	Region 4	Pastoral Group TG
074	074_SPENCER	Trunked Region Wide	Region 4	Spencer Group TG
075	075_R2_INC01	Trunked Region Wide	Region 2	R2 Incident TG
076	076_R2_INC02	Trunked Region Wide	Region 2	R2 Incident TG
077	077_R2_INC03	Trunked Region Wide	Region 2	R2 Incident TG
078	078_R2_INC04	Trunked Region Wide	Region 2	R2 Incident TG
079	079_R2_INC05	Trunked Region Wide	Region 2	R2 Incident TG
080	080_R2_INC06	Trunked Region Wide	Region 2	R2 Incident TG
081	081_R2_INC07	Trunked Region Wide	Region 2	R2 Incident TG
082	082_R2_INC08	Trunked Region Wide	Region 2	R2 Incident TG
083	083_R2_INC09	Trunked Region Wide	Region 2	R2 Incident TG
084	084_R2_INC10	Trunked Region Wide	Region 2	R2 Incident TG
085	085_R2_INC11	Trunked Region Wide	Region 2	R2 Incident TG
086	086_R2_INC12	Trunked Region Wide	Region 2	R2 Incident TG
087	087_R2_INC13	Trunked Region Wide	Region 2	R2 Incident TG
088	088_R2_INC14	Trunked Region Wide	Region 2	R2 Incident TG

Talkgroups Number	Talkgroups Name	Mode	Allocated Area for Operational Use	SA CFS Designated Operational Purpose
089	089_R2_INC15	Trunked Region Wide	Region 2	R2 Incident TG
090	090_R2_INC16	Trunked Region Wide	Region 2	R2 Incident TG
091	091_R2_INC17	Trunked Region Wide	Region 2	R2 Incident TG
092	092_R2_INC18	Trunked Region Wide	Region 2	R2 Incident TG
093	093_R2_OPS	Trunked Region Wide	Region 2	R2 Operations TG
094	094_R2_LOGS	Trunked Region Wide	Region 2	R2 Logistics TG
095	095_ANGASTON	Trunked Region Wide	Region 2	Angaston Group TG
096	096_BAROSSA	Trunked Region Wide	Region 2	Barossa Group TG
097	097_GILBERT	Trunked Region Wide	Region 2	Gilbert Group TG
098	098_GUMERACH	Trunked Region Wide	Region 2	Gumeracha Group TG
099	099_HORROCKS	Trunked Region Wide	Region 2	Horrocks Group TG
100	100_LIGHT	Trunked Region Wide	Region 2	Light Group TG
101	101_N_YORKE	Trunked Region Wide	Region 2	Northern Yorke Peninsula Group TG
102	102_PARA	Trunked Region Wide	Region 2	Para Group TG
103	103_S_YORKE	Trunked Region Wide	Region 2	Southern Yorke Peninsula Group TG
104	104_WAKEFIEL	Trunked Region Wide	Region 2	Wakefield Group TG
105	105_YORKE_VY	Trunked Region Wide	Region 2	Yorke Valley Group TG
106	106_CFS_COMM	Trunked Region Wide	State wide	SA CFS - Comms Test TG (Technical radios only)
107	107_AIR_MGMT	Trunked State Wide	State wide	Air Ops State TG
108	108_AIR_PRZ1	Trunked Mt Lofty Ranges	Region 1 Air	SA CFS Air Ops TG
109	109_AIR_PRZ2	Trunked Mt Lofty Ranges	Region 1 Air	SA CFS Air Ops TG
110	110_AIR_CAMP	Trunked Ngarkat CP	Ngarkat Air	SA CFS Air Ops (Ngarkat) TG
111	111_STATE1_C	Trunked State Wide	State wide	State Operations TG Waymouth St – Charlie
112	112_STATE2_C	Trunked State Wide	State wide	State Operations TG Waymouth St – Oscar
113	113_STATE3_C	Trunked State Wide	State wide	State Operations TG Waymouth St – Roger
114	114_CFS_TEST	Digital Trunked State Wide	State wide	SA CFS - Comms Test TG (Technical radios only)
115	115_CFS_EMER	Trunked	State wide	SA CFS – Emergency TG
116	116_STATE_TN	Trunked	50 Km radius Brukunga	State Training Centre – Brukunga Facility TG
117	117_R1_INC01	Trunked Region Wide	Region 1	R1 Incident TG
118	118_R1_INC02	Trunked Region Wide	Region 1	R1 Incident TG
119	119_R1_INC03	Trunked Region Wide	Region 1	R1 Incident TG
120	120_R1_INC04	Trunked Region Wide	Region 1	R1 Incident TG

Talkgroups Number	Talkgroups Name	Mode	Allocated Area for Operational Use	SA CFS Designated Operational Purpose
121	121_R1_INC05	Trunked Region Wide	Region 1	R1 Incident TG
122	122_R1_INC06	Trunked Region Wide	Region 1	R1 Incident TG
123	123_R1_INC07	Trunked Region Wide	Region 1	R1 Incident TG
124	124_R1_OPS	Trunked Region Wide	Region 1	R1 Operations TG
125	125_R1_LOGS	Trunked Region Wide	Region 1	R1 Logistics TG
126	126_E_TORREN	Trunked Region Wide	Region 1 Mainland	East Torrens Group Primary TG
127	127_E_TORR2	Trunked Region Wide	Region 1 Mainland	East Torrens Group Secondary TG
128	128_HEYSEN	Trunked Region Wide	Region 1 Mainland	Heysen Group Primary TG
129	129_HEYSEN2	Trunked Region Wide	Region 1 Mainland	Heysen Group Secondary TG
130	130_KI	Trunked Region Wide	Lower Region 1 & KI	Kangaroo Island Group Primary TG
131	131_KI2	Trunked Region Wide	Lower Region 1 & KI	Kangaroo Island Group Secondary TG
132	132_KYEEMA	Trunked Region Wide	Region 1 Mainland	Kyeema Group Primary TG
133	133_KYEEMA2	Trunked Region Wide	Region 1 Mainland	Kyeema Group Secondary TG
134	134_MAWSON	Trunked Region Wide	Region 1 Mainland	Mawson Group Primary TG
135	135_MAWSON2	Trunked Region Wide	Region 1 Mainland	Mawson Group Secondary TG
136	136_MT_LOFTY	Trunked Region Wide	Region 1 Mainland	Mt Lofty Group Primary TG
137	137_MT_LFTY2	Trunked Region Wide	Region 1 Mainland	Mt Lofty Group Secondary TG
138	138_MUNDOO	Trunked Region Wide	Region 1 Mainland	Mundoo Group Primary TG
139	139_MUNDOO2	Trunked Region Wide	Region 1 Mainland	Mundoo Group Secondary TG
140	140_ONKAPARI	Trunked Region Wide	Region 1 Mainland	Onkaparinga Group Primary TG
141	141_ONKAPAR2	Trunked Region Wide	Region 1 Mainland	Onkaparinga Group Secondary TG
142	142_STRATHAL	Trunked Region Wide	Region 1 Mainland	Strathalbyn Group Primary TG
143	143_STRATH2	Trunked Region Wide	Region 1 Mainland	Strathalbyn Group Secondary TG
144	144_S_FLEURI	Trunked Region Wide	Region 1 Mainland	Southern Fleurieu Group Primary TG
145	145_S_FLEUR2	Trunked Region Wide	Region 1 Mainland	Southern Fleurieu Group Secondary TG
146	146_STURT_C	Trunked Region Wide	Region 1 Mainland	Sturt Group Primary TG
147	147_STURT_C2	Trunked Region Wide	Region 1 Mainland	Sturt Group Secondary TG
148	148_VICTOR_C	Trunked Region Wide	Region 1 Mainland	Victor Harbor Group Primary TG
149	149_VICTR2_C	Trunked Region Wide	Region 1 Mainland	Victor Harbor Group Secondary TG
150	150MFS_DISP1	Trunked	MFS	MFS TG
151	151MFS_DISP2	Trunked	MFS	MFS TG

Talkgroups Number	Talkgroups Name	Mode	Allocated Area for Operational Use	SA CFS Designated Operational Purpose
152	152MFS_DISP3	Trunked	MFS	MFS TG - SA CFS SCC communications to MFS
153	153MFS_METRO	Trunked	MFS	MFS TG
154	154MFS_CTRY	Trunked	MFS	MFS TG
155	155MFS_INC01	Trunked	MFS	MFS TG
156	156MFS_INC02	Trunked	MFS	MFS TG
157	157MFS_INC03	Trunked	MFS	MFS TG
158	158MFS_INC04	Trunked	MFS	MFS TG
159	159MFS_INC05	Trunked	MFS	MFS TG
160	160MFS_INC06	Trunked	MFS	MFS TG
161	161MFS_INC07	Trunked	MFS	MFS TG
162	162MFS_INC08	Trunked	MFS	MFS TG
163	163MFS_INC09	Trunked	MFS	MFS TG
164	164MFS_INC10	Trunked	MFS	MFS TG
165	165MFS_INC11	Trunked	MFS	MFS TG
166	166MFS_INC12	Trunked	MFS	MFS TG
167	167MFS_INC13	Trunked	MFS	MFS TG
168	168MFS_INC14	Trunked	MFS	MFS TG
169	169MFS_INC15	Trunked	MFS	MFS TG
170	170MFS_INC16	Trunked	MFS	MFS TG
171	171MFS_INC17	Trunked	MFS	MFS TG
172	172MFS_INC18	Trunked	MFS	MFS TG
173	173MFS_INC19	Trunked	MFS	MFS TG
174	174MFS_INC20	Trunked	MFS	MFS TG
175	175MFS_INC21	Trunked	MFS	MFS TG
176	176MFS_INC22	Trunked	MFS	MFS TG
177	177MFS_INC23	Trunked	MFS	MFS TG
178	178MFS_INC24	Trunked	MFS	MFS TG
179	179MFS_INC25	Trunked	MFS	MFS TG
180	180_NOT_USED	Trunked	MFS	MFS TG not used by SA CFS
181	181_NOT_USED	Trunked	MFS	MFS Spare
182	182SPX01_MFS	Simplex	State wide	MFS Simplex
183	183SPX02_MFS	Simplex	State wide	MFS Simplex
184	184SPX03_MFS	Simplex	State wide	MFS Simplex

Talkgroups Number	Talkgroups Name	Mode	Allocated Area for Operational Use	SA CFS Designated Operational Purpose
185	185SPX04_MFS	Simplex	State wide	MFS Simplex
186	186SPX05_MFS	Simplex	State wide	MFS Simplex
187	187SPX06_MFS	Simplex	State wide	MFS Simplex
188	188SPX07_MFS	Simplex	State wide	MFS Simplex
189	189SPX08_MFS	Simplex	State wide	MFS Simplex
190	190SPX09_MFS	Simplex	State wide	MFS Simplex
191	191SPX10_MFS	Simplex	State wide	MFS Simplex
192	192MFS_WESTCST	Mixed	MFS	MFS TG
193	193MFS_RIVERLD	Mixed	MFS	MFS TG
194	194MFS_MID_NTH	Mixed	MFS	MFS TG
195	195MFS_STHEAST	Mixed	MFS	MFS TG
196	196_EM_TRN_A	Trunked	State wide	SA CFS – Emergency Training Set ‘A’ – in agreement with MFS
197	197_CFS_TRN1	Trunked	State wide	SA CFS – Training Set ‘A’ – in agreement with MFS
198	198_CFS_TRN2	Trunked	State wide	SA CFS – Training Set ‘A’ – in agreement with MFS
196	196_EM_TRN_B	Trunked	State wide	SA CFS – Emergency Training Set ‘B’ – in agreement with MFS
197	197_CFS_TRN3	Trunked	State wide	SA CFS – Training Set ‘B’ – in agreement with MFS
198	198_CFS_TRN4	Trunked	State wide	SA CFS – Training Set ‘B’ – in agreement with MFS
199	199_NOT_USED	Trunked	MFS	MFS TG not used by SA CFS
200	200_COONALPN	Trunked Region Wide	Region 3	Spare Regional T/G
201	201_COORON_C	Trunked Region Wide	Region 3	Coorong Group TG
202	202_NGARKAT	Trunked Region Wide	Region 3	Ngarkat Group TG
203	203_LOXTON_C	Trunked Region Wide	Region 3	Chaffey Group TG
204	204_MALLEE_C	Trunked Region Wide	Region 3	Mallee Group TG
205	205_MID_MURR	Trunked Region Wide	Region 3	Mid Murray Group TG
206	206_SWANPORT	Trunked Region Wide	Region 3	Swanport Group TG
207	207_RIDLEY	Trunked Region Wide	Region 3	Ridley Group TG
208	208_URIVERLA	Trunked Region Wide	Region 3	Spare Regional T/G (HF Trial)
209	209_R3_OPS	Trunked Region Wide	Region 3	R3 Operations TG
210	210_R3_LOGS	Trunked Region Wide	Region 3	R3 Logistics TG
211	211_R3_INC01	Trunked Region Wide	Region 3	R3 Incident TG
212	212_R3_INC02	Trunked Region Wide	Region 3	R3 Incident TG

Talkgroups Number	Talkgroups Name	Mode	Allocated Area for Operational Use	SA CFS Designated Operational Purpose
213	213_R3_INC03	Trunked Region Wide	Region 3	R3 Incident TG
214	214_R3_INC04	Trunked Region Wide	Region 3	R3 Incident TG
215	215_R3_INC05	Trunked Region Wide	Region 3	R3 Incident TG
216	216_R3_INC06	Trunked Region Wide	Region 3	R3 Incident TG
217	217_R3_INC07	Trunked Region Wide	Region 3	R3 Incident TG
218	218_R3_INC08	Trunked Region Wide	Region 3	R3 Incident TG
219	219_R3_INC09	Trunked Region Wide	Region 3	R3 Incident TG
220	220_R3_INC10	Trunked Region Wide	Region 3	R3 Incident TG
221	221_R3_INC11	Trunked Region Wide	Region 3	R3 Incident TG
222	222_R3_INC12	Trunked Region Wide	Region 3	R3 Incident TG
223	223_R5_SE	Trunked Region Wide	Region 5	SE Group TG
224	224_LACEPEDE	Trunked Region Wide	Region 5	Lacepede Group TG
225	225_LUCINDAL	Trunked Region Wide	Region 5	Lucindale Group TG
226	226_GAMBIERC	Trunked Region Wide	Region 5	Gambier Group TG
227	227_NCOORTEC	Trunked Region Wide	Region 5	Naracoorte Group TG
228	228_PT_MACDO	Trunked Region Wide	Region 5	Port MacDonnell Group TG
229	229_ROBE_CFS	Trunked Region Wide	Region 5	Robe Group TG
230	230_TATIARA	Trunked Region Wide	Region 5	Tatiara Group TG
231	231_WATTLE_R	Trunked Region Wide	Region 5	Wattle Range Group TG
232	232_R5_OPS	Trunked Region Wide	Region 5	R5 Operations TG
233	233_R5_LOGS	Trunked Region Wide	Region 5	R5 Logistics TG
234	234_R5_AIR_O	Trunked Region Wide	Region 5	R5 Air TG
235	235_R5_INC01	Trunked Region Wide	Region 5	R5 Incident TG
236	236_R5_INC02	Trunked Region Wide	Region 5	
237	237_R5_INC03	Trunked Region Wide	Region 5	R5 Incident TG
238	238_R5_INC04	Trunked Region Wide	Region 5	R5 Incident TG
239	239_R5_INC05	Trunked Region Wide	Region	R5 Incident TG
240	240_R5_INC06	Trunked Region Wide	Region 5	R5 Incident TG
241	241_R5_INC07	Trunked Region Wide	Region 5	R5 Incident TG
242	242_R5_INC08	Trunked Region Wide	Region 5	R5 Incident TG
243	243_R5_INC09	Trunked Region Wide	Region 5	R5 Incident TG
244	244_R5_INC10	Trunked Region Wide	Region 5	R5 Incident TG
245	245_R5_INC11	Trunked Region Wide	Region 5	R5 Incident TG

Talkgroups Number	Talkgroups Name	Mode	Allocated Area for Operational Use	SA CFS Designated Operational Purpose
246	246_R6_INC01	Trunked Region Wide	Region 6	R6 Incident TG
247	247_R6_INC02	Trunked Region Wide	Region 6	R6 Incident TG
248	248_R6_INC03	Trunked Region Wide	Region 6	R6 Incident TG
249	249_R6_INC04	Trunked Region Wide	Region 6	R6 Incident TG
250	250Code plug ID	Dummy	Displayed Code Plug Type & Version	Code plug Identification

Radio VHF Allocations **Annex B**

CFS Channel Plan for VHF Fireground Communications

Region	Group	Primary Channel VHF	Secondary Channel VHF	Tertiary Channel VHF
1	East Torrens	92	97	104
1	Heysen	87	77	103
1	Kangaroo Island	72	73	77
1	Kyeema	77	78	88
1	Mawson	1	30	32
1	Mount Lofty	67	68	69
1	Mundoo	16	17	18
1	Onkaparinga	29	30	31
1	Strathalbyn	73	83	55
1	Southern Fleurieu	22	23	24
1	Sturt	39	40	41
1	Victor Harbor	34	35	36

Region	Group	Primary Channel VHF	Secondary Channel VHF	Tertiary Channel VHF
2	Barossa	84	87	89
2	Gilbert	63	62	58
2	Gumeracha	58	62	63
2	Horrocks	62	73	77
2	Light	103	99	109
2	Northern Barossa	6	8	11
2	Northern Yorke	97	104	89
2	Para	41	50	51
2	Southern Yorke	31	29	34
2	Wakefield Plains	29	31	34
2	Yorke Valley	58	62	63

Region	Group	Primary Channel VHF	Secondary Channel VHF	Tertiary Channel VHF
3	Chaffey	58	34	57
3	Coorong	51	44	57
3	Mallee	46	55	29
3	Mid Murray	44	55	67
3	Ngarkat	46	58	
3	Ridley	39	29	50
3	Spare	44	51	44
3	Swanport	17	49	63

Region	Group	Primary Channel VHF	Secondary Channel VHF	Tertiary Channel VHF
4	Black Rock	13	23	50
4	Blyth Snowtown	83	84	87
4	Bundaleer	29	31	34
4	Burra	45	55	57
4	Flinders	73	69	67
4	Hallett	11	8	7
4	Mount Remarkable	62	58	3
4	Pastoral Areas	1	2	3
4	Spencer	72	82	78

Region	Group	Primary Channel VHF	Secondary Channel VHF	Tertiary Channel VHF
5	Air Operations	56	-	-
5	Lacepede	94	24	41
5	Lucindale	99	73	57
5	Mount Gambier	23	98	35
5	Naracoorte	29	62	87
5	Kingsley	69	30	51
5	Robe	2	74	35
5	Tatiara	89	1	34
5	Wattle Range	36	58	68
5	ForestrySA	68	N/A	N/A

Region	Group	Primary Channel VHF	Secondary Channel VHF	Tertiary Channel VHF
6	Western Eyre (Ceduna)	50	55	57
6	Eastern Eyre	55	57	50
6	Elliston	30	32	57
6	Caralue (Kimba)	83	84	87
6	Caralue (Wudinna)	29	34	39
6	Lower Eyre	45	46	58
6	Streaky Bay	63	64	67
6	Tumby Bay	12	17	35