SINGAPORE QUALITY AWARD 2005 WINNER

APPLICATION EXECUTIVE SUMMARY

KEY MILESTONES

1989 - Singapore Civil Defence merged with Singapore Fire Service to form Singapore Joint Civil Defence Force.

1990 - The Toxic Materials Section as set up to look into the mitigation and management of hazardous materials.

May 1990 - The Disaster Assistance and Rescue team(DART) was formed to handle complex rescue and fire fighting incidents.

28 Jul 1990 - SCDF's first overseas disaster relief operation. A combined army and civil defence contingent is sent to Baguio, Philippines following a massive earthquake.

1 Apr 1992 - The integration of the civil defence and fire service was completed. The name was changed back to the Singapore Civil Defence Force.

Dec 1992 - The first of 177 HDB shelters were commissioned.

1 Apr 1994 - The Fire Safety Act was enacted.

Sep 1994 - Following a review of the shelter programme, it was announced that shelters would be built into new apartments.

1 Oct 1994 - The first phase of the Fire Safety Manager's scheme for commercial buildings was implemented.

1995 - The Toxic Materials Section as expanded and renamed the Hazardous Materials (HAZMAT) Branch.

15 Apr 1996 - The 1777 hotline for non - emergency ambulance calls was launched.

1 Apr 1997 – SCDF was assigned to be incident manager.

Jun 1997 - The Fire Safety Manager's scheme was extended to industrial premises.

7 Oct 1997 - The Civil Defence Shelter Bill requiring the compulsory provision of shelters in new residential developments was passed in Parliament.

1 Jan 1998 - Issuance of the Code of Practice for Fire Precautions in Buildings.

Apr 1998 - Fire Bikes equipped with Impulse Guns were put on trial.

1 May 1998 - The Civil Defence Shelter Act came into force.

28 Sep 1998 - SCDF signed a Memorandum of Understanding with the Ngee Ann Polytechnic for research and development projects in fire engineering, fire safety management and fire fighting equipment.

26 Mar 1999 - The Civil Defence Academy was officially opened. SCDF signed a Memorandum of Understanding with the University of Western Sydney Hawkesbury to offer a distance learning Masters Programme in fire safety design.

15 Apr 1999 - 28 Fire Bikes, together with the impulse guns were commissioned for operations and deployed to fire stations.

1 Jun 1999 - The Jurong Island Fire Station was opened.

26 Jul 1999 - Another MOU was signed, this time with the New South Wales Fire and Emergency Services to establish a frame work to facilitate the exchange of information and training.

15 Apr 2000 - The Light Fire Attack Vehicle was officially launched and deployed. The Paramedic Scheme was officially implemented with 215 fully operational Paramedics.

15 Aug 2000 – Development and Implementation of Water-mist gun.

2 Apr 2001 - Set-up of the Q-Lab at the Civil Defence Academy. The Computer Fire Modelling Training Centre, or Q-Lab, allows SCDF to conduct fire tests of materials and quantify the expected size of fires in different situations.

1 May 2001 – Full implementation of Fast Response Paramedics (FRP).

Jul 2001 – SCDF was admitted to the Singapore Quality Class.

Nov 2001 – Opening of the Singapore Civil Defence Heritage Gallery.

9 May 2002 - Opening of Innoventure land was opened at HQ SCDF.

Sep 2002 - SCDF's Control Room and Emergency Ambulance Service received the ISO 9000 certification.

Mar 2003 - SCDF was conferred the People Developer Standards by Spring Singapore.

Mar 2003 - The Special Rescue Company (SRC) was set up to support operations in conjunction with CD forces in any major operations involving HAZMAT or urban search and rescue.

May 2003 - SCDF launched the Quality Service Handbook which declares our quality service standards to our customers.

Sep 2003 - SCDF launched the Community Emergency Preparedness Programme (CEPP) providing training on conventional Civil Defence skills such as first aid and basic firefighting, as well as skills to prepare the ordinary resident for unconventional scenarios. Doubling up as Public Education Centres, the the four Division HQs provide easy accessibility to residents from the nearby constituencies as well as the workers from industrial and commercial buildings.

Oct 2004 - For its development of the Crisis Information Management System (CIMS), the SCDF received an Intelligent Enterprise Asia Award 2004. Into its 5th year, the annual award is open to organisations in the Asia-Pacific. It is conferred by Intelligent Enterprise magazine, and winners are handpicked by am independent panel of judges, represented by Asia's leading management and IT consultants. CIMS has not only enabled quicker and more accurate information in incident management, but also helped the SCDF to hone its capability to manage crisis simultaneously and efficiently in real time.

10 Sep 2004 - The Fire Safety (Buildings Requiring Fire Certificate) Order 2004 came into effect. With this, industrial buildings join commercial premises in being subject to inspection and are issued with Fire Certificates only after inspections ascertain that the buildings comply with fire safety requirements. About 1,249 industrial premises have been affected under the scheme.

15 Mar 2005 - The Hazmat Decision Support System (HDSS) was introduced. It harnesses info-comms technology and facilities data exchange among multiple sites and sources to produce comprehensive situation pictures of the incident. Coupled with plume modelling and decision support tools, HDSS enables SCDF to manage incidents involving hazardous materials more effectively and efficiently.

THE LIFE SAVING FORCE

CONTENTS

Foreword

We are deeply honoured and humbled by the distinction that the SQA has conferred upon us. I would like to take this opportunity to also thank all my staff, whose dedication and burning passion to the call of duty has made the SCDF what it is today. I also wish to thank the people of Singapore for their belief in us; and finally to our partners for working with us to realise our goals.

While attaining SQA is a very significant milestone for us in the SCDF, our journey of excellence does not end here. It makes the start of yet another journey to bring us to a higher platform. We will do all that it takes so that Singaporeans, young and old, may rest in the assurance that we are well-trained, competent and technologically equipped to high and exacting standards. We will always be ready for a swift and decisive response when duty calls.

Since its inception in 1982, the Singapore Civil Defence Force has been bound by a strong sense of commitment and duty to protect and save the lives and property of our people in Singapore. Over the years we have strived to better ourselves in the face of a constantly changing security environment, always challenging ourselves and benchmarking with the best around the world with the sole aim to create a safe and secure best home for our people. Today SCDF is among the world leaders not just in providing a fire-safe environment but also in harnessing technology to protect the population against conventional and unconventional threats.

As we sharpen our skills and amass our knowledge to stay ahead of potential life threatening situations, the SQA framework for business excellence has indeed provided us with a systematic approach to productivity, innovation and continuous improvement. We also had great opportunities to learn from the best in the world. Indeed the journey towards SQA has reinforced an already strong commitment and team spirit in the SCDF to continuously excel towards achieving our shared vision.

We are proud to share with you our learning experience in this summary of our SQA Application Report. We have outlined our key strategies, core guiding principles and strengths that have steered us towards a new level of organisational excellence. We sincerely hope that our experience will inspire you and benefit your organisation in one way or another in this shared journey towards excellence.

COMR James Tan Chan Seng
COMMISSIONER
SINGAPORE CIVIL DEFENCE FORCE

ORGANISATIONAL PROFILE

1. ORGANISATIONAL DESCRIPTION

a. Organisational Environment

The Singapore Civil Defence Force (SCDF) is a uniformed organisation under the purview of the Ministry of Home Affairs. Our primary function is to provide emergency rescue services to the population during peacetime and in wartime. The roots of the organisation as it is today can be traced back to 1989 when the Singapore Civil Defence Force and the Singapore Fire Service (SFS) merged to form the Singapore Joint Civil Defence Force (SJCDF).

The SCDF was originally known as the Civil Defence Command when it was established in 1981 after the national Total Defence Doctrine was promulgated. It was in 1983 that the name "SCDF" was adopted. In contrast, the Singapore Fire Service (SFS) had a much longer and richer history dating back to 1888. In 1972, it was led for the first time by a local as the Chief Fire Officer. The Singapore Fire Brigade, as it was then known during the period of the British rule, was renamed as the Singapore Fire Service in 1980.

Since the historic merger of the SCDF and SFS, we have undergone tremendous changes to establish ourselves as the trusted emergency rescue service provider of the nation. The SCDF is a modern organisation deeply committed to the aspirations of Singaporeans and the progress of the nation. We are a member of the Home Team and we work closely with our Home Team partners and the community to ensure a safe and secure Best Home for everyone in Singapore. This is the foundation to see the continued growth and prosperity of the country in an increasingly globalised but turbulent world.

Our Mission
To protect and save lives and property for a safe and secure Singapore.

Our Vision
To be a World Class organisation providing fire fighting, rescue and emergency ambulance services through professionalism, operational excellence and service quality.

Our Core Values
We take **PRIDE** in saving lives and property.
We **CARE** for our people and those we serve

Nature of Our Business
Emergency Rescue – We provide fire-fighting, rescue and emergency ambulance services round-the-clock. We are committed to arriving at the scene of an emergency call within 8 minutes for 82% of all cases responded to.

Fire-Safety – We regulate building fire-safety to ensure that all Singaporeans can live, work and play in an environment that is safe from fires. We are committed to making and enforcing policies appropriately and creatively without imposing unnecessary costs and limitations on flexibility.

Civil Protection – We plan and execute the nation's shelter building programmes which, in conjunction with the Public Warning System (PWS), aim to protect our population from enemy bombardment during a military conflict.

Community Engagement – We engage the local community in counter-terrorism as well as safety-and-security programmes to build-up networks of civil resilience. We are committed to the vision of having at least one member of every household trained in CD skills.

Our People
We are a strength of 5,176 as at 31 Mar 2005. Regular officers make up 36% of the staff while full-time NSFs and civilian personnel make up 60% and 4% respectively. Though the NSFs serve between 2 years with us, we treat them as part of the family to work hand in hand in achieving achieve our shared mission and vision. The staff breakdown is as tabulated below:

Staff	Strength	%
Senior Officers	452	9%
Emergency Response Specialists	1438	27%
Civilian Staff	193	4%
NSF	3093	60%

Our Facilities

We operate from 14 Fire Stations and 24 Fire Posts. These are our main service delivery points for our emergency services. Strategically located around the island, they can achieve a response time of not more than 8 minutes (for fire calls) and 11 minutes (for ambulance calls) when answering to any emergency cases.

The Fire Stations and Satellite Fire Posts come under the command of 4 territorial Division HQs. Besides having to supervise the delivery of the emergency services by the frontline units, the Division HQs are also responsible for engaging the community via various Public Education and community involvement programmes to make Singapore a safe and secure home for all.

The 4 Division HQs come under the supervision of HQ SCDF, which is located at Ubi Ave 4. From here, all policies are strategised, formulated, communicated, implemented, enforced and reviewed. HQ SCDF is also the service delivery point for Fire Safety and Civil Protection matters.

To equip our staff with the specialist competency to meet our mission, 2 training institutions have been set-up. These are the Basic Rescue Training Centre (BRTC) and the Civil Defence Academy (CDA), where over 3,600 regular CD officers, full-time NSFs and civilian staff undergo various training programmes each year.

Our Major Equipment

The 2 key components critical to the successful delivery of our emergency services are our people and equipment. The successful matching of man and equipment determines the speed and efficacy of our rescue efforts. At the operational level, it translates into how fast a casualty can be brought to safety and be given resuscitation to save his or her life – hence our constant pursuit of more competent officers and better equipment.

We respond to emergency calls in specialist vehicles which we use to transport both rescuers and vital equipment to the scene. The equipment we use are designed for various rescue and life-saving scenarios, such as for cutting and lifting, fire-fighting, foaming, ventilation, life-detecting and resuscitating, etc.

Our Technologies

Most of our operational equipment is the best that technology can offer. However, we also exploit IT extensively to enhance productivity and customer value. Examples of service areas that have been enhanced by technology includes:-

- **Emergency Rescue** – Command, Control & Communications System (C3/Cubicon), Medical Information System (MIS) and the Crisis Information Management System (CIMS)

- **Fire-Safety** – Fire-Safety On-line Processing System (FISOPS) and Electronic Submission of Building Plans for Approval (CORENET)

- **Civil Protection** – Public Warning System (PWS)

- **Community Engagement** – SCDF Internet Website

- **Administration & Support** – eUnit Management System (eUMS), Inventory Management System (IMS) and Electronic KM Infrastructure (iKnow) and the Training Management System (TMS)

Our Regulatory environment

As a government department, we derive our authority from the Civil Defence Act (1986), the Fire Safety Act (1993) and the Civil Defence Shelter Act (1997) in carrying out our duties. We are also subject to the Government Instruction Manuals (IMs), circulars, policies and practices.

b. Organisational Relationships

Our Relationship with Customers

The epitome of our customer relationship lies in our core values of Pride and Care. We pledge to care for our customers and in this respect we have created systems to ensure that their needs and expectations can be adequately met. Our customers are classified according to the types of processes delivered:

a.*Fire-fighting, Rescue and Emergency Ambulance services* – Victims of fire/rescue incidents, or patients that require our ambulance service

b.**Fire-Safety and Civil Protection** – The public-at-large, building owners/tenants and professionals in the building industry.

c. **Community Engagement** – residents, workers and students.

Our Relationship with Suppliers

We depend on a reliable supply chain of goods and services to deliver world-class service to our customers. Interruptions to this supply chain will hinder our obligations to our customers. Thus, we strive to establish a strong collaborative working

relationship with key suppliers. We have regular dialogues with them to ensure that they are aligned to our mission and vision. We also have a supplier performance management system in place to measure the cumulative performance of key suppliers, which serves to motivate excellent performance from them.

Our Relationship with Partners

We maintain a healthy relationship with our partners to ensure that our mission and vision can be achieved. The relationship is based on mutual respect and mutual benefits. There are constant dialogues and consultations through various platforms such as the Fire-Safety Standing Committee to discuss fire code requirements and implementation issues. Our partners come from the **government** (CD Operationally Ready National Servicemen, Home Team departments and other public authorities, **community** (CD Volunteers, National Fire Prevention Council, Community Development Councils, CD Executive Committees and National Civil Defence Cadet Corps, as well as the **private sector** (Fire-Safety Managers Association, Institute of Engineers, Singapore Institute of Architects,and the media).

2. ORGANISATIONAL CHALLENGES

In the near horizon, we have identified 4 key challenges with the potential to totally change our operating environment and affect our success in fulfilling our mission. These are:

Militant Extremism – Since the 9-11 attacks, many governments in the world have shifted their national security focus from conventional wars to one of terrorism that can be mounted by small militant groups. As the Life Saving Force, the SCDF must acquaint itself with the modus operandi of the terrorist groups in order to be effective in saving lives.

Globalisation – The second challenge is the impact of globalisation brought about by modern communications technology. Globalisation has made the world a much smaller place, and the impact of events in one part of the globe will be quickly felt in another part of the world. In SCDF's context, people are unlikely to accept rules at face value and are more likely to challenge the norm, which will affect our role as a regulator. Intense competition and short business cycles will make jobs more transient and lead to instability in our workforce. The fast-paced environment will need an equally adaptable workforce, which adds more stress on the workforce. Maintaining cohesiveness will be a challenge for the SCDF.

Urbanisation – Our spectacular economic growth of the last few decades has led to rapid urbanisation with many commercial and industrial structures sprouting up in many parts of Singapore. The surge in the construction of more homes, schools, roads, utilities and recreation outlets, coupled with the constraint of land and a growing population **(confirmed that our population is growing?)**, has added significantly to the congestion in Singapore. These changes to our physical landscape will affect the emergency scenarios we face and the way we operate.

NIB Technology - NIB (Nanotech, Infotech & Biotech) technologies are set to rule the world in the years ahead. They will open up numerous possibilities in the form of new jobs, medical advances, faster computing speeds, greater automation via nano-gadgets, new recreational attractions, etc. However, there will be threats as well, not just in the form of accidents involving biological materials but also a widened arsenal for the terrorists. The impact on the SCDF will be both positive and negative. NIB can lead to smaller, smarter, more portable and more effective rescue equipment. We can also increase customer value through faster and more intelligent information systems. On the other hand, we must be able to meet the new threats arising from the wrong or improper use of NIB.

a. Our Competitive Structure

The services provided by the SCDF are very specialised, and it can be said that there is no competition for the SCDF in Singapore. Due to the absence of such competition locally, we use international benchmarks to measure our service levels. Some examples of our achievement are as tabulated:-

International Benchmarks	
Singapore is ranked as the *safest* country in terms of fire-safety for having the *lowest fire deaths* per 100,000 population with only a 0.12 fatality rate over the three-year period (1999 to 2001).	World Fire Statistics 2004
Singapore has the lowest figures for **cost of direct fire loss**.	
Singapore is the *most economical* fire-fighting organisation, yet keeping the fire-death rate to the lowest. The cost of our fire-fighting organisation is only 0.04% of GDP from 1999 to 2001.	

The SCDF has also won a number of quality certifications and accolades. We were admitted to the Singapore Quality Class in 2001. A year later in Sep, the Emergency Ambulance Service (EAS) and the SCDF Control Room received the ISO 9000 certification. The Civil Defence Academy (CDA), the Disaster Assistance Rescue Team (DART) and the Public Warning System (PWS) also received the ISO certification, but in early 2004. The SCDF was also awarded the People Developer Standards **(singular or plural?)** and the Public Service Award for Organisational Excellence in 2003, while the Chief Information Officer Award was conferred in 2004.

b. Organisational Directions

To meet the many challenges ahead, we have identified 5 key pillars critical to our success: ***Operational Excellence***, ***Public Protection***, ***Community Involvement***, ***Service Excellence*** and ***Organisational Resilience***. We aim to strengthen these pillars so that we can soar even higher in our achievements.

Operational Excellence – This is a critical pillar in the SCDF as it is here that we make a vital difference in the lives of fellow Singaporeans. We have to maintain a high level of professionalism in carrying out our mission in the face of rising militant terrorism, globalisation and urbanisation.

Public Protection – This is the regulatory pillar of the SCDF and aims to make Singapore a safe place to be, both in peacetime and in wartime. This pillar can only be strong if we are sensitive to the aspirations and needs of Singaporeans. To help make Singapore a truly global and accessible city, the SCDF will make rules only where they are most needed.

Community Involvement – In an urbanised city like Singapore, a major incident is likely to affect a large number of people. As our resources and that of other government bodies are limited, the community can be empowered to play a greater self-help role during an emergency. A well-prepared community is a resilient one as well, and will be in a good position to thwart sinister designs that terrorists may have against us.

Service Excellence – As a customer-oriented organisation, this pillar is of great importance. In fact this pillar provides the foundation for the other 3 pillars described above.

Organisational Resilience – To support all 4 pillars that have been described, we need to be very well organised. Our human resource, logistics, finance and planning processes must be efficient and responsive. The SCDF must embrace innovation, adopt best practices and benchmark ourselves against the very best. Hence, we have worked hard to achieve the various standards of excellence such as the Singapore Quality Class, ISO 9000 and People's Developer Standard. Winning the Singapore Quality Award 2005 is yet another affirmation of quest to be the best service provider that we can be.

LEADERSHIP

1.1 SENIOR EXECUTIVE LEADERSHIP

1.1a How senior executives develop the purpose, vision and values for the organisation that focus on customers and other stakeholders, learning and innovation.

Senior Management
The Singapore Civil Defence Force (SCDF) is a uniformed organisation that provides emergency services round-the-clock. Following the events of 11 Sep 2001 and the emergence of terrorism as a societal threat, the operating environment of the SCDF has changed in a fundamental way. Rising to these challenges, SCDF's Senior Management (SM) sets clear visions, directions and purposes for the Force. They are also actively involved in charting strategies, developing plans and systems, and building new capabilities to handle the unconventional threats and to ensure that Singapore remains safe and secure. Indeed, as a mission-driven agency, visionary and effective leadership is instrumental to the success of the SCDF.

The SCDF SM comprises the Commissioner, Deputy Commissioner, Assistant Commissioners, Commanders of Civil Defence Divisions, Directors of Staff Departments, Director of the Civil Defence Academy (CDA) and Commander of the Basic Rescue Training Centre (BRTC). The Senior Management works closely as a team and is unified in a common philosophy of:

- **Leading from the Front;**
- **Engaging our People; and**
- **Being responsive to the needs of our Customers and Stakeholders.**

SCDF's Mission, Vision and Values
Working closely with its people, the Senior Management has formulated the SCDF's mission, vision and values that focus on the requirements, expectation and satisfaction of stakeholders who include its owner, people, partners and customers.

Our mission, to protect and save lives and property for a safe and secure Singapore, is aligned to the mission of the MHA to make Singapore a safe and secure best home for our people.

Our vision to become a world-class organisation in the provision of fire-fighting, rescue and emergency ambulance services through professionalism, operational excellence and service quality, is a long term target for our people and partners to develop services that would meet the growing expectations of our customers.

Our values of PRIDE and CARE were also adopted based on a people-oriented perspective to build a culture that would drive SCDF towards its mission and vision.

Mission	To protect and save lives and property for a safe and secure Singapore.
Vision	To be a World Class organisation providing fire fighting, rescue and emergency ambulance services through professionalism, operational excellence and service quality.
Values	We take **PRIDE** in saving lives and property. We **CARE** for our people and those we serve

Guided by the mission, vision and values, the Senior Management develops the strategic directions and sets the performance targets for the Force. The aim is to create a dedicated and professional workforce, nurture a culture consistent with our values, and to encourage an environment that supports continuous learning and innovation.

The Senior Management's conviction and drive towards innovation excellence is epitomsed by the SCDF Innoventure Scheme, which encourages and promotes creativity and learning in the SCDF. Resources have been allocated for a purpose-built InnoventureLand to showcase successful projects and to offer a stimulating enviornment to facilitate our people in thinking out-of-the-box.

Being a people-developing organisation, the SCDF has put in place systems to nurture the growth of the Force. As a life-saving force, the SCDF cannot afford any service failures. Maintaining service excellence through continuous training and learning is thus a key focus of the SCDF, and this can be seen in the the wide range of in-house courses and the excellent training facilities in CDA. Dedicated units such as the Manpower Department, National Service Personnel Department and Training Department are taking charge of staff development and training matters.

Platform to Communicate Mission, Vision and Values to Stakeholders

The Senior Management uses a variety of platforms to communicate, demonstrate and reinforce the SCDF's mission, vision and values to our stakeholders. These include meetings at various levels, annual workplan seminars, incident management, annual reports, video news bulletins, in-house newsletters and general staff briefings, just to name a few.

To further disseminate the mission, vision and values to our people, the Senior Management believes in leading from the front. Commissioner SCDF and all Unit Commanders walk the talk by responding to the sites of all major incidents and to take command of the ground operations. This is a very clear demonstration of our values by the Senior Management.

The **Nicoll Highway incident** on 20 Apr 2004 is a prominent example. The incident highlighted the SM's conviction of leadership by example. Throughout the entire 4 days of operations, the Senior Management – in particular Commissioner SCDF – was at site to provide tactical guidance, direct rescue operations and to give moral support to rescuers.

A more recent example is the **Asian Tsunami Disaster** of Dec 2004. An SCDF Operations Lion Heart contingent was each dispatched to Khao Lak (Thailand) and Bandar Aceh (Indonesia) to assist in humanitarian operations. Once again, members of the SM were on hand to provide leadership at the operation sites, where a CD Division Commander was assigned to lead each contingent. In addition,

Commissioner SCDF also flew to Aceh to better understand the ground situation and to give moral support to the rescuers.

In demonstrating the criticality of continued training to enhance our life saving skills, our Senior Management undergoes refresher training every year at CDA. The training involves being updated on the latest developments and new threat scenarios, as well practical lessons such as on donning and mitigating chemical incidents.

The SM regularly evaluates the effectiveness of their personal leadership and involvement at the individual, department/unit and corporate levels. At the individual level, staff appraisal reports as well as the 360° Feedback is used. At the Department or Unit level, the leadership of each Director and Unit Commander is measured and evaluated based on the achievement of targets through the SCDF Performance Management System, audits as well as the accomplishment of objectives during Division-level exercises and actual operations.

At the Corporate Level, operational readiness of the SCDF is regularly reviewed through three main channels:

Organisational Health Survey (OHS)

The SM values the honest feedback from all staff and is committed to improving the morale and welfare of its people. The Organisational Health Survey (OHS) serves as a useful bottom-up communication tool to help them understand and improve staff satisfaction levels.

Customer Feedback and Surveys

The Senior Management also uses customer feedback as a tool to validate the effectiveness of our organisation. Customer feedback is obtained through various active listening posts such as feedback forms, surveys, hotlines, the media, written correspondences, public consultations, meetings and dialogues. Public Perception Surveys (PPSs) are also organised to measure public perceptions and attitudes on civil defence, emergency preparedness and SCDF in general.

Force-Level Exercises

Force-level exercises involving other ministries and agencies (Related Agencies or RAs) are conducted at least once a year to validate the operational readiness and preparedness of the Force and the participating RAs. Through such evaluation processes, the Senior Management is able to take appropriate measures not just to enhance the SCDF's overall state of readiness and responsiveness, but also to build the level of camaraderie with the various agencies.

1.2 ORGANISATIONAL CULTURE

1.2a How the organisation translates its values into policies, practices & behaviour.

Approach to Culture Development

In the SCDF, policies and practices that would strengthen our corporate culture and integrate our core values of PRIDE and CARE are developed. With such policies and practices, officers are guided and motivated to behave in manners consistent with these values. Figure 1.2.1 shows the relationship between SCDF's values vis-à-vis the policies, practices and desired behaviours.

1.2b How the organisation permeates a culture consistent with its values, and which encourages and supports innovation, learning and achievement of organisation's objectives.

Permeation of Desired Culture

The permeation of our organisational culture and values of PRIDE and CARE is a 3-pronged approach involving continued Training, Reinforcement and Rewards.

Training - Training is provided to all personnel in order to create an awareness of our core values. This training can come in the form of induction programmes for newcomers into the organisation, or lessons held during courses. Handbooks containing these values are also distributed to the staff.

Reinforcement - The reinforcement of PRIDE and CARE is continuously done by communicating these values at Force-level events such as the Civil Defence Day Parade and Learning Day events. Other platforms like the iKnow Portal, R995 Magazine and the email-based SCDF Bouquets are also used. Additionally, the appointment of Director Operations Department and Director Manpower Department as the Champions of PRIDE and CARE, respectively, allows the organisation to emulate them as role models. When visiting the various units, they will stress the importance to understand and demonstrate our core values in the course of work.

SCDF's Learning Day

SCDF's Learning Day is organised and conducted at least 4 times a year as part of the overall training plan to supplement the in-house core and developmental training courses. It aims to enhance the individual officer's competency to stay current and relevant, as well as to facilitate the execution of his roles and functions.

VALUES	POLICIES	PRACTICES	DESIRED BEHAVIOUR
PRIDE **&** **CARE**	<u>Innovation</u> • Innovation policy – Innoventureland/ Chief Innovation Officer • Mass participation through WITs and SSSs • Rewards for innovation <u>Learning</u> • Continuous learning and sharing • Adopting best practices • Competency-based Training System • Minimum training days of 12.5 • Reimbursement for continuous learning <u>Achievement of Objectives</u> • Enhancing consequence management • Leveraging on technologies • Civil protection in an economically competitive environment • Sustained community involvement • Lifelong learning for employability • Responsiveness and transparency in service	<u>Traditions</u> • CD Day Parade • CD Pledge • Officers' Creed • Dining In • Safety Pledge <u>Routines</u> • Incident Management • Station drills & training • Exercises & Debriefs • Internal audits • Regimentation <u>Events/Programmes</u> • Social and sports • SHARE Programme • Home Adoption • Blood Donation <u>Incentives</u> • Commissioner awards • Commander awards • Long service awards • Innovation awards • Service Excellence awards • SCDF Bouquets	**P**rofessional in our service at all times; **R**esilient under difficult conditions with the "can do " spirit of never giving up; **I**nnovative and resourceful; **D**isciplined Force; **E**ffective in our operations by meeting all performance indicators; & **C**ompassionate towards those we serve; **A**ccountable for our actions to all our stakeholders; **R**esponsive to public expectations and rendering services beyond our call of duties; **E**thical in our conduct by showing respect for confidentiality.

Figure 1.2.1: Values translated into Policies, Practices and Desired Behavior

Rewards - Efforts to forge a culture consistent with our values culminate with the presentation of the **PRIDE & CARE Award**. This award is given to staff who demonstrate PRIDE and CARE in their course of work. Such officers are identified and recognised during the annual PRIDE & CARE Day, thereby allowing them to serve as a source of inspiration and motivation for their fellow colleagues. The SCDF also presents the **Service Excellence Awards** to recognise deserving personnel and to champion the attitude of service responsiveness among the staff. Every month, between 12 to 14 awards are given to our personnel.

A culture that encourages and supports innovation

In line with our value of PRIDE, we constantly strive to create an environment that encourages and supports innovation. The overriding conviction is that everybody has the potential to innovate. In this light, a framework has been put in place to acquire, evaluate and implement creative ideas and solutions. This framework revolves around 2 critical elements: excellent infrastructure and motivation through rewards.

Excellent Infrastructure

Our very own InnoventureLAND, centrally located at HQ SCDF, serves to facilitate brainstorming and to host project meetings, presentations as well as group discussions. The InnoventureLAND is a symbol of our efforts to create an environment for innovation, and it embodies a "dare to try" spirit that the SM hopes to see in every staff. Additionally, an Innovation Fund of $150,000 has also been set aside to nurture promising projects such as the Light Fire Attack Vehicle (LFAV) and the Water Mist Gun (WMG) for frontline fire-fighting.

Motivation Through Rewards

A budget of $20,000 has been set aside for Innovation Awards which are given out annually to proposers of outstanding projects that promise new solutions and enhancements to SCDF's frontline operations. To encourage innovation across all staff, awards are given for creative and value-adding ideas through platforms like Work Improvement Teams (WIT) and Staff Suggestion Schemes (SSS). In recognition of their efforts, outstanding WITs projects are awarded *Gold*, *Silver* or *Bronze* medals at the Force and Ministry-level conventions while deserving SSSs are given monetary incentives.

A culture that encourages and supports learning

Learning in the SCDF comes in the form of continuous training and self-development. This is achieved through extensive training conducted at 2 levels: organisational and individual. To ensure a well-rounded learning process for our staff, training is conducted both internally via in-house establishments, and externally (e.g. Civil Service College, SPRING Singapore, private training firms and overseas study trips for international exposure).

Creating the Future

The SCDF has come a long way to enhance learning. Effort has always been placed to target and change the mindsets of our officers towards continuous learning, especially staff that have been with the Force since its pioneering stages. The emphasis is to bring about a mindset of re-training and to adapt them to a new culture of continuous learning and innovation.

Creating Our Desired Culture
The SCDF's desired culture is one which is consistent with our values of PRIDE & CARE. While this culture may not be explicitly described, the SCDF has drawn up a list of desired behaviours that manifest our desired culture. These behaviours are creatively described using the acronyms of PRIDE and CARE. We recognise that it would require a reiterative process to develop a culture consistent with our values. The SCDF uses several methods to constantly identify the gaps and differences between the current and desired culture. The measures include:

Performance Audits
Audits are conducted on units to assess their performances and to identify the possible gaps therein. The Performance Indicators of the units are used as a measure for the assessment. The audits cover a wide range of areas, ranging from Operations, Training, Logistics and Manpower issues, to the competency of the personnel.

Customer Feedback
Feedback received from the public on areas for improvement is highlighted to the Senior Management. Where necessary, the respective department or unit will develop action plans to address the gaps identified, and these plans would be implemented and tracked. In the SCDF, best practices are shared among the departments and units to foster learning and the sharing of knowledge. These are ongoing steps to bring us closer to our desired culture.

Survey Findings
The OHS and PPS findings are used as part of the reviews in the Corporate Planning Process. Through the result evaluation of the OHS and PPS, as well as subsequent reviews, gaps and differences between the current and desired cultures are identified and addressed.

A Living Culture
Our strive towards enhancing our emergency response coverage is an excellent example of how the SCDF integrates a system to bridge a gap and draw closer to our desired culture of being innovative and responsive to public expectations. When gaps in the operational response zones were identified via performance indicators, we studied the possibility of putting our resources closer to our customers, i.e. at the neighbourhood-based Fire Posts and Neighbourhood Police Posts. The latest addition to our enhancement is the Mobile Fire Post (MFP) concept. The MFP innovatively uses a converted bus to provide a temporary working area for our responders, without having to incur overheads as would the case of a permanent facility, but still provide a platform for a swift and timely response.

1.3 RESPONSIBILITY TO COMMUNITY AND ENVIRONMENT

The SCDF is proud to call itself the *Life Saving Force*. But our responsibility to our citizens goes beyond our statutory duties, and towards the overall well-being of the community. This is in line with our core value of "caring for those we serve". Our commitment to the community and the environment is best illustrated by our policy shown in Figure 1.3.1.

SCDF Policy on Community and Environement

We are an organisation that aims to make a difference to Singapore, even if it means going over and above our core mission of protecting and saving lives and property.

Figure 1.3.1: Community and Environment Policy

Main Thrusts	Our Goals	Programme / Initiatives
Responsibility to The Community (Local and International)	To extend SCDF's professional service in international humanitarian emergency response to major disasters overseas	Operation Lion Heart – The standby of a 160-strong contingent ready to respond to international calls for humanitarian/rescue aid.
	Provision of Monetary Support	• SHARE / Community Chest Staff Contributions • President's Challenge projects • Ad hoc requests • Support for adopted charities
	Provision of Time and Effort Through Community Work	• An Adopted Home for each of the SCDF's 7 units, reviewed on an annual basis.
Responsibility to The Environment	Water Saving in Operations and Training	• Minimization of water consumption at the Civil Defence Academy and Fire Stations through recycling features in buildings, training practices, etc
	Water Saving via Utilities Usage	• Minimization of water consumption at all SCDF installations through appointment of Water Controllers at each unit (under Logs Directive)
	Environment-Friendly Fire Extinguishers for Training Purposes	• Minimisation of harmful effects on the environment caused by use of CO_2
	Clean Burning for Simulation Training	• Minimisation of harmful effects on the environment caused by release of carbons during free burning

Table 1.3.2: Community and Environment Framework

SCDF's Community and Environment Framework. The SCDF articulates this policy through specific goals which determine how the Force contributes to the community and to the environment in which it operates. The framework adopted by SCDF is shown in Figure 1.3.2.

Responsibility to the Community
In discharging its responsibility to the community, SCDF focuses on three areas:

Humanitarian Assistance - Extending beyond the shores of Singapore, the SCDF leverages on its professional search, rescue as well as emergency medical expertise to provide international humanitarian assistance during major overseas disasters. The SCDF overseas mission is codenamed Operation Lion Heart, with officers being rostered on 24-hr standby to respond to international calls for aid. These missions are led by a member of the SM.

Assistance at Charitable Homes - SCDF is also committed to performing community service at local charitable homes, particularly those whose residents are physically disadvantaged to evacuate quickly during emergencies. SCDF aims to commit an average of 5000 hours of community service a year, and to this end, its seven units (Four Divisions, HQ SCDF, two training institutions) have reached out and adopted their own charities or homes.

Fund-Raising - The Force also aims to raise at least $100,000 annually for charitable causes. This encompasses all forms of monetary contributions made by staff, such as direct contributions to the Community Chest from their salaries, ad hoc donation drives as well as the funds raised for the adopted homes.

Responsibility to the Environment

In showing responsibility to the environment in which it operates, our goals are to minimise water usage and the harmful effects on the environment (e.g. pollution of the air) as a result of our fire-fighting operations.

Minimise Water Usage - Water-saving initiatives are an inherent part of SCDF's corporate policy. In CDA, where extensive training requires large amounts of water, a water-recycling system has been put in place to re-use water for our training purposes. A review system was established in 2002 to monitor water usage in daily operations and emergency responses and deliberate effort was put in to reduce the amount of water used.

Minimise Harm on Environment – Our rigorous efforts in educating the public on fire safety includes training on the use of fire extinguishers for fighting incipient fires. One of the most effective medium is dry chemical powder, and for this reason, such fire extinguishers were used in large numbers in the past. To protect our environment, SCDF has innovatively developed a simulated dry chemical powder extinguisher which uses a pressurised spray of air and water instead of the harmful chemical powder compound.

1.3b How the organisation communicates its policies and goals to employees and external parties, and involves them in achieving the goals.

A structured framework is in place to facilitate communication of our societal responsibilities towards the community and environment. We communicate information on community service matters via e-mail broadcasts, video news bulletins, in-house newsletters as well as our i-Know portal. For our partners and suppliers, such information is shared via annual reports, newsletters and the media .

The Spirit of Caring and Sharing

This spirit of fundraising has been ingrained in the SCDF. In 2002, we raised a total of S$1.12 million – more than the S$1 million target set by our SM – for the annual President's Challenge charity drive. In 2003, our officers spontaneously created an innovative way to raise funds in support of the SARS Courage Fund through music. The project saw a special SCDF

Musical Night being organised, with performances by the SCDF Combo Band as well as other guest singers and players. This event helped to raise some S$41,000 for the Courage Fund. In late-2004, following the Asian tsunami disaster, our staff again rose to the occasion and put together a $30,000 donation in support of the humanitarian efforts by the Red Cross.

1.3c How the organisation evaluates and improves its involvement and contribution to the community, society and the environment in which it operates.

To ensure the continuity and consistency in the administration of charitable projects and liaison with charitable agencies, There is a Community & Environment Steering Committee, with representatives from all SCDF units, which meets on a quarterly basis. The quarterly meetings allow unit representatives to share their experinces with their adopted homes, provide feedback to HQ SCDF on the difficulties faced or the lessons learnt, as well as to raise new ideas for activities that other units or departments can adopt. The targets set are also reported to the Senior Management on a quarterly basis, and this allows a continuous evaluation and review on SCDF's current corporate citizenship standing. In addition, feedback from the units and departments, partners, service authorities and members of public are collated and evaluated regularly to enable the Force to refine and improve the posture of its corporate citizenship.

Housekeeping at MINDS

2   PLANNING

2.1   STRATEGY DEVELOPMENT AND DEPLOYMENT

2.1 Describe the organisation's strategy development process to strengthen organisational performance and competitive position, and the deployment of strategies and goals.

SCDF's Strategy Development Process

The mission and vision of the SCDF drives the strategy development process in the organisation. Additional factors such as changes in the operating environment, Home Team and National-level scenarios, as well as inputs from stakeholders are also considered. In essence, this annual strategy development process helps to ensure that SCDF's operating strategies remain relevant and aligned with its mission and vision, as well as the needs of the stakeholders.

This philosophy is cascaded to every sphere of the SCDF's activities and its various work units, through the rigorous implementation of the SCDF's Corporate Planning Process as illustrated in Figure 2.1.1.

2.1a Describe the process for developing and deploying the organisation's short and long-term strategic plans. Include key steps and key participants in the process.
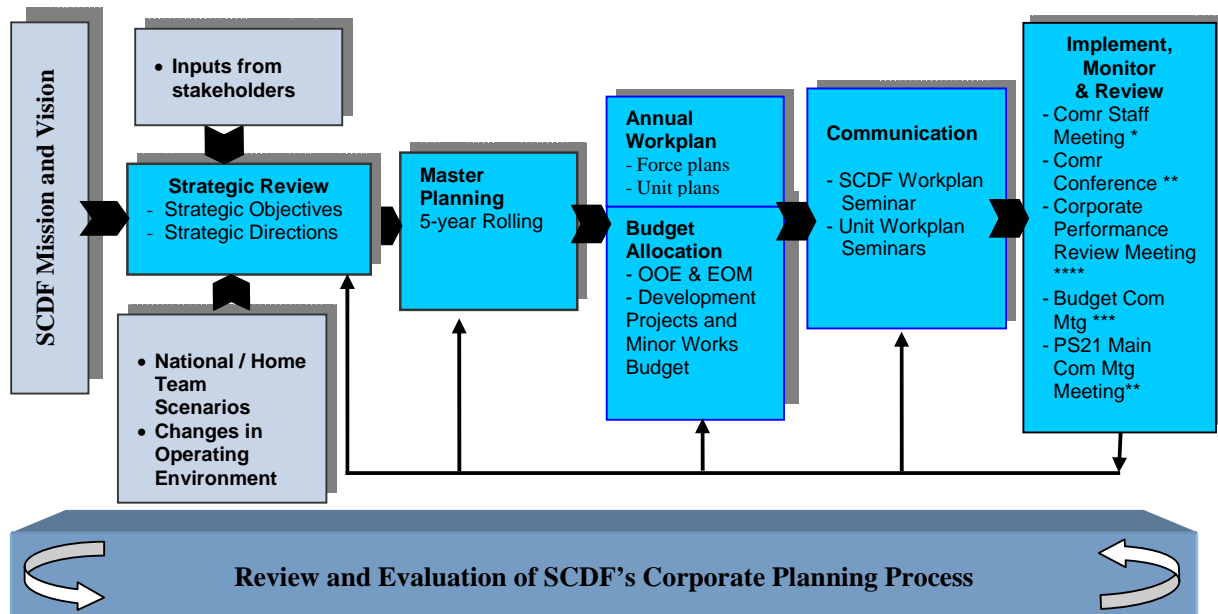
SCDF's Corporate Planning Process

SCDF's corporate planning process is an annual cycle to develop and deploy the organisation's short and long term strategic plans. The process involves every member of the SCDF in varying degrees, from the Senior Management down to the lower levels of the organisation.

The five main stages in the Corporate Planning Process are:-
i.   Strategic Review
ii.   Master Planning
iii.   Annual Workplan
iv.   Communication
v.   Implementation, Monitoring and Review

Strategic Review Stage - The annual planning process kicks off with a strategic review of the effectiveness and relevance of the SCDF by the Senior Management. Valuable feedback and inputs for the review

Legend: *Weekly **Monthly *** Bi-Monthly **** Quarterly

Figure 2.1.1 SCDF's Corporate Planning Process

process are obtained throughout the year from established mechanisms including the Public Perception Survey; customer feedback surveys and other listening posts from various stakeholders (e.g. the Resource Panel for NSmen; surveys conducted for vendors and suppliers, as well as dialogues with related professional bodies). Reference is also made to the National Scenarios and Home Team Scenarios which are strategic studies of the driving forces that may impact the operations and activities of the SCDF.

Master Planning Stage - This is initiated with the planning and conduct of the SCDF Corporate Retreat. The Senior Management, together with a broad representation of the Force, meets to review new challenges, threats and opportunities that impact the Force. After the Retreat the Senior Management will finalise the strategic objectives and directions for the staff departments to be translated into initiatives and programmes over a 5-year period known as the 5-year Rolling Masterplan.

Annual Workplan Stage - The 5-year Rolling Masterplan provides the framework for the development of the annual workplan. This annual plan, developed in advance for the coming workyear, comprises specific objectives and detailed action plans worked out by the various departments. Key performance indicators (KPIs) are also formulated to track the progress of the action plans. Simultaneously budget allocation is worked out for operating expenses, manpower costs and for development projects and minor works.

Communication Stage – After establishing the workplan, the information is disseminated to all levels of the SCDF through Force-level and unit-level workplan seminars.

Implementation, Monitoring & Review Stage - This is an ongoing stage throughout the year to monitor the initiatives and programmes to ensure that the strategic directions and objectives are met. Regular meetings such as the monthly, bi-monthly and quarterly reviews of corporate performance are conducted at department and unit levels. Commissioner (Comr) SCDF chairs key meetings such as the monthly Comr Staff Meeting (CSM), Comr Conference (CC) and PS21 Meeting, the bi-monthly Budget Committee Meeting (BCM) as well as the quarterly Corporate Performance Review Meeting. Policies and strategic issues are proposed, debated, endorsed and tracked during these forums.

2.1b Summarise the organisation's key strategic objectives and goals for the short and long-term that arise from the strategy (or strategic?) development process.

The SCDF's Mission, Vision and Core Values provide the guidance for the development of both short and long-term goals. The SCDF's strategic objectives are :

1. To ensure a safe and secure best home,
2. To be prepared for emergencies, and
3. To build a successful partnership with the community.

We measure the achievement of our corporate objectives via the attainment of performance indicators in key performance areas as shown in Table 2.1.2

Strategic Objective	Key Performance Areas
To ensure a safe and secure best home	No. of fire fatalities
	Response Time of emergency resources
	Duration of Fire Operations
	Fire-Safety Enforcement Checks
	Budget Utilisation
To be prepared for emergencies	Readiness of Public Warning System
	Readiness of Public Shelters
To build a successful partnership with the community	Awareness and confidence level of community in emergency preparedness
	Level of participation of community emergency preparedness programmes

Table 2.1.2 Strategic Objectives and Key Performance Areas

2.1c How the organisation reviews its performance relative to plans, and how it reviews the relevance of plans to reflect business changes?

The Senior Management monitors and reviews the implementation of the long and short-term strategic plans carried out by departments and units on a regular basis. The senior Management ensures the effectiveness and relevancy of plans to enable the SCDF to stay on top of the situation. SCDF's Corporate Scorecard system is used to monitor and review its performance at four levels: i.e. the Corporate, Departmental, Unit and Sub-unit levels. This process is advantageous as it often leads to

the identification of gaps in the light of the changing operating milieu.

2.1d How the organisation evaluates and improves its strategic planning process?

Evaluation and Improvement Mechanisms
Through feedback from customers, including partners from government agencies, suppliers, the industry and institutional organisations, as well as the general public are gathered to aid the evaluation and improvement of key processes.

Regular review and evaluation of the overall processes and their sub areas are performed throughout the entire Corporate Planning Process. Improvements and remedial actions are then proposed and undertaken. This strengthens the process and enhances the relevancy and effectiveness of the strategy deployment to achieve our mission, vision and strategic objectives.

Highlights of Recent Reviews
Towards the end of 2003, following the adoption and implementation of the Balanced Scorecard system, the Corporate Planning Process has been further strengthened by aligning the planning, implementation, monitoring, reporting and review structures and procedures.

We are continuously looking out for new means and mechanisms to evaluate and improve our planning processes, with the aim of developing a more robust and holistic strategic planning process for the SCDF.

3   INFORMATION

3.1 MANAGEMENT OF INFORMATION

3.1a How information needed to drive planning, day-to-day management and improvements to the organisation's performance is selected and collected. List the key types of information and describe how they are related to the organisation's performance objectives and goals.

The SCDF views information as an asset to be leveraged in order to enhance organisational effectiveness and institutionalise organisational learning. Given the diverse scope of SCDF's roles and functions, the information selected, collected and processed for planning, day-to-day management and performance evaluation, is diverse and abundant. In SCDF, the management of information is focused and able to support the Force in meeting its five strategic directions of **Operational Excellence**, **Public Protection**, **Community Involvement**, **Organisational Resilience**, and **Service Excellence**.

The SCDF received two highly coveted, prestigious, awards in 2004 for its innovative use of technology, namely the IEA (Intelligent Enterprise Award) and the CIO (Chief Information Officer) Award. These awards recognise the SCDF's effectiveness and efficiency in adding value, driving innovation to improve job performance, and meeting customer needs through strategic application of IT. These awards also testify to the effectiveness of the SCDF's **Information Management Framework**, which is a systematic process of selecting, collating, and managing information to create proficient IT systems and platforms.

SCDF's Information Management Framework
Our Information Management Framework , as shown in Fig 3.1.1, consists of various driving forces that determine the type of information required, and also involves the process of identifying, selecting, and collecting information. Figure 3.1.1.
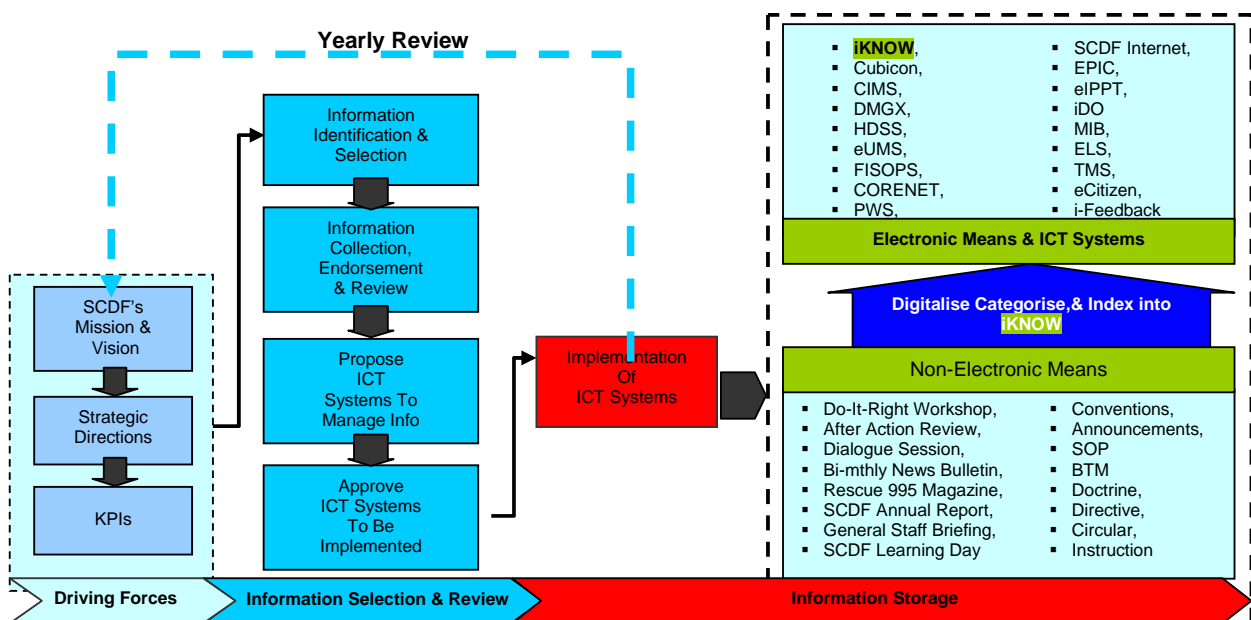

Figure 3.1.1 Information Management Framework in SCDF

Driving Forces
SCDF's five strategic directions support the mission and vision of the Force. This is in turn supported by Key Performance Indicators (KPIs) – which are devised to measure performance in the organisation using the Balanced Scorecard (BSC).

Staff departments identify the type of information required to measure their respective performance. As mentioned in Category 2, the SCDF uses the BSC to track and measure its performances. This is a comprehensive and multi-tiered review process, comprising:

i.   Level 1 – Corporate Score Card

ii.   Level 2 – Departmental Score Cards

iii.   Level 3 – Unit[1] Score Cards

iv.   Level 4 – Sub- unit[2] Score Cards

Information Selection
Information in the SCDF is categorised as Structured and Unstructured. Structured information is that which has been analysed, documented and indexed (e.g. doctrines, directives, SOPs, manuals, staff aids and spreadsheets). Unstructured information manifests itself in the form of experiences and competencies that are shared with fellow officers through internal forums like the General Staff Briefing, Learning Day and the After Action Review platforms. It can also be shared through emails, verbal communication, video files, multimedia files as well as pictures.

Information Review
Information is managed and reviewed at two levels – the Departmental and Corporate level.
At the Departmental level, information is managed through an Information Management Committee (IMC) that is led by TD. All staff departments review their information needs annually, following the endorsement of their workplan by the Senior Management.

The key types of information needed to drive planning; day-to-day management and improvement are selected based on the following criteria:

i.   **Planning needs –** for strategic analysis and planning;

ii.   **Performance measures** – to facilitate performance review by the SM based on strategic objectives set for the workyear;

iii.   **Day-to-day operations** – to perform daily operations in a seamless manner;

iv.   **Feedback –** to enable staff departments to know the satisfaction level of customers (internal and external) so as to enhance service performance.

Information Storage
iKnow
The iKnow is a system that digitises, categorises, indexes and stores the structured and unstructured information available within the SCDF. Using this system, electronic and non-electronic information is integrated through a portal, enabling information to be shared among the officers. Ultimately, this serves to facilitate our officers in driving the organisation's strategic directions and delivering customer satisfaction.

> **3.1b How the organisation ensures that information is reliable, accessible and disseminated quickly to employees, supplier/partners and customers. Include how the organisation shares information to encourage innovation and learning.**

Reliability
All departments are accountable for the accuracy and consistency of the data they collect and process. Strict access to key information is imposed to ensure the integrity of the information. Reliability is also ensured through audit checks, which serve as a means to surface any irregularity in the data. Internal audits are conducted by in-house audit teams as part of the information management process. External auditors include those from the Ministry of Home Affairs (MHA), Infocomm Development Authority (IDA), Internal Audit Unit (IAU) and the Auditor-General's Office (AGO).

In addition, the reliability of our ICTsystems is ensured through sound security policies. Our ICT Security Management Framework (based on IDA and MHA security policies) supports the security requirements and objectives of the SCDF. A three-fold approach is thus employed, namely **protect, detect** and **correct**, to manage IT risks and threats in SCDF:

The **protection** of ICT systems is ensured with the use of Smart Cards and User IDs with passwords for authentication and security control. We also prohibit unauthorised external storage devices such as thumb-drives and external hard disk from being connecting to our ICT systems to prevent infection by viruses. The **detection** of undesirable threats such as the presence

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[1] *Unit refer to 4 CD Divisions, BRTC and CDA*
[2] *Sub-unit refer to 14 Fire Stations, CSB, CMB, DART, SRC.*

of computer viruses or incidents of attempted hacking is in place via a security reporting system, which also tracks our staff's adherence to IT-related policies and procedures. **Corrective** measures, such as conducting ICT security audits to check for security breaches, will be taken to ensure that operations are not disrupted.

Accessibility
In the SCDF, information content is broadly divided into two categories: "classified" and "unclassified". Classified information is further graded into the "restricted", "confidential", "secret"

or "top secret" categories. Access to the information is subjected to the security grading, appointment and functional responsibilities of the officers concerned. However, we also encourage greater sharing of information among officers and external parties, but without compromising information security.

Dissemination
The SCDF has put in place information systems and other platforms to enable the timely dissemination of information to its stakeholders, employees, suppliers, partners and customers. The various forums are shown in Table 3.1.2:

for Owners	for Employees	for Supplier/Partners	for Customers
Meetings ▪ Ministerial meeting ▪ Group Tech meeting ▪ Dept Exco meeting ▪ Executive Group Forum ▪ Organisational Excellence Forum ▪ MHA PS21 Quarterly Reports ▪ Organisational Review ▪ Staff Well-being ▪ Service Improvement Unit Report	▪ All SOs and civilian staff are issued with a desktop computer with e-mail access ▪ All ERSs are issued with e-mail accounts ▪ Knowledge centre in units ▪ SCDF intranet ▪ Daily newsflashes – "Force in the News", e-Routine Orders (RO). For NSFs, ROs are displayed on bulletin boards ▪ Bi-monthly Rescue 995 magazines ▪ Bi-monthly news bulletin ▪ SCDF Annual Report ▪ Learning Day ▪ General Staff Briefing ▪ Do-It Right (DIR) workshops ▪ Comr/AC Dialogue sessions with the ground	▪ Periodic circular to professional bodies by FSSD Regular dialogue sessions/briefings/seminar ▪ FSSD seminars ▪ Quarterly supplier dialogue sessions by Logs Dept e.g. Gebiz briefing to vendors ▪ Invitations to annual Workplan Seminars for CDECs & NSmen ▪ Quarterly CDEC briefings ▪ CSSP briefings with grassroots leaders ▪ Tea sessions and ad-hoc media briefings ▪ Bi-monthly CDANS newsletters to NSmen ▪ NSmen forums	▪ SCDF Internet ▪ Media Releases ▪ Fire-safety exhibitions ▪ Seminars ▪ Emergency Handbook ▪ CD volunteer scheme ▪ Public Education programme ▪ Community Emergency Preparedness Programme ▪ Emergency Preparedness Day ▪ SCDF Contest e.g. Mystery PWS Signal contest in Sept 03 ▪ Heritage Gallery

Table 3.1.2 Dissemination of Information

Sharing of information to encourage innovation and learning
The SCDF Innoventure Scheme was launched in Dec 2001 to promote a culture of creativity, innovation, and enterprise in the Force. A series of programmes and activities have been adopted to encourage information-sharing, innovation and learning in the organisation. The SCDF InnoventureLand serves as a hub where people can gather to hold informal discussions and exchanges, as well as to explore and experiment new ideas.

The SCDF InnoventureSpace, a website devoted to innovation in SCDF, provides a virtual environment to promote innovation, and is accessible to officers through iKNOW. This website is designed to serve

as a resource hub for publications and articles relevant to innovation practices. It is also linked to the "My Idea Bank" (MIB) portal where all staff suggestions are submitted and shared. Besides submitting ideas through the MIB, the InnoventureSpace also features an Innovation Deposit Box, which allows officers to submit ideas directly to the Chief Innovation Officer (CIO) for evaluation purposes.

The other platforms that encourage innovation and learning are the GSBs, Learning Days, DIR Workshops, AARs, conventions and dialogue sessions. On the virtual front, the iKNOW also comes with a collaboration tool to facilitate officers with a forum to hold real-time discussions through instant messaging, much like an online chat-room,

for our staff to thrash out their ideas together. This tool also enables the user to search and locate officers with the desired specialist knowledge so as to initiate the discussion. Another feature is the Communities of Practice (COP), which brings together individuals of similar work areas, interest, and projects to share ideas, thoughts and expertise via tools such as files, calendars and project information databases.

We use various analytical tools such as trend analysis, regression and correlation and fire modeling analysis to crunch data so that projections can be made and meaningful representations can be formed to facilitate decision-making.

Trend analysis
Trend analysis is commonly used to analyse statistical data collected through day-to-day emergency operations. Typically, it will be used to study general patterns observed in fire or EAS (Emergency Ambulance Service) calls, or zoomed down to focus on specific issues such as unattended cooking fires or traffic accidents along particular roads, etc.

Regression and Correlation analysis
To determine the eight-minute response zones by the SCDF emergency appliances, a two-pronged, and complementary, method was adopted, namely through Statistical Analysis as well as Actual Runs. In the statistical approach, an elaborate data collection effort was conducted for all existing fire stations and fire posts.

Fire Modelling
With the introduction of the Performance-Based Fire Code, building designers and architects are given more flexibility in designing a fire-safe building. Fire modelling is used to determine the approval of special building plans where solutions cannot be determined based on conventional fire-engineering calculations.

The SCDF uses benchmarking as a strategic and operational tool for accelerated improvement. Benchmarking has been adopted as an important vehicle towards achieving our vision of a world-class organisation.   We regularly undertake benchmarking and comparative studies to harvest best practices and seek breakthrough improvements by learning from both local and international top-notch organisations.
Benchmarking and comparative studies are undertaken based on the following guiding principles:

- Derivation of benchmarking needs from SCDF's strategic objectives;
- Adopting an "external" focus to compare against the established best practices of other organisations, as well as international standards; and
- Continuous learning and improvement to better ourselves; and to emerge as the industry leader.

Our commitment to benchmarking is epitomised by the issuance of the benchmarking directive in Dec 2004.   Through this directive, the benchmarking process is institutionalised as an annual cycle and a framework is also formally established in the SCDF. The directive also describes the benchmarking cycle, roles and responsibilities of project teams, and also details the methodological framework of benchmarking studies, as shown in Figure 3.2.1.

Planning	1	Identify Focal Area
	2	Approval from Management (PS 21 Committee)
	3	Formation of Benchmarking
	4	Benchmarking Training
	5	Specify key Indicators
Collection of Data and Infomation	6	Partners Selection
	7	Development of Project Plan and Milestone chart
	8	Preparation of Questionnaire for Benchmarking
	9	Collation of Findings
Analysis	10	Review data and Findings
	11	Gaps Identification
	12	Improvement Identification
	13	Communicate Findings
Implementation	14	Recommendation of Improvement Measures
	15	Approval From Management
	16	Implement Action Plans
Review	17	Collate Results Arising from Improvement Measures
	18	Monitor Performance
	19	Evaluate Benchmarking Process
	20	Document Lessons Learnt

Figure 3.2.1: SCDF'S Benchmarking Cycle

3.2b How comparative and benchmarking information is used to improve processes and to set stretch goals and/or encourage breakthrough improvements. Include a summary of comparative and benchmarking activities and studies done.

Both comparative and benchmarking information are employed for process improvements, and where possible, to set stretch goals or targets. Our key benchmarking projects are:

Benchmarking Projects	Benchmarking Partners	Objective
Control Room 995 Call-Taking	▪ Singapore Police Force ▪ Comfort Transportation Pte Ltd ▪ OUB Bank	▪ To enhance the response time of emergency call taking
Emergency Ambulance Service (EAS) Protocols	▪ Queensland Ambulance Service	▪ Enhance ambulance service protocols

Some of our comparative studies include:

- Innovation Process
- Core Operational Process
- Plan Approval Process
- Response Time to Public Feedback on Fire Hazards

3.2c How the organization evaluates and improves its overall process of selecting and using comparative and benchmarking information.

The progress of benchmarking projects is monitored by the Planning Department, and upon completion of a study, a final report as well as recommendations of the action plans for improvement, is be presented to the Senior Management. Through the monthly Organisational Review meetings, the benchmarking process undertaken by the project teams is evaluated, and results of improvement monitored against the comparison indicators.

4   PEOPLE

4.1a Describe the organisation's human resource requirements and plans, based on the organisation strategic objectives and goals

In SCDF, our people are our strength. People in the Force comprise regular staff and full-time National Servicemen (NSF). The regulars comprise Senior Officers, Emergency Response Specialists and civilian staff. The NSFs who serve two years with us are also regarded as an integral part of the organisation. We adopt the People Developer Standard (PDS) framework to train and develop our people to enhance their capabilities.

Our People Management Framework
Manpower planning plays a central role in shaping our people management strategies to meet the needs of both staff and organisation. We have developed a People Management Framework that aligns all HR systems and plans towards the achievement of SCDF's vision, mission, strategic objectives and directions. Fig 4.1.1 explains the People Management framework.
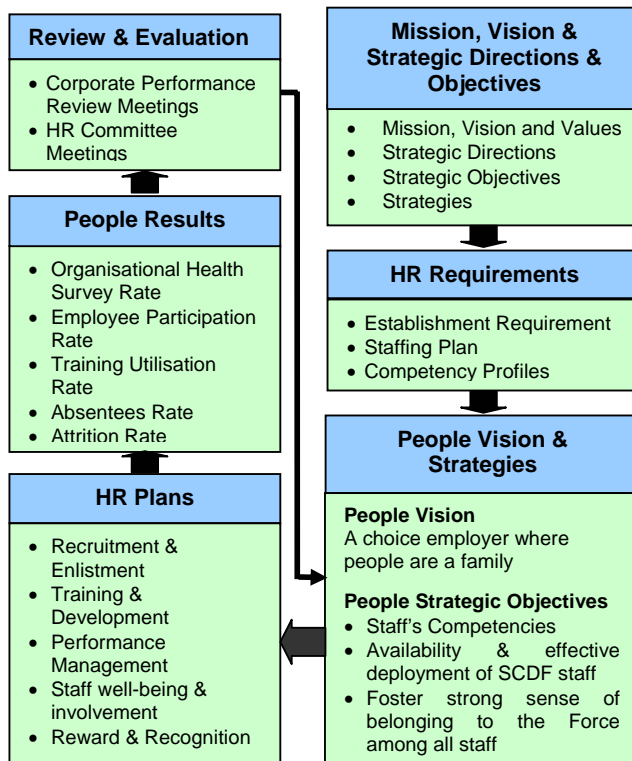
Figure 4.1.1 SCDF's People Management Framework

HR Requirements
Our HR requirements include our organisation establishment, competency profiles of our jobs and staffing plan. The specific manpower requirement is expressed in terms of number, vocation, and the establishment rank for each scheme of service (SO, ERS, Civilian and NSF).

Based on the organisation structure as well as job characteristics, all jobs in the SCDF are classified into functional areas. The Force uses a competency framework to develop the profile for each job. The competency profiles help to identify the training needs of all staff to achieve their desired competencies.

The competency framework, as shown in Fig 4.1.2, covers four core areas namely Job Specific Skills & Knowledge, General Process Skills, Contextual Knowledge & Primary Behaviours
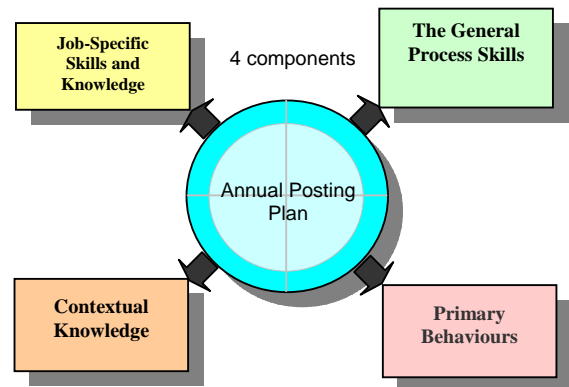

Figure 4.1.2 Competency Framework

Job Specific Skills & Knowledge
These are the skills and knowledge required to perform the specialised tasks, such as fire fighting and rescue, that form the core function involved in this job. It is the know-how of carrying out the job, and is also known as technical competencies.

Contextual Knowledge
Contextual Knowledge is an understanding of where the work fits in the entire business of the organisation. Such awareness is vital, especially if individuals are to exercise their discretion and act to the benefit of the Force in situations that are out-of-the-norm. Job-holders need to be exposed to wider issues at a holistic, organisational level, to gain such contextual knowledge.

General Process Skills
General Process Skills cover crucially needed to manage work, one-self and also others. This

category would include skills in the areas of leadership qualities, problem solving, time management, interpersonal communication and negotiation skills, for example.

Primary Behaviours
Primary Behaviours are a very special aspect of personal capability. These are personal characteristics associated with excellence, such as integrity, team spirit, achievement motivation and imagination. These traits complement the Job Specific Skills, General Process Skills and Contextual Knowledge which represent the necessary conditions for adequate performance. The possession of these primary behaviours by the job holders is an indication of their future potential.

Our People Vision – "A Choice Employer"
Our "People Vision" is to make the SCDF a choice employer where everyone in the organisation is part of the family. Essentially, it means being able to provide our people with a fulfilling work environment that is balanced with their family and social life. Being a Choice Employer will enable the SCDF to recruit and retain the right talents, which will in turn help us realise our corporate vision of being a world-class organisation.

Our People Strategic Objectives
A set of people-strategic objectives guides us to meet the HR requirements as well as to support the People Vision as follows:

- To ensure that SCDF Staff possess the necessary competencies to support the Force's mission and vision

- To ensure the availability and effective deployment of staff

- To promote, facilitate and enhance a healthy and positive working environment and foster a sense of belonging to SCDF

SCDF's HR Plans
The people management strategies are implemented through the key HR plans as follows:

1. Recruitment and Enlistment
   The recruitment targets are set at the beginning of the year, and take into consideration the projected growth in establishment and attrition trends.

2. Training and Development
Training needs for all staff are identified based on the competency framework, and comprehensive foundation training is provided for our staff. Besides training, a comprehensive system of posting

planning is in place to develop our staff to their fullest potential.

3. Performance Management
A robust performance management system is in place to facilitate open communication between supervisors and staff. The system requires supervisors at all levels to set work targets for their subordinates, ensure their development on the job, provides regular feedback as well as to understand the latter's career aspirations.

4. Staff Well-Being
The concern for the well-being of our staff comes from the belief in the creativity and ability of our staff, and in giving them the space they need to develop and prove themselves. A variety of work-life balance programmes are available to help our people manage their work responsibilities and find a balance with their family life as well as personal and social lifestyles apart from the workplace.

5. Reward and Recognition
We place great emphasis on rewards and recognition to inculcate the right values and reinforce positive behaviours in the Force. Rewards such as the Pride and Care Awards and Service Excellence Awards are given out regularly to forge a desired set of behaviour and culture in our organisation. The SCDF also adopts a performance-driven wage system to reward staff who have exceeded their performance expectations.

4.1b How does the organisation implements and reviews its human resource plans?

HR Plan Implementation
The HR Committee, led by our Dy Comr, is overall responsible for managing and developing people in the SCDF. The formulation, implementation and review of HR plans are carried out by this committee. Key members of this committee include Dir Manpower Department, Dir National Service Personnel Department, Dir Training Department and Dir Planning Department.

HR Plans Review
The HR Committee reviews the HR Plans quarterly to ensure that they are relevant to the strategic objectives. Taken into consideration would be changes in the operating environment, new threats, as well as scenarios at the MHA and national levels. It uses people results (training utilisation rate, attrition rate, etc) monitored through the Balanced Scorecard to review the impact of the HR plans on the SCDF's corporate objectives. It also uses the

OHS (Organisational Health Survey) to gather opinions from the employees and to gauge the effectiveness of the plans.

4.2 EMPLOYEE INVOLVEMENT AND COMMITTMENT

4.2a. The strategies adopted and the mechanism available to encourage employee involvement and commitment in teamwork, innovation and the achievement of organisation goals and objectives.

Our Employee Involvement Strategy

To cultivate a sense of ownership, we have put in place our strategy designed to foster commitment and involvement, and improve organisational performance. Our employment involvement strategy, which is "To promote, facilitate and enhance a positive working environment and foster a strong sense of belonging to the Force among all staff" is manifested through a host of mechanisms, as shown in Fig 4.2.1.

By implementing these programmes successfully, we have been able to achieve the following benefits:

- Encourage teamwork
- Promote innovation
- Achieve strategic goals
- Promote staff well-being and Enhanced Sense of Belonging

Promote Innovation	Encourage Teamwork
• My Idea Bank (SSS) • Work Improvement Team • SCDF Innoventure Scheme	• Section Concept • Talent Management Scheme • SCDF Project Study Group • Organisation Review

Promote Staff Well-Being and Enhanced Sense of Belonging	Achieving Strategic Goals
• Sports Activities • Community Service • SCDF Combo-Band • Work-life Balance • Career Counselling • Para-Counselling	• Community of Practices • Corporate Retreat • Workplan Seminar • PRIDE & CARE Day • Home Team Activities • After Action Review

Figure 4.2.1 Employee Involvement Mechanisms

SPICE Programme

To encourage staff at all levels to participate in employee involvement activities, a Staff Participating In Co-Employment Programme (SPICE) was conceived in 2003 to provide a structured framework and bring under-one-roof the variety of activities already available in the Force. The term SPICE connotes extra interest, liveliness and excitement. We believe that our people can add more flavour to their work with SPICE as they participate in sporting, social or cultural activities.

SPICE activities are designed to foster teamwork and promote mass participation. By joining SPICE, our staff can adopt a balanced perspective in work – one that values both operational success as well as personal fulfilment. This is one of the means to help us attract and retain the right people, which in turn enables the Force to better overcome its challenges.

4.2b The process of implementation of mechanism for employee involvement and commitment, and the review of their effectiveness.

The HR Committee oversees the implementation and review of the various employee involvement mechanisms. The committee decides on the strategy to involve the employees. It also appoints Departments (called "champions") to lead the various employee-engagement mechanisms. The committee meets quarterly to review the progress and effectiveness of the programmes that are being implemented. The implementation and review process is shown in Figure 4.2.2.
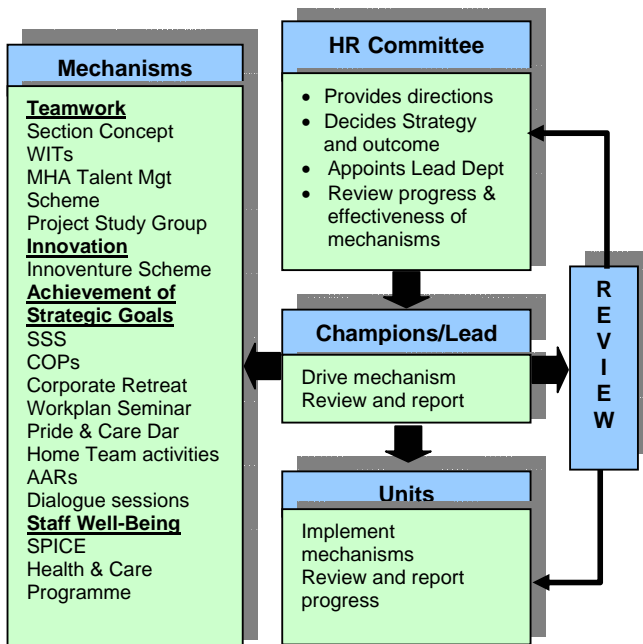
Mechanisms
Teamwork Section Concept WITs MHA Talent Mgt Scheme Project Study Group **Innovation** Innoventure Scheme **Achievement of Strategic Goals** SSS COPs Corporate Retreat Workplan Seminar Pride & Care Dar Home Team activities AARs Dialogue sessions **Staff Well-Being** SPICE Health & Care Programme

HR Committee
- Provides directions
- Decides Strategy and outcome
- Appoints Lead Dept
- Review progress & effectiveness of mechanisms

Champions/Lead
Drive mechanism
Review and report

Units
Implement mechanisms
Review and report progress

R E V I E W

Figure 4.2.2 Employee Involvement Process

Review of Effectiveness of employee involvement mechanisms

The effectiveness of these mechanisms is reviewed through the following means:

Use of KPIs

Performance indicators such as participation rate, number of projects completed, implementation rate, and cost savings are used to measure success of employee involvement mechanisms.

Results of Organisational Health Survey (OHS)

In addition, the OHS is used to gauge the employees' willingness to be involved in the Force. For example, questions such as "I am satisfied with my involvement in decisions that affect my work" provide useful indicators to gauge the effectiveness of our employee involvement strategies. After the OHS, action plans are formulated to address the gaps that are identified.

Feedback from Dialogue Session

Within the SCDF, a learning culture, with the emphasis on building a shared vision, has made a major impact to encourage the involvement of individual employees. As part of the visioning process, the Senior Management visits the ground units regularly for dialogue sessions with the personnel. They engage staff at the frontlines personally and listen to concerns that are raised. Through face-to-face interactions with the SM, frontline officers are given opportunities to voice their opinions and be involved in decisions that affect them. We use this platform to complement the OHS by further engaging our staff in dialogue to

ascertain the root causes of certain issues raised via the OHS.

4.2c How the organisation evaluates and improves its overall employee involvement process

The HR Committee provides the overall framework for employee involvement, and meets quarterly to evaluate the effectiveness of the entire involvement process. The birth of the SPICE programme clearly illustrates the "fruits" of this review process. The Staff Well-Being Sub-Committee highlighted the need for an integrated framework to manage the overall staff-involvement activities. Under the previous arrangement, such activities tend to be ad-hoc and loosely organised. Not all staff were fully aware of the range of programmes available; and how to obtain more information on their area of interest. As a result many of these activities had limited participants and few permanent members. The review highlighted the need for a structured process to be put in place to manage these programmes, and hence, the **SPICE** programme and a corresponding management framework were introduced. A recruitment blitz was conducted where personnel were given an overview of the programmes available. This allowed them to 'mix and match' their interest to the various categories and to sign up for the activities accordingly. A one-stop SPICE webpage was also made available in the iKnow portal where staff can sign up for any activity with the" click" of the mouse. Since its launch, the SPICE programme has received very encouraging support and positive feedback from our staff.

4.3 EMPLOYEE EDUCATION, TRAINING AND DEVELOPMENT

4.3a. How the organisation identifies the education, training and development needs for all employees to support its objectives and goals.

As an emergency services provider, responsible to protect and save lives, we in the SCDF cannot stand for any service failure at the frontline because lives are at stake. Training is therefore taken very seriously in the SCDF. Our training focuses on equipping our officers with skills and knowledge to meet the challenges at the operational frontlines. Qualities such as leadership abilities, a clear head in times of crisis, as well as a heart that burns with the desire to help turn disasters around, are instrumental in the success of our operations.

Our Competency-Based Training Approach

Competency-based training is used to identify training needs, monitor the implementation of training plans and to review their effectiveness as shown in Figure 4.3.1. Such training directly supports SCDF's strategic objectives. Based on the organisational structure, the Planning Department draws up a competency profile that spells out the skills and knowledge required for each job in terms of its specific functional areas. The competency requirements are revised based on Training Needs Analysis.

Training Needs Analysis of Our Staff

As part of the corporate planning process, the Training Department carries out the training need analysis between Oct to Jan each year. At the macro level, the analysis looks at the challenges and threats confronting the SCDF, and identifies the competencies that are needed to continue fulfilling our mission. At the micro level, it identifies the individual staff needs in order to enhance effectiveness and performance. Based on training needs, Individual Learning Plans (ILP) are formulated for all regular officers for each workyear.

Total Learning Plan

Based on the Training Needs Analysis, a Total Training Plan (TLP) is then formulated. It sets the training direction for the new workyear, allocates the budget, the number of training places and then deploys performance indicators to measure the effectiveness of the training programmes.
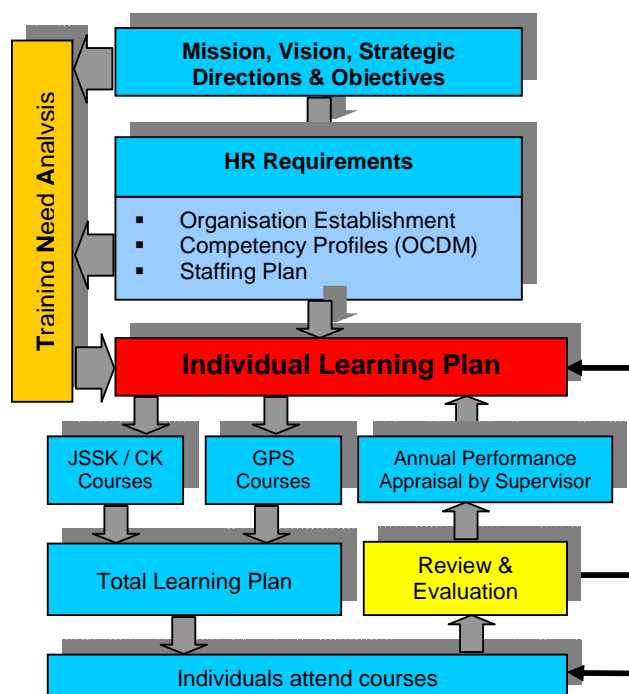
Figure 4.3.1 Identifying Staff Training and Development System

Officer Core Development Matrix (OCDM)

To equip officers with job-specific skills and knowledge (JSSK) and contextual knowledge (CK), the SCDF has developed an Officer Core Development Matrix (OCDM). This OCDM helps to identify the courses necessary to meet the competency requirements of each appointment in the Force. It links career development to training needs.

4.3b. How education and training is delivered and how education and training effectiveness is reviewed.

Based on the approved OCDM and in consultation with the Directors as well as the Unit Commanders, Manpower Department nominates officers for the necessary job-specific skills knowledge and contextual knowledge courses. The nomination considers the career development plan of the staff, and also succession plans that are in place. Education and training are anchored to the competency framework, and the requisite training is delivered based on competency requirements. Officers in SCDF can be sent for training courses conducted either in CDA, BRTC or by external training providers.

Staff Forums

Besides formal courses, we also have a wide range of training activities lined up for our staff. For example, we organise a Learning Day each quarter where internal and external speakers are invited to give talks or to share their expertise. We also hold quarterly General Staff Briefings to update staff on new policies and latest developments. As part of ongoing efforts to validate their skills and CD knowledge, all regular staff need to attend refresher workshops that are catered for the different target groups.

Review of training effectiveness

We measure training effectiveness in 3 main ways:

1. Use of Kirkpatrick's Model
   The SCDF adopts the Kirkpatrick's model to measure training effectiveness using indicators such as course evaluation, learning contract, proficiency tests results, and actual operational performance.

2. Training Places Utilisation Rate
   The Manpower Department monitors the attendance of the staff sent for training. The utilisation rate of training places is managed as a key performance indicator in the Balanced Scorecard to ensure that there is no wastage.

3. Conduct of Operational Exercises

In line with the "Train as we Operate" concept, operational scenario-based exercises are carried out at different levels (Fire Station level, Division levels, etc) throughout the year to test the readiness of the units. During such exercises, controllers are assigned to evaluate the exercises and review whether objectives were met. Such exercises and their corresponding evaluation are excellent means to test and validate the competencies and skills of our frontliners.

4.3c. How does the organisation evaluate and improve its overall employee education, training and developmental process.

The HR Committee evaluates and improves the overall employee education, training and developmental process based on feedback gathered from trainees and training results. At the end of each training session, trainees are requested to provide feedback and comments on the training they have received, covering areas like training syllabus, content relevancy, training facilities and effectiveness of training instructors in delivering the lessons. Training feedback is collated and at the end of the workyear, a TLP Effectiveness Report is prepared to review the effectiveness of the Total Learning Plan. The report establishes improvement trends, reviews whether the plan has achieved the strategic objectives and also recommends improvements to the plan in the following year.

4.4 EMPLOYEE HEALTH AND SATISFACTION

4.4a. How the organisation develops a work environment that enhances employee health and satisfaction, and promotes a harmonious relationship between management and unions/employees.

To fulfill the mission of ensuring a safe and secure Singapore, our frontline units operate 24 hours a day all year long. Given the rigorous requirements, there is need to create a safe and healthy work environment to ensure that our officers are in the best state to respond to emergencies. Figure 4.4.1 shows the framework that SCDF has adopted to create an environment that enhances employee health and satisfaction:
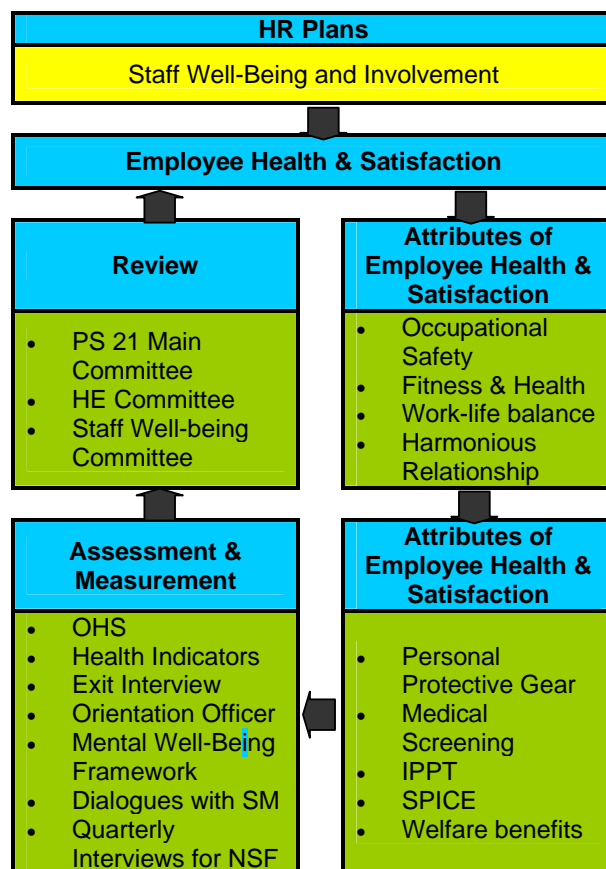
Figure 4.4.1 Employee Health & Satisfaction Enhancement Process

Safeguarding Our People's Health
We have instituted several measures to safeguard our staff's health. These include:

1. Occupational Safety
To ensure safety during training and operations, SCDF has developed a Training Safety Regulations Manual (TSRM) that covers all operations, training and exercises conducted within the Force and applies to all SCDF staff and external participants. Safety is enforced at several levels. The Commander of the units undergoing training has the responsibility to ensure the safety for his personnel, such as the donning of appropriate gear like gloves and helmets. In all operations and exercises, commanders, instructors and controllers who are involved also double-up as safety officers and help to ensure that safety rules and regulations are complied with. To reinforce a culture of safety, a safety pledge is recited prior to each training session. Audits are also conducted to ensure that the stipulated TSR are adhered to during training as well as station drills.

2. Keeping Staff Fit and Healthy

As a Life-Saving Force, our staff need to keep at an optimum level of fitness in order to carry out their range of duties effectively. To help officers stay healthy and fit, sports and fitness activities are organised for all personnel at the Unit level throughout the year. Additionally, all uniformed officers are also required to take IPPT (Individual Physical Fitness Proficiency Test) every year. It is commonplace to see groups of colleagues jogging after work in the vicinity of the workplace to train for the IPPT.There are also anecdotes of staff that bring their whole family out to exercise during the weekends, just to prepare for IPPT.

3. Work-Life Balance

Various frameworks, family-friendly workplace practices and welfare schemes have been put in place to ensure that work in the SCDF does not become too overwhelming. Most importantly, it also leaves officers with more time for their families and social lives. Some of these efforts include the Family Life Programme, Corporate Friendship Programme and the SCDF Health and Care Programme

4. Sustaining a Harmonious Relationship

Under the Trade Union Act (Government Officers — Exemption Notification), uniformed officers from the SCDF cannot join, or form, trade unions. Nevertheless, great effort has been taken to develop a harmonious relationship between management and staff. Frequent dialogues session with the SM, where work-related issues are openly discussed, helps create an atmosphere of trust and understanding. Relationships based on mutual trust secures the staff's continued commitment to the SCDF, encouraging them to value-add to their work and improve the overall effectiveness of our emergency services.

Promoting Workplace Health

As a testimony of our commitment to developing a corporate culture that promotes health at the workplace, we awarded the Singapore H.E.A.L.T.H Gold Award for five years in a row (2000 - 2004) and the Platinum Award in 2005, by the Health Promotion Board (HPB).

4.4b How the organisation measures and assesses employee satisfaction.

As employee satisfaction is of principal concern to SCDF, we constantly assess this aspect to ensure that our people are happy to work in the Force. We use a variety of measures to gauge general sentiments as well as those of specific staff groups:

1. OHS Survey Results

The OHS survey involves all staff groups in the Force. It provides a means of measuring employee satisfaction levels, and allows for the tracking of improvements made. Survey results are compared against industry norms, and such benchmarking efforts enable us to profile strengths and weaknesses and target specific areas for improvement.

2. Health Indicators

Besides the OHS, health indicators such as MC rates, resignation trends and fitness levels are also monitored as performance indicators; these are tracked quarterly in the CPRM.

3. Mental Well-being & Resilience Framework

We also have in place several psychosocial systems such as the Paracounsellors' Scheme, CARE (Caring Action in Response to an Emergency) Management System and a helpline service to take care of the mental well-being and resilience of our staff. Through these measures, we can assess and ensure that our staff are able to maintain a state of vigilance in today's security environment.

4. Exit Interviews

The SCDF also conducts exit interviews for staff who are resigning. This is carried out to identify problem areas that may have led to the resignation. The findings are documented and the data analysed for patterns and trends..

5. Specific Staff Group Dialogues

The SCDF uses dialogues as a means to build personal commitment as well as to assess employee satisfaction levels. For example, the Senior Management Dialogues are conducted once every 6 months at all the units. During these sessions, the SM is able to hear first-hand the views and concerns of frontline staff. The secretariats of these dialogue sessions will monitor the issues raised and ensure that action is taken to address the concerns.

4.4c How the organisation evaluates and improves its approach to enhancing employee health and satisfaction.

Similar to the employee involvement process, employee health and satisfaction levels are monitored via the Staff Well-Being Sub-Committee, which in turn reports to the HR Committee. The Staff Well-Being Sub-Committee tracks the various health and staff well-being KPIs (Body Mass Index levels, IPPT passing rate, etc) to track and ensure their effectiveness. The committee also gathers

input from the OHS to validate areas for improvements and to formulate post-OHS action plans to close the gaps identified. The post-**OHS action plans** are presented to the HR Committee for approval and implementation.

1. Staff Appraisal Report
2. Performance Driven Reward System
3. Reward and Recognition Scheme

4.5 EMPLOYEE PERFORMANCE AND RECOGNITION

4.5b. How the organisation evaluates and improves its performance and recognition systems

4.5a. How the organisation's employee performance and recognition systems support high performance, innovative and creative behaviours and achievement of objectives and goals

As part of the Civil Service, the SCDF complies with the policies set by the Public Service Division for awarding promotions, merit-based increments and performance bonuses. The HR Committee oversees the interpretation and implementation of these policies and systems. Some of the initiatives of review are listed here:

1. Review of Salary Framework
2. Performance Appraisal Feedback
3. Review of Skill Allowance

Our Performance Management System
As our people are our strength, and because we aspire to be a choice employer, a fair and consistent performance and recognition system is needed to develop people to their fullest potential and, most importantly, to ensure that deserving officers are given their due rewards. We have put in place a Performance Management System which comprises the following components:

Monetary Award	Reward and Recognition in SCDF	Non-Monetary Award
• Promotion • Performance Bonus • Merit-based Increment • IPPT Monetary Award		• National Day Award • Minister's Award • Commissioner's Commendation • Home Team Achievement Award • Best Station Award • PRIDE & CARE Award • Service Excellence Award

Figure 4.5.1: SCDF's Reward and Recognition Framework

5   PROCESSES

5.1 INNOVATION PROCESSES

5.1a How the organisation acquires, evaluates and implements creative ideas from all sources.

Our Innovation Intent

Innovation is one of the main vehicles priming SCDF towards achieving our strategic objectives. Our innovation drive focuses on key process areas with the intention of making quantum leaps in these processes. Our innovation culture is imbedded in the basic philosophy that '*everyone has the potential to innovate*'. Ideas come from individuals and teams from across all levels of the organisation. Essentially, we treat all these ideas as having the potential to make a positive difference for the Force.

Our Innovation Framework

In SCDF, innovation is driven through two broad frameworks: a structured three-stage Innovation Process reinforced by four innovation enablers – the ECCI (see Figure 5.1.1).
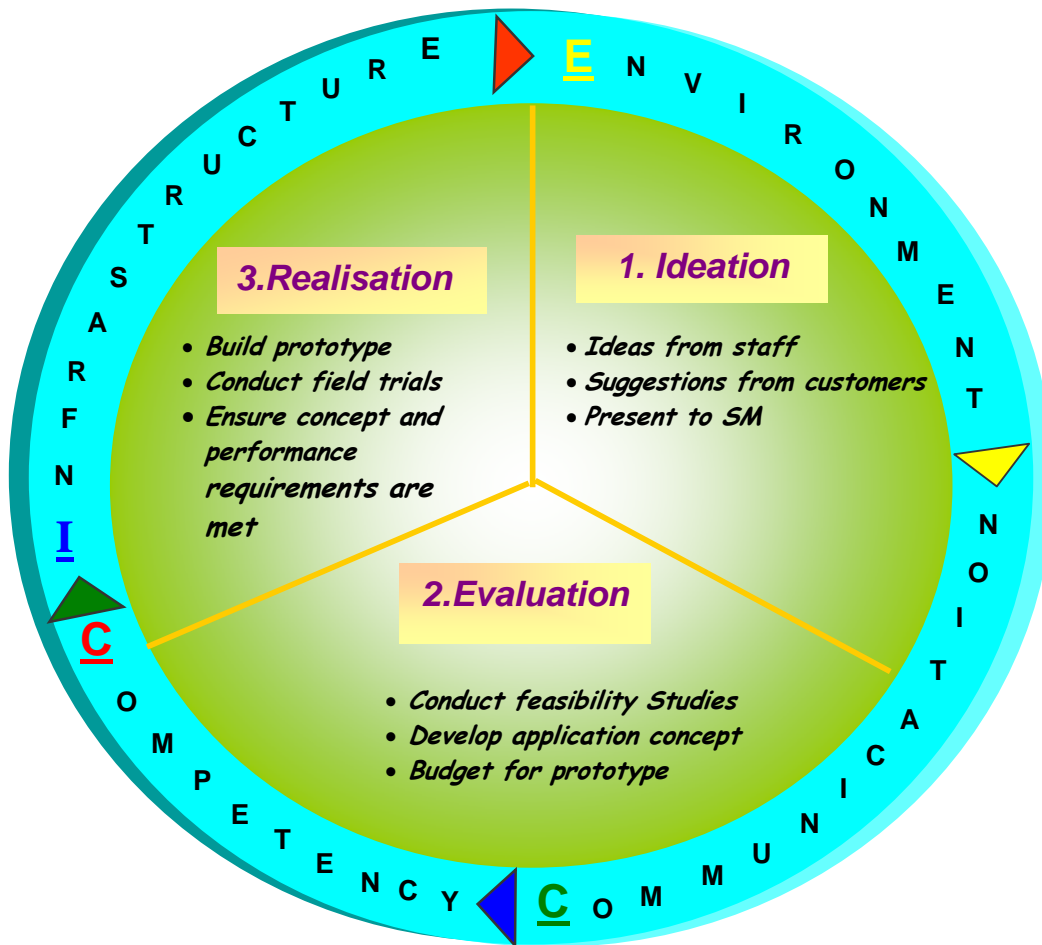
Figure 5.1.1 SCDF's Innovation Process

Inner wheel content:

3. Realisation
- Build prototype
- Conduct field trials
- Ensure concept and performance requirements are met

1. Ideation
- Ideas from staff
- Suggestions from customers
- Present to SM

2. Evaluation
- Conduct feasibility Studies
- Develop application concept
- Budget for prototype

Outer ring: ENVIRONMENT, COMMUNICATION, COMPETENCY, INFRASTRUCTURE, ECCI

Our 3-Stage Innovation Process

1.*Ideation Stage*
Innovative ideas from staff are harvested through the SSS (captured in the "*My Idea Bank*" or MIB system on the iKnow portal), WITs, visits by the SM as well as dialogue sessions. Suggestions from our customers are also solicited via feedback and dialogue sessions. Facilitated by the Chief Innovation Officer, innovative ideas are presented to the Senior Management. If the ideas are found to possess great potential to add or create value in our processes or operations, a project team is then appointed to conduct a feasibility study.

2. *Evaluation Stage*
At the evaluation stage, the Chief Innovation Officer facilitates studies to ensure that the innovative idea is applicable and meets operational needs. The team then develops the application concept and establishes the performance requirements for prototyping. There are frequent discussions with the Senior Management to garner feedback on the proposed prototype. At the same time, a preliminary budget for prototyping is also computed.

3. *Realisation Stage*
The team will source for the requisite expertise and resources to bring the idea into realisation. A prototype isl be built and tested to ensure that the concept and performance requirements are met. Following that, the project team monitors the performance of the prototype through rigorous trials to validate the entire project.

Our Innovation Enablers
Our innovation culture is rooted in four innovation enablers: Environment, Communication, Competency and Infrastructure, or also known as ECCI.(see Table 5.1.1.). Various mechanisms or 'triggers' have been developed with clear objectives in order to reinforce innovation in the organisation.

1. *Environment*
In creating an environment for developing innovation capacity and capability in the SCDF, we have established an **InnoventureAward** scheme. This is to recognise innovation efforts and breakthrough projects at the individual, team and the organisation levels. We have also reserved S$100,000 in the **InnoventureFund** to provide low-risk funding for trial tests as well as the prototyping of innovation projects. The **Innovation COP** (Community of Practice), which is a forum comprising the Unit and Department Innoventurers[3] along with the Chief Innovation Officer, is facilitated by Director SQD

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[3] Officers appointed by Senior Management to spearhead innovation in the Units or Depts

(Service Quality Department). This COP meets bi-monthly to share ideas on new innovations and to provide updates on the progress of on-going projects and initiatives. The COP is also involved in the planning, developing, implementing and reviewing of the innovation projects and scheme.

2. *Communication*
The innovation strategy is cascaded from two levels. Starting at the top, the Senior Management is involved in officiating the opening of the annual Innovation Fair (Innovation @ Work) where the latest innovations and capabilities are showcased. At the next level, we also use the online InnoventureSpace (found on the iKnow 'intranet' portal, and includes a variety of creative tools and techniques) and in-house publications like R995 to disseminate news and information on innovation to all our staff.

3. *Competency*
To promote active participation and experimentation of innovative ideas, our Chief Innovation Officer plans and conducts training courses related to innovation for the Innoventurers, WITs leaders and facilitators. External training is given to Innoventurers and project team leaders to equip them with the latest and most relevant knowledge to further boost their capacity to innovate. For a wider exposure, we also visit our industrial partners to be updated on the latest developments in the fire-fighting and related industries.

4. *Infrastructure*
We have established a purpose-built facility in HQ SCDF, called the InnoventureLand that allows officers to meet, hold discussions and exchange ideas within a cosy and inspirational environment. Available in the InnoventureLand is a wide variety of tools to stimulate creative thinking by the officers. We have also instituted an innovation framework, which sets the pace for innovation culture building in

the SCDF by defining the process by which innovation is driven in the organisation.

Innovating for Operational Excellence
In the SCDF, innovation is integral to operational efficiency and excellence. Through the years, many innovation projects have come about that added to our emergency response capabilities, and these are projects that even other emergency services talk about. Many of our innovation projects have also been presented national-level awards. Examples are the Water-Mist Fire-Fighting technology (TEC Award and Eureka Award), Water-jet Cutting technology (TEC Award) and the Mobile Scrubber project (Enterprising Agency Award).

5.1b Describe how the organisation harvests creative ideas and the delivery systems are designed and introduced. Include how employees, customers and suppliers/partners are involved in the design process.

We adopt a five-step process to design, develop and implement major products and services. This is illustrated in Figure 5.1.3.
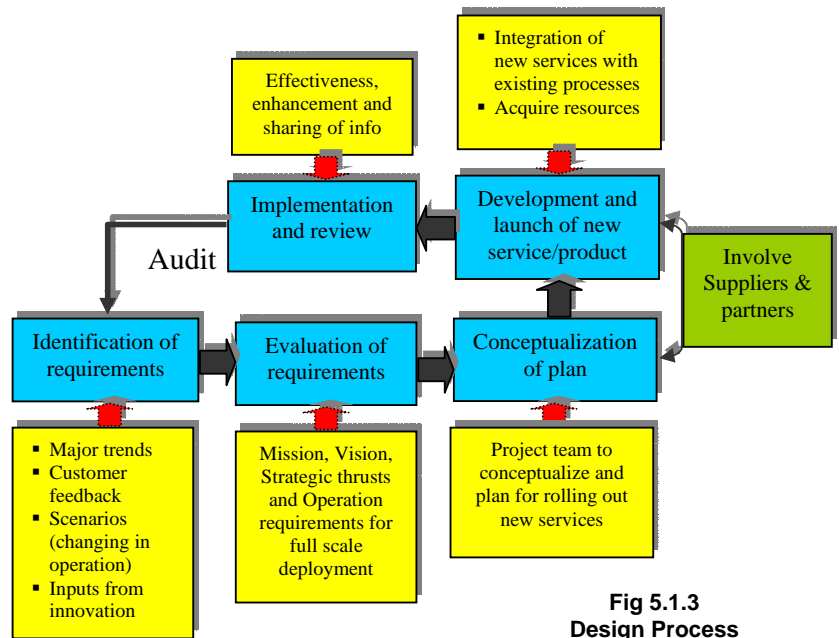
**Fig 5.1.3
Design Process**

Step 1: Identification of Requirements
The design process begins with an environmental scan, which is in line with the Corporate Planning Process. Notable major trends, relevant customer feedback and specific requirements (based on the project's nature) form the basis of the design.

Step 2: Evaluation of Requirements
Once the requirements are identified, they will be validated for ground deployment purposes, in the light of our Force vision, mission, strategic thrusts and operational requirements. For example, the Sarin gas attack in Japan in Mar 1995, which resulted in thousands of casualties, sparked off a new idea for SCDF to acquire capabilities to conduct mass decontamination of affected persons.

Step 3: Conceptualisation of plan
A project manager is appointed by Senior Management to design the new product/service. Team members are selected based on their relevant expertise and functions. Facilitated by the Chief Innovation Officer, the project team and suppliers/partners are involved in coming up with design specifications and to develop the action plan to roll out the new service. At the end of this stage, a proposal is then presented to the Senior Management to effect the implementation of the project.

Step 4: Development and launch of new Service
With approval, the project team proceeds to design and develop the new service/product.

Step 5: Implementation and Review
Once the service/product is ready, exercises are conducted to ensure that the frontline officers are competent in handling it. After the exercise, an After-Action-Review (AAR) is conducted to verify the level of effectiveness of the new service/product. Follow-up reference materials are then developed to help the frontline units internalise the new procedures. Audits are also conducted by the project team to ensure that the new service/product is performing to expectations.

5.1c How the innovation and design processes are evaluated and improved.

Innovation Process Review
In SCDF, our Innovation COP meets on a bi-monthly basis to share and discuss ideas, as well as to provide updates on projects with great potential. The monitoring of the project development progress is undertaken at the monthly PS 21 Main Committee meeting attended by the Senior Management. With constant feedback and comments from the Senior Management and the Innoventurers, the Innovation COP, facilitated by Director SQD is able to evaluate and sharpen the innovation process, and ensure that progress is made in line with the annual workplan.

Design Process Review
The Design Process, which was institutionalised along with the Innovation Process, involves using customer feedback and inputs through scenario planning to identify operational requirements. Unlike traditional development projects which focus on acquiring hardware alone, the new design process strikes a balance between building hardware and developing capabilities to serve the public.

5.2 PROCESS MANAGEMENT AND IMPROVEMENT

5.2a How the organisation's key processes for production and delivery of its products and services (including key support processes) are managed to maintain process performance and to ensure products and services meet customer and operational requirements.

SCDF's Key Processes Management Framework
In SCDF, key processes are developed with the main aim of meeting the requirements of our customers and are streamlined to customer needs. Our four key processes are: Emergency Rescue Services, Fire Safety, Civil Protection and Community Engagement.

The key processes interface directly with our customers, and are delivered by our 14 Fire Stations, four CD Divisions, two Training Camps and the HQ SCDF. These processes are managed systematically including the weekly / monthly meetings with Comr (corporate level) and the unit commanders (unit level). These key processes are derived from our operational requirements starting from corporate level (strategic planning) down to sub-unit level (day-to-day operation). Our Key Processes Management Framework is shown in Table 5.2.1.

The performance indicators linked to the key processes are identified and tracked to ensure that job targets, requirements and service standards are not compromised. When gaps or areas of non-performances are surfaced, immediate action is initiated to study the situation and recommend rectifications. The best option is proposed for Senior Management's decision.
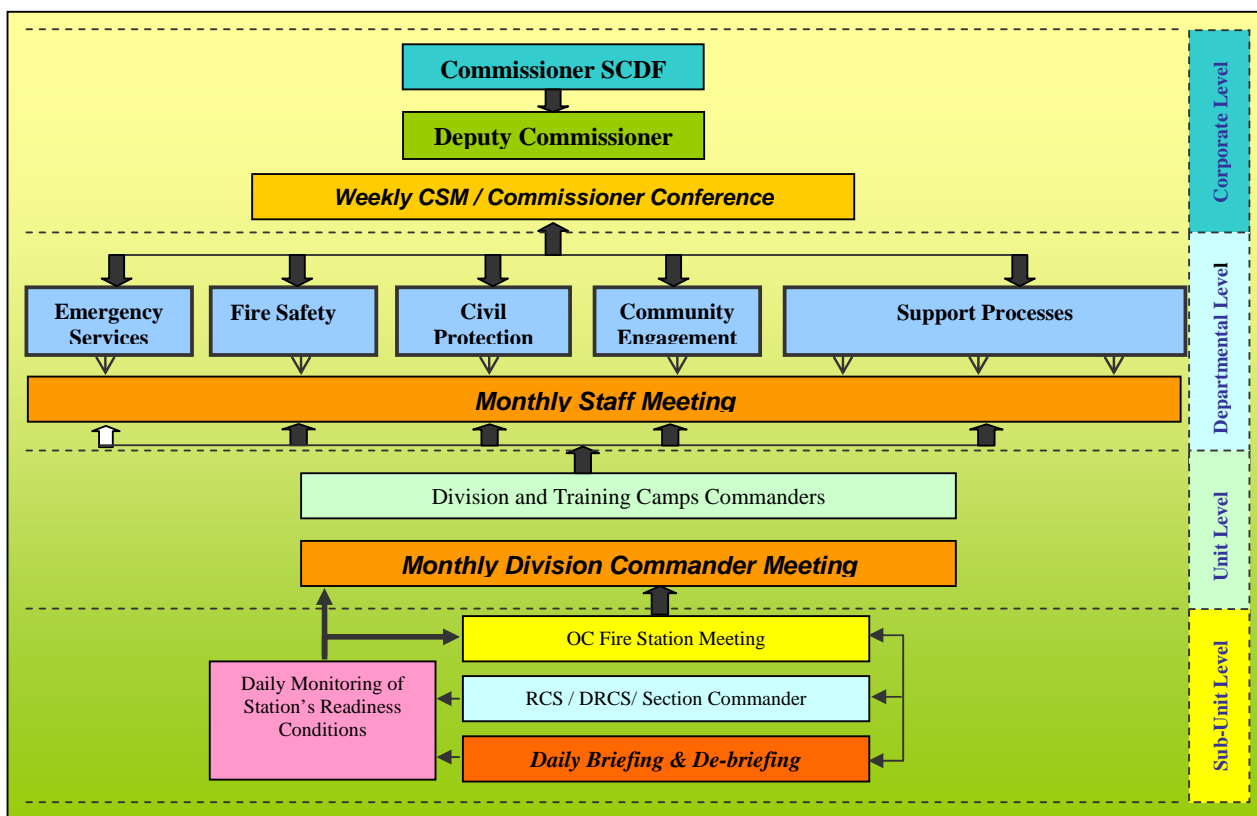
Table 5.2.1 SCDF's Key Processes Management Framework

5.2b Include a description of the processes and their key measurements and requirements.

Key Measurements and requirements
Our Key Processes and their respective Key Performance Indicators are shown in Table 5.2.2

Key Processes (Owner)	Key Performance Indicators	Indicated Targets
Emergency Services • Rescue services • fire-fighting services • special services • ambulance services	• No. of fatalities per 100,000 population • Proportion of fire put-out within 1 hr • Activation time 1 min • Answer 995 calls within 10 sec • Fire engines, fire bikes and special appliances arrive at the location within 8 min • Ambulance arrive at location within 11 min	<0.14 95% 99% 90% 82% 82%
Fire Safety • fire safety enforcement • fire safety plans consultation and approval • Petroleum storage and transport licensing	• % of non-compliance to fire safety regulations • % of building with trained FSM • No. of enforcement checks conducted • No. of abatement notices per 100 enforcement checks	<3% 95% 8500 <22%
Civil Protection • Public Warning System • Public shelters	• % of population covered by PWS • % of operationally ready PWS sirens • % of operationally ready public shelters	97% 98% 90%
Community Engagement • community engagement programmes • emergency preparedness education and training	• % of targeted population trained • community engagement programmes conducted	94% 280

Table 5.2.2 SCDF's Key Processes' Requirements and Measurements

5.2c How the organisation reviews and improves its key processes to achieve better process performance and improvement to products and services.

Annually, our key processes are reviewed by the respective process owners and where necessary, changes are proposed. SCDF's Planning Department evaluates these proposals and ensures their alignment with Force objectives before seeking Comr's approval. Once approved, the changes to the key processes are then updated into the workplan, as part of the ongoing review and improvement process. Sometimes, process reviews may also be specifically requested by the Senior Management.

An illustration of our Fire Safety process review is shown here: The review of the Plans Approval Process led to the introduction of the Self-Regulation System in 1998, and more recently, the Performance-Based System in 2004. While the Self-Regulation System has shortened the plans approval period from months to just two working days, the Performance-Based System offers greater flexibility to building designers. The latter approach specifies the desired fire-safety objectives but leaves it to the industry to propose their own appropriate fire-safety engineering solutions to comply with those objectives. This allows room for flexible and creative designs for the fire protection system in the building without compromising fire-safety standards. Building design costs can also be lowered as a result.

5.3 SUPPLIER AND PARTNERING PROCESS

5.3a How the organisation identifies and selects its suppliers and partners. Include a description of the key performance requirements for suppliers and/or partners and how the relationship and partnership fit into the overall strategy of the organisation.

We have in place a rigorous supplier rating system to identify and recognise our suppliers. It measures their performance in terms of their grade, delivery timeliness and acceptance rate. This system is part of our ongoing programme to nurture strategic supplier partnerships to enhance our mission and vision.

Identification and Selection of Our Suppliers
Key suppliers of the SCDF include firms that are contractually bound to supply goods and services in support of our emergency services provision and the conduct of training activities. The identification and selection of our suppliers is governed strictly by procedures in the Government Instruction Manual (IM). We use a multi-faceted evaluation approach to assess all the conditions stated in the tender requirements. The suppliers are identified and selected based on the framework illustrated in Figure 5.3.1.
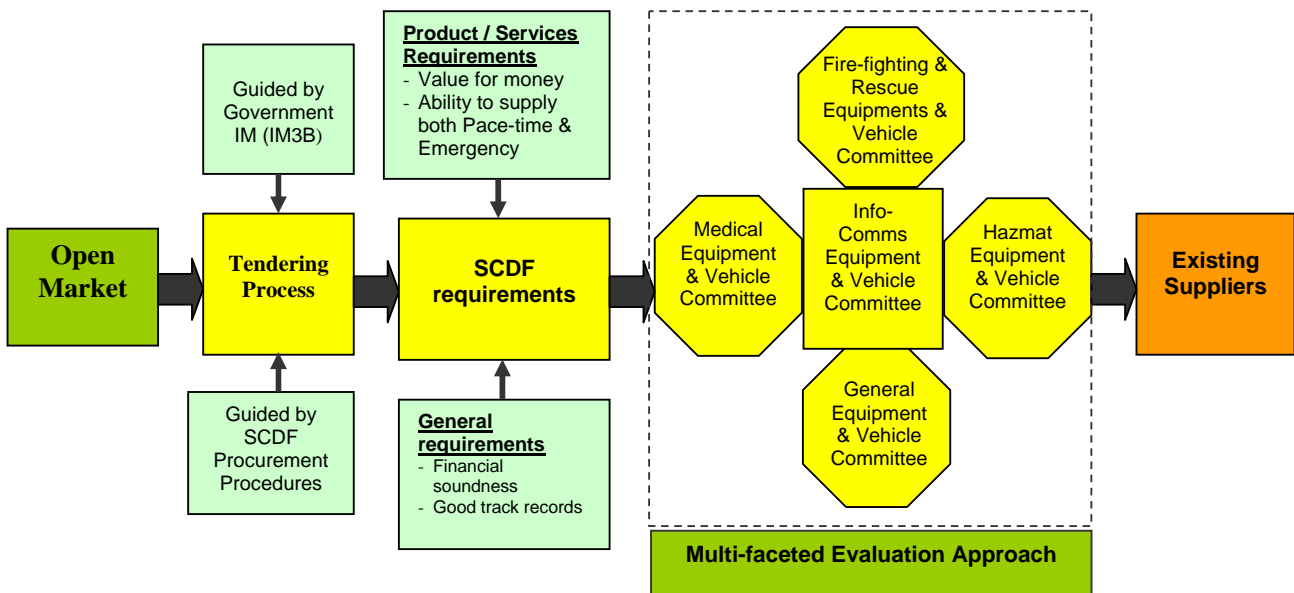
Figure 5.3.1 SCDF's Identification and Selection of Suppliers Framework

Category	Strategic Intent for our partners	Communication Platforms
Government Partners ▪ Home Team Depts ▪ Government & Related Agencies (e.g. SAF, MOH,NEA, HDB) ▪ CD NSmen	▪ Competent in their respective functional areas ▪ Complement SCDF in operations/ achieving of her objectives ▪ Fast response upon service sought / mobilization ▪ Physically & mentally prepared for operations, trainings & exercises.	▪ Dialogue sessions ▪ Meetings ▪ Consultation panel ▪ Joint Operational Exercises
Community Partners ▪ CDECs ▪ CD Volunteers ▪ People's Association ▪ National Fire Prevention Council ▪ Community Development Council	▪ Active involvement in joint projects / activities ▪ Good relations / rapport with the community ▪ Competent in basic CD / Emergency Preparedness / Fire Safety knowledge & skills	▪ Meetings ▪ Emergency preparedness exercises ▪ Training forums
Private Sector Partners ▪ Fire Safety Managers association ▪ Singapore Institute of Architects ▪ Institution of Engineers of Singapore ▪ Association of Consulting Engineers ▪ Singapore Hotel Association	▪ Share expertise knowledge & provide professional timely advice/ services when needed ▪ Fire code development ▪ Improve fire safety requirement	▪ Dialogue Sessions ▪ Meetings ▪ Seminars
Supplier – Partners ▪ 2 potential suppliers have been identified	▪ Maintain a continuous supply of reliable essential goods/services both in peacetime and emergencies through a mutually beneficial relationship.	▪ Project briefing ▪ Design and build product ▪ Launching of product

Table 5.3.2: SCDF's Identification and Selection of Partners Framework

Identification and selection of Our Partners

The basic guiding principle for forging alliances with our partners is to leverage on mutual strengths and expertise to bridge our operational gaps and common goals. In addition, we also aim to gain their commitment and involvement towards civil defence. Our partners are broadly classified into 3 categories and are aligned to our key processes as shown in Table 5.3.2

Key Performance Requirements for Suppliers and Partners

Our suppliers and partners work closely with us to realize our objectives. A set of key requirements have been drawn up for them and these are incorporated into the contractual terms. Further requirements are communicated to them during subsequent meetings and dialogues

> **5.3b   How the organisation communicates and ensures that its requirements are met by suppliers and/or partners and how timely and actionable feedback is provided to suppliers and/or partners.**

Our Communication and involvement with Suppliers and Partners

Performance requirements and communicated to suppliers and partners largely through one or more of the following means:

1. Tender Documents.
2. Discussions during site visits
3. Presentations or demonstration of prototypes
4. Work progress meetings
5. Quarterly dialogue sessions
6. Feedback channels
7. Survey Forms

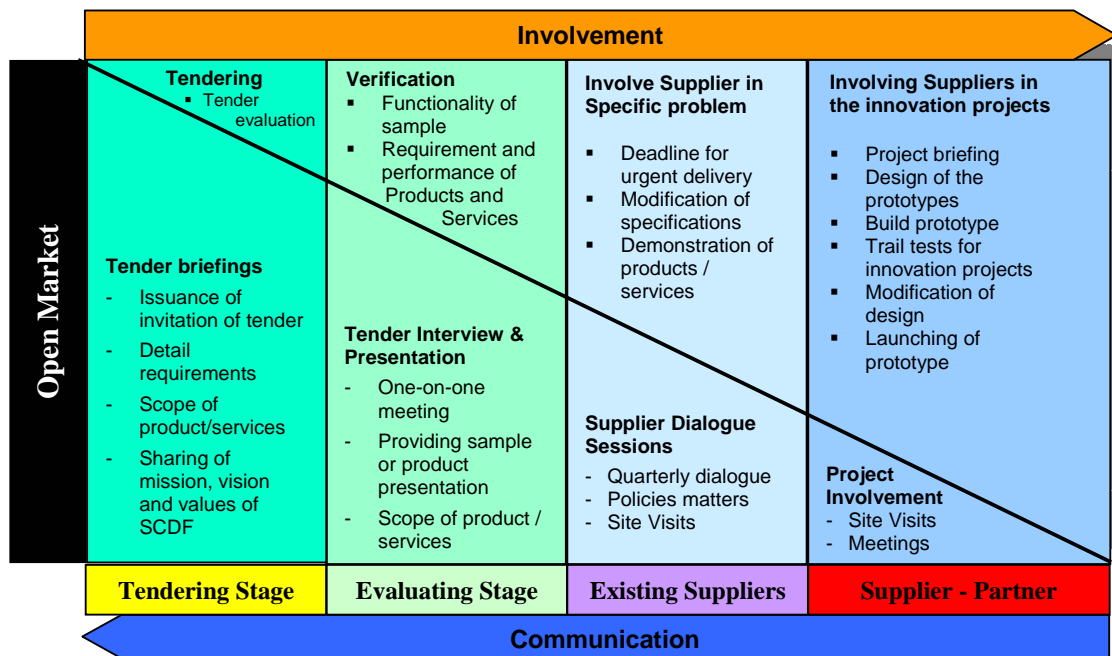Our Supplier Communications and Involvement platform is shown in Figure 5.3.3

Figure 5.3.5 SCDF's Communication and involvement platforms with Suppliers

5.3c   How the organisation works with suppliers and/or partners to understand their needs, and the plans and processes established to help suppliers and/or partners improve their goods and services, as appropriate.

SCDF's Logistics Department has instituted a structured Supplier Partnership Programme (SPP) to manage, nurture and develop partnerships with our suppliers. The SPP enables us to identify a pool of credible and reliable suppliers that can support our day-to-day operations – which is in alignment with our strategy of operational excellence.   SCDF has collaborated with its suppliers to develop many new operational equipment to support fire-fighting and Hazmat operations.

Raising the Supplier profile
As our suppliers are already experts in their own fields when they render their services to the SCDF, we assist them by raising their company profile, as well as to review and improve their work processes and quality standards while they are working on projects with the Force.   For example, Delgro Engineering's partnership with the SCDF to develop the LFAV.

Engaging Government Partners to enhance Operational Excellence
The SCDF has a rigorous system to manage our CDNSmen. They are trained to handle a wide range of situations so as to improve their deployability in today's multi-faceted SCDF operations.   With the setting up of the new SCDF NS ORBAT (Order of Battle); our CDNS units are today leaner and more mobile.   Since 2002, we have been holding mobilisation exercises regularly to gear up their operational readiness.

Engaging Community Partners in Bonding with Community
The SCDF engages its community partners (i.e. the CDECs and CD Volunteers) to help promote civil defence and emergency preparedness at the community level. There are 84 CDECs – one at each constituency – to help raise emergency preparedness levels among residents.   To enhance community vigilance and readiness levels, we have facilitated the community in jointly-developing CSSPs to raise awareness and knowledge on pertinent issues such as dealing with suspicious-looking objects/persons and knowing how to conduct In-Place Protection (IPP) procedures during a chemical incident.

Engaging Private Sector Partners to improve Fire Safety requirements
We engage professional institutions and building practitioners to gather feedback from them. This is to enable us to keep our fire safety requirements relevant and updated to meet the needs of the industry.   Through the Self-Regulation System, the plans approval process has been cut from months (depending on the size of the project) to just two days. This could only have been achieved through greater trust, and by forming very close partnerships with the building practitioners.

6   CUSTOMERS

6.1 CUSTOMER REQUIREMENTS

6.1a How the organisation segments its customers and/or markets and determines current and future customer/market requirements. State the requirements for each segment.

As the Life-Saving Force, the SCDF endeavours in carrying out its duties with PRIDE and CARE. Our service intent springs from a desire to be transparent and accountable for our actions, and is wholly aimed at delighting our customers.

Our Service Intent

"*We are committed to make every customer encounter a delightful experience. Our services are responsive and customers' needs are attended to by competent and caring staff.*"

Our customers are categorised according to their demand for our key services – **Emergency Rescue, Fire Safety, Civil Protection, and Community Engagement.** We have segmented our customers according to these processes:

Provision of Emergency Rescue Services
SCDF provides fire-fighting, rescue as well as emergency ambulance services to ensure that lives and properties of the public are protected and saved in the event of mishaps. Victims of fire and rescue incidents and mishaps, and the patients who require our ambulance service are the key customers that receive emergency services.

Fire Safety and Civil Protection
We are the regulatory body that ensures a fire-safe environment prevails in Singapore for the benefit of the general public. The SCDF also regulates the construction and management of public shelters and the Public Warning System. In an emergency, the SCDF's role is to provide advance warning and adequate protection to the general public. The public-at-large is our customer in fire safety and civil protection.

In the provision of fire safety and civil protection the SCDF needs to enforce regulations through licensing of controlled materials, approval of building plans and by conducting site enforcement checks. Here our customers are the building owners/tenants and professionals in the building industry.

Community Engagement
The SCDF undertakes to train and prepare the population for any eventuality. Towards this end, the promotion and sustenance of active community support and participation in civil defence-related training, exercises and activities takes prominent focus. Our efforts are particularly targeted at residents, workers and student cohorts.

Identifying Customers' Requirements
To rise above the expectations, preferences and needs of our customers, the SCDF works closely with our stakeholders, including our customers. Most importantly, the inputs obtained will serve as a guide to identify customer requirements. The current and future requirements of our customers are identified through the means as described in Figure 6.1.1.
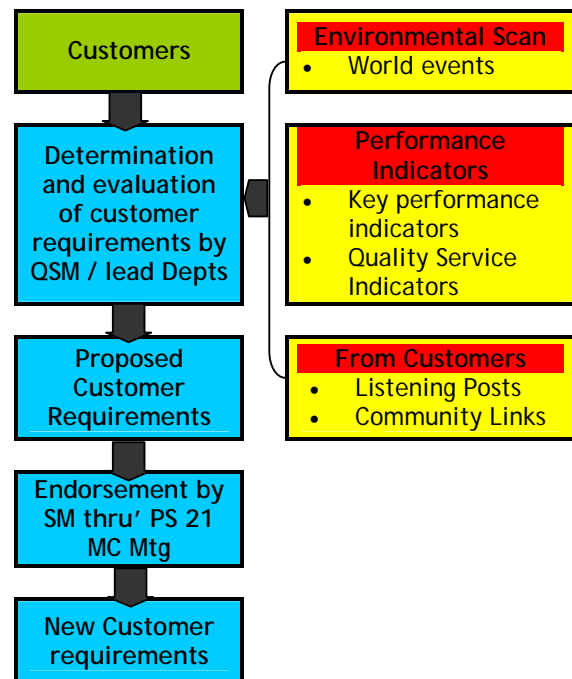
Figure 6.1.2 Customer Requirements Determination Process

Our Customer Requirements

Table 6.1.2 details our customer segments and their current as well as future requirements.

Key Processes	Customers	Customer Requirement	Quality Service Indicators (QSI)
Emergency Rescue Services a. Fire-fighting and rescue b. Ambulance	Victims / Next-of-Kin Patients / Next-of-Kin	**Common to all** ▪ Fast response to emergency 995 calls ▪ Fast response to incident sites ▪ Professional and compassionate service ▪ Protect life and prevent fire spread ▪ Effective and speedy rescue ▪ Minimal damage to property ▪ Fast and easy access to Fire Investigation Report ▪ On-site retrieval and payment for Fire Incident Report ▪ Speedy, safe and comfortable conveyance to hospital ▪ Save life / preserve life ▪ Effective pre-hospital care[FR1]	▪ Answering 995 calls within 10 secs ▪ Response to ambulance cases with 11 mins ▪ Response to fire & rescue incidents within 8 mins
Fire Safety Civil Protection a. Licensing b. Enforcement Checks c. Plan Approval	Public-at-large Applicants Building owners Offenders Building owners Professionals	**Common to all** ▪ Prompt counter service ▪ Prompt processing of license application ▪ Consistent and fair enforcement regulations ▪ Clear and transparent enforcement regulations ▪ Easy payment through GIRO, credit cards etc ▪ Clear guidance on fire safety policies / regulations ▪ Integrity of shelter that protects against bomb blasts ▪ Competent and professional advice ▪ Prompt processing of plans, enquiry and requests ▪ PWS Coverage ▪ Flexible and autonomous building plans ▪ Performance Based Code[FR2]	▪ Customer waiting within 5 mins ▪ Customer serving time within 10 mins ▪ Issuance of License or certificates within 3 workings days/seven working days ▪ Processing building Plans within 2 days ▪ Waiver application within 10 working days ▪ Reply to walk-in consultations within 3 workings days ▪ Reply to written Consultation within 21 working days
Community Engagement	Residents Students Workers	▪ Accessibility of information ▪ Availability of learning opportunity ▪ Acquiring basic fire-fighting, CPR and First Aid knowledge and skills ▪ Emergency preparedness knowledge ▪ Awareness of fire-safety ▪ Fun learning experience ▪ Multi-languages public education displays[FR3]	▪ Reply to written correspondence within 3 working days

Table 6.1.2 SCDF's Customer Segments

[FR1] Implementation of new Medical protocols

[FR2] Requirement requested by building owners for more flexibility in designing the buildings

[FR3] Better understanding of the fire-safety awareness

Listening Strategies	Listening Posts	Type of Feedback Sought
Solicited Feedback	**Feedback Forms** ▪ Emergency Ambulance Service ▪ Fire Operatioms ▪ Community Programmes ▪ Customer Service Centre	▪ Satisfaction level ▪ Areas for improvement ▪ Level of preparedness (for community engagement programmes)
	Public Perception Surveys	▪ Satisfaction Level with our services ▪ Confident level perceived by public
	Meetings / Dialogues	▪ Gauge awareness and level of acceptance on prevailing policy ▪ Areas for improvement
	Public Consultation	▪ Gauge awareness and level of acceptance on prevalence policy
Unsolicited Feedback	**Hot Lines**	▪ Satisfaction level ▪ Areas for improvement
	Written Correspondence (E-mail, Mail & Fax)	
	Media ▪ Forum Page Letters ▪ Media interviews ▪ Newspaper articles	▪ Satisfaction level ▪ Areas for improvement ▪ Confidence Level
Learning Strategies	**Study Visits/Exchanges**	▪ New trends, demands & capabilities ▪ Share / learn experience on major incidents
	World Statistics	▪ Comparative studies

Table 6.1.3 SCDF Listening and Learning Strategies

6.1b How the organisation uses different listening and learning strategies to analyse and anticipate future and new customer / market needs.

Listening Strategies
In the SCDF, we have set-up a range of listening posts across our key process areas to allow us to pro-actively solicit feedback. Ample avenues are also provided for customers to reach out to us on their own accord. These multiple listening posts, as shown in Table 6.1.3 caters to both solicited and unsolicited feedback. This ensures a high level of convenience for our customers, and also allows the SCDF to receive and respond to our customer's concerns promptly and in the most appropriate manner.

1. Solicited Feedback
Solicited feedback is those derived from feedback forms, surveys and meetings/dialogue sessions.

a. *Feedback Forms*
Feedback is collected from customers via prescribed forms that assess areas such as professionalism of frontline staff, competency, politeness and overall standard of service. Ares covered include the emergency ambulance service, fire-fighting operations and emergency preparedness programmes.

b. *Surveys*
We conduct Public Perception Surveys (PPS) that are targeted at the population-at-large. Research consultants are appointed to carry out this survey oat regular frequency. The survey is designed to solicit feedback in the areas of awareness levels on civil defence and SCDF programmes, public participation level, the corporate image of the SCDF as well as public confidence in the SCDF to protect and save them.

c. *Meetings / Dialogue Sessions*
Regular meetings and dialogue sessions are held with focus groups such as building owners, Qualified Persons (QPs) and members of public to address their concerns over civil defence and fire-safety issues. These briefings help our customers to acquaint themselves with incident trends through our fire and ambulance statistics. The briefings also provide a platform for them to seek clarification, and give input and views on our public education programmes and frontline operational efficiency. Such dialogue sessions are chaired by members of the SM. For example, dialogues on fire-safety are chaired by Dir FSSD, while those involving grassroots leaders are led by the Commanders of our Div HQs.

In this way, the SM is able to obtain direct and first-hand feedback from the customers and respond promptly to them.

2. Unsolicited feedback
Examples of unsolicited feedback include calls via hotlines and correspondences through letters, faxes or emails and the media.

Learning Strategies
SCDF also uses two key platforms by which to identify new customer requirements:

1. Local/Overseas Study Visits/Exchanges
Participation in local or overseas conferences allows the SCDF to pick up new trends or anticipated future customer needs. Officers who attend overseas visits or conferences are required to submit a report upon their return and recommend ideas that would either sharpen our operational capabilities, or enable us to provide better services to our customers.

2. World Statistics
SCDF also scans the level of service provided by emergency response agencies in other parts of the world. For e.g. we participate in the international surveys namely, World Fire Statistics Survey and International Fire Chief (Asia) Survey. These surveys publish key indicators such as the fire death per 100,000 populations, costs of direct fire losses and cost of fire fighting organization. Such comparative study enables SCDF to understand the overall effectiveness of our organization in meeting customer requirements.

6.1c How the organisation incorporates customer requirements and future and new market needs into strategic plans.

The QSM network led by Director of Service Quality Dept (SQD) has overall responsibility to maintain effective customer relationships as well as their satisfaction levels. He ensures their requirements, expectation and future markets needs are identified through various information collection channels (i.e. daily operations, external and internal sources, etc). Relevant strategies and action plans are then mapped out and incorporated into the Corporate Planning Process as illustrated in Figure 6.1.4.
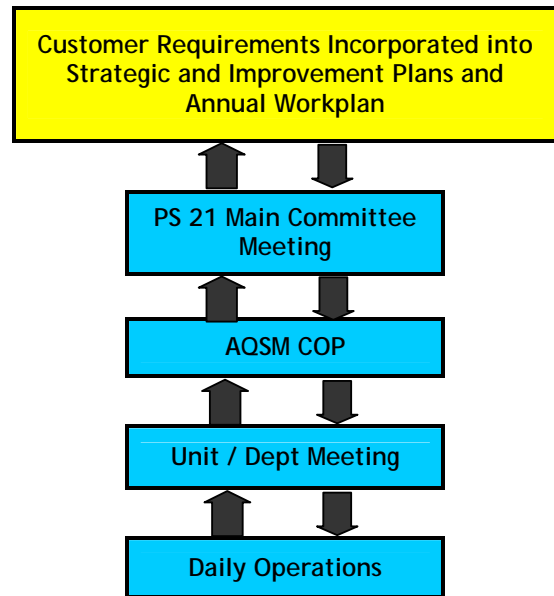
Figure 6.1.4 Incorporating Customer Requirement into Strategic Plans / Annual Workplan

6.1d We evaluate and improve the processes for determining customer requirements and expectations.

SCDF's Service Quality Dept (SQD) takes the lead in streamlining all policies and systems concerned with quality customer service. The SQD provides a customer-centric focal point to ensure that excellent service is provided to customers. SQD is constantly on the lookout for new customer needs to be met, arising from their feedback or changes to the environment. The Director SQD is also the Corporate QSM, and has the task of centrally reviewing and evaluating customer requirements and expectations.

6.2 CUSTOMER RELATIONSHIP

6.2a How the organisation provides easy access for customers to conduct business, seek assistance and information, and make complaints. Describe key customer contact requirements and how these requirements are determined, and deployed to all people in the response chain

SCDF plays a leading role in providing fire-fighting, rescue and emergency ambulance services, as well as the regulation of building fire safety standards in Singapore. These services are delivered with professionalism, operational excellence and service quality. Recognising the importance of good customer relationship in enabling us to achieve these goals, we have put in place a range of communication mechanisms to enable us to provide our customers with convenient, responsive and caring service. Our approach to maintaining sound customer relationship involves 3 key strategies: Reaching Out, Identifying Key Customers Contact Requirements and a Customer Oriented Frontline.

1. Reaching Out

- *Easy Telephone Access*
  The SCDF Control Room, which is manned 24hrs, receives and responds to fire-fighting, rescue and emergency ambulance calls. Such calls come through an easy to remember "995" hotline. In addition, hotlines are also available for various customer groups to access the relevant SCDF departments. Separately, the QSM Hotline, at the Service Quality Department, allows customers to directly provide feedback to the SCDF.

- *Written Correspondences*
  Our customers can also reach us via letters, faxes and emails. All the relevant contact details are widely available in sources such as Yellow Pages, Government Directory, the SCDF internet and our public education materials.

- *Electronic Services*
  We have also introduced a host of 31 e-Services that are available round the clock on our internet website so as to make it easy for customers to reach us and for conduct of business. . For example, with e-Services, QPs can now apply for Temporary Fire Permits/Fire Safety Certificates, submit building plans and update

particulars through the internet. In addition, the general public can also register for emergency preparedness lessons, make a report on fire hazards and search for their nearest bomb shelter on our internet website.

- *Service Counter*
  The SCDF's Customer Service Centre (CSC) is located at HQ SCDF. With a modern queue system, friendly counter service personnel, a host of modern amenities such as electronic kiosks, a comfortable holding area and refreshment dispensers, the CSC provides visitors with a good ambience and enhances their experience with our service. Dedicated meeting rooms are also available for our fire-safety consultants to meet their customers in private for detailed discussions.

- *Visits to SCDF Facilities*
  In order to facilitate community engagement and education, SCDF has created many easily accessible avenues. Fire stations are open for visits every Saturday mornings to the general public and organised groups such as school students, corporate visitors, and uniformed organizations, to enhance their understanding of the need for and importance of emergency preparedness and to provide awareness to the many important roles played by SCDF in contributing to a safe and secure Singapore. Emergency preparedness programmes are also conducted at our Division HQs during weekdays and weekends .

Our key customer contact points, shown in Table 6.2.1, ensure the ease of accessibility for our customers when they need to seek assistance or provide their feedback on our services.

2. Customer Contact Requirements
We keep a close watch on changing customer expectations, industry service standards, as well as new technologies, as indicators to help manage and benchmark its customer contact requirements. Accessibility and responsiveness are key pre-requisites in the identification and establishment of customer contact points.

All customer contact requirements have been included in the Quality Service Indicator (QSI) Handbook, which the SCDF has made available to the public. These QSIs are an effective means of communication to showcase our commitment to provide excellent service to delight our customers.

Medium of Communication	Contacts Points	Services / Information provided	Customer Contact Requirements
Telephone (Toll free lines)	▪ 24-hrs Emergency Hotline "995"	▪ Fire-fighting, rescue and emergency ambulance services	To answer calls within 10 secs
	▪ QSM Hotline (18003826792)	▪ Feedback/compliments/complaints	
	▪ SCDF Emergency Information Hotline (18002865555)	▪ General civil defence information	
	▪ FSSD Hotline (18007344308)	▪ Reporting of fire hazards and other fire safety related matters	
Written Correspondence (letters, Faxes, emails)	▪ SCDF HQ ▪ 2 Training Camps ▪ PAD / QSM ▪ 4 CD Divisions ▪ 14 Fire stations ▪ SCDF Feedback System	▪ General civil defence information; ▪ Feedback/compliment/complaint; ▪ Reporting of fire hazards and other fire safety related matters; ▪ Enquiry on job opportunities; ▪ Enquiry and registration for courses.	To reply to customers within 3 working days
Electronic Services	▪ SCDF Internet ▪ FISOPS ▪ On-Line Forms	▪ SCDF On-Line Feedback ▪ SCDF services and contact points ▪ Reporting of Fire Hazards	To reply to customers within 3 working days
Service Counter	▪ SCDF HQ	▪ Walk-in Consultation ▪ Plan Submissions ▪ Payments	To serve customers within 10 mins
Visits to SCDF Facilities	▪ 14 Fire Stations ▪ Heritage Gallery	▪ Learn about the latest fire fighting and rescue technology; ▪ Learn about history of SCDF.	Competency in area of work Public contact skills

Table 6.2.1 SCDF's Key Customer Contact Points

3. Customer Oriented Frontline
To reinforce the QSI indicators, we have developed a set of Rules of Service Engagement (ROSE) for our frontline officers. The ROSE Handbook shares a set of best practices in engaging customers at all the various contact points.

These rules have been customised to suit the different needs of the frontline staff, namely the ambulance crew, fire-fighting crew, Customer Service Officers, Control Room operators as well as fire-safety enforcement officers. ROSE aims to harmonise the standards of services provided across the SCDF.

The SCDF Rules of Service Engagement (ROSE)

6.2b How the organisation ensures that complaints are resolved effectively and promptly, and that all complaints received are aggregated and analysed for use in overall improvement.

In the SCDF, all feedback is taken seriously. While complains are dealt with expeditiously and in the most cordial of manners, written acknowledgements is given to customer who offers compliments. Their feedback is crucial to our corporate growth and overall improvement as a Force. We ensure that all complaints are followed up in compliance to the standard set in our QSIs (i.e. to reply to correspondences within three working days, and to meet this standard at least 90% of the time). If a full reply cannot be given at the targeted deadline, an interim reply followed by an update on the case will be sent later.

Management of Feedback / Complaints
The SCDF manages its feedbacks/complaints within the framework of its Feedback Management System (See Figure 6.2.3).

Director SQD has the overall staff responsibility to ensure that complaints are promptly replied to and that concerns voiced by our customers are adequately addressed. The QSM network which has instituted the presence of Assistant QSMs (AQSMs) at all units and departments helps the Force to swiftly attend to customer concerns in the event of a lapse in service. A clear set of guidelines has been laid down with regards to the handling of complaints of different categories.
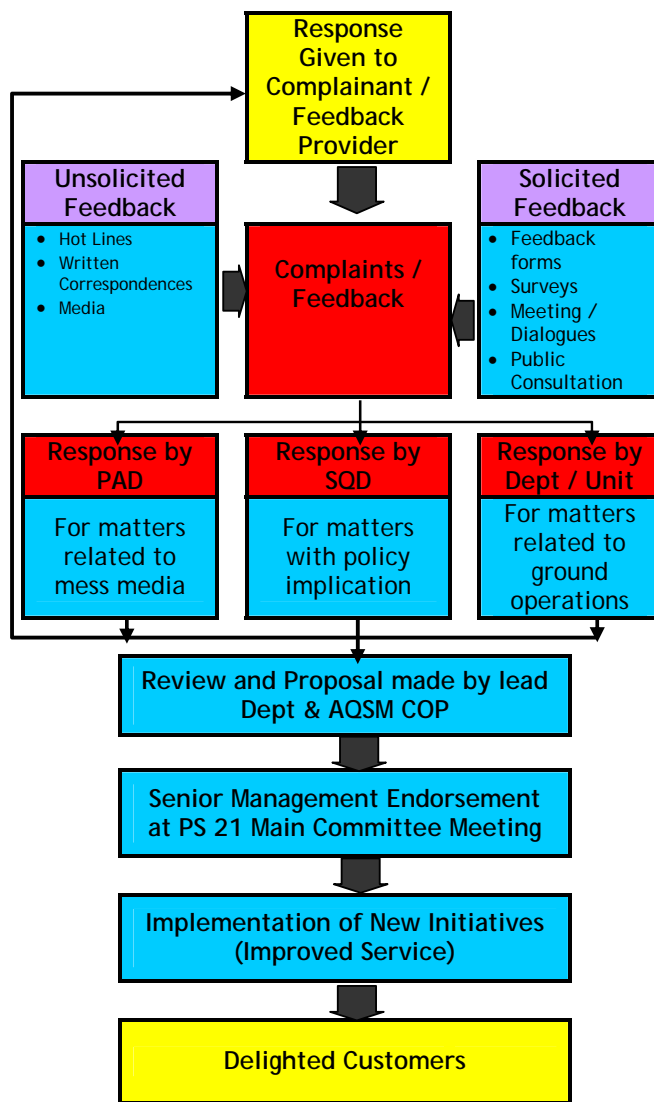
Feedback/Complaint Management Framework

Response Given to Complainant / Feedback Provider

Unsolicited Feedback
- Hot Lines
- Written Correspondences
- Media

Complaints / Feedback

Solicited Feedback
- Feedback forms
- Surveys
- Meeting / Dialogues
- Public Consultation

Response by PAD — For matters related to mess media

Response by SQD — For matters with policy implication

Response by Dept / Unit — For matters related to ground operations

Review and Proposal made by lead Dept & AQSM COP

Senior Management Endorsement at PS 21 Main Committee Meeting

Implementation of New Initiatives (Improved Service)

Delighted Customers

Figure 6.2.3 SCDF's Feedback/Complaint Management Framework

Service Recovery

Recognising the need to establish clear procedures to carry out service recovery in the event of a lapse of service, we have put in place a system to allow us to take proactive steps to minimise the grievance or inconvenience caused to the customer. To cite an example of service recovery in action, where a complaint is made against a frontline staff at the point of customer contact, the officer must take immediate action to make good the situation and apologise where necessary. If the complaint cannot be neutralized, the officer will alert his/her supervisor, who will immediately contact the aggrieved party to try and reverse the situation with appropriate measures of atonement. Such measures may include face-to-face interviews to offer clarifications/apologies, or even to send tokens of goodwill such as a fruit basket or a "get-well" card.

6.2c How the organisation evaluates and improves its customer relationship management.

We believe that good relationships with our customers, coupled with their confidence in the Force, are key factors critical to realising our strategic objectives. That drives us to constantly evaluate and try to improve our handling of customer relationships at two levels, namely the management level and the staff/frontline level.

1. Management Level

At the monthly SCDF PS21 Main Committee Meeting, chaired by Comr and attended by members of the Senior Management, Director SQD presents all matters relating to customer feedback, satisfaction levels (survey results) and other service-related issues. Lessons learnt from customer feedback and corrective/preventive actions taken are discussed and shared among the SM. Based on feedback by the AQSMs and departments, ways and means to improve customer relationship management is also discussed.

2. Staff/Frontline Level

In recent years, to ensure more effective and wider communication of lessons learnt and strategies in service improvement so as to continually strengthen customer relationships, new forums have been introduced as sharing platforms. Some of the key sharing forums are

- Do-It-Right (DIR) Workshops
- Paramedic Chats
- SCDF Service Barometer

6.3 CUSTOMER SATISFACTION

6.3a How the organisation determines customer satisfaction.

The SCDF determines customer satisfaction through different channels, such as QSIs, Public Perception Surveys, feedback forms and the compliant/compliment index. We have dedicated departments to analyse customer feedback obtained via these means and to propose appropriate recommendations to further enhance customer satisfaction.

6.3b How the organisation translates customer satisfaction feedback into strategic and improvement plans.
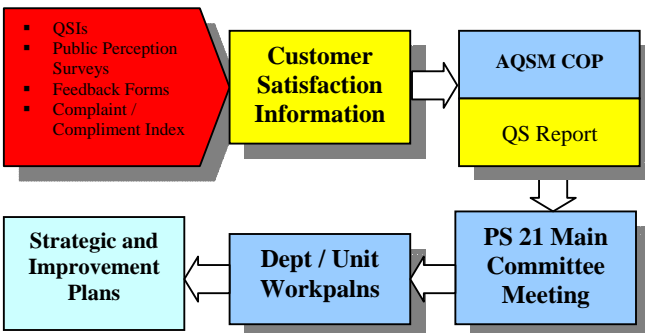
Figure 6.3.1 Translation of Customer Feedback into Strategic Plans

Figure 6.3.1 illustrates how information and findings on customer satisfaction – solicited through multiple sources – is managed and monitored and how new initiatives are incorporated into the strategic plans and workplans of the relevant departments.

On a bi-monthly basis, the AQSMs meet to discuss and analyse customer feedback.The various feedback and survey findings, as well as the complaints/compliments trends are compiled into a monthly Quality Service Report which is presented and reviewed for improvement at the PS21 Main Committee Meeting. Poor performances are explored and action plans are put in place to prevent recurrence the following month. Specific customer feedback, requests, suggestions and complaints are also aired and shared during the forum to develop appropriate follow-up actions. An example of initiatives stemming from customer feedback is the publication of the SCDF Quality Service Handbook (which declares the service standards to be provided to our customers), an initiative in response to customers' feedback for a greater level of transparency in our work processes.

6.3c How the organisation evaluates and improves its overall process of determining customer satisfaction.

The distinct needs of our different customer segments are evaluated and reviewed by the respective Units and Departments having direct contact with our customers. This helps us to be more focused in monitoring and managing the satisfaction levels of various customer segments.

To ensure that our surveys are accurate in reflecting customer satisfaction levels, unit and department AQSMs are required to review the survey methodology from time to time, give feedback and submit new survey approaches and requirements to ensure relevancy. For example, the survey methodology of the Emergency Ambulance Service feedback form was re-looked to ensure that customer feedback is able to accurately reflect the current service standards. The revised EAS feedback includes a rating on "the level of care and concern shown" by our paramedics, which relates to a new customer requirement on effective pre-hospital care.

Following the introduction and implementation of ROSE across our frontline services, Service Audits were instituted to evaluate the level of application of best practices as stipulated in the ROSE handbook. These audits are performed on immediate customer contact points such as the EAS and the SCDF Control Room.

7 RESULTS

7.1 CUSTOMER RESULTS

7.1a Summarise current levels and trends in key measures and/or indicators of customer satisfaction and retention. Address different customer groups and market segments, and include comparative data as appropriate.

The vision of the SCDF is to be a world class organisation in providing fire-fighting, rescue and emergency ambulance services through professionalism, operational excellence and service quality. Our commitment to providing quality service is reflected in our measurement and close monitoring of customer satisfaction levels for our various customer segments.

In SCDF, customer satisfaction is measured via three primary means:

- **Direct customer feedback** via feedback forms (Emergency Ambulance Service (EAS) Fire fighting, Counter Service and Community Engagement programmes/ platforms)

- **Complaints and compliments** received from our various feedback mechanisms and

- **Public Perception Survey**

Direct Customer Feedback

a. *Satisfaction Level with Emergency Ambulance Service (EAS)*

For the past three years, almost all our EAS customers have rated our service as 'satisfactory' or 'very satisfactory' (see Figure 7.1.1). All respondents also agreed that our paramedics were helpful and polite when attending to the patients or NOKs.
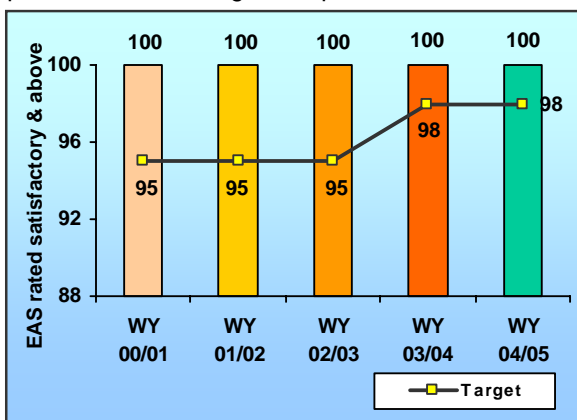
Figure 7.1.1 - Satisfaction Level with Emergency Ambulance Service

b. *Satisfaction Level with Fire-Fighting Operations*

Victims/owners of premises affected by structural fires our fire-fighters responded to, were satisfied with our services over the past two years since the feedback forms were implemented. Over 90% of the respondents indicated that our crews were competent, and all said they were helpful (see Figure 7.1.2).
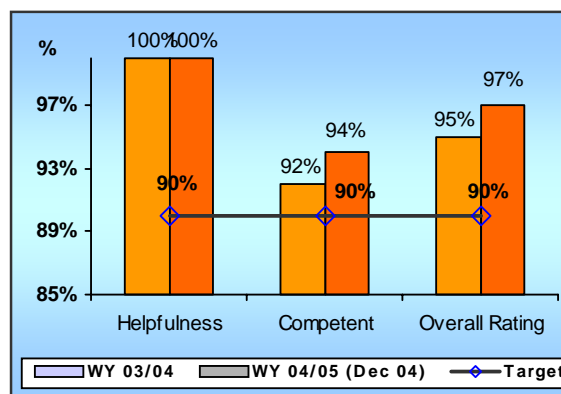
Figure 7.1.2 Satisfaction Level With Fire Operations (Structural Fires)

c. *Satisfaction Level of Users of the Customer Service Centre - CSC*

Our CSC provides walk-in consultancy for the approval of building plans and licensing – two essential services for an effective fire-safety process. In the feedback gathered in WY 02/03 via forms at the CSC, 91% of the customers served by our counter service staff were very satisfied with the quality of service. Furthermore, no respondent had experienced long waiting times in the process. In WY 04/05, the satisfaction level rose to 98%. This was a result of the implementation of staggered lunch and break hours for our CSC staff, which ensured that customers could be served any time they walk into the CSC (see Figure 7.1.3).
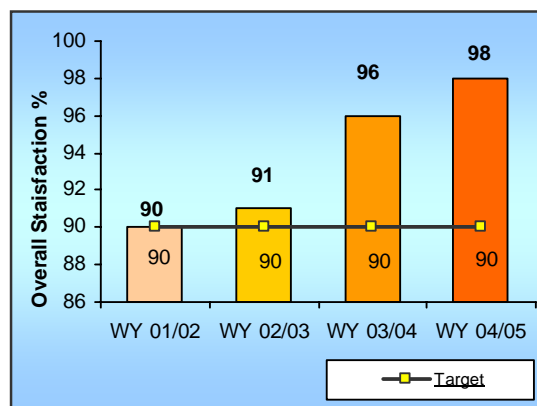
Figure 7.1.3 - Overall Satisfaction Level with SCDF's Counter Service

d. Community Engagement Efforts – Awareness and Confidence Level

We have been conducting community engagement feedback surveys since WY 03/04 (see Figure 7.1.5). More than 3,000 participants responded to the survey in WY 04/05, and 96% of the respondents knew about our emergency preparedness programme and express confidence in being better prepared to cope with emergency after attending our public education programmes
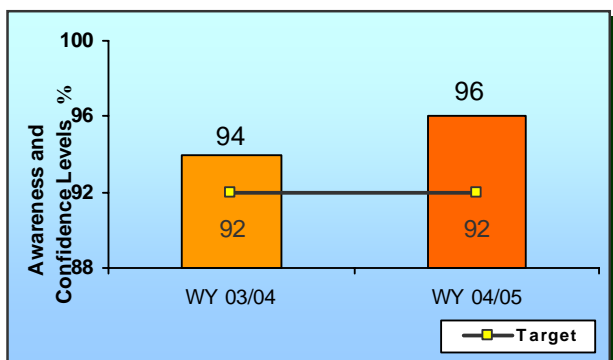
Figure 7.1.5 Awareness and Confidence Levels in Coping with Emergencies

Complaints and Compliments

In terms of complaints and compliments received (mainly through the various Feedback mechanisms), we have consistently received more compliments than complaints. This illustrates the relative success of our relentless efforts in providing quality service to our customers.   Table 7.1.6 shows the number of compliments and complaints received over the past three years.   The compliments received were generally for excellent services as well as appreciation for help rendered at fire drills / exercises, fire-safety talks / demonstration / exhibitions.
.

.	WY 01/02	WY 02/03	WY 03/04	WY 04/05
Complaints	16	22	37	24
Compliments	792	1356	1693	2207
Ratio	1:50	1 : 62	1:46	1:92

Table 7.1.6 - Complaints and Compliments

Public Perception Survey

The SCDF conducts the Public Perception Survey (PPS) approximately once every two years. We have consistently attained very high performance results in this survey. For a more effective feedback process, we measure the dissatisfaction level rather than the satisfaction level so as to focus on specific areas for improvement.

a. Overall Dissatisfaction Level

i. Dissatisfaction with Responsiveness[4]

The SCDF is committed to arrive at an incident site within eight minutes for the provision of fire-fighting and rescue services; and 11 minutes for emergency ambulance services. Our resources are activated within a minute to ensure that those in distress are attended to expeditiously.   As shown in Figure 7.1.7, the dissatisfaction level was 8% in both 1998 and 2001; this improved to just 2% in 2003.
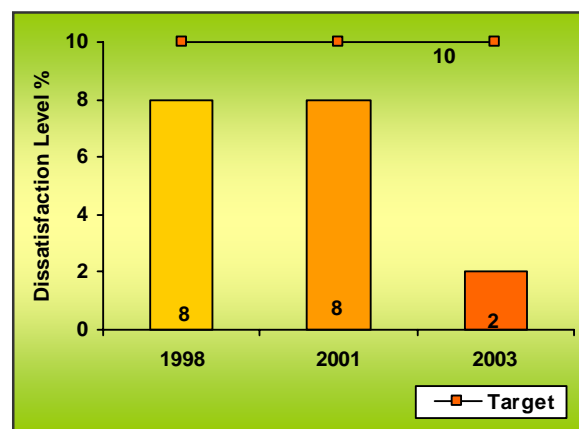
Figure   7.1.7   -   Dissatisfaction   with Responsiveness

ii.   Dissatisfaction   with   Fire   Fighting Services

The provision of fire-fighting is one of the SCDF's key areas of service to the public. Figure 7.1.10 shows a slight increase in the dissatisfaction level in 2001 but zero cases in 2003. This represents a significant improvement in this area in terms of service to the users.
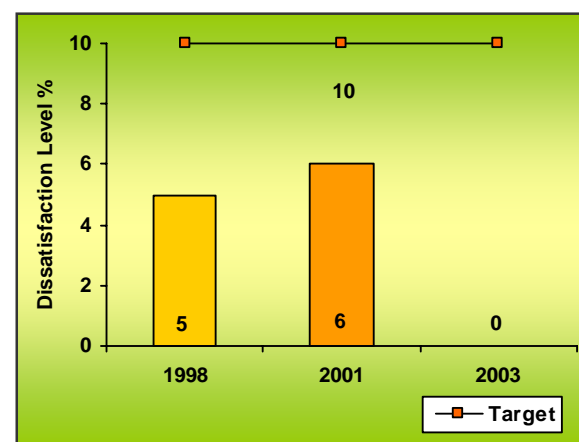
Figure 7.1.10- Dissatisfaction with Fire Fighting Services

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[4] *Responsiveness is defined as the willingness to help customers and provide prompt service*

iii. Dissatisfaction with Ambulance Services

For the EAS, the levels of dissatisfaction in 1998 and 2001 have remained the same (see Figure 7.1.11). This fell significantly to just 1% in 2003, and represents another significant improvement in our service to the public.
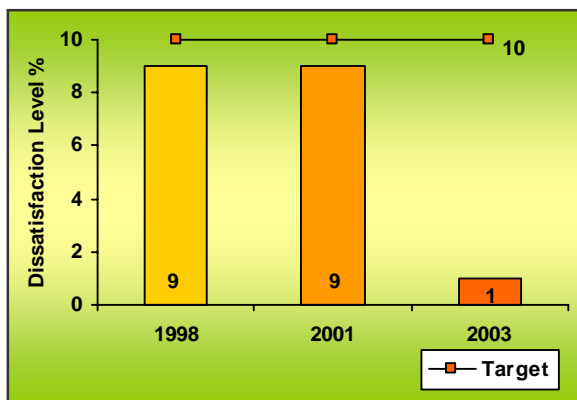
Figure 7.1.11 - Dissatisfaction with Ambulance Services

iv. Dissatisfaction with Rescue Services

In the area of rescue services, Figure 7.1.12 shows a slight increase in 2001 but zero cases in 2003. This improvement also coincides with the general increase in satisfaction levels in the emergency services provided via fire-fighting and the EAS.
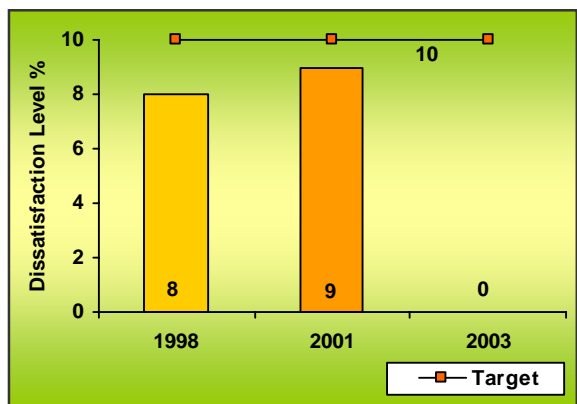
Figure 7.1.12 - Dissatisfaction with Rescue Services

v. Dissatisfaction with Fire Safety Services

Figure 7.1.14 shows an increase in dissatisfaction levels from 1998 to 2001, while there was a sharp decrease from 9% to 1% in 2003. This represents a significant improvement in provision of fire safety and civil protection services.
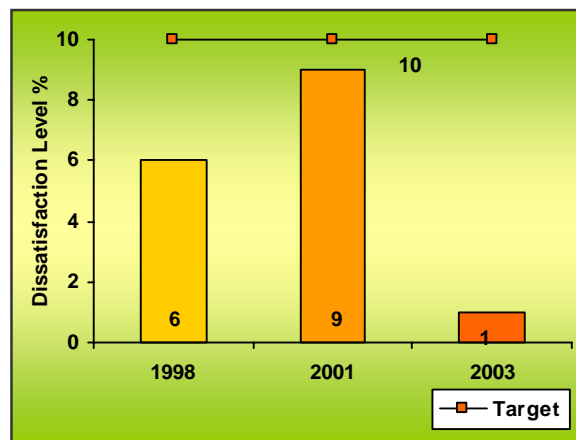
Figure 7.1.14 - Dissatisfaction with Fire Safety Services

i. Confidence in coping during Emergency (after participating in CD Programme & activities)

Figure 7.1.15 shows that from a level of 72% in 2001, 91% of respondents affirmed their confidence in being better prepared to cope with emergencies in 2003 after participating in our programmes and activities.
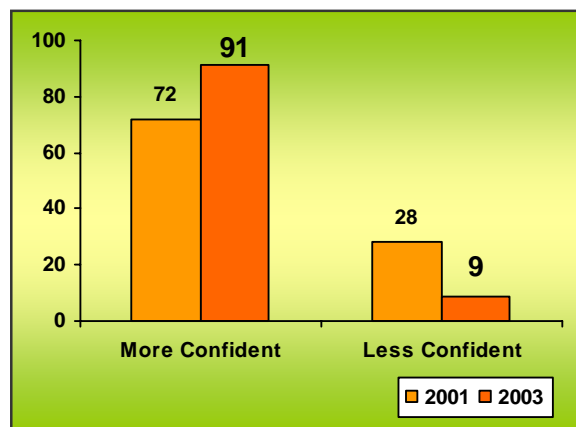
Figure 7.1.15 - Confidence in Coping with Emergency

7.1b Summarise current levels and trends in key measures and/or indicators of service performance. Address different customer groups and market segments, and include comparative data as appropriate.

Quality Service Indicators

We have declared 12 QSIs to the public. These QSIs serve as an effective communication means to showcase our commitment to provide excellent service to delight our customers . Some of the QSI targets and achievements are shown here:

i. Answering 995 Calls

In May 2003, a stretched target was imposed on the SCDF Control Room to answer 995 calls within 10 seconds. A benchmarking team was tasked by the SM in Aug 2003 to work out a plan to achieve the target. In Oct 2003, the performance improved from an average of 82% in WY 03/04 to 94% in WY 04/05 (see Fig 7.1.7).
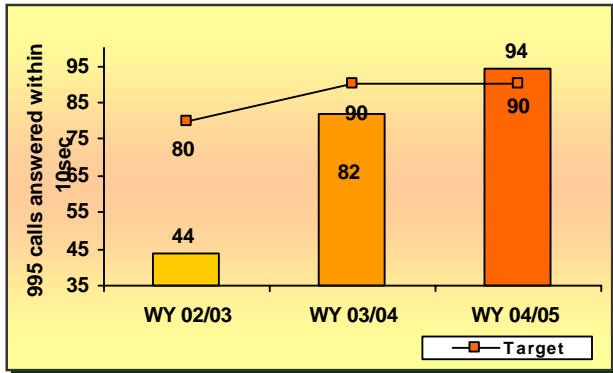
Figure 7.1.7 - % of 995 calls answered within 10sec

ii. Emergency Ambulance Service Response Time

Despite the increase in demands on the EAS, there was a significant improvement in our response time for ambulance calls over the past three years. This can be attributed to the increase in the number of ambulances from 18 to 30, as well as in the establishment of Fire Posts, which enable us to locate closer, and hence respond faster, to our customers.
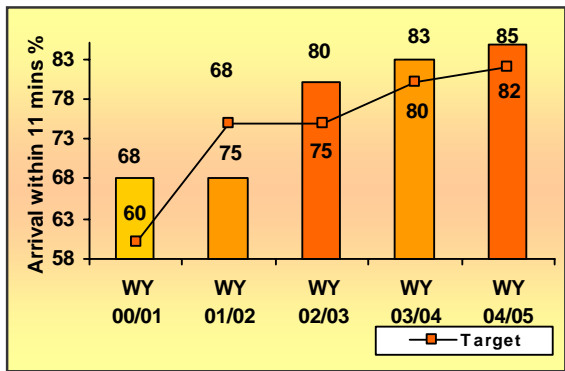
Figure 7.1.8 - % of Ambulance and FRP Response Time within 11mins

iii. Fire Fighting and Rescue Service Response Time

In the event of any fire or rescue emergency, we aim to arrive at the incident site within eight minutes to mitigate the incident expeditiously and to minimise the loss to life and property. Where operational gaps existed before, the establishment of Fire Posts closer to customers since 2002 have greatly enhanced our response times (see Figure 7.1.9).
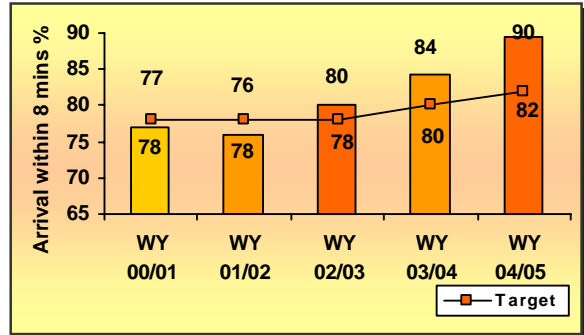
Figure 7.1.9 - % of Fire Fighting and Rescue Appliances' Response Time within eight mins

iv. Approval of Fire safety Plans

The SCDF processes applications for Fire-Safety Plans such as architectural, mechanical and ventilation works, and fire-protection plans. Approval notices are issued within two working days. The results in Figure 7.1.10 are all well above the targets set. For a tighter benchmarking process the target for WY 05/06 has been revised upwards to 99.5%.
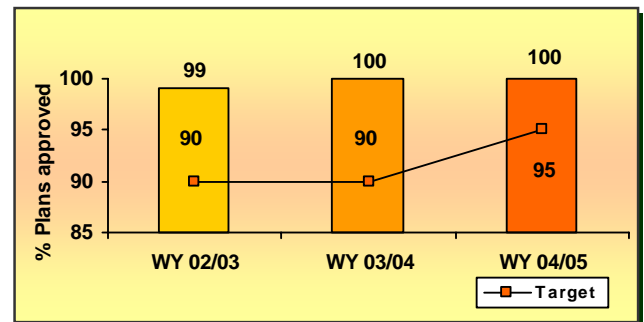
Figure 7.1.10 - % of Fire safety Plans approved within two working days

v. Issuance of Temporary Fire Permit (TFP) / Fire Safety Certificate (FSC)

FSSD is the authority to issue the TFP / FSC to applicants within three working days. Figure 7.1.13 shows that average of 95% of the TFP / FSC were issued within the timeframe. The target for FY 05/06 will be raised to 95% from the current 90%.
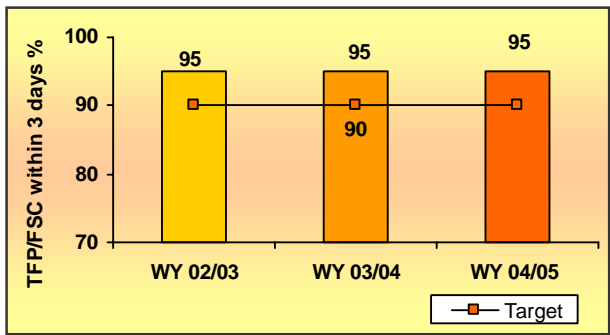
Figure 7.1.13 - % of the TFP / FSC processed within three working days

vi. Serving time per customer per transaction at CSC

The counter staffs strive to serve each customer and complete the transaction within 10 minutes and in a professional and proficient manner. The results are as shown in Figure 7.1.17.
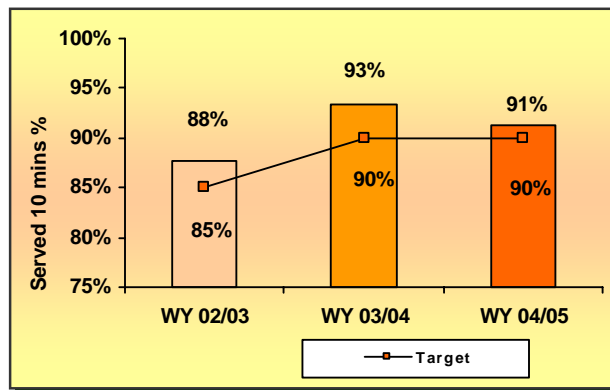

Figure 7.1.17 - % of customers served within 10mins

vii. Reply to letter / email / faxes

The SCDF is committed to reply to all written correspondences promptly and professionally within three working days. Figure 7.1.18 shows that the such correspondences were replied to within the targeted timeframe.
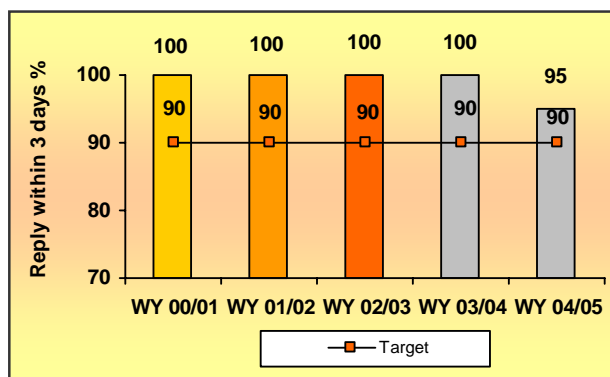
Figure 7.1.18 - % of written correspondences replied within three working days

7.2 FINANCIAL RESULTS

7.2a Summarise current levels and trends in key measures of financial performance, including aggregate measures of financial results and /or economic value, as appropriate. Compare results relative to competitors and /or benchmarks, as appropriate.

Being the sole agency in providing emergency services and the enforcement of fire-safety, we compare ourselves with other fire-fighting organisation around the world. Based on the results, we have the lowest "Fire Deaths" and "Fire Injuries" and are, at the same time, the most economical fire-fighting organisation (survey by both the World Fire Statistics and the International Fire Chief Association of Asia).

Cost of Direct Fire Loss in % of GDP (World Fire Statistics 2004)
Singapore was rated the lowest in terms of 'cost of direct fire loss' by the **World Fire Statistics**[5] (2004) as shown in Figure 7.2.1. The survey provides comparative performance indicators for 22 countries, out of which four leading nations - Canada, United Kingdom, United States and Japan - are highlighted.
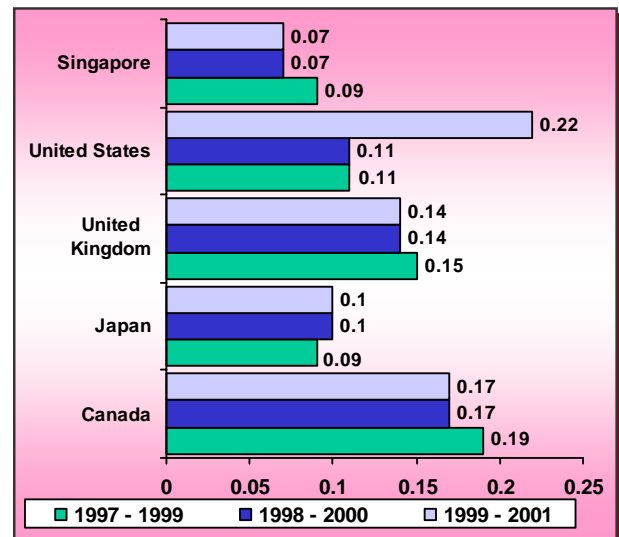
(For Singapore data, the Fire Loss Insurance claims data from MAS is used as a proxy for comparison with the rest of the countries listed in the World Fire Statistics)

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[5] *World Fire Statistic is published annually by United Nation Geneva Association. The participation countries include US, Canada, Europe, and Asia Pacific. The statistics are issued annually covering the past 3 year data.*

Cost of Fire Fighting Organisations in terms of total Fire and Ambulance Service Expenditure as % of GDP (World Fire Statistics 2004)

From the World Fire Statistics (2004), we can see that SCDF is the most economical fire-fighting organisation. The cost of our fire-fighting organisation amounts to only 0.04% of GDP for period 1999 to 2001. (See Figure 7.2.2)
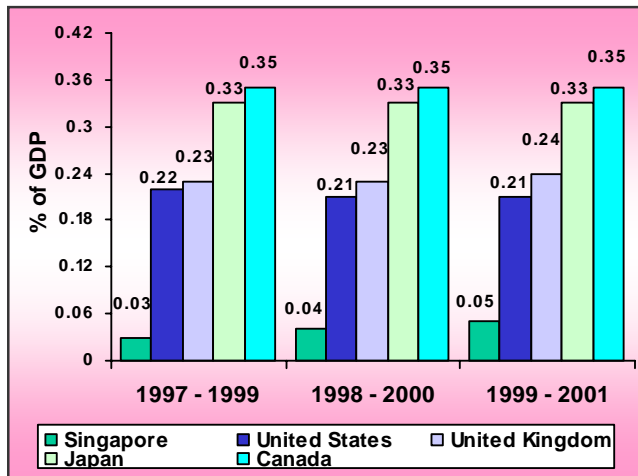

Figure 7.2.2 - Cost of Fire Fighting Organisation

7.2b Summarise current levels and trends in key measures and/or indicators of marketplace performance, including market share/position, market acceptance, business growth, and new markets entered, as appropriate. Compare results relative to competitors and/or benchmarks, as appropriate.

Fire Death (World Fire Statistics 2004)

The World Fire Statistics 2004 rates Singapore as having the lowest fire deaths from 1999 to 2001 as shown in Figure 7.2.3. This is significant because at the same time Singapore is also rated as the most economical fire-fighting organisation
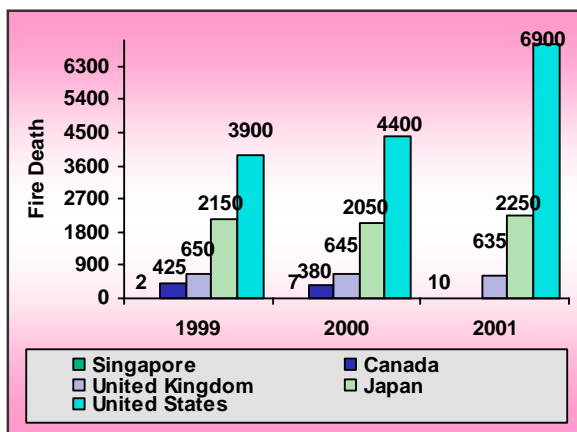
Figure 7.2.3 Fire Death (World Fire Statistics 2004)

Fire Deaths per 100,000 Populations (World Fire Statistics 2004)
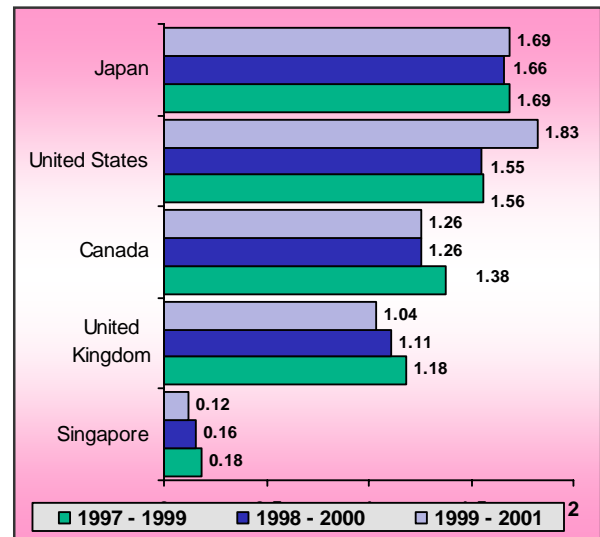
Figure 7.2.4 - Fire Death per 100,000 Population (World Fire Statistics 2004)

Figure 7.2.4 shows the average population comparisons for fire deaths over a three-year period from 1999 to 2001. It clearly reflects that Singapore is the most fire-safe country as we are ranked as having the lowest fire deaths per 100,000 populations with a 0.12 fatality rate.
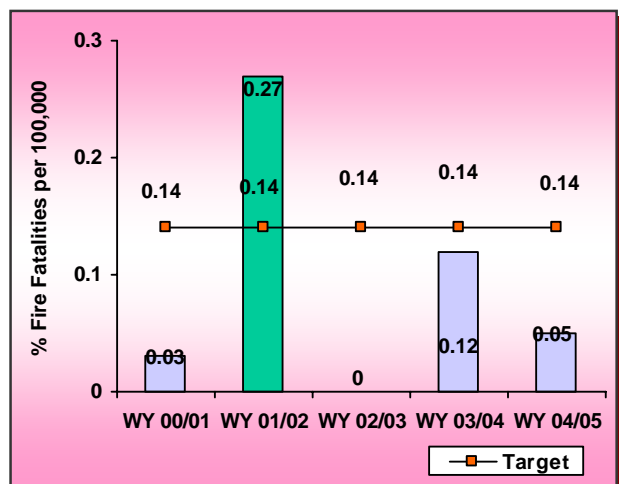

Figure 7.2.5 - Number of Fire Fatalities per 100,000 Population

53

7.3 PEOPLE RESULTS

7.3a Summarise the current levels, trend and impact of employee involvement. Segment results by categories of employees, and include comparative data as appropriate.

People are our most important and valued asset. We seek to provide a conducive environment to develop our staff to their fullest potential; at the same time enhancing their well-being. This is in line with our core values of *Pride* and *Care*. We aim to get the right people, in the right numbers, at the right places, and at the right time.

Employee Involvement

Employee Involvement through the Staff Suggestion Scheme (SSS) , WITs and Innovation
Our efforts to promote innovation have produced tangible results. We use the following indicators to track employee involvement:
- Participation ratio in SSS, WITs and Innovation
- No of SSS and WITs projects
- Implementation Ratio of SSS and WITs
- No of Innovation Awards

Shown here are some of the results:
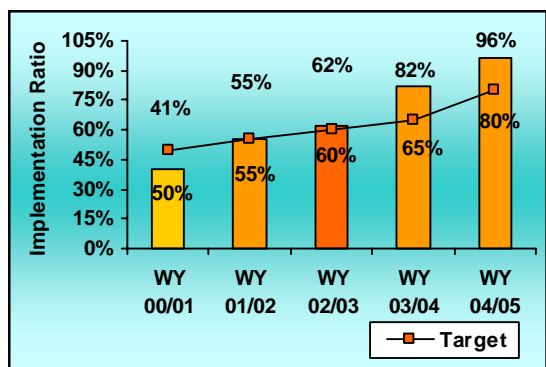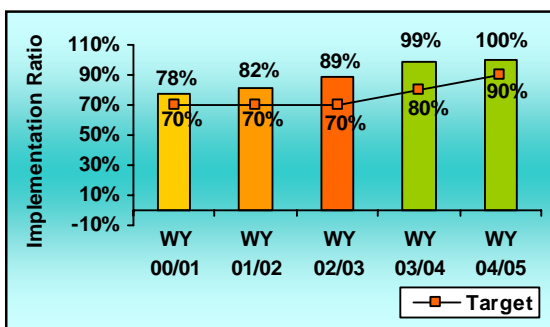

Figure 7.3.1 - SSS Implementation Ratio

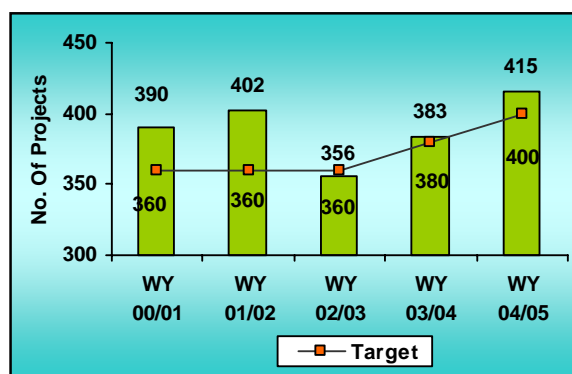
Figure 7.3.2 – WITs Implementation Ratio

Figure 7.3.3 - WITs Project Indexes

As for innovation, we have won several awards in The Enterprise Challenge between WY 01/02 and 03/04 as shown in Figure 7.3.4.

The Enterprise Challenge (TEC) Award	
WY 01/02	SCDF received two awards i.e. Enterprise and Innovator Award for the project on "Water-mist Technology for Front Line Fighting"
WY 02/03	SCDF received three awards i.e. Enterprise, Innovator and Innovator Incubator Awards for Water-jet Cutting for Front Line Fighting
WY 03/04	SCDF received two awards i.e. Enterprise and Innovator Award for project on "Mobile Scrubber"

Figure 7.3.4 - TEC (Innovation) Awards

7.3b Summarise the current levels, trends and impact of education, training and development of all employees. Segment results by categories of employees, and include comparative data as appropriate.

Employee Training and Development

We believe in the training and development of our officers, and overseeing such matters in the Force is a dedicated unit known as the Training Department. Over the years, the SCDF has steadily invested increasing amounts in training our people. In WY 04/05, the annual outlay of the training budget was nearly 12% of the payroll.

i. **Budget allocated for Training (Actual Expenditure)**
The primary objective of providing officers with training is to equip them with the necessary skills and knowledge to carry out their duties. The budget allocated to training an indicator of our commitment

towards the continuous development and education of our staff. Figure 7.3.6 shows that the increasing training budget over the past 3 years:
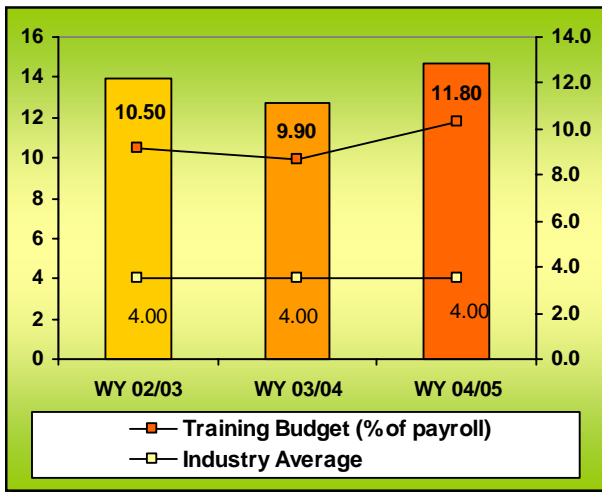

Figure 7.3.6 – Budget allocated for training as % of Payroll

ii Training Opportunities and Training Places Utilization Rate

Over the past years, employees' training days have substantially exceeded the Civil Service target. This result is again an indication of our effort towards the training and development of our employees

iii. Evaluation of Trainee Performance

We track the performance of trainees in key courses such as Basic Officer's Course (BOC), Emergency Response Specialist Course (ERSC), the Fire-Fighter Course (FFC) and the Basic Rescue Training (BRT). Figure 7.3.7 shows that at least 80% of our trainees had successfully completed their courses.
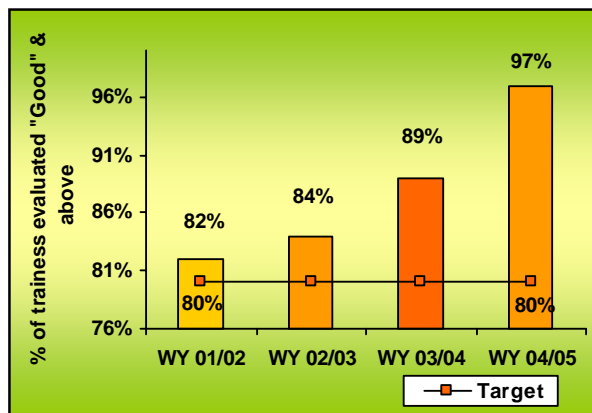

**Figure 7.3.7 – Trainees' Performance for Evaluation of "Good" and above**

Employee Health and Satisfaction

In the SCDF, we believe that only a happy worker can provide quality service to delight our customers. The OHS results show that our staff are happy and satisfied working in SCDF.

i. Our Staff's Satisfaction working in SCDF

Results from the recent OHS, an effective indicator to gauge employee satisfaction, show that employee satisfaction increases over the years from 76% to a marked improvement of 87% (see Figure 7.3.8) from WY 02/03 to WY 04/05.
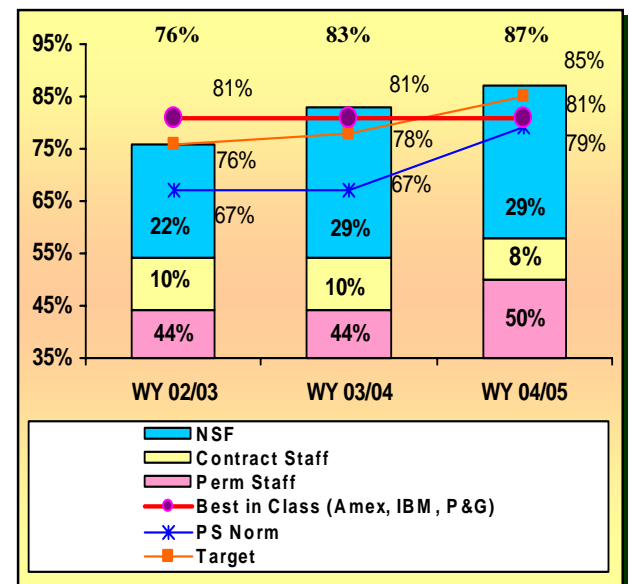
(Source: Forbes OHS 2005)
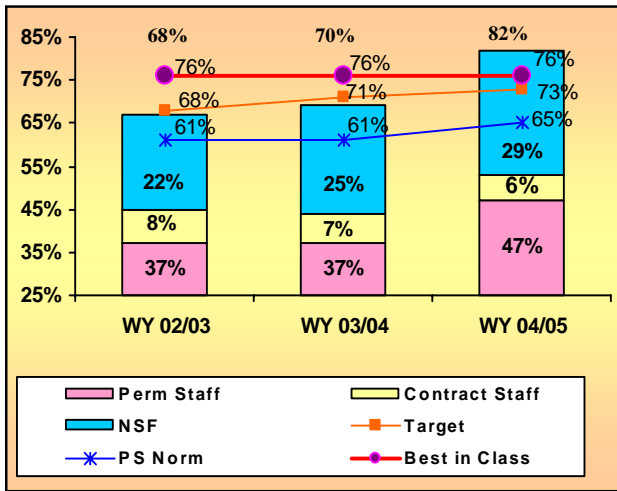**Figure 7.3.8 – Employee satisfaction**

ii. Our Staff Work-Life Balance
As shown in Figure 7.3.9, our staff responded favourably to the various work-life balance and family-friendly frameworks that have been put in place. The implementation of the five-day work-week further boosted SCDF's standing as a family-friendly employer. The chart below (Figure 7.3.32) is the feedback from our staff that they are able to balance work demands with family and social life.

(Source: Forbes OHS 2005)

Figure 7.3.9 – Balancing the demands of work and personal life

iii. Our Staff and Harmonious Work Environment

The recent OHS results, seen in Figures 7.3.33 and 7.3.10, attest that the relationship between the staff and their supervisors is harmonious, even in the absence of unions. Our staff affirmed that the supervisors are genuinely interested in their well-being and in maintaining harmonious relationships. SCDF is therefore able to support a harmonious environment that would greatly add to the satisfaction and commitment of our staff.

(Source: Forbes OHS 2005)

Figure 7.3.10 – Harmonious relationship between supervisors and staff

7.4a Summarise current levels and trends in key measures of operational performance of key design, production, delivery, and support processes. Include productivity, cycle-time and innovation. Compare results relative to competitors and /or benchmarks.

Operational results are outcomes or outputs which have a direct impact on the primary mission of the SCDF to protect and save lives and property for a safe and secure Singapore. Sound operational results mean we are at optimum readiness to respond to our customer needs at all times. We closely measure results of our four key processes.
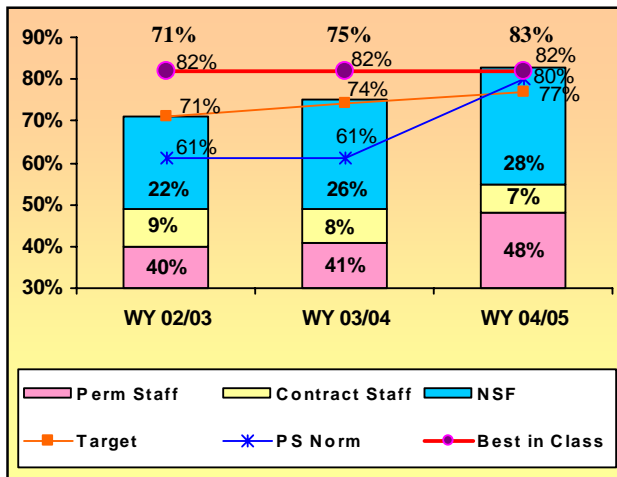
i. Activation Time of Emergency Resources

The activation time is the time taken by the turnout fire/ambulance crew to leave the fire station upon activation by our Control Room. All crews are required to leave the fire station within 1 minute to respond to the incident. Figure 7.4.1 shows SCDF has constantly achieved 100% over the past 3 years.
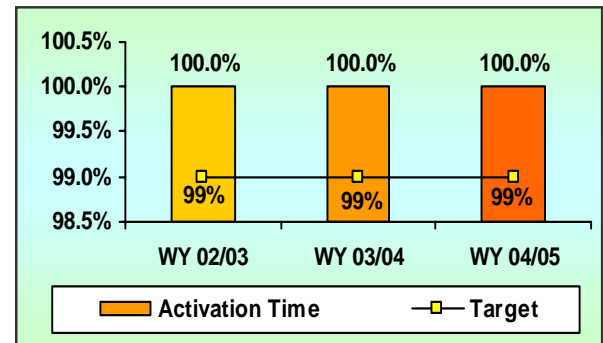

Figure 7.4.1 - Activation time within 1 min

ii. Fires Extinguished Within 1 hour

SCDF responds to more than 5000 fire incidents each year. It is vital to put out the fire within the shortest possible time to prevent it from spreading.
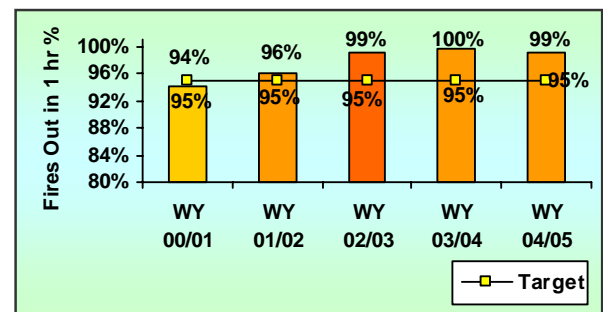

Figure 7.4.2 Fires Extinguished within 1 hour

56

iii. % of Buildings with FSM

In line with our strategic objective to ensure a safe and secure Singapore, our fire safety code stipulates that building complexes having a total floor area of 5000sqm or an occupancy load of at least 1000 people, require to engage a FSM (Fire Safety Manager). We closely monitors these building complexes and ensure that the buildings concerned engage FSM (see Figure 7.4.3). The target for WY 05/06 will be raised to 96%.
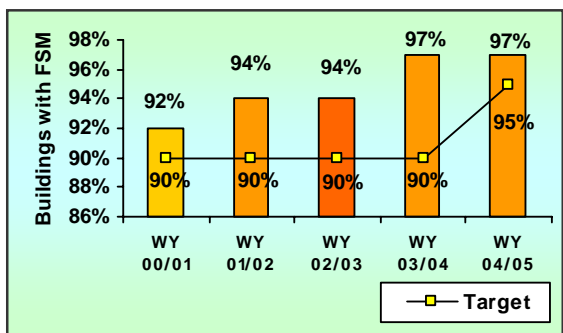

Figure 7.4.3 - % of buildings with FSM

iv. Fire Safety Enforcement Checks

Figure 7.4.4 shows that the number of fire safety enforcement checks conducted by SCDF has been on a constant increase. A robust enforcement system in critical to maintain high in the fire safety standards in Singapore.
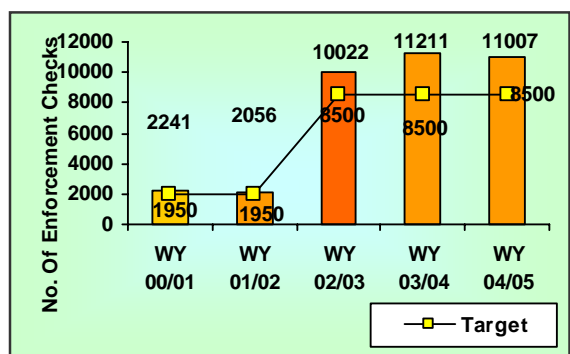

Figure 7.4.4 - Number of Enforcement Checks conducted

v. % of Operationally Ready PWS Sirens

SCDF tracks the operational ready status for every PWS siren that we have installed. We conduct monthly sounding tests and regular maintenance to ensure the sirens are in operational ready condition. We target at least 95% of the sirens to be operationally ready to ensure the extent of coverage is not impeded. Figure 7.4.5 shows our performance is maintained at higher then we targeted.
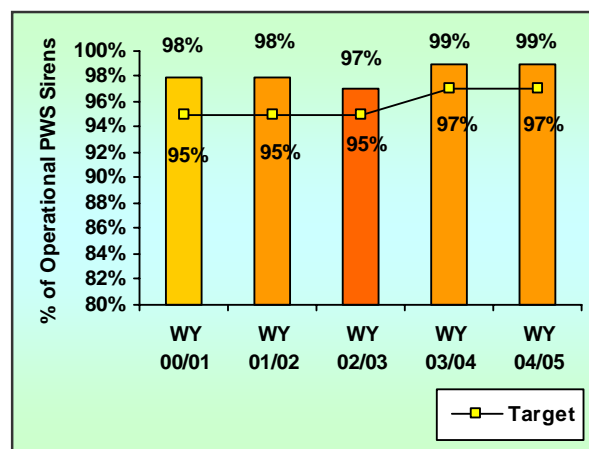

Figure 7.4.5 % of PWS sirens tested and found operational ready

vi. No. of Public Education Programmes Conducted by SCDF

Our Public Education programme range from emergency preparedness exercise, exhibits, fire drill demonstrations and emergency life support skills. Every workyear, we target to conduct at least 250 programmes to entice member of public to participate in our educational programme as shown.
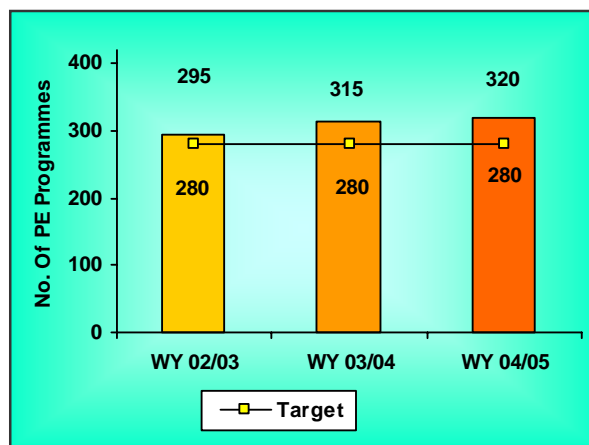
Figure 7.4.6 No. PE Programme Conducted by SCDF

7.4b Summarise current levels and trends in key measures and/or indicators of supplier and partners performance. Include the organisation's performance and/or cost improvement resulting from suppliers and partner performance.

SCDF's suppliers and partners performance is critical to our achievement of strategic objectives. Their operational results is thus monitored closely as follows:

Vehicles Serviced within three working days

Over the last 3 years, SCDF's Central Maintenance Base (CMB) has been able to service vehicles within the set timeframe as shown in Figure 7.4.7. Constant review of the work processes is carried out and the target for WY 03/04 has since been raised to 95%. In addition, the number of working days required for repair has been reduced from 4 to 3 working days.
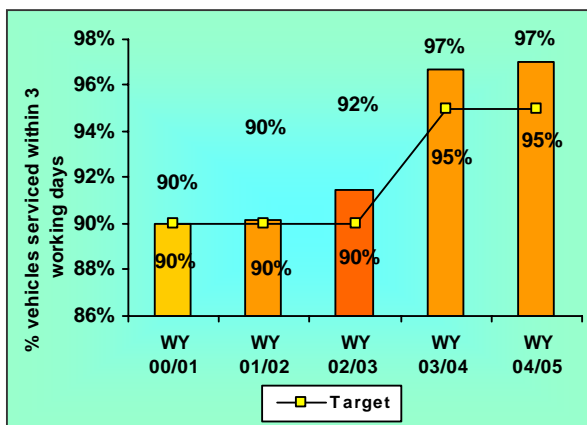

Figure 7.4.7 - % of vehicles serviced within three working days

ii. Appliances Serviced within four working days

Similar to the servicing of vehicles, CMB has serviced the appliances within the set timeframe for the past 3 years, shown here in Figure 7.4.8. For WY 03/04, the target has also since been raised to 95%. In addition, the number of working days required for servicing has been reduced from 5 to 4 working days.
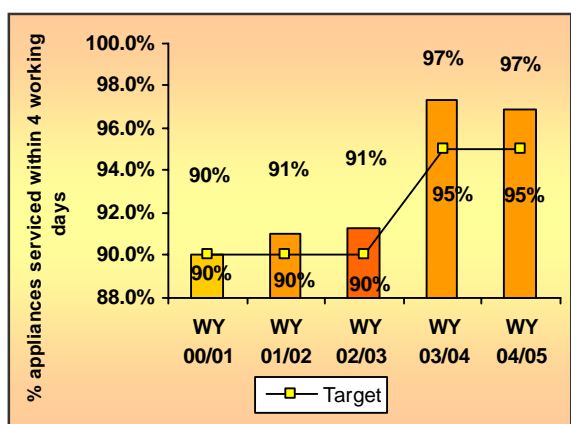
Figure 7.4.8 - % of appliances serviced within four working days

Specialised equipment Serviced within two working days

The time taken for the servicing of Specialised Equipment had been achieved well above the target set as shown.
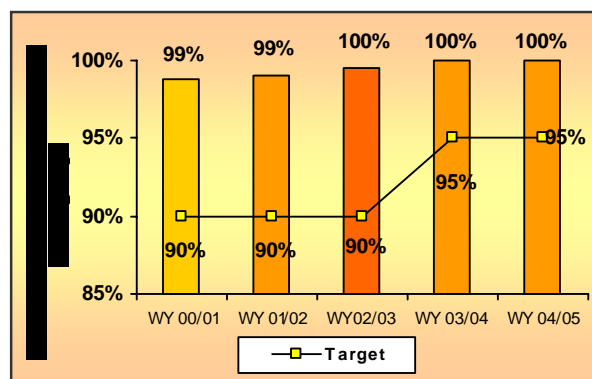
Figure 7.4.9 - % of specialised equipment serviced within 2 working days

7.4c Our key organisational contribution to the community, society & the environment (e.g. Saving on wastage, contribution and participation in community projects) have shown improvement trends and met targets.

i.   Fund Raising for Charity

SCDF has supported the numerous fund raising programmes for charity over the past few years. In early 2005, the SCDF supported the Singapore Red Cross Society in helping to raise $30,400 for the Tidal Waves Asia victims. Other forms of assistance were also carried out individually by units, such as, contribution of essential items. Though a voluntary effort from all staff, the amounts raised have surpassed the targets set as shown in Figure 7.4.10.

Figure 7.4.10 – Amount of Funds Raised for Charity

In 2002, as part of our contribution to the community, SCDF raised a total of $1.14 million for the President's Challenge. SCDF also received the Platinum Award for Fund Raising for this event from our President.

For the SARS Courage Fund 2003, SCDF raised a total of $101,360. Our combo band, fully comprising our own regular staff as well as NSFs, also helped in raising $41 000 towards this cause by staging a musical event. SCDF received the President Certificate of Commendation for Management of SARS in 2003.
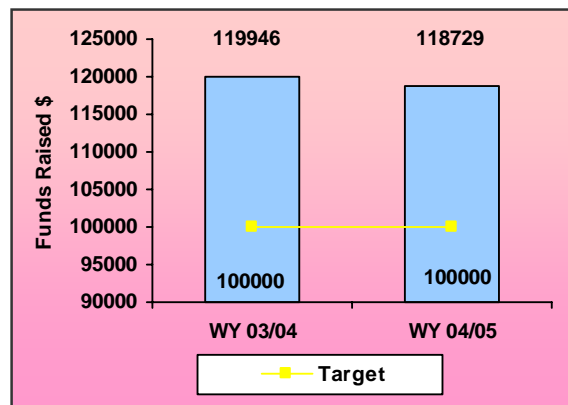
ii. Participation Rate in Charity Programme

In a demonstration of support to fund-raising programmes for the less fortunate, SCDF employees have shown consistent participation as illustrated in Figure 7.4.11
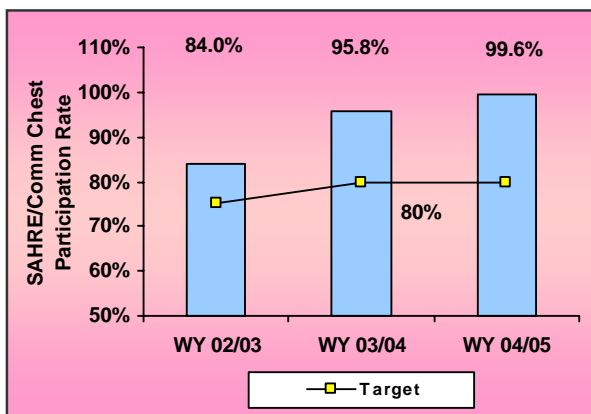
Figure 7.4.11 - SHARE / Community Chest Participation rate

iii. No. of SHARE Awards received

SCDF received one Platinum Award in 2002; 5 Platinum and 2 Gold in 2003 and 7 Platinum SHARE Awards in 2004 from Ministry for Community Development and Sports (Community Chest).

iv. No. of hours contributed to community service

We perform area cleaning, social interaction, conduct fire safety checks and talks to all the homes that we have adopted and help the home to move to new location. Beside, we also perform skit performance, conduct public education programme, participate in blood donation drive etc… Figure 7.4.12 shows the no. of man-hours that our employees have contributed to community service.

Figure 7.4.12 – No. of man-hours contributed to community

Glossary

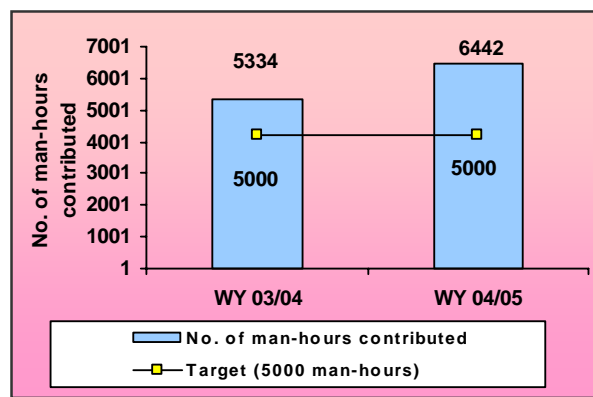|				
AAR	After Action Reviews	EAS	Emergency Ambulance Services
AC	Assistant Commissioner	ECCI	Environment, Communication, Competency & Infrastructure
AGO	Auditor General Office		
AQSM	Assistance Quality Service Manager	e-CEPT	e-Certification & Proficiency Tests
BA	Breathing Apparatus		
BCM	Budget Committee Meeting	ECS	Exercise Community Spirit
BOC	Basic Officer Course	EG	Executive Group
BRTC	Basic Rescue Training Camp	EHRS	Emergency Response Hazmat System
BSC	Balanced Scorecard		
BTF	Basic Task Force	ELS	Electronic Leave System
BTM	Basic Training Manual	eIPPT	Electronic Individual Physical Proficiency Test
C3	Command, Control and Communication		
		EIR	Electronic Incident Report
CA	Chemical (warfare) Agent	EOM	Expenditure on Manpower
CC	Commissioner's Conference	EPIC	Emergency Public Information Center
CD	Civil Defence		
CDA	Civil Defence Academy	ERC	Evaluation Review Committee
CDC	Community Development Councils	ERS	Emergency Response Specialists
CDEC	Civil Defence Executive Committee		
CDNSmen	Civil Defence National Servicemen	ETF	Enhanced Task Force
CERT	Community Emergency Response Teams	eUMS	eUnit Management System
		ExCEL	Excellence through Continuous Enterprising and Learning
CEP	Current Estimated Potential		
CEPP	Community Emergency Preparedness Programme	FB	Fire Bikes
		FISOPS	Fire safety On-line Operating System
CI	Community Involvement		
CIMS	Crisis Information Management System	FP	Fire Post
		FRP	Fast Response Paramedic
CK	Contextual Knowledge	FSM	Fire Safety Manager
CMB	Central Maintenance Base	FSSD	Fire Safety and Shelter Department
CO	Civilian Officers		
Comdr	Commander	FY	Financial Year
Comr CD	Commissioner Civil Defence	GeBiz	Government Electronic Business
COP	Community of Practice		
CORENET	Construction and Real Estate Network	GDP	Gross Domestic Products
CPBr	Community Preparedness Branch	GPS	General Process Skill
CP	Command Post	GSB	General Staff Briefing
CPR	Cardio Pulmonary Resuscitation	HAZMAT	Hazardous Material
CPRM	Corporate Performance Review Meeting	HDB	Housing Development Board
		HDSS	Hazmat Decision Support System
CSB	Central Supply Base		
CSC	Customer Service Center	H.E.A.L.T.H.	Helping Employees Achieve Life-Time Health
CSM	Commissioner's Staff Meeting		
CSSP	Community Safety and Security Programme	HQ	Headquarter
		HRDS	Human Resource Development System
DART	Disaster Assistance Rescue Team		
		HT	Home Team
DC	eputy Commissioner	HTDP	Hazmat Transportation Drivers Permit
DIR Workshop	Do-It-Right Workshop		
Div	Division	HUBT	Home United Basketball Team
DECAM	Decentralised Alarm Monitoring	HUFC	Home United Football Club
DIR	Do-It-Right	HUS CR	Home Affairs Uniformed Service Career Review
DMGX	Dynamic Management Information Report Generator External		
		IAU	Internal Audit Unit
DRC	Deputy Rota Commander		

ICT	Infocomm Technology		PWS	Public Warning System
ICTSC	Infocomm Technology Steering Committee		QS	Quality Service
IDA	Infocomm Development Authority		QSI	Quality Service Indicators
iKNOW	Intellectual Knowledge		QSM	Quality Service Manager
ILP	Individual Learning Plan		R995	Rescue 995 (In-house Magazine)
IM	Instruction Manual		RA	Related Agency
IMC	Information Management Committee		RC	Residents' Committee
Infr.Net	Computerised Feedback Management System		REDCON	Readiness Condition
			REPT	Rescue Equipment Proficiency Test
INSARAG	International Search and Rescue Advisory Group		RI	Registered Inspector
			RO	Routine Order
IPAM and	Institute of Public Administration and Management		ROSE	Rules of Service Engagement
			SAF	Singapore Armed Force
IPPT	Individual Physical Proficiency Test		SAM	Strategic Articulation Map
IRC	Immediate Response Company		SAR	Staff Appraisal Reports
ISO	International Standard Organisation		SARS	Severe Acute Respiratory Syndrome
ISTSC	Infocomm Technology Steering Committee		SCDF	Singapore Civil Defence Force
IT	Information Technology		SHARE	Social Help and Assistance Rendered by Employees
JSSK	Job Specific Skill and Knowledge			
KC	Knowledge Center		SM	Senior Management
KPI	Key Performance Indicators		SO	Senior Officers
LFAV	Light Fire Attack Vehicle		SOP	Standard Operating Procedures
MC	Medical Certificate		SOS	Samaritans of Singapore
MHA	Ministry of Home Affairs		SPP	Supplier Partnership Programme
MIB	My Idea Bank			
MOU	Memorandum of Understanding		SPRING	Singapore Productivity and Innovation Board
MPD	Manpower Department			
NCDCC	National Civil Defence Cadet Crops		SQA	Singapore Quality Award
NEV	Net Economic Value		SQD	Service Quality Department
NIB	Nanotechnology, Info-technology and Biotechnology		SRB	Special Rescue Battalion
			SSS	Staff Suggestion Scheme
NOK	Next Of Kin		SWIFT	Station With Immediate First-Aid and Treatment
NSF	National Service Full-Time			
OC	Officer Commanding		TACT HQ	Tactical Headquarter
OCDM	Officer Core Development Matrix		TD	Technology Department
OHS	Organisational Health Survey		TEC	The Enterprise Challenge
OOE	Other Operating Expenditure		TMS	Training Management System
Ops	Operations		TNA	Training Needs Analysis
PDS	People Developer Standard		TRAISI	Training Administration System on Intranet
PDV	Personnel Decontamination Vehicle			
PE	Public Education		TSR	Training Safety Regulations
PI	Performance Indicator		TLP	Total Learning Plan
PM	Paramedic		UOB	United Overseas Bank
PPS	Public Perception Survey		UN	United Nations
PRAISE	Promotion Ranking and Appraisal System		WISE	Worker Improvement through Secondary Education
PS	Public Service		WIT	Work Improvement Team
PS 21	Public Service for 21st Century		WY	Workyear

National Awards & Accolades

Year	National Awards / Accolades	Awarded by
1999	H.E.A.L.T.H. Award (Silver) (Helping Employee Achieve Live Time Health)	Ministry of Health
2000	H.E.A.L.T.H. Award (Gold)	Ministry of Health
2001	Singapore Quality Class	SPRING Singapore
	H.E.A.L.T.H. Award (Gold)	Ministry of Health
	Innovation Award ▪ TEC Award for "Watermist Technology for Frontline Fire-fighting" ▪ Innovator Award for "Watermist Technology for Frontline Fire-fighting"	Ministry of Finance
2002	H.E.A.L.T.H. Award (Gold)	Ministry of Health
	ISO 9001:2000 Certification for Emergency Ambulance Service and Control Room (HQ SCDF)	International Standards Certification – BSI
	Innovation Award ▪ TEC Award for "Water-jet Cutting for Frontline Fire-fighting" ▪ Innovator Incubator Award	Ministry of Finance
	Public Relations in the Service of Mankind (PRISM) Award ▪ Best Public Campaign (Government) for Projects $500,000 and below Mystery PWS Signal Contest ▪ Best Newsletter Video News Bulletin	Institute of Public Relations of Singapore
2003	H.E.A.L.T.H Award (Gold)	Ministry of Health
	People Developer Standard	SPRING Singapore
	Public Service Award for Organisational Excellence	Public Service 21 Office
	Service Excellence Award (4 Silver)	SPRING Singapore
	Community Chest – 5 Platinum SHARE Award Community Chest – 2 Gold SHARE Award	Ministry for Community Development and Sports
	Platinum Award for Fund Raising Event – President Challenge 2002	President
	President Certificate of Commendation for Management of SARS	President
	Sporting Singapore Inspiration Awards	Ministry for Community Development and Sports
	Outstanding IQC Organisation Award 2003	SPRING Singapore
2004	Chief Information Officer (CIO) Award	CIO Asia (IDG Communications (S) Pte Ltd)
	ISO 9001:2000 Certification for DART Unit (HQ SCDF), PWS Branch and CDA	SGS International Certification Services (Pte) Ltd
	H.E.A.L.T.H Award (Gold)	Ministry of Health
	Community Chest – 7 Platinum SHARE Award	Ministry for Community Development and Sports
	Innovation Award TEC Award – Enterprising Agency Award (Mobil Scrubber)	Ministry of Finance
2005	Renewal of ISO 9001:2000 Certification for Control Room and Emergency Ambulance Service	International Standards Certification - BSI
	Singapore Quality Award	Spring Singapore