cooperative governance

Department:
Cooperative Governance
REPUBLIC OF SOUTH AFRICA

FIRE SAFETY SEMINAR

Report

03 to 04 March 2016

Public Works Conference Centre, Durban, KwaZulu Natal

SOUTH AFRICA

Summary

The fire services sector has made strides in many respects, notably with the review of the Fire Brigade Services Act, 1987 (Act No 99 of 1987) (FBSA) which has been identified by the Department of Cooperative Governance (DCoG) as one of the old-order legislation that require a comprehensive review. This review aims to closely align and harmonise the FBSA with other applicable legislation especially the local government legislation. DCoG published a Discussion Paper on the review of fire services legislation for public comments in March 2013. The Discussion Paper is followed by the Draft White Paper of Fire Services which will culminate in a revised fire services legislation.

This reform is fundamental to better position the fire services to respond to the changing and growing needs of society as well as to contribute meaningfully in the achievement of the strategic objectives of the country's National Development Plan. In essence, the White Paper provides a framework for understanding the philosophy and approach espoused by our government in the delivery of fire services in the country. The fundamentals of the White Paper are derived from our Constitution and the relevant post 1994 local government legislation. In addition, and in line with international trends and practices, the White Paper seeks to establish fire safety and prevention as core elements of fire services functions in order to prevent fires and ensure that precautionary measures are put in place to reduce the likelihood of fires thereby reducing the loss of lives, injuries, damage to property and the environment as a result of fires.

Despite the above-mentioned developments, the fire services sector experiences a number of challenges. While most of our fire services have made tremendous progress in delivering the various services that communities expect, the majority of our country's fire services are frankly not functioning properly and continue to grapple with serious challenges that over the years, have weakened their ability to deliver on their legal mandate. The challenges include the increase in injuries, loss of lives and damage to property and infrastructure due to fires, weak institutional capacity to deliver sustainable fire services by most municipalities especially from resource poor areas, to name but a few. DCoG recognises that preventing fires saves lives and reduces injuries. The fact that some municipalities do not take fire services function seriously is also hampering the efficient provision of fire services in the country. Experience has also demonstrated that there is inadequate political and stakeholder buy-in which is required for the fire services to receive the necessary support within a municipality. As outlined in the National Development Plan, to achieve sustainable and inclusive growth by 2030, South Africa needs to invest in a strong network of economic infrastructure designed to support the country's medium and long-term objectives. Fire services play a critical role in the protection of this network of economic infrastructure. It is therefore important to continuously increase the capacity of fire services to deliver on its critical mandate as failure to do so may impact negatively on socio-economic development. This is critical as both social and economic infrastructure and rural development requires reliable and efficient fire services across the country with the capacity to provide adequate protection from fires and ability to manage them when they occur. In essence, fires adversely affect the country's economy and livelihoods systems of communities.

The Fire Safety Seminar provided a platform for key role players in the fire sector to discuss progress, challenges and proposed solutions and recommendations towards solving the challenges in the sector. The main focus of this year's Seminar was Dangerous goods transportation by road with specific focus on recent major incidents, Fire Safety Risk Assessment for Residential care facilities, Community Fire Risk Management, Role of traditional leadership in fire safety and Fire Engineering.

The recommendations in terms of the focus areas will be factored into departmental planning processes to enable the department to present progress reports at future seminars. The Fire Safety Seminar outcomes enable the department to address issues that are pertinent to the sector.

Report compiled by:

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I. INTRODUCTION AND BACKGROUND

The Fire Brigade Services Act, 1987 (Act No. 99 of 1987) (FBSA) is one of the pieces of legislation administered by the Department of Cooperative Governance (DCoG). The purpose of the FBSA is to provide for the establishment, maintenance, employment, co-ordination and standardisation of fire brigade services; and for matters connected therewith. The objectives of the **Fire Safety Seminar** were:

- To propose practical interventions and strategies to address challenges and better exploit opportunities relating to fire safety and prevention;
- To distil and share lessons learned from the experiences of sector stakeholders and other government departments, including from the private sector;
- To facilitate broader, shared understanding of key challenges, issues, lessons and workable approaches, especially as they relate to fire engineering, community- based fire safety initiatives, skills development and Dangerous Goods Management.
- To strengthen cooperation and to enhance partnerships among government and key stakeholders in addressing common challenges; and
- To recommend approaches for strengthening policies, strategies and practices relating to fire risk reduction and to reduce the gap between theory and practice.

A total of 130 participants from various subsectors in the fire sector, Chief Fire Officers, Fire Safety Officers, Fire Managers from the private sector, and government representatives attended the Fire Safety Seminar.

This final report captures the highlights of the deliberations undertaken during the Fire Safety Seminar and the key issues developed by the commissions.

II. OVERVIEW OF SESSIONS

DAY 1 – OVERVIEW

The Fire Safety Seminar was opened by the reading of the Fireman's Prayer which was led by a uniform member of the eThekwini Fire Department. Opening, introductory and welcoming remarks were provided by Mr Jonty Ndlazi, Head: KZN Provincial Disaster Management Centre.

During the plenary session the following presentations were presented:

(A) Purpose of the seminar

Mr GOL Phetlhu, *Department of Cooperative Governance, National Disaster Management Centre*

The presentation highlighted the key objectives of the Fire Safety Seminar which were:

- ❖ To provide a platform for interactive dialogue and engagement amongst fire safety and prevention practitioners and professionals in order to contribute to the national fire risk reduction agenda.
- ❖ To create a platform for sharing knowledge, experience and good practice on fire safety and prevention matters.

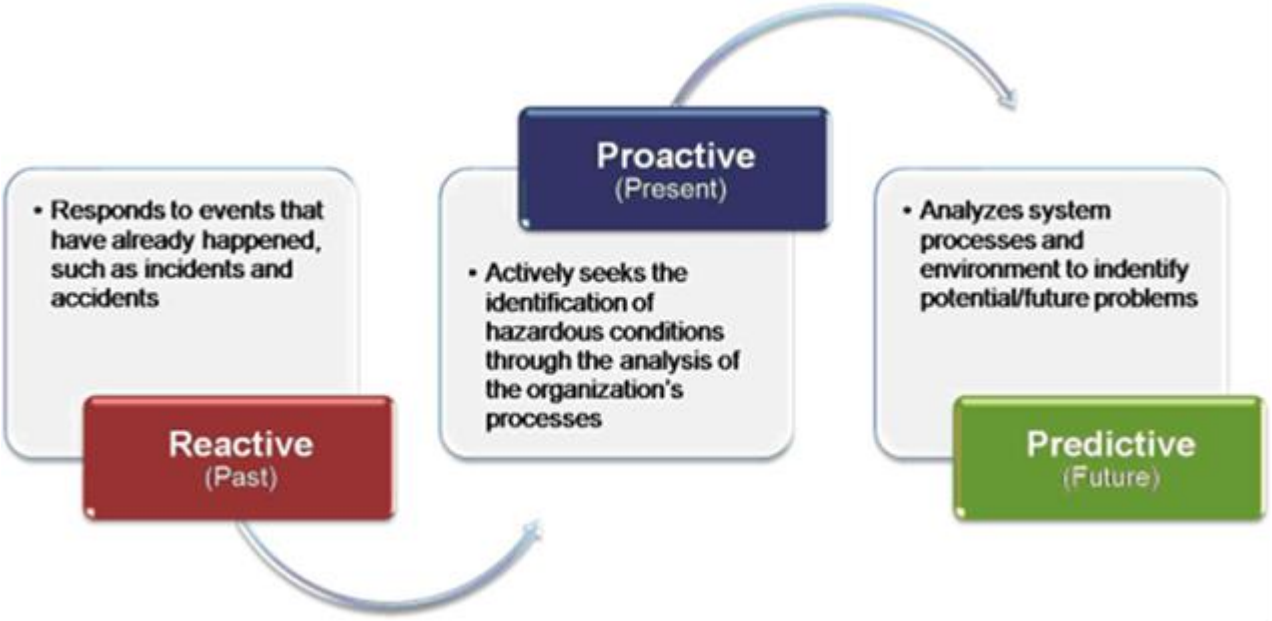
- ❖ To build awareness on the importance and centrality of fire safety and prevention in the sustainable delivery of fire services.
- ❖ To mobilise political support and buy-in for fire safety and prevention activities and programmes.
- ❖ To create a national platform for fire services role players including the private sector and civil society to reflect on the technological developments and their impact on fire safety and prevention.
- ❖ To create a platform for researchers, students, etc, for sharing lessons learned from empirical research, case studies with a view to enhance fire safety and prevention practice.

(B) Priorities of Fire Safety and Prevention

Mr. M.M Khangale, *Department of Cooperative Governance, National Disaster Management Centre*

The priorities of fire safety and prevention are informed by a paradigm shift from response oriented methodologies of providing fire services towards an approach that primarily strives to reduce fire risk through fire safety and prevention initiatives. The presentation on the priorities of Fire Safety and Prevention was underpinned by the philosophy which is depicted below:

Figure 1: New fire services operational philosophy



With this philosophy as a guiding framework, the following are the priorities of fire safety and prevention that were outlined:

- ❖ Fire risk profiling;
- ❖ Ensure that design of new buildings takes proper account of fire safety

- Prioritise vulnerable and high-risk facilities like old-age homes, special schools, etc;
- Prioritise critical infrastructure and designated buildings;
- Linkage of fire safety & prevention into development through IDPs, SDF;
- Ensure community involvement – context must be taken into account;
- Establishment of partnerships (within government and with civil society, academic institutions, research bodies like CSIR, etc & the private sector) for purposes of fire safety and prevention;
- Skills development;
- Development of fire safety & prevention bylaws;
- Assignment of budget for fire safety and prevention;
- Assignment of budget for fire safety and prevention;
- Active participation on government programmes like Operational Fiela
- Dangerous Goods Management
- Veldfire risk mapping
- Early warning systems
- Enhance enforcement programs

(C) Fire safety within KZN environment

Mr E Mchunu, *City of eThekwini*

The presenter noted that the Province of KwaZulu Natal (KZN) continues to experience an increase in the number of fire incidents, particularly during the dry winter season. Contributing factors to the increase in the number of fire incidents in the Province, are mainly the rapid development of informal settlements at central district business areas, illegal electrical connections, the negligent use of open flames during cooking and lighting, the use of highly combustible material, such as thatch roofs, the lack of fire knowledge and awareness and poor fire response capacity from authorities. The presenter reflected on the legislation supporting the provision of fire services as well as the national codes that can be utilised as benchmarks for service delivery. The presenter argued that there is a need for municipalities to enter into Mutual Aid Agreements, with the following recommended terms:

- The agreement is temporary and should have a specific time frame;
- Municipalities without fire services are required to establish functional fire & rescue services in their areas of jurisdiction;
- Municipalities to consider the establishment of fire services at a minimum category C and D as per SANS 10090;
- The minimum to be multiplied by the number of shifts to provide a service on 24hour basis;
- Tariff of charges will be involved if municipalities respond outside their area of jurisdiction (depending on agreed charges/bylaws);
- By-laws is a subject of legal departments for respective municipalities.

(D) Dangerous goods transportation by road (specific focus on recent major incidents)

Mr J van Wyk, *Sasol*

The presenter discussed the critical controls for product transportation safety. The presenter highlighted the factors that can contribute towards preparedness:

- **Preventative measures**
  - Transport sector and Local Authorities
  - Transport Route Risk Assessment – (TRRA's)
  - Dedicated routes
  - Information sharing – DG Notifications
  - Industries and LA's
  - Road shows
  - Joint exercises
- **Understanding and enforcement of Legislation, Standards and Codes**
  - Town planning vs Fire Safety
  - Understanding of roles and responsibilities
- **Pre- response, response and post response plans**
  - Communication – (peace time)
  - Alignment between agencies
  - Joint operations
  - Training – (Hazmat)
  - Risk assessments (Understanding the risk, Factual information)

(E) Fire Safety Risk Assessment for Residential care facilities

Mr D Poxon*: Fire Protection Association of Southern Africa (FPASA)*

The presenter presented an overview on Fire Safety Risk Assessment for Residential care facilities. The presenter highlighted that fire brigades attended over 42 000 during 2013 of which over 27 000 in residential facilities (formal and informal) with over 570 deaths. The presenter noted the Nigel old age home fire that killed 21. He introduced a five-step risk assessment method i.e. (a) identification of hazards (b) identification of people at risk (c) evaluate, remove reduce and protect (d) record, plan, inform, instruct and train and (e) review. He highlighted the key considerations to reduce risks to people which included detection and warning, firefighting, escape routes, signs and notices, etc.

(F) Community Fire Risk Management: Smoke Alarms: Why, Where, and Which?

Mr. R Eksteen: *Western Cape Provincial Disaster Management Centre*

The presenter reflected on the fire problem within the South African environment and most of the fire related deaths in South Africa occur in residential properties. The presenter outlined the Key Action Areas of the Western Cape Burn Prevention Strategic Framework as (a) Socio-Structural and technological risks (b) Behavioural risks and (c) Supportive institutional environments. The presenter identified high-risk residents in community as:

- Young children
- Older adults
- People with disabilities
- Low-income communities
- Communities with many recent immigrants from non-English speaking countries
- Residents of homes with security bars

II. COMMISSIONS

The commission sessions at the Fire Safety Seminar focused on the following main themes:

I Community Fire Risk Management;
III Dangerous Goods Management;
IV Fire Engineering.

The three themes served as a way of loosely clustering and organising presentations and discussions and were meant to be porous, allowing for recurrent issues and ideas to surface and flow across thematic boundaries. The commissions reported to plenary on the last day of the Seminar.

IV. THEMATIC PRESENTATIONS AND DISCUSSIONS IN COMMISSIONS

THEME 1: COMMUNITY FIRE RISK MANAGEMENT

Keynote presentations: Rural fire risk reduction, Mr H Homann, Working on Fire

- Update on WOF products and services;
- Components of prevention i.e. legislation, awareness, fire breaks and fuel load reduction.

Keynote presentations: Role of traditional leadership in fire prevention and risk reduction, Mr X Blose: Umlalazi Local Municipality

- The presenter gave an overview of the role of Traditional Leadership institutions in fire prevention and risk reduction.
- The institutions of Traditional Leadership are central to our system of governance in rural areas.
- Traditional customs and ways of living must complement and reinforce our modern systems of democracy.
- Traditional Leaders have a fundamental role to play in fire safety and response.
- Functions of the traditional councils in terms of the KwaZulu-Natal Traditional Leadership and Governance Act, Act 5 Of 2005–
    - To work together with municipalities in the identification of community needs;

- To facilitate the involvement of the traditional community in the development or amendment of the Integrated Development Plan (IDP) of a municipality in whose areas that community resides;
- To participate in the development of policy and legislation at local level;
- To promote Indigenous Knowledge Systems (IKS).
- To alert any relevant municipality to any hazard or calamity that threatens the area of jurisdiction of the traditional council in question.
- To contribute to disaster management in general.
- Ensure compliance with all laws and orders and instructions of a competent authority.

❖ The presenter identified the following as possible areas of cooperation between the Traditional Leaders and the Fire Services –
- Areas of cooperation
- Fire breaks
- Awareness campaigns
- Fire volunteers recruitment and training
- Compliance enforcement (By-Laws)
- Reporting of incidents
- Early Warnings (Dissemination of fire warnings i.e. FDI)

Recommendations:

- Capacity building programmes be conducted to Traditional Leadership institutions to enhance their role in fire safety programmes.
- Traditional Leadership Institutions must be rigorously involved in development of risk reduction plans.
- Traditional Leadership structures must play a vital role in promoting disaster management awareness campaigns programmes and dissemination of early warning messages e.g. Fire Danger Index.
- Traditional Leaders must promote Indigenous Knowledge System (IKS) such as the promotion of fire breaks implementation.

THEME 2: DANGEROUS GOODS MANAGEMENT

Keynote presentations: Transportation of Dangerous Goods by Road, Mr P Venter, City of eThekwini

❖ The presenter noted that Dangerous Goods are regulated internationally by the United Nations and that nationally these are some of the key Legislation and Regulations –
- National Road Traffic Act, (NRTA) and National Road Traffic Regulations (NRTR)
- South African National Standards (SANS Codes) which are specifically referred to in the NRTR under Regulation 273A
- Municipal By-Laws (Emergency Services By-Laws)
- Occupational Health and Safety Act (OHSA)
- Hazardous Substances Act
- Explosives Act
- Fertilizer, Farm Feeds, Agricultural Remedies and Stock Remedies Act.

- The presenter reflected on pertinent South African National Standards (SANS) such as SANS 10231: 2014 Transport of Dangerous Goods - Operational Requirements for road vehicles, SANS 1518: 2011 - Transport of dangerous goods — Design, construction, testing, approval and maintenance of road vehicles and portable tanks, SANS 1157 - Transport of dangerous goods — Inspection requirements of road vehicles for the issue of municipal dangerous goods transport permits
- The presenter made the following concluding remarks –
    - The transportation and handling of Dangerous Goods must be treated with care and done in a safe and reliable manner.
    - For this purpose codes of practice were prescribed for the transportation of Dangerous Goods. These requirements have been put in place to reduce the risk of and manage unintentional incidents where dangerous goods and hazardous materials are released and can affect life, property and the environment.
    - Much ignorance has prevailed regarding the hazards and dangers associated with the transportation of dangerous goods and the relevant safety standards have been incorporated into the regulations and codes of practice.
    - These codes however remain meaningless unless properly enforced and the transport industry receives proper training to comply with the regulations and prescribed codes of practice.

Keynote presentations: Storage, usage and handling, H, Seeparsad, City of eThekwini

- The presenter gave a brief overview of the Hazardous substance Act no 15 of 1973 and outlined the nine classes as depicted below:

- With regard to Storage of Dangerous Goods, the presenter made the following observations:
  - Substances are stored in accordance with the magnitude of the dangerous nature of the substance
  - Dangerous goods classification is different from hazardous substance classification as it does not consider adverse effects from long term exposure

    Substances may be both a hazardous substance and a dangerous good, although this can be for differing properties of the substance
  - On Any Registered Premises no person shall store; use or handle any dangerous goods in circumstances that such dangerous goods does not come into contact with any fire; flame; naked light or any other agency that may cause ignition
  - Storage and use of dangerous goods cannot be handled unless the said premises are situated or constructed or so protected by surrounding walls or bunds to adequately protect adjoining premises from the risk of danger from fire
  - No person storing and handling dangerous goods will prevent or impede the scape of any person or animal
  - Premises storing and handling dangerous goods must have equipment in such premises that is maintained in good and proper order and free from any leakage
  - Unauthorised entry to dangerous goods storage is prohibited.

Keynote presentations: MHI – Roles and responsibilities of local authorities, Ms. N Mkhwanazi

- The presenter gave an overview of the regulatory framework noting the following instruments **–**
  - Occupational Health and Safety Act, 85 of 1993
  - National Building Regulations and Building Standard Act, 103 of 1977
  - Fire Brigade Services Act, 99 of 1987
  - Municipal Bylaws
  - **SANS CODE OF PRACTICE:**
  - SANS 10 228
  - SANS 10 400
  - SANS 10 087
  - SANS 10 089
  - SANS 10 131

The presenter highlighted that the MHI Regulations were promulgated in 1998 (reviewed in July 2001) and its scope of application includes the following –

- Employers, self-employed persons, user
- Local government
- Shall not apply to nuclear installations
- Notification of Installation
- Risk Assessment – conducted by AIA
- Await LA and DOL approval
- Provide and practice on site emergency plan
- Monitor and report accidents/near miss
- Develop and practice offsite emergency plan

- The presenter gave an overview of the Bhopal pesticide plant disaster which claimed the lives of over 3000 people. The presenter reflected on the role of local government regarding MHIs and most notably highlighted the following:
  - Without derogating from the provisions of the National Building Regulations and Building Standards Act, 77 (Act 103 of 1977),no local government shall permit the erection of a new major hazard installation at a separation distance less than that which poses a risk to:
    - airports;
    - neighboring independent major hazard installations;
    - housing and other centers of population or;
    - any other similar facility:
  - Where local government does not have facilities available to control a major hazard incident or to comply with the requirements of this regulation, that local government shall make prior arrangements with a neighboring local government, relevant provincial government or the employer, self-employed person and user for assistance.
  - All offsite emergency plans to be followed outside the premises of the installation or part of the installation classified as a major hazard installation shall be the responsibility of the Local Government.

Recommendations:

- Develop Strategic plans to deal with MHI's
- Identification of the Unit to spearhead the
- process
- Establish MHI Committee
- Powers of the Committee vs Municipal processes iro approval of MHI's
- Roles and responsibilities of MHI Committee [LA] iroS9
- Work in collaboration with DoI - Regulator

THEME 3: Fire Engineering

Keynote presentations: Fire Safety Management as a Design Input, D, Poxon, FPASA

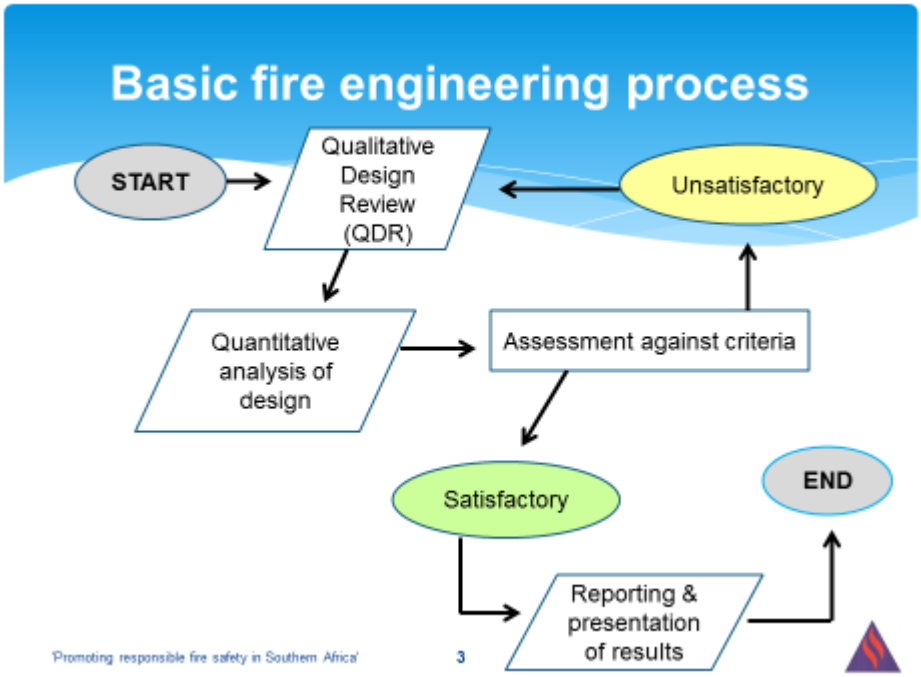
- ❖ The presenter grappled with the fundamental question, of what should fire safety management achieve? He argued that it must achieve –
- Minimize fire incidents in a building
- That passive, active and procedural fire safety systems are in place and operate properly
- Occupants of a building reach a place of safety and avert disaster
- ❖ The presenter highlighted that key aspects of fire safety management include –
  - Meeting legal obligations
  - Designing so that a building can be managed
  - The need for a fire safety manual
  - Clear roles regarding fire prevention and protection
  - Planning for managing emergencies
- ❖ With regard to management input at the design stage, the presenter noted the following –
  - Consider human behaviour in emergency situations and use this to lead people to safety to avoid complex systems that require rapid learning
  - Needs to be appropriate for what people do, not what the designer wants them to do
  - Clear statement of design requirements for fire safety management to be developed
  - Fire safety systems are an inherent part of the design and not supplementary
  - Implications of the design, from a management perspective, to ensure functional over the life time of the building

Recommendations:

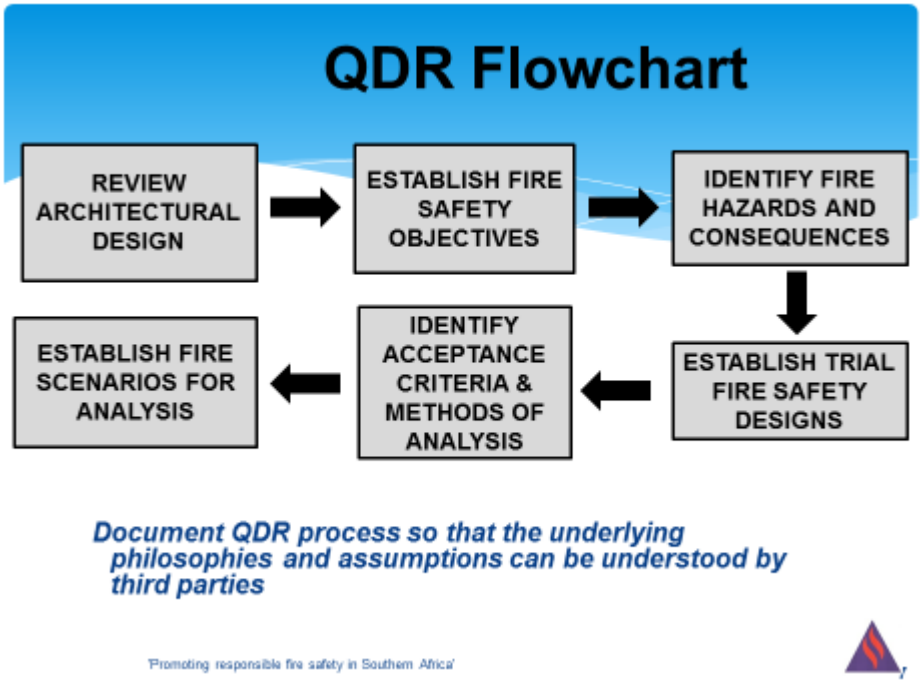
- FSM is a critical risk reduction function
- Extent will depend on complexity of premises and fire risk profile
- Fire risk assessment is fundamental
- Regular compliance audits a must
- The design and construction of the building and all the fire safety systems installed (both active and passive), need to be fully documented for handover to management on completion

Keynote presentations: Rational Designs Principles

- The presenter prefaced his presentation by outlining the basic fire engineering process as illustrated below:



- The presenter outlined the Qualitative Design Review (QDR) process flow as outlined below:



- Analysis using the following sub-systems to provide guidance, support and to present the general principles of the fire safety design:
  - Initiation/development of fire in enclosure of;
  - Origin
  - Spread of smoke and toxic gases beyond;
  - Enclosure of origin;
  - Fire spread beyond enclosure of origin;
  - Detection/activation of fire protection systems;
  - Fire service intervention;
  - Evacuation

Keynote presentations: National Building Regulation (SANS 10400), L Potelo, City of Johannesburg

- The presenter noted that the National Building Regulations and Building Standards Act, 1977 (Act 103 of 1977) states that an application of intention to erect a building shall be made to the local authority, and a FIRE protection plan shall accompany such application. Therefore, the South African National Standard SANS 10400 is the platform to use as guidance towards planning for the intended building construction. This standard consists of parts A – W. Fire protection uses mainly:

  - Part A – Administration
  - Part M – Stairways
  - Part T – Fire Protection
  - Part W – Fire Installations

- The presenter highlighted that our main focus area is Part T – Fire Protection. This part of SANS 10400 provides deemed to satisfy requirements for compliance with part T (Fire Protection) of the South African National Standard. Part T1 (1) Any building shall be so designed, constructed and equipped that in case of fire –
  - safe evacuation of occupants, including persons with disabilities;
  - the intensity and spread of such fire will be minimised;
  - sufficient stability will be retained;
  - the generation and spread of smoke will be minimised;
  - Adequate access, and equipment for detecting, fighting, controlling and extinguishing such fire, is provided.
- The presenter noted that there are several challenges confronting the fire safety officer and key among these is the whole issue of who is a competent person. In this regard he noted that Competent person (fire engineering) is a person who
  - is registered in terms of the Engineering Profession Act, 2000 (Act No. 46 of 2000), as either a Professional Engineer or a Professional Engineering Technologist, and
  - is generally recognized as having the necessary experience and training to undertake rational assessments or rational designs in the field of fire engineering.
- Concerns: Some Competent Persons (Fire Engineering) are questioning the competency of the Fire Department's plan examiners. Only ECSA registered engineers should submit Rational Designs.
- The presenter made the following recommendations:
  - Local Authorities need to arrange sessions of this nature and address all issues that are not clear in the National Building Regulations.
  - The Fire Brigade Services Act needs to be reviewed, so that we may be able to enforce the regulations without necessarily being challenged by the private sector.

OVERVIEW OF SESSIONS

DAY 2 – OVERVIEW

(A) Recap of first day

Mr GOL Phetlhu, *Department of Cooperative Governance, National Disaster Management Centre*

(B) Reducing fire risks through partnerships. Presentation by the National Disaster Management Centre

Mr MM Khangale, *Department of Cooperative Governance, National Disaster Management Centre*

This presentation highlighted the importance of partnerships for purposes of fire safety and prevention. The presenter noted that the Department of Trade and Industry (the dti) together with two of its agencies i.e. the National Consumer Commission (NCC) and the National Regulator for Compulsory Specifications (NRCS) and the National Disaster Management Centre (NDMC) located within the Department of Cooperative Governance and Traditional Affairs (COGTA) have joined hands in a safe paraffin appliance awareness campaign. The campaign is aimed at raising awareness on the usage of safe paraffin stoves and to eliminate poor quality stoves that tend to contribute to fires that often devastate informal settlements across the country. It is also aimed at improving intergovernmental cooperation and facilitating service delivery where the provision of safe consumer goods is concerned.as part of this campaign, 2500 unsafe stoves were removed and replaced with safe and compliant paraffin stoves during a campaign that was held in Vusimuzi Informal Settlement, Tembisa in Ekurhuleni City. It was indicated that the NDMC together with all PDMCs have identified vulnerable areas across the country that will be visited as part of this campaign.

(C) Career path for fire safety personnel in the municipal environment

Mr P Brits, *Fire Safety Division, City of Ekurhuleni*

- The presenter reflected on the mandate of the fire service which flows from the Constitution and the Fire Brigade Services Act, 1987. The presenter outlined the core divisions of the fire services which include, Fire Safety, Operations, Emergency / Medical, Training and Logistics. The presenter reflected on current fire safety courses in the country and this is summarised in the table below:

- The presenter noted that Metropolitan areas has staff available to specialise in specific disciplines in the fire safety section where else we do have municipalities that don't even have a fire safety section. Question to answer: Who is the most experienced Fire Safety Officer? The one who specialise in one functionality or the one who has to do everything? The presenter alluded to the NFPA Codes which identify identified four types of roles applicable to fire safety as –
    - Fire Inspector: An individual who conducts fire code inspections and applies codes and standards;
    - Plan Examiner: An individual who conducts plan reviews and applies codes and standards;
    - Fire Investigator: An individual who has demonstrated the skills and knowledge necessary to conduct, coordinate, and complete an investigation;
    - Fire Marshal: A person designated to provide delivery, management, and/or administration of fire protection and life safety related codes and standards, investigations, education, and/or prevention services for local, county, state, provincial, federal, tribal, or private sector jurisdictions as adopted or determined by that entity

- With regard to the identification of job levels, the presenter identified the following –
    - Inspector I - An individual at the first level of progression, conducts basic fire inspections and applies codes and standards
    - Fire Inspector II - An individual at the second or intermediate level of progression, conducts most types of inspections and interprets applicable codes and standards
    - Fire Inspector III - An individual at the third and most advanced level of progression, performs all types of fire inspections, plans review duties, and resolves complex code-related issues
    - Plan Examiner I - An individual at the first level of progression, conducts basic plan reviews and applies codes and standards
    - Plan Examiner II - An individual at the second or most advanced level of progression, conducts plan reviews and interprets applicable codes and standards.
- With regard to courses that are applicable to fire safety, the presenter lists the following –

Fire Engineering Science (Hydraulics & Chemistry) Fire Engineering (Fire Dynamics) Fire Engineering (Fire Models) Fire Engineering (Design & Assessment) Fire Protection Engineering (Active) Fire Protection Engineering (Passive) Smoke Control Interaction between fire and people Egress & Risk Assessment Building Engineering Building Plan Examination	Engineering (Fire Dynamics) Building Construction for the Fire Service Building Regulations, Codes, Standards & Legislation Fire Prevention Practices Fire Safety Risk Assessments Community Risk Reduction Codes & Inspection Procedures Fire Investigation (Origin & Cause Determination) Fire & Life Safety Educator Public Information Officer

- **Proposed way forward**
    - We need to realise that no fire service in South Africa is a mirror image of each other due to:
        - Different municipal classifications (Metro, District, Local);
        - Different organizational structures (Size of staff complement);
        - Different risks in area of jurisdiction (Farm land vs Petroleum Depots)
        - Different topography in area of jurisdiction (Built-up vs Rural)
    - No professional body representing fire service
        - Fire Brigade Board is not functioning as desired, perhaps the new Fire Brigade Services Act will address this shortcoming via the route of a Professional Body
    - A mind set needs to take place at Top Management level in fire services to move towards prevention, protection and education instead of response
        - No specific tertiary qualification exist for fire safety personnel
        - Research international qualifications and convert/adapt for South Africa environment
        - Compile and draft a “new” qualification and submit for approval by SAQA

- Engage tertiary education institutions to provide “distance learning” on this program throughout South Africa
- Current short courses as provided by e.g. FPASA, ETS and SAESI/IFSAC can be included in the “new” qualification as this approach is standard in USA degree programs

- No career path exists for fire services:
  - Needs to be drafted for all sections
  - Needs to be based on roles rather than ranks
  - Needs to be included as a regulation in terms of the new Fire Brigade Services Act
  - Establish a small working group to draft a career path for fire safety

(D) Presentation by the National Regulator of Compulsory Specifications (NRCS)

Mr H Nyalungu, National Regulator of Compulsory Specifications

- The presenter noted that the NRCS is an entity of the department of Trade and Industry established to administer compulsory specifications and other technical regulations with the view to protect human health, safety, the environment and ensure fair trade in accordance with government policies and guidelines. The NRCS serves to protect the health and safety of the consumer, as well as to protect the environment, (also promotes fair trade), to evaluate & approve or homologate the commodities to which a compulsory specification is enforced and then conduct on-going inspection/market surveillance & sampling, to ensure the removal/reduction of non-compliant commodities by imposing sanctions on non-compliant clients and to ensure the continuous compliance of approved products.
- With regard to the key question of why does the NRCS regulate paraffin stoves, the presenter outlined the following –
  - The contribution of faulty and illegal paraffin appliances to fire incidents cannot be ignored since this leaves the dwellers stranded and devastated as a result of injuries; loss of property and loss of lives
  - It is for this primary reason that the NRCS has introduced a technical regulations known as VC 9089:2013 (for Non-pressure paraffin stoves and heaters) and VC 9093 (of Pressurized Paraffin Appliances)
  - Consumers are warned not to purchase unsafe non-pressure paraffin stoves and heaters as it may cause serious injury, death or destruction of property.
  - Consumers must only purchase safe and compliant non-pressure paraffin stoves and heaters.

- Such compliant non-pressure paraffin stoves and heaters are marked with an approval number that was issued by the National Regulator for Compulsory Specifications.
- This approval number is marked either on the appliance itself or on its packaging (the box in which it is supplied).
- Such an approval number consists of the following characters:
    - AZ/1906/2006/XXXX

(E) Report-back by Commissions

All commissions reported back to plenary on key issues and recommendations that emerged from their respective commissions. See attached presentations.

(F) WAY FORWARD, Khangale MM, NDMC

Mr MM Khangale identified 14 key points that emerged from the discussions and engagement during the workshop. He noted that these points will be used to reflect on progress at the next fire safety seminar:

NO	KEY FOCUS AREA	RESPONSIBLE AGENCIES
Point No 1	Fire risk profiling	Municipalities
Point No 2	Creation of institutional arrangements for fire safety & prevention	All spheres of government
Point No 3	Assign a budget for fire safety and prevention	All spheres of government
Point No 3	Develop skills of fire safety and prevention practitioners	All spheres of government
Point No 4	Enhance code enforcement for high risk facilities like residential care facilities, hospitals, prison, schools for children with special needs, etc	Municipalities
Point No 5	Establish partnerships for fire safety and prevention	All spheres of government
Point No 6	Enforce Building Regulations & work closely with land use and town planning divisions	Municipalities
Point No 7	Education and awareness programs	Municipalities with the support of provincial and national governments
Point No 8	Provision of Strategic Leadership and creation of a Social Compact to reduce fire risks and losses	National and provincial governments
Point No 9	Strengthening research and development	All spheres of government

Point No 10	Establishment of exchange programmes for sharing experiences	All spheres of government
Point No 11	Development of MHI off-site plans & establishment of committees	Municipalities
Point No 12	Build capacity to manage dangerous goods (all classes) incidents	All spheres of government
Point No 13	Community engagement	Municipalities
Point No 14	Develop a career-path for the fire services	National government with the assistance of stakeholders
Point No 15	Development of fire safety & prevention bylaws	Municipalities with the assistance of provincial and national governments
Point No 16	Promote the use of SANS 1157 to standardise Dangerous Goods vehicle inspections	All spheres of government
Point No 17	**Will still look at recommendations of each commission to ensure there is alignment (see below)**	
Point No 17	Training of traditional leaders in fire safety related matters	All spheres of government
Point No 18	Create mechanisms for more than one person should scrutinise and approve dangerous goods plans	All spheres of government
Point No 19	More Joint exercises between industries and Local Authorities	All spheres of government
Point No 20	Enforcement of applicable legislation should be intensified	All spheres of government
Point No 21	There should be MoAs between municipalities	Municipalities
High- level recommendations		
Consider having the next session to be more of a strategic dialogue to reflect on key issues facing the sector;		
Encourage all provinces to host their own fire safety seminars prior to the hosting of the national seminar		

(G) Closing address by the Head of the NDMC, Ken Terry

The head of the NDMC noted that the NDMC started hosting the Annual National Fire Safety and Prevention Seminar in 2013 and that delegates at the 2013 seminar requested the NDMC to organise this event on annual basis and the 2nd annual seminar was held in Nelspruit, Mpumalanga during March 2015. This year, we organised the seminar in collaboration with the KZN COGTA and the Fire Protection Association of Southern Africa (FPASA). The Head noted that the seminar is a platform that also enables our key partners from within and outside government to share information and knowledge on key issues that must be prioritised by all stakeholders in order to reduce fire losses. The complexity of the fire problem in our country requires concerted effort by all role players across all spheres of government, civil society and the private sector. It is against this background that the NDMC is partnering with various organisations within and outside government to pool all available resources in order to reduce fire risks and losses.

Mr Terry alluded to some of the work that the NDMC is currently doing notably that the NDMC has submitted the draft White Paper on Fire Services to Cabinet for further processing. This draft White Paper on Fire Services will form the basis of the new legislation. This White Paper places fire safety and fire prevention at the centre of the work that must be undertaken by all fire services in the country. The NDMC has also prepared a draft Bill on Fire Services which will be discussed with stakeholders prior to submission to Cabinet for consideration. This will be done once Cabinet approves the White Paper. In closing, he thanked the Fire Protection Association of South Africa, and Santam for supporting the hosting of this conference through their generous donations. He also thanked the KZN COGTA for allowing us to host the summit in their province and for all the logistical support including securing this venue at no cost from the provincial department of Public Works. He thanked all the speakers for sharing their knowledge and expertise on fire safety and prevention issues. To the delegates, he said he hope the seminar was informative and that lesson learned here will improve fire safety practice going forward. He thanked the delegates for the continued support in making this summit a success that it has become.

IV. CONCLUSIONS

The NDMC regards the Seminar as a platform for stakeholders in the sector to debate and discuss issues of common interest. The department endeavours to host the Fire Safety Seminar as an annual event. The participation of stakeholders is central to the success of the Seminar and the Department will ensure that key stakeholders continue to contribute their valuable inputs and engage on challenges facing the sector. The recommendations made by various commissions will be factored into departmental planning processes to ensure that they are presented at future Seminar's reports on progress.

V. ACKNOWLEDGEMENTS

The Department of Cooperative Governance would like to thank all the stakeholders who participated in the Fire Safety Seminar, 2016. The NDMC extends its thanks to the KZN GOGTA (PDMC), representatives of the industry, Chief Fire Officers, Fire Safety Officers, firefighters, municipalities, traditional leaders, provincial government departments and members of the media.

The department would also like to thank sponsors of the Fire Safety Seminar, namely Fire Protection Association of Southern Africa (FPASA) and Santam.

Photo: Fire and Rescue International