

Delhi Fire Service

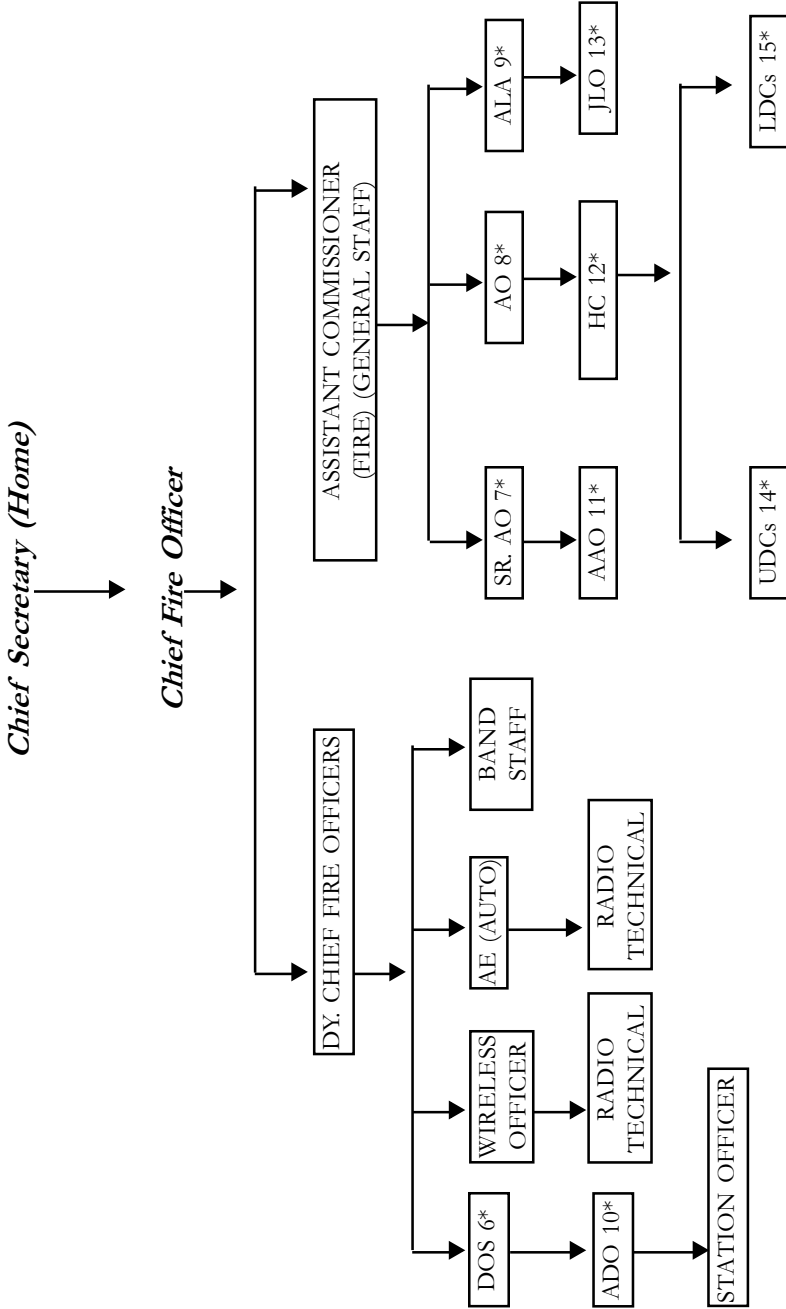
The Delhi Fire Service (DFS) came into existence in 1942 after amalgamation of 2 fire stations in Delhi that were functioning separately under the control of Delhi Municipal Committee and New Delhi Municipal Committee. In 1970, DFS had 14 fire stations including training centre and headquarters. The fire safety provisions were introduced in the building byelaws in 1983 and Fire Prevention and Fire Safety Act came into existence in 1986. The service was brought under plan development in 1990-91.

Organisational Structure and Functions

The Municipal Corporation of Delhi (MCD) administered Delhi Fire Service till November 1994 after which the administrative control was shifted to the Home Department of Delhi Government. The Department provides fire services to Delhi covering an area of 1,483 sq. km. with an approximate population of 13.78 millions. The fire units are sent to tackle the incidents irrespective of whether the area is under the control of MCD, NDMC or Cantonment Board.

The DFS comprises of 41 fire stations including the training centre. Chief Fire Officer, the Executive in charge of DFS, functions under the administrative control of Principal Secretary (Home), Delhi Government. The DFS is divided into five divisions-South, West, Central, East, Northwest and 17 sub-divisions. Each division is headed by Deputy Chief Fire Officers assisted by Divisional Officers and Assistant Divisional Officers. The Station Officers are in charge of each fire station. Figure 1 describes the organisational hierarchy of the Department.

Figure 1: Organizational Set up



6* Divisional Officer	7* Senior Accounts Officers
8* Administrative Officers	9* Assistant Legal Advisor
10* Assistant Divisional Officer	11* Assistant Accounts Officer
12* Head Clerk	13* Junior Legal Officer
14* Upper Division Officer	15* Lower Division Clerk

Functions and Responsibilities

The Delhi Fire Service protects and safeguards the lives and property in Delhi in the event of an outbreak of fire and other emergencies like drowning, house collapse, road accidents, rescue, full emergency, animal rescue and bomb explosion. It ensures minimum standards of fire prevention and fire safety measures in multi-storied buildings (15 metres or more), cinemas, institutional, industrial buildings in accordance with the Delhi Fire Prevention and Fire Safety Act, 1986.

The number of firemen is one of the major problems faced by the DFS. According to the Deputy Chief Fire Officer, there has been no change in the number of personnel till 2001. In 2004, the total number of employees working in DFS WAS 1,692 out of a sanctioned post of 2,253.¹

Acts and Laws

The Delhi Fire Prevention and Fire Safety Act, 1986 primarily govern the Delhi Fire Service. The provisions in the Delhi Municipal Corporation Act, 1957 were found to be inadequate in enforcing fire safety measures. The enforcement agencies did not have the statutory authority to compel the owners of buildings to carry out necessary measures for fire prevention. Penalties were insufficient and local authorities had their own respective byelaws. There was a complete lack of coordination in fire prevention, fire fighting and safety measures in the absence of a single agency. In view of this situation, the Act was implemented in 1987.

To ensure safety of the buildings and their occupants, the **Building Bye-laws** were adopted in June 1983 and a **National Building Code Part 4** is referred to cover the requirements for fire prevention, life safety and fire protection of buildings. It specifies construction, occupancy and protection features necessary to minimize danger to life and property. One of the salient features of the Act is

that buildings more than 15 metres in height should have provisions of fire prevention and fire safety measures and the Chief Fire Officer is empowered to inspect any building for these provisions and take suitable actions for non-compliance.

Financial Allocations and Performance

The approved plan outlay for the Ninth Five Year Plan was Rs 100 crore. DFS however spent only Rs 38 crore in that period and thus was considered a 'poor' performer. Despite the gross under utilisation of funds, the approved outlay for the Tenth Five year Plan was increased by Rs 20 crore to Rs 120 crore. Table 1 details the expenditure and budgets of DFS over a period of five years.

Table 1: Budget Estimates and Actual Expenditure (Rs in lac)

Year	Budget estimates		Revised Estimates		Actual Expenditure	
	Plan	Non-plan	Plan	Non-plan	Plan	Non-plan
2000-01	350	2,804	350	2,310	183	2,165
2001-02	350	2,567	1,490	2,279	1,347	2,162
2002-03	800	2,299	1,300	2,275	1,212	2,231
2003-04	1,200	2,520	575	2,330	3,87	2,277
2004-05	1450	2731	1495	2618	3,459	

Source: Government of NCT Delhi. Data abstracted from detailed Demand for Grants for the years of 2000-01, 2001-02, 2002-03, 2003-04, 2004-05

According to the facts, there has been an improvement in the utilisation of funds. For instance the expenditure in the year 2003-04 and 2004-05 is approximately 88-90% of the revised budget estimate. The total expenditure incurred in year 2004-05 is Rs 35 crore. There has been an improvement in utilizing the approved plan outlay, but still it is not up to the mark to make the system efficient and competent. Table 2 describes major expenditure in DFS, which indicates the inconsistency between the rate of expenditure and the needs and requirements of DFS.

Table 2: Major Expenditures of Delhi Fire Service (Rs in lac)

<i>Major expenditure heads</i>	<i>1998-99</i>	<i>1999-00</i>	<i>2000-01</i>	<i>2001-02</i>	<i>2002-03</i>	<i>2003-04</i>
Direction and administration	66	51	0.45	0.60	0.46	0.70
Protection and control	1,780	2,068	2,221	2,306	2,965	2,505
Training	70	70	81	78	92	89
Other expenditures	2	4	0	1065	340	0

Source: Government of NCT Delhi. Data abstracted from detailed Demand for Grants for the years of 1998-99, 1999-00, 2000-01, 2001-02, 2002-03, 2003-04, 2004-05

The maximum expenditure is incurred on protection and control which includes sub-heads such as salaries to fire men, domestic travel expense, maintenance and repairs, machinery and equipment, supplies and material, motor vehicles and advertisement and publicity.

Mode of functioning

The Delhi Fire Service works on Centralized Mobilizing Schemes. Once the call is received, the information is transferred to the nearest fire station and pre-determined number of fire units is dispatched immediately. According to the DFS, there has been a downward trend in the number of fire calls received from 1999-2000, however the decrease has been marginal. Table 3 substantiates the point.

Table 3: Information on the Working of Delhi Fire Service

<i>Year</i>	<i>No. of Calls</i>	<i>Approx. Loss (In lac)</i>	<i>Property Saved (In lac)</i>	<i>Injured</i>	<i>Deaths</i>
1999-00	15,002	2,244	6,998	1,257	269
2000-01	14,877	14,571	12,761	1,250	263
2001-02	13,785	3,430	5,331	1,197	261
2002-03	14,488	4,901	8,250	1,294	270
2003-04	14,595	5,874	8,750	1,334	135
2004-05	14,208	4,681	6,629	1,687	272

Source: Delhi Fire Service Press Note as on 14th to 20th April 2005

According to DFS personnel, due to lack of manpower, the current employees feel overworked. The shortage of staff ranges from 26 to 50 percent in various wings with reference to the sanctioned strength of existing fire stations. According to the CAG Report 2004, the Anti-Corruption Branch received complaints alleging fraudulent induction of at least 20 people as fire operators in connivance with

some DFS personnel. The recruitments were made through the Delhi Subordinate Services Selection Board. On probing, discrepancies in the driving licenses and the stipulated age criterion of the recruited fire personnel were found.

Major Drawbacks

The Delhi Fire Service has taken numerous steps to make the system more competent and systematic so that various big or small incidents of fire can be controlled without significant damages. Some of the main areas of improvements are increase in the number of fire stations, and need for modern fire fighting equipments for the firemen. DFS has also made a list of 220 building that were constructed before the enactment of building bye laws and thus do not comply with fire safety requirements. They have been able to enforce the requirements in 150 cases however 70 buildings are still unsafe. They also disseminate fire prevention and safety demonstrations in schools and other government departments. Some of the major drawbacks are discussed below:

- **Response Time**

According to the CAG Report 2001, the response time of fire units was more than the stipulated five minutes in most fire stations. Calls from MTNL phones do not get connected as all new emergency numbers have four digits in them. The fire officers have not been able to rectify this flaw till date. The main reason stated by the Delhi Fire officer was congestion, encroachments and traffic. Even though DFS is directly affected by these encroachments it is not their responsibility but of the Police Department to remove them.

- **Fire Prevention**

The DFS does not have any estimate on number of high-rise buildings in Delhi as on date and has no mechanism to ascertain such numbers. According to a Directive in 2003, many of the approximately 1,200 high-rise buildings in Delhi had not complied with the fire safety norms, making them unsafe for residential or commercial purposes. According to an Association head of a high rise building in a Lal Dora district, No objection certificates (NOC) are difficult to get even if all the 12 requirements mentioned in the

Building Bye Laws have been complied with, unless the officials are bribed. Therefore, the residents have become very perceptible to harassment from officials.

■ **Fire Stations**

It was observed that distribution of 36 fire stations was not in proportion to the (provisional) population of 1.38 crore in Delhi till March 2001 as indicated in Table 4.

Table 4: District-wise Fire Stations

<i>District</i>	<i>Population</i>	<i>No. of Fire station</i>
New Delhi	1,71,806	6+1*
Central	6,44,005	5+1*
East/North East	32,12,482	4+2*
West	21,19,641	7+1*
North/North West	36,27,183	9
South/South West	40,07,859	5

Source: Government of NCT Delhi. 2001. CAG Report

**Increase in the number of fire stations by 2005*

There were only four fire stations in Trans-Yamuna area where more than 23 per cent population of Delhi resides. As per priority fixed by the Board of Officers in January 1976, the additional fire stations were to be established first on the already offered land. When DFS was transferred from MCD to Delhi Government in November 1994, 13 out of 18 on going projects of fire stations were to be completed by MCD by March 1999. There were 18 projects in hand with MCD including 12 fire stations. Of these, only three fire stations were completed and nine were still in progress and fire stations were operating from incomplete buildings as on 2001.

These projects were in progress for periods ranging from two to nine years. Payment of Rs 24.91 crore had already been released to MCD till September 1999 out of a total demand of Rs. 27.08 crore. The DFS had neither maintained any detailed accounts of these projects nor conducted joint inspections with MCD to assess their progress. On enquiring about the status of these fire stations the Deputy Fire Officer A.K Sharma said that all the fire stations are being constructed by PWD and not MCD. So the question arises as to what happened to Rs. 24.91 crore already released to the MCD?

▪ **State of Fire Fighting Equipments**

An important requirement for fire fighting is adequacy of fire fighting equipments and their proper maintenance. DFS not only needs to further increase the number of already existing specialised equipments but also introduce more specialised gear, tools and equipment. The requirement of water tenders in Delhi is more than 200, however there are only 110 water tenders as on date. According to CAG Report 2001, a large number of fire fighting equipments were out of commission as most of these had outlived their life and require frequent repairs. Arrangements for fire fighting in high-rise buildings were also insufficient as five out of six turntable ladders were out of commission.

DFS does not have adequate water supply. There are 7,640 fire hydrants with Delhi Fire Service. 90% hydrants are unserviceable as they have been obscured under the road carpeting and no satisfactory arrangement exists for their speedy repairs and maintenance. These hydrants are also ineffective since water supply is restricted to few hours in the morning and in the evening. The Board of Officers had recommended 700 underground static water tanks as on January 1976. However, this number is still far from being achieved. 256 of these tanks are with the MCD, 44 with NDMC, and one with the Cantonment Board.

Comparative study

The comparative study of Delhi Fire Service with other fire fighting agencies in the world was done to analyse various problems that engulf DFS. The criteria of comparing these fire agencies were basic geographical jurisdiction and population. Table 5 gives a comparative analysis of the same.

Table 5: Comparative Analysis of DFS with Other Fire Services in World

<i>City</i>	<i>Area (sq.miles)</i>	<i>Population (in mn)</i>	<i>Personnel</i>	<i>Budget Allocation (in Crore)</i>	<i>% of total allocation</i>	<i>No. of fire stations</i>	<i>fire apparatus</i>
Delhi	572.9	13.78	2,694	51.31 (2004-05)	0.55%	41	237
Tokyo	844.40	12.36	17,988	9,261	4.2%	80	1,895
New York	320	8.00	11, 098	NA	NA	–	–

Reforms

DFS should fill the 646 vacant posts and increase the sanctioned number of posts by a considerable amount. Having done that it should give emphasis on division of labour in order to increase efficiency. The annual allocated amount to DFS should be increased drastically accompanied by better utilization of its financial resources. There are 41 fire stations as against the recommended number of 70, therefore work needs to be hastened and if PWD is not able to perform, the responsibility of construction of fire stations should be given out to private parties.

Fire brigades should be located at strategic points where the incidents of fire are more likely. It should work out different modalities to cut the response time in consultation with the traffic department. MTNL should make sure that the connectivity to the fire department at all times is foolproof. The main criterion for the location of new fire stations should be the response time vis a vis population, industries and traffic instead of construction on the already proposed sites offered by DDA.

The number of surprise inspections on the already existing high-rise buildings as well as newly constructed buildings should be increased and NOC should be provided only after ensuring that owners have made required fire safety changes. If the 12-point fire safety requirement is difficult to achieve then alternative safeguards should be recommended by DFS. Corruption and malpractices regarding NOC should also be checked. The system of volunteer fire corps consisting of community members should be created, which in collaboration with fire station personnel will conduct fire fighting, rescue and first-aid activities. Furthermore, they should instruct residents on fire prevention, basic fire fighting, rescue and first aid techniques.

It has to be understood that people will not stop doing illegal and unsafe businesses; there would be encroachments and congestion on the roads due to traffic. Removal of such situations is not possible, neither in the short-run nor in the long run. DFS should think of strategies of fighting fire and minimising damages under such circumstances through innovative measures.

—Prepared by Shreya Agarwal

Notes

- ¹ Government of NCT Delhi. 2004. *Census of employees working in the Delhi Government and Autonomous bodies*. Directorate of Economics and Statistics

References

- Government of NCT Delhi. 2001. *CAG Report*
- Government of NCT Delhi. 1998. *Detailed Demand for Grants for 1998-99*
- Government of NCT Delhi. 1999. *Detailed Demand for Grants for 1999-2000*
- Government of NCT Delhi. 2001. *Detailed Demand for Grants for 2001-02*
- Government of NCT Delhi. 2002. *Detailed Demand for Grants for 2002-03*
- Government of NCT Delhi. 2003. *Detailed Demand for Grants for 2003-04*
- Government of NCT Delhi. 2004. *Detailed Demand for Grants for 2004-05*
- Government of NCT Delhi. 2005. *Detailed Demand for Grants for 2005-06*
- Government of NCT Delhi. 2002. *Annual Plans 2002-03: Plan Outlay and Expenditure*
Department of Planning
- Government of NCT Delhi. 2003. *Annual Plans 2003-04: Plan Outlay and Expenditure*.
Department of Planning
- Government of NCT Delhi. 2004. *Annual Plans 2004-05: Plan Outlay and Expenditure*.
Department of Planning
- Government of NCT Delhi. 2005. *Annual Plans 2005-06: Plan Outlay and Expenditure*.
Department of Planning
- Website of Delhi Fire Service: <http://dfs.delhigovt.nic.in/>
- Times of India*. 2003. *Problems of firemen*. 30 May
- The Hindu*. 2004. *Fraudulent recruitment*. 2 September
- The Hindu*. 2005. *Survey of godowns and jbuggis*. 25 February
- The Hindu*. 2005. *Plan procurement of equipments*. 20 May
- Times of India*. 2005. *Fire safety measures in new high rise buildings*. 12 May

Congress seeks changes
in building bye-laws

