

International Association for the Study of Insurance Economics

Geneva Association Information Newsletter

# **World Fire Statistics**

Information Bulletin of the World Fire Statistics

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## Aims and Activities of the World Fire Statistics Centre

The Centre's main objective is to persuade governments to adopt strategies aimed at reducing the cost of fire which, although running at around 1% of GDP in most advanced countries, has generally received much less attention than the cost of crime or of road accidents. In pursuit of this objective, the Centre collects from over 20 leading countries statistics on national fire costs (see Contents above).

A further important effort is devoted to persuading the European Union to identify fire safety as a topic for collective action, leading to a European fire strategy.

The Geneva Association Newsletter on "World Fire Statistics" appears annually and is distributed free of charge. Printed copies: 500. Unrestricted circulation. For further information contact
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## 1. United Nations Fire Statistics Study

The Centre presented its annual report to the UN Committee on Human Settlements at the meeting in Geneva in September 2000.

The following 8 tables of international fire costs comparisons appeared in the report:

#### **TABLE 1 - Cost of Direct Fire Losses**

Adjusted direct losses (in millions, except for Italy and Japan - billions)

Country	Currency	1996	1997	1998	Adjustment	
		Direct	Direct	Direct		
		Losses	Losses	Losses		
Austria	Sch	3.723	4,253		Add 16.5%	
Canada	\$Can	1.163	1,292	1.136	Add 37.5%	
Czech Republic	CzKr	1.346	1,230	1,903	Add 4% (96-97), 3.5% (98)	
Denmark	DKr	2,319	2,118	2,161	Add 10% (96), 12% (97-98)	
Finland	FMk	519	567	614	Add 70%	
France	F	14.110	12.025	11.940	Add 22.5%	
Germany	DM	3.946	3.347	3.374	Add 26.5% (96), 33% (97)	
-					26% (98)	
Italy	Lit			1.954	Add 112%	
Netherlands	f	1,237			Add 1%	
Norway	NKr	2,483	2,773	2.568	Add 6.5%(96), 8.5%(97-98)	
Poland	ZI	494	567	575	Add 1.5%	
Slovenia	SIT	2.397	1.969	1,828	Add Nil	
Sweden	SKr	2.900	3,150	3,100	Add 35%(96), 30%(97-98)	
United Kingdom	£	707	762	883	Add 41%(96), 44%(97)	
					47%(98)	
United States	\$US	9,400	8.500	8.600	Add 5.3%	
Non-ECE		·			Add	
Japan	Yen	364	349	453	Add 17%(96), 33%(97)	
					8%(98)	
Singapore	S\$	87	100	80	Add 34%	

#### Adjusted figures for direct fire losses and as average percentage of GDP

(millions, except for Italy and Japan – billions)

Country	Currency	1996	1997	1998	1996-1998
			Direct		Percentage of GDP
			Losses		
Slovenia	SIT	2,400	1,950	1,850	0,07
Czech Republic	CzKr	1,400	1,270	1,970	0.09
Japan	Yen	425	465	490	0,09
Singapore	S\$	115	135	110	0,09
United States	\$US	9,900	9,000	9,100	0,11
Germany	DM	5,000	4,450	4,250	0,12
Hungary	Ft				0,12 (86-88)
Poland	ZI	500	575	600	0.12
Spain	Pta				0.12 (84)
United Kingdom	£	1,000	1,100	1,300	0,14
Finland	FMk	880	960	1,040	0,15
Australia	\$A				0,16 (92-93)
New Zealand	\$NZ				0,17 (93-94)
Austria	Sch	4,350	4,950		0,18 (95-97)
Netherlands	f	1,250			0,18 (95-96)
Canada	\$Can	1,600	1,775	1,550	0,19
France	F	17,300	14,700	14,600	0,19
Italy	Lit			4,150	0,20
Denmark	Dkr	2,550	2,350	2,400	0,22
Sweden	SKr	3,900	4,100	4,000	0,22
Switzerland	SwF				0,23 (89)
Norway	NKr	2,700	3,000	2,800	0,27
Belgium	BF				0,40 (88-89)

Italy's 1998 fire losses are calculated on a new and improved basis, incompatible with previous years' figures

## **TABLE 2 - Costs of Indirect Fire Losses**

Average percentage of GDP (1996-97)

Country	%
Norway	0.004
Finland	0.007
Sweden	0.008
USA	0.011
Italy	0.014 [1993-94]
Japan	0.016
Czech Republic	0.018
Slovenia	0.018
UK	0.020
Canada	0.022 [1993-94]
France	0.023
Germany	0.027 [1995-96]
Netherlands	0.027 [1993-95]
Denmark	0.029 [1992-93]
Hungary	0.029
Austria	0.034
Switzerland	0.095 [1989]

<u>Note</u>: This table must be regarded with serious reservations - the figures are produced on widely varying bases and some of the differences look too large for credibility.

TABLE	3 -	Fire	Deaths
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Country	Adjus	ted figures (fire dea	ths)
	1995	<b>1</b> 996	, 1997
Singapore		5	10
Switzerland	20	35	
Spain	210		260
Netherlands	85	130	
Australia	135	145	110
Austria	60	65	75
Italy	455		
Germany	770	895	730
France	585	645	530
New Zealand	35	40	45
Czech Republic	115	125	140
UK	770	745	760
Sweden	105	125	135
Greece	150	140	160
Canada	440	410	460
Slovenia	30	30	30
Norway	65	70	70
Poland	590	620	600
Denmark	90	105	75
Japan	2,400	2,020	2,140
United States	5,000	5,400	4,400
Finland	95	110	105
Hungary	300	290	290

### TABLE 4 - Population Comparisons for Fire Deaths (1995-1997)

#### Population comparisons for fire deaths

Country	/	Death per 100,000 persons
Singapo	ore	0.20 [1996-97]
Switzerl	and	0.43 [1994-96]
Spain		0.60 [1995,97]
Netherla	ands	0.68 [1994-96]
Australia	a	0.71
Austria		0.79
Italy		0.82 [1993-95]
German	V	0.98
France	-	1.01
New Ze	aland	1.10
Czech F	Republic	1.23
Belgium		1.24 [1992-94]
UK		1.29
Sweden		1.38
Greece		1.43
Canada		1.46
Slovenia		1.51
Norway		1.56
Poland		1.56
Denmar	k	1.71
Japan		1.74
USA		1.86
Finland		2.02
Hungary	/	2.88

<u>Note</u> : Population figures used are derived from the United Nations Demographic Yearbook.

## **TABLE 5 - Cost of Fire Fighting Organizations**

#### Average percentage of GDP (1995-1997)

Country	%
Singapore	0.03 [1996-97]
Denmark	0.09
Norway	0.10
Austria	0.11 [1994]
New Zealand	0.13
Netherlands	0.15 [1994-96]
Belgium	0.18 [1997-99]
Poland	0.18
Sweden	0.21
UK	0.23
USA	0.23
Czech Republic	0.24
Finland	0.29 [1993-94]
Japan	0.30
Canada	0.35 [1991]

## **TABLE 6 - Costs of Fire Insurance Administration**

#### Average percentage of GDP (1995-1997)

Country	%
Hungary	0.01 [1987-88]
Singapore	0.03 [1996-97]
Netherlands	0.04 [1987-88]
Finland	0.05
Spain	0.05 [1986]
Canada	0.06 [1991]
Italy	0.06
Sweden	0.06
Germany	0.07
Denmark	0.08 [1997]
Slovenia	0.08 [1996-97]
USA	0.08
Norway	0.09
UK	0.09
France	0.10
Japan	0.11
Austria	0.14 [1979-80]
New Zealand	0.19 [1993-94]
Belgium	0.28 [1988-89]

#### **TABLE 7 - Costs of Fire Protection to Buildings**

Country	Fire protection (%)	Currency	Cost in millions	(except for Italy billions)	/ and Japan –
	(70)		1995	1996	1997
Canada	3.9	\$C	1,800	2,000	2,200
Czech Republic	3.0	CzKr	2,600	3,000	3,100
Denmark	5.0	DKr			4,600
France	2.5	F	11,600	11,400	11,100
Italy	4.0	Lit	6,000	6,200	6,250
Japan	2.5	Yen	1,025	1,150	1,000
Netherlands	3.0	f.	1,890		
New Zealand	2.5	\$NZ	160	165	175
Norway	3.5	NKr	3,500	3,800	4,400
Singapore	4.0	S\$		800	950
Slovenia	2.0	SIT	2,350	3,450	3,900
Sweden	2.5	SKr	1,750	1,500	1,500
UK	2.2	£	1,175	1,250	1,325
USA		\$US	24,700	27,400	29,800

<u>Note</u>: In the United Kingdom, the estimated fire protection costs varied from 1 per cent for housing to 6 per cent for industrial buildings, in the United States, from 2.5 per cent for housing to 12 per cent for private non-residential structures, and in Canada from 2 per cent for single homes to 13.2 per cent for high-rise apartments.

## TABLE 8 - Fire Protection to Buildings

Average percentage of GDP (1995-1997)

Country	%
Sweden	0.11
Slovenia	0.13
France	0.14
UK	0.16
New Zealand	0.18
Czech Republic	0.19
Belgium	0.21 [1987-88]
Japan	0.21
Canada	0.24
Switzerland	0.29 [1989]
Netherlands	0.30 [1993-95]
Italy	0.33
USA	0.35
Norway	0.39
Denmark	0.41 [1997]
Hungary	0.42 [1987-88]
Singapore	0.64 [1996-97]

### **UN Scheme Endorsed**

In their session held in Geneva on September 15, 1999, the United Nations Committee expressed its interest in the Report, thanked Mr. Wilmot, invited him to present a similar report to its next session and encouraged countries, which had not yet done so to participate in the study.

### European Parliament and Fire Costs

Following a meeting with Sir Christopher Prout MEP and with DG III (Industry), Sir Christopher in 1994 drafted the following Motion for resolution by the European Parliament:

"Whereas fire is currently costing countries of the European Union approximately 1% of GDP,

Whereas in comparison with road safety, crime prevention and industrial safety, little or nothing is being done to monitor progress on safety measures,

Whereas the rewards have been high for Governments, such as the United States of America, which have organised a determined campaign to cut fire costs,

### NOW THEREFORE

- 1. The European Parliament urges the Council of Ministers to make a public announcement stating their concern over the level of fire costs in the EU.
- 2. The European Parliament calls on the European Commission to establish a Working Party of fire experts whose terms of reference would be to recommend ways of tackling the fire problem."

Sir Christopher (now Lord Kingsland) is no longer an MEP, but in 1995 Ms Christine Crawley MEP put down a similar Motion which went to the Environment Committee in 1996. However, only three of the twenty proposed Motions before the Committee were accepted for pursuit and, although the fire resolution was "recognised to be an issue of great importance", it was not accepted. Lord Kingsland in 1997 raised it again with the Chairman of the Environment Committee, who took it up with the Commission, only to receive a stone-walling response.

In 1998 the Centre was in touch with the Organisation for Economic Co-operation and Development (OECD), who expressed interest in the Centre's work and described it as "an initiative that definitely deserves to be supported". However, their own budgetary situation was such as to prevent them from translating that interest into any form of sponsorship.

In April 1999, an international conference, "Firesafe Europe 99", was organised in Chester, UK on behalf of FEU<sup>1</sup> and CACFOA<sup>2</sup> with EU financial support. This resulted in a suggested European fire safety action programme, and the Centre has helped FEU to carry this forward by jointly organising an FEU/WFSC seminar in Augsburg on 19th June, 2000 on "European Fire Strategy - the Part of Statistics".

#### League of Augsburg 2000

As a result of the seminar, the "League of Augsburg 2000" has been formed to develop proposals for a European fire statistical database which would meet the needs of likely users of the figures. A core group is being formed from among the likely users: fire services, fire protection associations, fire equipment suppliers, fire insurers, government, industry and commerce, and academics. The European Commission is being invited to join the core group, whose role is to produce a report suggesting the best way of carrying forward the proposals.

The July 2000 issue of *Fire International* carried a leading article urging all the relevant authorities in European countries to collaborate in the Augsburg project. It added that: "Before fire safety provision and fire safety response across Europe can be improved, it is vital that we have a benchmark to measure standards against. A statistical data base for Europe would help meet that need."

	SCHEDULE OF CONFERENCES ORGANISED AND/OR SPONSORED BY THE GENEVA ASSOCIATION				
2001					
February 15-16	Amsterdam	3 <sup>rd</sup> Meeting of Amsterdam Circle of Chief Economists, hosted by ING			
April	Copenhagen	9 <sup>th</sup> Joint Seminar with the European Association of Law and Economics (EALE)			
<b>June</b> 7-9	Amsterdam	28 <sup>th</sup> Annual General Assembly of the Geneva Association			
September 13-14	Geneva	17 <sup>th</sup> Progress Seminar			
17-19	Strasbourg	28 <sup>th</sup> Seminar of the European Group of Risk and Insurance Economists			

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<sup>&</sup>lt;sup>1</sup> Federation of European Union Fire Officers Associations.

<sup>&</sup>lt;sup>2</sup> Chief and Assistant Chief Fire Officers' Association (UK).