



**Working Group**

**STATISTICS**

**Report 2013**

**By Chairman Johan Pihlstrøm, Sweden**

**Conclusions**

In relative numbers have the Armed Forces, which reported this year, significantly lower levels both for killed and seriously injured persons in comparison with the civil society. One conclusion is that risk management education has effect.

The Armed Forces should have a more fixed purpose to reduce the number of minor accidents In order to reduce the slightly injured persons. If this can be done it will very strongly affect the number of killed and seriously injured persons.



## Working Group Statistics Report 2012

### Background

The ECRAF Executive Committee started a working group in the area of statistics in 2010. The purpose was to systematize the statistical data which ECRAF member countries supplied the ECRAF organization with. According to the "Directive for ECRAF Road Safety Statistics 25042013" the Work Group for Statistics leaves the, from now on, yearly report. The chairman for this working group has from 2010 been Mr. Johan Pihlström from Sweden.

Because this is the first time that the ECRAF organization asks member states to supply national data in a structured way to ECRAF there could be details to be adjusted for the future.

### Method and Demarcation discussion for statistical data 2012

The chairman sent a letter to all ECRAF member states on the 13<sup>th</sup> of May, and answer required at latest on the 14<sup>th</sup> of June. The time limit was very short but the delegates knew that this require letter was coming.

Seven (7) member states (Belgium, Czech Republic, Denmark, Norway, Slovakia, Sweden and the United Kingdom) responded at the letter from the Work Group. Due to the number of responding countries the statistical data is rather limited and there are some difficulties to make a good analyze and well substantiated conclusions for the Armed Forces in the ECRAF organization on an aggregated level.

### Statistics for 2012

Below is the statistical data for every country returned both in nominal and relative figures. The foundation for the relative numbers is each country's sum of employed, conscripts (for year 2012) and eventually home guard or similar per 10 000 person. And the relative numbers for the civilian statistics is each country's population in the age between 15 and 64 per 10 000 persons.

The nominal figures for the civilian statistics, if not reported from the Armed Forces itself, are collected from European Commission Directorate-General for Statistics (Eurostat).

### Nominal figures

Matrix 1 shows the military statistics from the reporting countries. Because the responding countries were quite few, the data is returned all together in the same matrix.

Military	Denmark	Slovakia	Belgium	Czech Republic	United Kingdom	Sweden	Norway	Total
Accidents	424	49	622	239	4 294	378	749	6 755
Killed	0	0	0	3	15	0	0	18
Seriously injured	0	3	0	5	14		0	22
Slightly injured	3	6	39	42	254			344
Staff in accidents	400	56		569	181			1 206
Est. Total costs (€)	400 000	114 765		471 716			707 292	1 693 773
N:o employed and conscripts	11 400	20 084	32 500	30 021	210 000	49 565	25 500	379 070

In 2012 the total number killed within the responding Armed Forces was 18 persons. 22 were seriously injured and 344 were slightly injured. The total number of active, employed/home guard or similar during 2012 was 379 070 persons in the responding countries.

The estimation of the costs for these accidents were €1 693 773. This is an estimate from the responding countries and not all nations have this kind of statistics. Furthermore the definition of which costs should be included differs between the nations. This makes the estimation quite unreliable to use as a comparison fact.

Main accident causes in the Armed Forces:

- speeding or inappropriate speed for the situation, road conditions or drivers skill/experience
- drivers skill and/or experience is inadequate for the mission/exercise
- too short distance between vehicles
- reversing and hitting a static object at low speed within barrack area

Accident spots were mostly outside urban areas or in terrain.

Matrix 2 shows the civilian statistic from the countries that reported military statistics. The red markings for “accidents” in the matrix represent figures from 2010. Markings regarding “killed” are estimations from the CARE database for the year 2012.

The cells without any numbers cannot be found in the report from the ECRAF country or in the official statistics given by the Eurostat.

Civilian	Denmark	Slovakia	Belgium	Czech Republic	United Kingdom	Sweden	Norway	Total
Accidents	3 498	6 072	39 306	81 404	160 080	16 458	6 154	312 972
Killed	167	295	755	681	1 725	286	145	4 054
Seriously injured				2 986		2 976	699	6 661
Slightly injured				22 590		19 848	6 713	49 151
Population in accidents								0
Est. Total costs (€)				195 016 800				195 016 800
Population (2013-01-01) age 15-64 years	3 623 031	3 906 624	7 762 678	7 259 262	41 861 203	6 153 960	3 293 431	73 860 189

## Chart 2

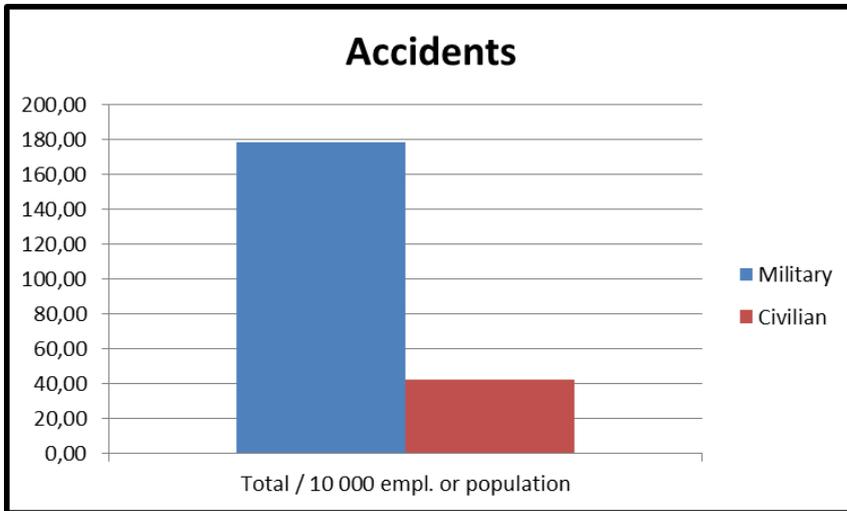
### Relative figures

To make statistics comparable between civil and military figures, the work group has made relative figures from the nominal figures. This is carried out to make comparisons between the military and civilian statistics and, if needed, between the members states Armed Forces. To get usable results the total populations in each country between the ages of 15 to 64 are used as foundation. This is done to make the relative figure more accurate. If a comparison is made with the total population instead it could be misleading because the soldiers, employed and home guard (or similar) are mostly in this range of age.

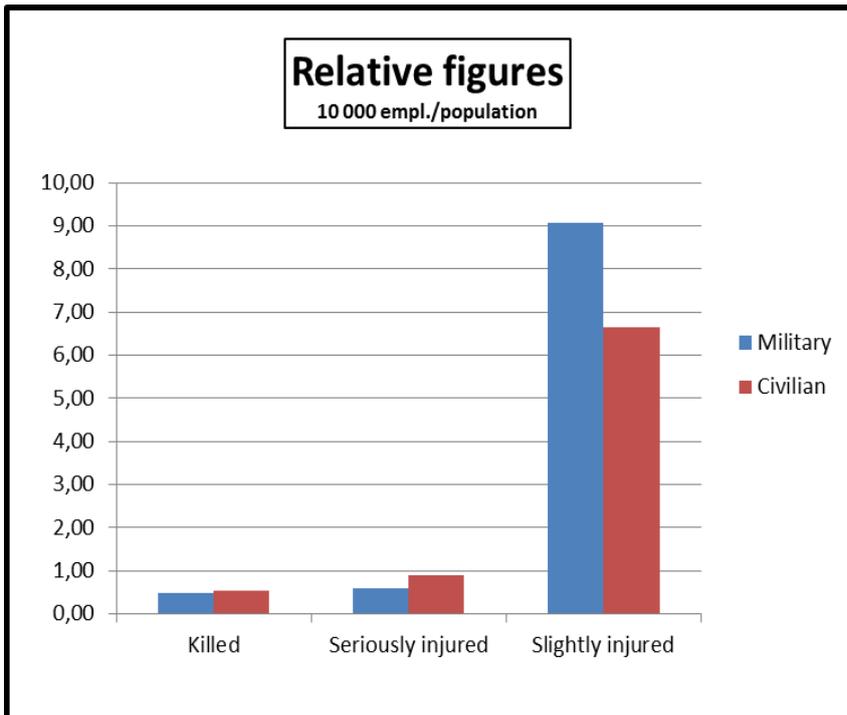
The relative figure in chart 3, below, shows the number of road accidents, killed or injured person per 10 000 employed (military) or population (civilian). Graph 1 and 2 below shows the same data graphical.

Total / 10 000 empl. or population	Military	Civilian
Accidents	178,20	42,3736
Killed	0,47	0,5489
Seriously injured	0,58	0,9018
Slightly injured	9,07	6,6546

Chart 3



Graph 1



Graph 2



## **Analyze**

The fact that the number of responding countries are limited and the fact that this is the first time that ECRAF produces this kind of analyze is the statistical material limited. This has to be held in mind as a demarcation in the further analyze.

### *Accidents*

In comparisons made between the reporting Armed Forces, on aggregated level, and the civilian society it shows that the Armed Forces reports more than three times road accidents than the civilian society. This can be explained that the Armed Forces have more accurate and formalized reporting system than the civilian society. Minor accidents may not be reported to the authorities in the same way that it's being done within the Armed Forces. The Armed Forces use their vehicles in a more extreme way and in complex exercises which can be an explaining factor to the difference. The accident causes can explain and even strengthen the theory that the Armed Forces use their vehicles in a more extreme way than the regular civilian road user.

### *Killed and seriously injured in road accidents*

The statistics regarding these categories are more statistical accurate, both military and civilian figures. In relative numbers the responding nations have significant lower records within the Armed Forces than in the civil society on aggregated level. This can be explained by the accident causes as well. Accidents in the Armed Forces mainly occur in lower speed and therefore are the risks to be seriously injured or killed lower.

Most of the Armed Forces have some kind of risk management education with all employees or at least the drivers before driving a vehicle. This can be an explanation as well.

### *Slightly injured*

The same analyze as in the case of accidents can be applied on the slightly injured persons. A person that has been slightly injured in a civilian road accident may have fewer motives to report this to the official authorities. But in comparison with the employed persons in Armed Forces there are legislation regarding work environment that stipulates the obligation to report and register a slight injury to the employer. This can be an explanation to the discrepancy between civilian and military statistics in this case.

## **Conclusions**

In relative numbers have the Armed Forces, which reported this year, significantly lower levels both for killed and seriously injured persons in comparison with the civil society. One conclusion is that risk management education has effect in lower levels.

The Armed Forces should have a more fixed purpose to reduce the number of minor accidents I order to reduce the slightly injured persons. If this can be done it will very strongly affect the number of killed and seriously injured persons.