###### National Assembly

Question Number: 3862

**Dr P J Groenewald (FF Plus) to ask the Minister of Transport:**

(1) How many railway accidents have taken place (a) in the year (i) 2010, (ii) 2011, (iii) 2012, (iv) 2013 and (v) 2014 and (b) since 1 January 2015 with trains belonging to (i) Spoornet, (ii) Prasa and (iii) Metrorail;

(2) (a) how many passengers (i) were injured and (ii) died in each specified railway accident in each specified year and period, (b) where did each specified railway accident take place and (c) what was the cause of each specified railway accident;

(3) whether she will make a statement on the matter? NW4673E

**Response:**

(1) In terms of the number of occurrences, per the main operators TFR and PRASA, the table below provides the annual numbers for the periods 2010/11, 2011/12, 2012/13, 2014/15, 2014/15 and the current period 2015/16 as at the end of Quarter 2 (30 September 2015).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Analysis of Occurrences** | | | | |
| **Annual Period** | **TFR** | | **PRASA** | | **Total** |
|  | **Number** | **of Total** | **Number** | **% of Total** |  |
| 2010/11(a)(i) | 2256 | 54% | 1356 | 32% | 4181 |
| 2011/12(a)(ii) | 2198 | 51% | 1464 | 34% | 4348 |
| 2012/13(a)(iii) | 2198 | 52% | 1468 | 34% | 4262 |
| 2013/14(a)(iv) | 2236 | 49% | 1843 | 40% | 4587 |
| 2014/15(a)(v) | 2282 | 49% | 1922 | 41% | 4632 |
| 2015/16 YTD(b) | 1045(i) | 51% | 950(ii) & (iii) | 47% | 2031 |

(2) (a)(i)(ii)

All operational occurrences and security-related incidents are captured as per the relevant category, and all fatalities and injuries are therefor recorded against such category. In terms of the number of fatalities and injuries per annum over the requested periods, the following table provides insight per operational occurrence category.

|  | **2010/11** | | **2011/12** | | **2012/13** | | **2013/14** | | **2014/15** | | **2015/16 Ytd** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Operational Occurrence Category** | **Fatalities** | **Injuries** | **Fatalities** | **Injuries** | **Fatalities** | **Injuries** | **Fatalities** | **Injuries** | **Fatalities** | **Injuries** | **Fatalities** | **Injuries** |
| A: Collisions during movement of rolling stock | 4 | 164 | 2 | 1162 | 0 | 420 | 0 | 27 | 0 | 157 | 19 | 634 |
| B: Derailments during movement of rolling stock | 1 | 121 | 1 | 33 | 0 | 22 | 0 | 14 | 0 | 12 | 0 | 24 |
| C: Unauthorised movements including rolling stock movements exceeding limit of authority | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| D: Level crossing occurrences | 44 | 134 | 13 | 48 | 38 | 73 | 18 | 66 | 17 | 68 | 3 | 14 |
| E: People struck by trains during movement of rolling stock | 364 | 199 | 354 | 193 | 355 | 231 | 394 | 201 | 410 | 250 | 190 | 94 |
| F: People-related occurrences: trains outside station platform areas or in section | 0 | 88 | 3 | 106 | 0 | 77 | 4 | 194 | 2 | 320 | 7 | 158 |
| G: Passenger-related occurrences: travelling outside designated area of train | 12 | 78 | 7 | 80 | 21 | 86 | 16 | 80 | 21 | 134 | 4 | 40 |
| H: People related occurrences: platform- train interchange | 16 | 618 | 20 | 777 | 18 | 753 | 7 | 689 | 8 | 569 | 5 | 311 |
| I: People related occurrences: station infrastructure | 6 | 64 | 0 | 65 | 0 | 76 | 0 | 183 | 0 | 156 | 0 | 77 |
| J: Electric shock | 10 | 18 | 12 | 26 | 8 | 8 | 16 | 15 | 15 | 20 | 12 | 8 |
| K: Spillage/leakage, explosion or loss of dangerous goods | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 0 | 0 |
| L: Fires | 0 | 50 | 0 | 30 | 0 | 41 | 1 | 29 | 0 | 31 | 0 | 1 |
| **Total per annum** | **457** | **1534** | **412** | **2520** | **440** | **1787** | **456** | **1498** | **473** | **1746** | **240** | **1363** |

The Table below provides insight into the number of fatalities and injuries as a result of security-related incidents

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **2010/11** | | **2011/12** | | **2012/13** | | **2013/14** | | **2014/15** | | **2015/16 Ytd** | |
| **Security-related incident category** | **Fatalities** | **Injuries** | **Fatalities** | **Injuries** | **Fatalities** | **Injuries** | **Fatalities** | **Injuries** | **Fatalities** | **Injuries** | **Fatalities** | **Injuries** |
| 1: Theft of assets (impacting on operational safety) | 0 | 0 | 0 | 1 | 0 | 41 | 0 | 3 | 0 | 4 | 0 | 0 |
| 2: Malicious damage (vandalism) to property | 0 | 15 | 0 | 4 | 1 | 0 | 0 | 14 | 2 | 34 | 0 | 5 |
| 3: Threats (to operational safety) | 0 | 0 | 0 | 0 | 1 | 13 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4: Hijacking of trains | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5: Crowd-related occurrences | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 2 | 0 | 0 |
| 6: Industrial action | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 9 | 0 | 0 |
| 7: Personal safety on trains | 7 | 122 | 4 | 98 | 0 | 0 | 1 | 201 | 1 | 340 | 7 | 90 |
| 8: Personal safety on stations | 9 | 60 | 0 | 88 | 3 | 45 | 1 | 137 | 5 | 165 | 2 | 64 |
| 9: Personal safety outside station platform area (including yards, sidings and depots) | 14 | 6 | 9 | 34 | 2 | 25 | 8 | 11 | 4 | 52 | 1 | 15 |
| TOTAL | 30 | 203 | 13 | 225 | 7 | 124 | 10 | 379 | 12 | 606 | 10 | 174 |

(2) (b) A further analysis of these occurrences was done in order to establish where within the Republic these occurrences are taking place. Gauteng, KwaZulu-Natal and Western Cape provinces are areas under which a significant number of such occurrences have been recorded during the requested reporting periods. This is mainly as a result of the location of the passenger lines as well as the density of the population which live in close proximity to the railway. The table below illustrates the distribution per province in terms of operational occurrence fatalities and injuries:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Fatalities** | | | | | | **Injuries** | | | | | |
| **Province** | **2010/11** | **2011/12** | **2012/13** | **2013/14** | **2014/15** | **2015/16** | **2010/11** | **2011/12** | **2012/13** | **2013/14** | **2014/15** | **2015/16** |
| Eastern Cape | 2% | 5% | 3% | 2% | 5% | 8% | 2% | 1% | 3% | 1% | 1% | 6% |
| Free State | 3% | 2% | 2% | 2% | 2% | 0% | 1% | 1% | 1% | 1% | 1% | 0% |
| Gauteng | 32% | 30% | 35% | 38% | 43% | 42% | 56% | 70% | 62% | 57% | 50% | 69% |
| KwaZulu-Natal | 22% | 26% | 18% | 23% | 16% | 26% | 14% | 15% | 18% | 17% | 22% | 10% |
| Limpopo | 4% | 1% | 2% | 2% | 0% | 0% | 4% | 0% | 1% | 1% | 1% | 0% |
| Mpumalanga | 3% | 3% | 8% | 3% | 2% | 2% | 1% | 1% | 1% | 1% | 1% | 0% |
| North West | 4% | 4% | 3% | 4% | 2% | 0% | 3% | 1% | 2% | 1% | 3% | 1% |
| Northern Cape | 1% | 0% | 1% | 1% | 1% | 2% | 1% | 0% | 0% | 0% | 1% | 1% |
| Western Cape | 28% | 30% | 29% | 26% | 29% | 20% | 20% | 10% | 12% | 20% | 22% | 12% |
| **Grand Total** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** |

With regard to fatalities and injuries as a result of safety-related incidents, the statistics is a reflection of the national crime trends, as per the table below:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Fatalities** | | | | | | **Injuries** | | | | | |
| **Province** | **2010/11** | **2011/12** | **2012/13** | **2013/14** | **2014/15** | **2015/16** | **2010/11** | **2011/12** | **2012/13** | **2013/14** | **2014/15** | **2015/16** |
| Eastern Cape | 0% | 0% | 0% | 0% | 0% | 0% | 2% | 0% | 2% | 1% | 0% | 1% |
| Free State | 0% | 0% | 0% | 4% | 0% | 0% | 0% | 0% | 1% | 0% | 0% | 1% |
| Gauteng | 46% | 50% | 50% | 26% | 43% | 17% | 44% | 48% | 52% | 36% | 43% | 38% |
| KwaZulu-Natal | 31% | 27% | 17% | 26% | 29% | 0% | 19% | 17% | 25% | 15% | 13% | 12% |
| Limpopo | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Mpumalanga | 4% | 4% | 6% | 9% | 0% | 0% | 0% | 0% | 1% | 0% | 1% | 0% |
| North West | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Northern Cape | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Western Cape | 19% | 19% | 28% | 35% | 29% | 83% | 34% | 34% | 19% | 47% | 42% | 49% |
| **Grand Total** | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

(2) (c) Given the nature of the different types of occurrences, various causes have been identified as contributing towards such occurrences. The following four main reasons can be highlighted:

1. Poor or lack of maintenance of rolling stock and infrastructure. One of the main contributing factors for derailments is poor maintenance of the track which results in broken or cracked rail, opening of the rail gauge underneath the train, defective signalling and electrical equipment and points. Other factors are the difference between the height of the platform and the train, which give cause to people falling when alighting trains. It has also become evident that lack of maintenance of roads leading to and from level crossings contribute to such occurrences.
2. Open / unrestricted access to the railway reserve. It is important to note that the majority of fatalities are as a result of Category E-People struck by trains which occur when a member of the public is struck by a train whilst crossing the railway track in an unauthorised place and manner. A significant number of persons who were struck by trains were the members of the public as well as employees. In terms of the members of the public, this is a further indication that people have an easy to the railway network. They may be using the network for various reasons such as crime, committing suicide or to access their amenities easily. A concern lies with the number of employees being struck by trains particularly on the running line. This suggests that these employees either do not adhere safety precautions when occupying the railway lines or the aspired safety culture is being neglected. The ease of access also contributes to collisions with obstacles such as livestock and game which move freely over and along railway lines. A further factor appears to be spatial planning which does not take the railway line into consideration.
3. Human factors. Various human-related factors such as train driver fatigue, poor supervision, lack of experience, negligence and poor communication have contributed to the majority of collisions between trains. Other aspects such as train driver behaviour, including speeding, passing signals at danger and not adhering to driver operating procedures have also been found as contributing factors.
4. Lack of enforcement / crime. One of the main reasons contributing towards level crossing occurrences, is the lack of law enforcement and lawless behaviour on the side of vehicle drivers. Signals and signs are not being observed, resulting in vehicles being struck by trains at a level crossing. Trespassing, theft of equipment and cables give further rise to an unsafe railway environment.
5. The Railway Safety regulator produces on an annual basis the State of Safety Report in compliance with Section 20 of the National Railway Safety Regulator Act No. 16 of 2002 (as amended) (the Act) which requires that “The Regulator must produce and submit to the Minister an annual report on the safety of workers, the public and the environment associated with railway operations that the Regulator is required to regulate under this Act including any other matters that may be prescribed. The statistics of operational concurrences as provided below are therefore extracts from such reports for the periods as requested.

(3) The Railway Safety Regulator produces, on an annual basis, a report of the State of Safety in the railway environment in compliance with Section 20 of the National Railway Safety Regulator Act No. 16 of 2002 (as amended). The Minister of Transport tables this report annually in Cabinet. The statistics provided are extracts from these reports for the periods as requested.