###### National Assembly

###### Question Number: 760

**760. Mr C H H Hunsinger (DA) to ask the Minister of Transport:**

(a) What is the total number of investigations that the Rail Safety Regulator has undertaken in each province in the past three financial years, (b) what is the nature of each investigation, (c) what did each investigation cost, (d) what are the outcomes of each investigation, (e) what lessons have been learnt from each investigation and (f) what is being done to prevent a repeat of irregular incidents in future? NW819E

**REPLY**

1. & (b)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Number of Investigations Conducted** | | | | |
| **Category** | **2014/15** | **2015/16** | **2016/17** | **Total** |
| Collision between trains | 8 | 8 | 10 | 26 |
| Derailments | 14 | 32 | 24 | 70 |
| Level crossing Collisions | 7 | 13 | 18 | 38 |
| People Struck By Trains | 1 | 3 | 22 | 26 |
| Platform Train Interface Occurrences | 0 | 12 | 19 | 31 |
| Averted Collisions | 0 | 2 | 3 | 5 |
| Runaways Trains | 1 | 1 | 1 | 3 |
| Train High Tension Fires | 1 | 0 | 1 | 2 |
| Electrocution | 0 | 0 | 1 | 1 |
| Signal Passed At Danger | 2 | 1 | 0 | 3 |
| Total | 34 | 72 | 99 | 205 |

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| **Gauteng** | | | | |
| **Category** | **2014/15** | **2015/16** | **2016/17** | **Total** |
| Collision between trains | 1 | 3 | 2 | 6 |
| Derailments | 4 | 9 | 13 | 26 |
| Level crossing Collisions | 1 | 3 | 1 | 5 |
| People Struck By Trains | 0 | 2 | 12 | 14 |
| Platform Train Interface Occurrences | 0 | 9 | 13 | 22 |
| Other | 2 | 2 | 5 | 9 |

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| **North West** | | | | |
| **Category** | **2014/15** | **2015/16** | **2016/17** | **Total** |
| Collision between trains | 0 | 2 | 0 | 2 |
| Derailments | 0 | 2 | 1 | 4 |
| Level crossing Collisions | 4 | 4 | 1 | 9 |
| People Struck By Trains | 0 | 0 | 0 | 0 |
| Platform Train Interface Occurrences | 0 | 1 | 0 | 1 |
| Other | 1 | 0 | 0 | 1 |

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| **Western Cape** | | | | |
| **Category** | **2014/15** | **2015/16** | **2016/17** | **Total** |
| Collision between trains | 1 | 3 | 0 | 4 |
| Derailments | 3 | 6 | 1 | 10 |
| Level crossing Collisions | 1 | 2 | 4 | 7 |
| People Struck By Trains | 0 | 0 | 4 | 4 |
| Platform Train Interface Occurrences | 0 | 3 | 3 | 6 |
| Other | 1 | 0 | 1 | 2 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Free State** | | | | |
| **Category** | **2014/15** | **2015/16** | **2016/17** | **Total** |
| Collision between trains | 0 | 0 | 0 | 0 |
| Derailments | 0 | 1 | 1 | 2 |
| Level crossing Collisions | 0 | 0 | 0 | 0 |
| People Struck By Trains | 0 | 0 | 0 | 0 |
| Platform Train Interface Occurrences | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 |

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| --- | --- | --- | --- | --- |
| **Eastern Cape** | | | | |
| **Category** | **2014/15** | **2015/16** | **2016/17** | **Total** |
| Collision between trains | 0 | 0 | 1 | 1 |
| Derailments | 1 | 4 | 0 | 5 |
| Level crossing Collisions | 0 | 2 | 2 | 4 |
| People Struck By Trains | 0 | 0 | 0 | 0 |
| Platform Train Interface Occurrences | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Limpopo Province** | | | | |
| **Category** | **2014/15** | **2015/16** | **2016/17** | **Total** |
| Collision between trains | 3 | 1 | 0 | 4 |
| Derailments | 0 | 2 | 2 | 4 |
| Level crossing Collisions | 0 | 0 | 4 | 4 |
| People Struck By Trains | 0 | 0 | 0 | 0 |
| Platform Train Interface Occurrences | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Northern Cape** | | | | |
| **Category** | **2014/15** | **2015/16** | **2016/17** | **Total** |
| Collision between trains | 0 | 0 | 0 | 0 |
| Derailments | 0 | 3 | 12 | 15 |
| Level crossing Collisions | 0 | 1 |  | 1 |
| People Struck By Trains | 0 | 0 | 0 | 0 |
| Platform Train Interface Occurrences | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Mpumalanga** | | | | |
| **Category** | **2014/15** | **2015/16** | **2016/17** | **Total** |
| Collision between trains | 1 | 2 | 1 | 4 |
| Derailments | 4 | 2 | 0 | 6 |
| Level crossing Collisions | 0 | 0 | 11 | 11 |
| People Struck By Trains | 0 | 0 | 0 | 0 |
| Platform Train Interface Occurrences | 0 | 0 | 0 | 0 |
| Other | 1 | 0 | 0 | 1 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **KwaZulu Natal** | | | | |
| **Category** | **2014/15** | **2015/16** | **2016/17** | **Total** |
| Collision between trains | 2 | 0 | 1 | 3 |
| Derailments | 2 | 1 | 4 | 7 |
| Level crossing Collisions | 1 | 0 | 4 | 5 |
| People Struck By Trains | 0 | 1 | 3 | 4 |
| Platform Train Interface Occurrences | 0 | 0 | 4 | 4 |
| Other | 0 | 0 | 0 | 0 |

(c) The cost of each investigation:

|  |  |  |  |
| --- | --- | --- | --- |
| **Cost per Independent BOI** | | | |
| **Occurrence** | **2014/15** | **2015/16** | **2016/17** |
| PE Station Derailment | R 831 184,27 |  | |
| Lebaleng rear-end Collision |  | R 514 026,00 |  |
| Denver rear-end Collision | R 1 814110,73 |
| Kaalfontein derailment | R 520 880,00 |
| Lower Adamson and Gaika derailments | R 724 600,00 |
| Blaney head-on Collision | R 358 188,00 |
| Booysens rear-end collision | R 580 764,00 |
| Booysens rear-end collision |  | R 140 402,00 |
| Kimberley derailment (AFRO 4000) | R 361 500,00 |
| **Total** | **R 831 184,27** | **R 4 512 568,73** | **R 501 902,00** |

The costs for RSR internal investigations includes operational costs only. These are conducted by the RSR inspectorate. The table below show the total costs for internal investigation for the last three (3) financial years.

|  |  |  |  |
| --- | --- | --- | --- |
| **Operational Costs for RSR Internal Investigations** | | | |
| **Financial Year** | **2014/15** | **2015/16** | **2016/17** |
| Cost | R 169 681,73 | R 344 180,00 | R 388 420,00 |

(d) The outcome of each investigation

**See attached Excel Spreadsheet**

| **Category** | **Lessons Learnt** |
| --- | --- |
| Collision between trains | * We need collision avoidance systems installed in trains * Invest in maintenance of infrastructure and rolling stock |
| Derailments | * We need more wayside monitoring equipment * Invest in maintenance of infrastructure and rolling stock |
| Level crossing Collisions | * We need enforcement at level crossings * We need to upgrade protection at level crossings * We need to redesign some level crossings |
| People Struck By Trains | * Protection of the railway reserves * Awareness to the public * Enforcement |
| Platform Train Interface Occurrences | * Upgrade of stations * Introduction of new trains * Security at stations * Public Announcements at stations (Improved and audible communication) |
| Averted Collisions | * Re-Training of employees * Fitness for Duty Declaration when reporting for Duty * Manage overtime |
| Runaways Trains | Adherence to procedures |
| Train High Tension Fires | Maintenance of rolling stock |
| Electrocution | Supervision |
| Signal Passed At Danger | Adherence to procedures |

1. The Railway Safety Regulator has adopted a strategic approach to enhance its oversight role, by conducting research on driver behaviour at level crossings (human factors), new technologies and have developed regulations that will support safe railway operations.