

SAFETY IN COAL MINES

9.1 JHARIA & RANIGANJ MASTER PLAN

9.1.1 The problems of subsidence and fires are the result of unscientific mining carried out by the erstwhile mine owners over more than 200 years of operations in these coalfields of Jharia and Raniganj prior to nationalisation. The population living in the old mining areas has increased many times over the years, though these areas became unsafe for habitation. In spite of the declaration of these areas unsafe by the local administration, the habitation increased unabated. The problem of subsidence and fire are being addressed by the Government from time to time. In this regard a High Level Committee was set up in December, 1996 under the Chairmanship of the then Secretary, Ministry of Coal with representatives from other Departments, Coal companies and the concerned State Governments to deal with the problem in a comprehensive manner.

Based on the recommendations of the Committee a Master Plan was prepared to deal with the problems of fire and subsidence and related rehabilitation covering the areas under Bharat Coking Coal Ltd. (BCCL) and Eastern Coalfields Ltd. (ECL) in 1999 for implementation of the same in a phased manner.

9.1.2 The Government has approved the Master Plan dealing with fire, subsidence and rehabilitation and diversion of surface infrastructure within the leasehold of Bharat Coking Coal Limited (BCCL) & Eastern Coalfields Limited (ECL) on 12th August, 2009 at an estimated investment of ₹.9773.84 crore (₹ 7112.11 crore for Jharia Coal Field (JCF) and ₹ 2661.73 crore for Raniganj Coal Field (RCF) including ₹116.23 crore sanctioned earlier for various Environmental Measures & Subsidence Control (EMSC) schemes. The summarized data of approved Master Plan is given in the table below:

Sl No.	Particulars of the different components of Master Plan	RCF(ECL) (April'2008)	JCF (BCCL) (March'2008)
A	Dealing with fire		
1	Total no. of existing fires	7	67 (under 45 fire projects)
2	Estimated Cost (₹ crore)	40.28	2311.50
B	Rehabilitation		
1	No. of sites to be Rehabilitated	139	595
2	Area affected in sq.km	8.62	25.69
3	No. of houses to be Vacated/ Rehabilitated		
i)	BCCL (Taking into account superannuation)		44155/ 25000
ii)	Private (Authorised)		29444
iii)	Encroachers (Un-authorised)		23847
iv)	Others		868
	Total No. of houses	33196	98314/ 79159
	Population covered	180263	395795
4	Land required for rehabilitation (Ha)	896.29	1504.99
5	Estimated cost (Rs. crore)	2610.10	4780.60
C	Diversion of Railway line/ Road/ OC pipeline	7 sites	Planning and survey with an outlay of ₹20 crores
	Estimated Cost (₹ crore)	11.35	20.00
D	Implementing Agency for fire projects & rehabilitation of BCCL/ ECL houses	ECL	BCCL
E	Implementing Agency for rehabilitation of Non-BCCL/ ECL houses - Private & Encroachers	Asansol Durgapur Development Authority (ADDA), Govt. of WB	Jharia Rehabilitation & Development Authority (JRDA) of Govt. of Jharkhand
F	Implementation Schedule, years	10 (in two Phases each of 5 years)	10 (in two Phases each of 5 years) +2 years for pre implementation phase)
G	Estimated Capital Requirement for fire projects, rehabilitation & diversion of rail/road/pipeline etc. (₹ crore)	2661.73	7112.11

9.1.3 Asansol-Durgapur Development Authority (ADDA) and Jharkhand Rehabilitation Development Authority (JRDA) have been notified by the state Governments of West Bengal and Jharkhand respectively as implementing agencies for rehabilitation purposes. Coal companies (ECL & BCCL) will provide technical support and the outlay will be funded partially through the internal resources of CIL and the cess collection under CCDA.

9.1.4 The implementation of the Master Plan for Jharia and Raniganj Coalfields is being monitored by the High Powered Central Committee (HPCC) constituted by this Ministry under the chairmanship of Secretary (Coal). So far, seven meetings of the Committee have been held. More than 50% of demographic survey work has already been completed for rehabilitation of the affected persons. In BCCL area 2352 houses have been constructed, in which 1151 families have been shifted till 31.12.2012. For shifting of BCCL employees 344 houses have been built and another 1152 triple storied quarters are under construction in various non-coal bearing zones. Further, Demographic Survey of 106 locations has been completed out of 141 identified

unstable locations in Raniganj Coalfield Area under ECL.

9.2 SAFETY MEASURES / INITIATIVES IN CIL

9.2.1 To improve safety standard, CIL has vigorously pursued several measures in the year 2012 along with on-going safety related activities / initiatives apart from compliance of statutory requirements for safety, which are given below.

- o Continuous oversight of safety status of mines through multi-disciplinary Internal Safety Organization (ISO) established for that purpose.
- o Conducting Safety Audit of the mine to find out status of safety.
- o Preparation of safety management plan based on risk assessment for all mines.

9.2.2 For improving safety in mining operation:

The following steps have been taken / are being taken to improve safety standard in mines.

1. Stress on introduction of Mass Production Technology in UG mines.
2. More number of surface miner to be introduced to eliminate

- blasting operation in opencast mines to make mining operation more eco-friendly.
3. Introduction of High Wall Mining wherever possible.
 4. High capacity HEMMs are being used.
 5. Mechanisation of drilling (for bolting) has been planned to be adopted in all mines.
 6. Phasing out of manual loading as per recommendation of 10th National Safety Conference.
 7. Man Riding System (MRS) is being used in underground mines having long / arduous travel.
 8. Operator Independent Truck Dispatch System (OITDS) is being provided in large OCP.

Operator Independent Truck Dispatch System (OITDS)

Company	Mine where OITDS installed
ECL	1. Rajmahal Project 2. Sonepur Bazari OCP
CCL	Piparwar (under installation)
NCL	1. Jayant, 2. Dadhichua, Nigahi, Amlori and Khadia (4 nos under installation)
WCL	1. To be provided for all OCP. 2. Tendered for all OCP. Technical bid opened Aug., 2012.
SECL	1. Gevra OCP 2. Dipka OCP
MCL	1. Balrampur, 2. Bharatpur, 3. Lingraj OCP

9.2.3: Steps taken for better Strata Management:

Roof & Side fall is still one of the major causes of fatal accident and fatality in underground mines. Steps taken for better strata control monitoring are as follows:

- Use of more number of

mechanised roof drilling machines.

- Switching over to use of resin capsules from cement capsules in phased manner.
- Initiatives have been taken to develop device with appropriate audio-visual alarm

to monitor the behaviour of overlying roof strata.

- Several roof-monitoring

devices have been developed at Area / Mine level workshop and have been tried in underground mines.

Company	No. of Roof bolting Districts	No. of Roof bolting Machine Required	No. of Roof bolting Machine Provided
ECL	96	96	43
BCCL	158	158	121
CCL	20	20	20
WCL	91	100	101
SECL	130	229	111
MCL	17	17	23
CIL	512	620	419

Type of roof drilling M/C being in use in CIL

Company	Universal Drilling Machine (UDM)	Hydraulic drilling machine	Mechanical type roof bolter	SDL converted to roof drilling m/c/ Jumbo Drill	Pneumatic	Quad bolter	Total
ECL	26	7	7	3	0	2	43
BCCL	0	0	16	50	55	0	121
CCL	0	0	20	0	0	0	20
WCL	31	27	37	2	3	1	101
SECL	75	8	13	0	1	2	111
MCL	15	8	13	0	0	-	23
CIL	147	50	106	55	59	5	419

Type of Strata Monitoring Devices used in some of UG mines of CIL

1. Auto Warning Tell-Tale
2. Multi Point Bore Hole Extensometer
3. Magnasonic Extensometer
4. Telescopic convergence recorder
5. Remote convergence recorder
6. Stress Meter
7. Load Cell (Mechanical)
8. Strain Gauge Load meter
9. Tri-axial Geophone (Micro-seismic technology)

9.2.4 Spontaneous heating, fire & explosion in mine:

- Expedite construction of sectionalization stoppings
- Fresh Pressure Quantity(PQ) Survey for checking efficacy of ventilation
- Initiated action to introduce more number of Gas Chromatographs in addition to conventional method of mine air sampling
- Use of Local Methane Detector (LMD) for early and accurate detection of methane.

Company-wise Status of Gas Detecting Apparatus provided in CIL

Company	Methano-meter	CO - Detector	FSL	Multi-Gas Detector	LMD	ETMS
ECL	714	85	1290	184	10	2
BCCL	415	144	1018	37	45	2
CCL	218	38	292	45	0	0
WCL	435	76	845	83	0	3
SECL	370	94	801	29	0	0
MCL	70	29	185	6	0	4
CIL	2222	466	4431	384	55	11

Company-wise Status of Gas Chromatograph

Company	Existing	Under process of procurement
ECL	1	1
BCCL	1	1
CCL	-	3
WCL	6	7(one portable)
SECL	1	2
MCL	2	2
CMPDIL	1(catering CCL)	0

9.2.5 Safety Training & Others:

- Advanced special Training by SIMTARS accredited Trainers for preparation of fresh risk assessment based safety management plan.
- Simulation trainer for dumper operators is being installed in different subsidiary companies.
- Digitization of mine plan.
- Introduction of LED type light weight cap lamp

9.2.6. Safety R&D initiatives at CIL (HQ) level:

- Construction of quick setting stopping by using expansion foam agent to isolate fire.
- Development of notch cutting machine to facilitate construction of stopping in UG.
- Eliminating the possibility of ignition of gas and incidences of explosion in UG mines due to electric fault by application of innovating technology of fault diversion.

9.2.7 For reduction of accident at Opencast as well as on Surface of Mines:

- Formulation of Mine-specific Traffic Rule.

- Code of Practices for HEMM operators, Maintenance staffs, & others.
- Risk Assessment & control management related to opencast activities
- Training of Contractor's Workers involved in contractual jobs.
- Introduction of Standard operating procedures (SOP)s for safe mining operations.
- Procurement of advanced surveying / slope monitoring devices.

9.2.8 Emergency Response Systems

- Emergency Action Plans of each mine is being reviewed from time to time
- Mock Rehearsals for examining the preparedness / efficacy of Mine-wise Emergency Action Plan.
- Demarcating Escape Routes: An exercise for demarcating Escape Routes in underground mines, on plans as well as belowground by fluorescent paint, display of the same at the entry to the mine has been done.

- State of the art Rescue Apparatus are being used.

9.2.9 Occupational Health Services:

- Computerization of health records / Medical history of employees for effective medical care.
- Organizing Wellness Clinic at different subsidiaries of CIL.
- Free health examination of all the contractual workers.
- Organizing Conference on Occupational Health to enhance awareness.
- IME / PME for contractor's worker are being regularly done.
- Subsidiary-wise Action Plan for dust control has been prepared.
- R&D related to dust problem in different coalfields: Studies on determination of free silica (α -quartz) content in respirable air borne dust in coal mines and preparation of data bank of free silica and other minerals present in dust as well as in coal is being done CIMFR, Dhanbad.



Doctors attending children and ladies in a free health camp conducted by one of CIL subsidiaries in aid of families of coal miners and villagers

Infrastructure for PME in CIL:

Company	PME Centre	X-Ray M/c	Spirometer	Audiometer	Pathology Lab
ECL	14	17	12	1	18
BCCL	9	9	8	9	9
CCL	13	13	13	13	12
NCL	12	6	11	11	12
WCL	10	10	10	10	10
SECL	14	18	12	18	14
MCL	2	6	2	2	5
NEC	1	1	1	1	1
CIL	75	80	69	65	81

Organization for PME in CIL:

Company	PME Centre	No of trained doctors for PME	No of PME Centre Staffs
ECL	14	14	14
BCCL	9	09	18
CCL	13	13	45
NCL	12	21	37
WCL	10	25	10
SECL	14	14	86
MCL	2	10	09
NEC	1	03	05
CIL	75	109	224

9.3 SAFETY MEASURES IN SCCL:

- (i) Mine Managers have taken up necessary modifications/design, improvements in the components of Man riding rail car transport system as prescribed by DGMS.
- (ii) Codes of practice for preparatory works to be taken up during installation, repairing/maintenance and working of Pontoon pumps have been formulated and under implementation.
- (iii) A meeting was conducted with GMs, Project Officers of Kothagudem Region to review and enhance the Safety status in Open cast mines.
- (iv) Monsoon audit has been conducted at all mines by a team consisting Area

- Safety Officer, Area Survey Officer and Civil Engineer from area.
- (v) Roof Bolting Audit committee was constituted to assess the implementation and standardize the roof bolting activity in the Company.
 - (vi) New working districts/machinery are being started/commissioned only after obtaining Safety Clearance certificate.
 - (vii) A committee has been constituted to study on the ventilation requirement in all UG mines and to recommend suitable ventilation systems including selection of appropriate mechanical ventilators for all UG Mines.
 - (viii) Guidelines have been formulated and steps are taken to avoid/eliminate the lorry movement accidents on Opencast mines
 - (ix) Care is being taken to provide separate road for Light Motor Vehicles in the premises of mechanized Opencast mines and to prevent failure of braking and steering systems of dumpers in mines.
 - (x) Pit Safety Committee meetings are being conducted regularly in mines, CHPs and work shops to enhance safety standards.
 - (xi) Monthly and Quarterly Risk Management meetings are being conducted at mines periodically.
 - (xii) Area Workshops, CSP/CHPs are taking Safety measures and implementing the Codes of Practice (CoP) / Safe Operating Procedure (SOP) in order to achieve the zero accident rate in surface departments.
 - (xiii) Safety awareness programmes are being conducted for the Contract workmen by involving the Workmen Inspectors and Pit Safety Committee members to reduce the accidents in UG and OCPs
 - (xiv) Director (O) and Director (P&P) have conducted critical review meetings in areas with senior officers.
 - (xv) Accident prone mines have been identified and action plans are under preparation to bring down the accident rate.
 - (xvi) Monthly Regional Safety Review Meetings and Area Safety Audit Cells have been revived to enhance safety standards
- 9.4 SAFETY MEASURES IN NLC:
- As far as NLC is concerned, the following strategic steps are taken to mitigate mishaps and to achieve 'Accident Free Performance', year after the year:
 - The Modern and appropriate technology are being pursued in NLC for improving Safe Working Environment.

- NLC operates automated state of art Thermal Power Stations and highly Mechanized Opencast Mines. The mechanization with improved technology with Automation is of the maximum use in all the Thermal Power Stations and Mines to restrict the employees' exposure to the Hazards.
- All the Machineries/Equipment are customized and modified with automation and are incorporated with Safety Features – 'Fail Safe System' – to ensure Safe / Reliable Operation and to achieve total loss control over Men, Machineries and Materials.
- Area wise responsibility with priority to Safety is being enforced at all Mine Operational / Maintenance Activities for ensuring specific site supervision.
- Policy on Conceptual improvement of the Training Practices synchronized with emerging skills and technological developments of competitive Environment.
- Commitment on inculcating Safety Awareness by way of imparting adequate / need based training with new training modules to all categories of Employees.
- In-depth Accident Analysis with systematic investigations is being carried out and the Accidents are brought under Control with strict enforcement on adoption of safety norms.
- Adopts Accident counseling system to ensure that serious/Reportable/Near miss Accident Victims are given appropriate counseling as a recurrence avoidance and behavioral transformation.
- Continuous monitoring of behavioral sense / attitude / commitment of Employees towards Safety.
- Persons who do not adhere to safe practices are warned. In case of serious lapses, disciplinary action is initiated. For minor nature, Employees are counseled and advised.
- Quarterly Inter Unit Safety Assessments are being carried out for NLC- Mines and Thermal Power Stations to assess safety standards maintained as per statute.

- Periodical Safety Audit / Risk Assessment once in 2 years accredited External Experts.
 - Periodical studies on following aspects are being undertaken as per the Provisions made available in the Occupational Health Surveillance:-
 - Environmental and Medical & Biological
 - i). Environmental - Identification of health hazards at work place.
 - Ergonomic Assessment- Machines/ Work process etc.
 - Dust/Noise/ Vibration-surveys
 - ii). Medical and Biological: --- Periodical diagnosis of occupational Diseases.
 - Safety Action Plan is reviewed, revised and prepared for all the NLC Units – Every Year.
 - Clear commitment and greater sense of responsibility at all levels (Executives/ Supervisors/Workmen) with priority to Safety are being enforced to improve upon Safety standards with an aim to achieve Accident free Performance.
- 9.5 SAFETY MONITORING IN CIL:
- Apart from statutory monitoring by DGMS, the status of safety is being monitored at various levels by the following agencies:

Level	Monitored By
Mine level	1. Workman inspectors: as per Mines Rule-1955 2. Pit Safety Committee: constituted as per Mines Rule-1955
Area level	1. Bipartite/Tripartite Committee Meeting Safety Officers' Coordination Meeting
Subsidiary HQ level	1. Bipartite/Tripartite Committee Meeting at HQ level 2. Area Safety Officers' Coordination Meeting 3. Inspections by ISO Officials
CIL HQ: Corporate Level	1. CIL Safety Board 2. CMDs meet 3. Director (Tech)'s Coordination Meeting
Ministry of Coal (MOC) / Other Ministries Level	1. Standing Committee on Safety in Coal Mines 2. National Conference on Safety in mines 3. Various Parliamentary Standing Committees

9.6 SAFETY PERFORMANCE OF CIL:

9.6.1 Accident Statistics is the indicator for relative status of Safety. Over the years the safety standard of Coal India Limited has been significantly improved due to the following factors:

- Genuine and collective commitment shown by the management, workers and statutory regulators,
- Well thought out, conscientious and almost continuous safety awareness drives,
- Improvement in knowledge and skill through continuous and need oriented training of the workforce,
- Adaptation of advanced technology in the field of mining machineries, mining methods and also application of best safety practices and procedure.
- Strong oversight and required directives and assistance from the Ministry of Coal.

Highlights of continuous improvement in safety indicator:

- The 5-yearly average fatal accidents have been reduced by more than 65% from 149 for the period 1975 to 80 to only 52 fatal accidents in the period 2011 to 2012.
- The 5 yearly average fatalities have been reduced by 70% in the above said period.
- The 5 yearly average fatality rate per Mill tonnes of coal production have been reduced by more than 93% in the said period.
- The 5 yearly average fatality rate per 3 lakh manshifts have been reduced by 52% in the said period.
- The 5 yearly average serious injuries have been reduced by more than 81% in the said period.
- The 5 yearly Serious injury rate per Mill te of coal produced have been reduced by more than 96%.
- The 5 yearly Serious injury rate per 3 lakh manshifts have been reduced by 72%.

9.6.2 Safety Objective of CIL:

The objective of safety in CIL is to achieve "Zero Harm Potential" in all mines and other establishments. Safety is always given prime importance in the operations of CIL as embodied in the mission of Coal India Ltd. CIL has formulated a Safety Policy for ensuring safety in mines and implementation of which is closely monitored at several levels. Salient features are as follows:

- Operations and systems - planned and designed to reduce mining hazards;
- Compliance of Statutory provisions;
- Improvement in working conditions by adopting appropriate technology;
- Provide material and monetary resources for execution of Safety Plans;
- Deploy safety personnel exclusively for safety;
- Promoting Worker participation in Safety Management;
- Prepare Annual Safety Plan and long term Safety Plan;
- Multi-level monitoring of the implementation of the Safety Plans;
- Continuous education, training and retraining on safety oriented skills;
- Continue efforts to improve standard of occupational health services.

9.7 STATUTORY PROVISION FOR COAL MINE SAFETY

Coal mining, world over, is highly regulated industry due to presence of many inherent, operational and occupational hazardous. Coal Mine

Safety Legislation in India is one of the most comprehensive and pervasive statutory framework for ensuring occupational health and safety (OHS). Compliance of these safety statutes is mandatory.

In India, the operations in coal mines are regulated by the Mines Act, 1952 Mine Rules -1955, Coal Mine Regulation-1957 and other statutes framed thereunder. Ministry of Labour & Employment is the Administrative Ministry concerned for ensuing implementation of the provisions of Mines Act and Rules and Regulations thereunder. Director General of Mines Safety is vested with the responsibility to ensure compliance of the provisions of Mines Act etc. The following are the statutes that are applicable in coal mines for safety & health.

Sl. No.	Statute
1	Mines Act -1952
2	Mines Rules -1955
3	Coal Mine Regulation -1957
4	Mines Rescue Rules -1985
5	Indian Electricity Rules - 1956
6	Mines Vocational Training Rules -1966
7	—
8	Indian Explosive Act, 1884
9	Explosive Rule - 1983
10	Indian Boiler Act, 1923
12	Mines Maternity Benefit Act & Rules -1963



Mechanised Roof-Bolting process in progress for better mine safety in an under-ground coal mine

9.8 ACCIDENTAL STATISTICS

9.8.1 Comparative Accidents Statistics of CIL – 5 yearly averages

Time Period	Av. Fatal Accidents		Av. Serious Accidents		Av. Fatality Rate		Av. Serious Injury Rate	
	Accident	Fatalities	Accident	Injuries	Per MT	Per 3 Lac	Per MT	Per 3 Lac Man shifts
1975-80*	149	185	1208	1265	2.04	0.42	13.95	2.85
1981-85	127	148	893	930	1.25	0.31	8.03	1.95
1986-90	130	146	567	593	0.90	0.30	3.61	1.20
1991-95	118	156	522	554	0.71	0.34	2.53	1.12
1996-00	92	105	476	507	0.41	0.25	1.96	1.21
2001-05	67	81	468	491	0.27	0.23	1.61	1.41
2006-10	60	78	299	312	0.20	0.25	0.80	0.99
2011-12#	52	55	213	223	0.13	0.20	0.51	0.79

* 6 years average, # - 2 years average, nearest full number

9.8.2 Accident Statistics of NLC- (for last five years).

Year	Fatalities	Serious Injuries	Injury Rate per MT production		Injury Rate per Three Lakh Man Shifts	
			F	S	F	S
2008-09	2	3	0.10	0.15	0.14	0.21
2009-10	3	9	0.13	0.39	0.21	0.62
2010-11	2	2	0.09	0.09	0.14	0.14
2011-12	1	6	0.04	0.24	0.07	0.40
2012-13 (Apr. to Dec. ' 2012)	4	3	0.22	0.16	0.38	0.29

F= Fatality Rate.

S= Serious injuries Rate.

9.8.3 Company-wise Accident Statistics of CIL, SCCL & NLC for the year 2012:

Company	Fatal Accidents	Fatalities	Serious Accidents	Serious Injuries	Fatality Rate		Serious Injury Rate	
					Per MT	Per 3 lac manshifts	Per MT	Per 3 lac manshifts
ECL	11	11	64	67	0.32	0.19	1.98	1.13
BCCL	8	8	28	30	0.25	0.19	0.94	0.70
CCL	6	7	9	9	0.14	0.21	0.19	0.27
NCL	6	6	9	9	0.09	0.45	0.13	0.68
WCL	8	9	29	29	0.21	0.17	0.69	0.56
SECL	11	12	37	38	0.10	0.21	0.32	0.65
MCL	2	2	7	7	0.02	0.13	0.06	0.44
NEC	1	1	0	0	1.47	0.45	0.00	0.00
CIL	53	56	183	189	0.12	0.20	0.42	0.68
SCCL	11	12	338	340	0.22	0.25	6.28	7.71
NLC	4	4	5	5	0.16	0.28	0.20	0.35

Note:

1. Accident Statistics are maintained calendar year wise in conformity with DGMS practice.
2. Figures are provisional & subject to reconciliation with DGMS

9.8.4 Rate of Fatality and Serious Injury of CIL, SCCL & NLC during the period 2009 to 2012

Company	Fatality Rate Per MT of coal production				Fatality Rate Per 3 lac man shifts				Serious Injuries Rate Per MT of coal production				Serious Injuries Rate 3 lac man shifts			
	2009	2010	2011	2012	2009	2010	2011	2012	2009	2010	2011	2012	2009	2010	2011	2012
CIL	0.15	0.21	0.13	0.12	0.21	0.31	0.19	0.20	0.60	0.71	0.60	0.42	0.82	1.06	0.90	0.68
SCCL	0.43	0.24	0.16	0.22	0.42	0.24	0.18	0.25	8.48	6.21	6.37	6.28	8.30	8.36	7.16	7.71
NLC	0.13	0.09	0.08	0.16	0.21	0.14	0.13	0.28	0.39	0.36	0.21	0.20	0.62	0.57	0.33	0.35

Note: All figures are provisional and subject to reconciliation with DGMS.

9.8.5 Company-wise Accident Statistics of CIL, SCCL & NLC during the period 2009 to 2012:

Company	Fatal Accidents				Fatalities				Serious Accidents				Serious injuries			
	2009	2010	2011	2012	2009	2010	2011	2012	2009	2010	2011	2012	2009	2010	2011	2012
ECL	8	12	8	11	9	12	8	11	74	111	81	64	75	111	84	67
BCCL	13	7	6	8	17	7	7	8	50	60	37	28	50	61	42	30
CCL	6	8	6	6	6	10	6	7	12	11	12	9	12	11	12	9
NCL	4	11	5	6	4	11	5	6	11	11	10	9	11	11	12	9
WCL	11	11	9	8	13	14	10	9	46	42	34	29	46	46	37	29
SECL	11	20	11	11	11	33	11	12	47	51	58	37	50	62	59	38
MCL	2	2	4	2	2	2	4	2	8	6	10	7	8	6	10	7
NEC	0	1	2	1	0	1	2	1	0	0	0	0	0	0	0	0
CIL	55	72	51	53	62	90	53	56	248	292	242	183	252	308	256	189
SCCL	17	10	8	11	21	12	8	12	406	302	319	338	411	312	320	340
NLC	3	2	2	4	3	2	2	4	8	3	5	5	9	8	5	5

Note: All figures are provisional and subject to reconciliation with DGMS