

BUS OPERATIONS

Chief Bus Controller/ Bus Operations Control Centre Controller/ Deputy Bus Operations Control Centre Manager/ Bus Operations Control Centre Manager

Job description: The Chief Bus Controller/ bus Operations Control Centre Controller performs daily operations at the Bus Operations Control Centre (BOCC) to ensure bus service reliability on the road. He works closely with Bus Captains and other stakeholders to regulate bus services in real-time environment to maintain bus service performance standards and minimise service delays. He also provides on-the-job coaching to Bus Captains and is required to respond to emergencies and restore bus service disruptions, assist in investigation and documentation of incidents and/or accidents. He takes on administrative duties in data compilation and contributes towards continuous improvement by providing feedback on gaps observed in operational activities. The manager oversees and supervises the team within BOCC, work with relevant authorities and other stakeholders to uphold and improve bus service performance standards and manages team performance, manpower allocation, training and budgeting.

Current Job Tasks	Future view of job tasks	Impact at task-level
1. Perform daily operations in BOCC to ensure bus service reliability by regulating bus services in real-time environment, bus monitoring and supervising to ensure bus follows schedules	<ul style="list-style-type: none"> Require additional basic knowledge on how EV buses work on top of ICE buses Work closely with both ICE and EV bus captains to regulate bus services through intelligent transport systems such as computer aided dispatch, schedule adherence support, service compliance which are highly automated 	
2. Provide on-the-job coaching to Bus Captains according to bus service standards by providing constructive advice for service improvements	<ul style="list-style-type: none"> Continue to have overview of bus service standards and corresponding bus captain assigned to the bus route, provide constructive advice to bus captains for service improvements 	
3. Provide support to emergencies, incidents, accidents and bus service disruptions when buses are inside/ outside of interchanges/ depots by providing situation analysis and best approach solution to resolve the crisis	<ul style="list-style-type: none"> Human intervention and judgment remain critical in executing crisis management procedures and support for emergencies Require to have knowledge in EV bus systems and EV vehicle operations on top of ICE bus systems and vehicle operations to provide proper analysis of service disruptions and provide best approach to resolve the crisis/ emergency 	
4. Improve bus service performance standards through consistent reviews and improvements to current practices	<ul style="list-style-type: none"> Bus service performance standards will be consistently reviewed and improved similarly to current practices 	



A MEDIUM proportion of the job tasks will be impacted by the key trend, thus minimising or changing the current job tasks

MEDIUM degree of change



Current/future skills

To take on adjacent/ new job role(s) the skills below will observe these changes:

- Bus Operations Control Management
- Bus Regulatory Compliance
- Workplace Safety and Health for Incident and Accident Investigation
- Continuous Improvement Management
- Crisis Management
- Health and Fatigue Risk Management
- Manpower Planning and Development
- Organisational Planning and Target Setting
- Data and Statistical Analytics
- EV Dashboard Diagnostic
- EV Fleet System Planning



Within the next **10 years**, the job role(s) could potentially undergo

REDESIGN



Job Adjacency

The job holder could potentially take on adjacent job roles as:

- Transportation manager
- EV Fleet Manager

Legend for job tasks & skills

- High impact
- Medium impact
- Low impact
- Declining skills
- Adjacent skills
- Emerging skills

10-year skills impact analysis for bus operations


















Job tasks today	Job tasks in 10 years	Job skills in 10 years	Job task impact	task	Job role impact	Job role transition
1. Perform daily operations at bus interchange/ bus depot such as monitoring and regulating bus arrival and departure timings; driving buses within the interchange/ depot if required	 Monitor and regulate EV and ICE bus arrival and departure timings through intelligent transport systems such as computer aided dispatch, schedule adherence support, service compliance which are highly automated	 Bus Interchange Operations  Bus Depot Operations  Bus Operations Control Management  EV Fleet System Planning	 Medium degree of impact	 Redesign	1. Transportation manager 2. Bus Operations Control Centre Controller 3. EV Fleet Manager	
2. Provide customer service in the interchange for commuters, conduct security checks, facilitate traffic and crowd control	 Continue to provide customer service in the interchange for commuters, conduct security checks, facilitate traffic and crowd control	 Service Excellence				
3. Provide support to emergencies, incidents, accidents in the interchange/ depot for vehicle-related and commuter-related	 Continue to provide support to emergencies, incidents, accidents in the interchange/ depot however vehicle-related service disruptions will need EV diagnostic	 Crisis Management  Workplace Traffic Safety Management  Workplace Safety and Health for Incident and Accident Investigation  EV Dashboard Diagnostic				
4. Support compliance to organisational and legislative requirements and improve ICE bus service performance standards	 Continue to support compliance to organisational and legislative requirements and improve bus service performance standards	 Bus Regulatory Compliance  Continuous Improvement Management				
Declining Functions	Monitoring and regulating ICE buses – arrival and departure, scheduling, regulating and supervising operations					
Emerging Functions	Automated and advanced high level monitoring and regulating ICE and EV buses – arrival and departure, scheduling, regulating and supervising operations					

Table 28: 10-year skills impact for bus operations

20-year skills impact analysis for bus operations




















Job tasks today	Job tasks in 20 years	Job skills in 20 years	Job task impact	Job role impact	Job role transition
1. Perform daily operations at bus interchange/ bus depot such as monitoring and regulating bus arrival and departure timings; driving buses within the interchange/ depot if required	 Monitor and regulate EV and AV bus arrival and departure timings through intelligent transport systems such as computer aided dispatch, schedule adherence support, service compliance which are highly automated	 Bus Interchange Operations  Bus Depot Operations  Bus Operations Control Management  EV Fleet System Planning  AV Planning and Route Management	 Medium degree of impact	 Redesign	1. Transportation manager 2. Bus Operations Control Centre Controller 3. EV Fleet Manager 4. AV Fleet Manager
2. Provide customer service in the interchange for commuters, conduct security checks, facilitate traffic and crowd control	 Continue to provide customer service in the interchange for commuters, conduct security checks, facilitate traffic and crowd control	 Service Excellence			
3. Provide support to emergencies, incidents, accidents in the interchange/ depot for vehicle-related and commuter-related	 Continue to provide support to emergencies, incidents, accidents in the interchange/ depot however vehicle-related service disruptions will need EV and AV diagnostic	 Crisis Management  Workplace Traffic Safety Management  Workplace Safety and Health for Incident and Accident Investigation  EV Dashboard Diagnostic  AV Dashboard Diagnostic			
4. Support compliance to organisational and legislative requirements and improve ICE bus service performance standards	 Continue to support compliance to organisational and legislative requirements and improve bus service performance standards	 Bus Regulatory Compliance  Continuous Improvement Management			
Declining Functions	Monitoring and regulating ICE buses – arrival and departure, scheduling, regulating and supervising operations				
Emerging Functions	Automated and advanced high level monitoring and regulating ICE and EV buses – arrival and departure, scheduling, regulating and supervising operations				

Table 29: 20-year skills impact for bus operations