INTEGRATED DRIVING AND SERVICE CONTROL SIMULATION SYSTEM

Redefine Driving Proficiency
Safer Journeys for All

Jointly designed and developed by ST Engineering and SMRT Buses Ltd, the Integrated Driving & Service Control (iDSC) simulation system offers enhanced training for bus professionals. Available at the Singapore Bus Training and Evaluation Centre (SG BTEC), the iDSC features a suite of bus cabin simulators of the most common models used for public bus services. These bus cabin simulators provide scenario-based, customised training for bus captains to hone safe driving skills and develop their vocational competency.

In pursuit of enhanced bus service reliability, the iDSC is networked-configured to provide bus captains and service controllers with a unique, team-based training experience.

Implemented with a rigorous curriculum that is backed by decades of operational experience, bus operators can be assured that their training needs are well covered with the iDSC.

Scalable Hardware Configurations and Customised Training Solutions

The iDSC system architecture and hardware is designed to suit future integration. To optimise utility, multiple vehicle models can be interchanged on a single trainer unit, saving space and resources.

**Bus Simulator Trainer**

The bus simulator trainer offers highly effective training for drivers without compromising the driving performance and experience.

**Features**
- Modified, compact bus cabin
- 120/180 degree field of view
- Driving controls (steering wheel, accelerator & brake, gear shift, digital instrument panels)

**Full Cabin Simulator**

The full cabin simulators are complete replicas of common bus models from MAN, Alexander Dennis Limited, Mercedes Benz and Volvo, providing a wholly immersive training experience.

**Features**
- Full size vehicle cabin
- 180/270/360 degree field of view
- Real vehicle controls (steering wheel, accelerator & brake, gear shift, instrument panel, in-cabin switches)
- 5.1 Full surround sound system

**Optional configuration**
- 3 or 6 degree of freedom motion platform
- Integration with vehicle on-board equipment

**Service Control Work Station**

The service control work stations are exact replicas of operational equipment at the Bus Operations Control Centre. The iDSC allows team-based training between service controllers and bus captains to improve bus service reliability.

**Instructor Operating Station (IOS)**

The IOS controls the simulator training environment and monitors all aspects of a trainee’s performance. Equipped with training analytics, instructors can deliver highly customised training sessions for greater effectiveness.

**Features**
- Plan and inject different scenarios
- Auto-generated assessment report
- Comprehensive debriefing tool with training video playback
Features

**For Bus Captains**

The iDSC adopts a proactive approach to skills training and competency development. Bus captains undergo an evidence and scenario-based training programme that is tailored to the individual’s training needs.

**Customised Local Terrain**

Enhances training realism and helps the bus captain to become familiar with the local routes and traffic.

**Advanced Safety and Situational Awareness**

Includes day and night driving, wet weather conditions, blind spots awareness, layout of depots and interchanges.

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**For Service Controllers**

Service controllers are trained in incident management and operations control procedures.

**Team-based Training**

Unique team-based training where service controllers and bus captains rehearse voice protocols that help them handle incidents effectively.