

# Integrated Communication Console

## Introduction

Integrated Communications Console allows the integration, monitoring and control of various communication subsystems through a single console. These communication subsystems include the Radio, Direct Telephone, Alternate Telephone, Public Address, Passenger Information, Closed Circuit TV, etc, which forms the nerve centre for managing operations on a day-to-day basis. The integrated communications console basically caters for the controller / supervisor at the control centre to communicate with the following parties:

- Vehicle driver
- Station Master / Depot Supervisor
- Way side Maintenance Crew
- Passengers

The underlying physical channels are transparent to the controller thus improving effectiveness, especially when handling difficult situations that would require maximum attention of the controller. No more diverse hardware and heterogeneous applications and no more many pairs of hands to operate the systems. The trend is to integrate the various communication mechanisms into a single console to provide the complete solution.



## Features

The Integrated Communications Console provides a unifying Graphical User Interface that caters to the various functions of the sub-systems and the hardware used to initiate / receive calls.

The underlying mechanism does the switching of hardware whenever the controller is ready to receive a call from the selected / identified sub-system.

Some of the other features are as follows:

- Login / Logout
- Automatic launching of application upon successful login
- Language Selection
- Password Change
- Alarm List display with facility to acknowledge
- Incoming Call List display that displays pending calls from the systems. When user selects the call to attend to from the list, the system shall automatically bring the concerned application to front / set focus and also switch the hardware (Mike & Speakers).



## Sub-System Integration

Each of the sub-systems can be integrated into the Communications Console by just clicking on the systems to be integrated in the configuration menu.

There are 2 approaches to integration.

### Approach 1

Silicomp has in-built subsystem components such as the Radio (for Motorola's Dimetra), PA, PIS, etc. Each of these sub-systems can be independently deployed (if required for backup purposes) or integrated into the console. The system provides easy to use drag and drop techniques to configure the sub-system GUI. For example, using these techniques, the pre-determined PA groups can easily be configured.



### Approach 2

Independent vendor applications can be integrated into the console system if they comply to certain protocols. However, the look and feel would be different.

The subsystems shall provide common information on alarm status and incoming calls received to the communications console. Hardware integration shall be in terms of communication cards and connection boards. Switching of voice modules within the sub-system shall be through dedicated switch.



## Benefits

Integration of console leads to:

- Consistent look and feel
- Avoid confusion in times of emergency
- Underlying mechanisms is transparent to the controller making it easier to understand and operate
- Reduce training effort as there is only one system to learn
- Improve controller efficiency
- Remove redundant hardware
- Faster response to alarm and incidents

**Groupe Silicomp Grenoble (Group Head Office)** 195, rue Lavoisier - ZIRST - BP 1 - 38330 Montbonnot St-Martin  
Tel: +33 (0)4 76 41 66 66 Fax: +33 (0)4 76 41 66 67 Email: [info@silicomp.fr](mailto:info@silicomp.fr) URL: [www.silicomp.fr](http://www.silicomp.fr)

**Silicomp Asia (Asian Head Office)** 31, International Business Park #04-02 Creative Resource Building Singapore 609921  
Tel: +65 68995353 Fax: +65 68995352 Email: [info@silicomp.com.sg](mailto:info@silicomp.com.sg) URL: [www.silicomp.com.sg](http://www.silicomp.com.sg)

**Silicomp America (American Head Office)** 7011 Koll Center Parkway Suite 280 - Pleasanton - CA 94566  
Tel: +1 925 931 4450 Fax: +1 925 931 4444 Email: [info.america@silicomp.com](mailto:info.america@silicomp.com)