

No. 775 Old Pretoria Rd Wynberg South Africa P.O.B 1502 highlands north 2037 Phone +27 11 887-7222 Email: info@jves.co.za

# PGS – Terminology



### PGS Building blocks

Device – Any device connected to the communication buses.

**Sensor** – A sensor is a device, mounted above or below a parking bay, capable of detecting the presence of a vehicle in the bay which than relays the information up stream.

**Space indicator** – A single bay LED indicator with at least two colours indicating whether the bay is available or occupied.

**Zone Counter** – Any device mounted above or below a driveway capable of counting the number of vehicles passing through the driveway.

**Way finding device** – Any device used to guide drivers to an available parking bay. These may be:

- Numeric displays
- Guiding arrows.
- No entry signs
- Etc.

**Power supply** – Any device whose main function is to feed other devices.

#### **Geographical definitions**

Section – A small parking area, which can be geographically defined with a few entrance and exit points. An example of a section will be an aisle with a driveway and parking bays on both its sides.

**Zone** – A larger area comprising of a few sections. The size of a zone is limited by the handling capability of the first level data interface device.

**Block** – A large area, consisting of a few sections and/or zones, which can be geographically defined with a few entrance and exit points. An example will be an entire parking lot or an entire level.

**Allocation** – A parking bay or a group of parking bays allocated to a specific users such as paraplegic, visitors, hybrids etc.

#### Parking bay measurements

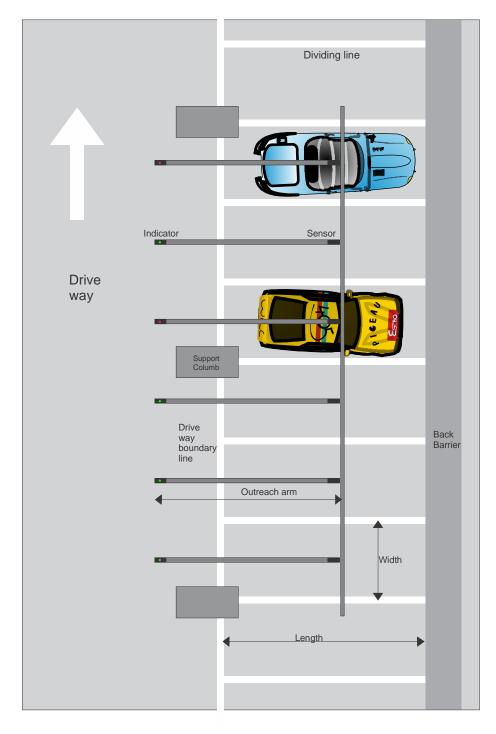
Please refer to the drawing in the following page for the bay definitions.

**Parking bay** or **Bay** for short – a single vehicle parking space

**Bay width** – The distance between the centers of the dividing lines.

**Bay length** – The length of the bay from the back barrier (Marking, pavement or wall) to the end of the Driveway boundary line.

**Outreach arm** – In a case of a split system, the distance from the middle of the parking bay to the best visible point in the driveway.



#### ControlRoom Upstream PC Downstream Block Buffer Zone Zone Zone Buffer Buffer Buffer Downstream RS-485 Block Buffer Zone Zone Zone Buffer Buffer Buffer Block Buffer

#### **Data Communication and management devices**

**Zone Buffer** – First-level data communication hub. The Zone Buffer connects directly to front line system devices such as Sensors, ZoneCounters and/or Way Finding devices. It collects the data from these devices relays this data to an upstream device such as, a Block Buffer or ControlRoom. It may also have local intelligence and may be capable of compressing the data and /or generate commands to be sent downstream to way finding devices.

**Block Buffer** - Second-level data communication hub. A Block Buffer connects to a few Zone Buffers and/or other front line system devices such as ZoneCounters and/or Way Finding devices. It collects the data from these devices and generates or relays commands to these devices upstream, generally to the Control Room. It may also have local intelligence and may be capable of compressing the data and /or generate commands to be sent downstream to way finding devices.

**ControlRoom** – Last-level data center. Generally, a PC that can display the parking status at real-time. In most cases the control room:

- Collects all the data from all the sensors and from the Zone Counters.
- Display the site status on large format screen. Generally on a geometrical
- Generated data for the way finding devices.
- Logs movements.
- Generates statistical reports as graphs and/or reports.

## **Other definitions**

**Upstream** – Communication flow from lower device to upper device. For example, ZoneBuffer to BlockBuffer.

**Downstream** - Communication flow from upper device to lower device. For example, ControlRoom to BlockBuffer.