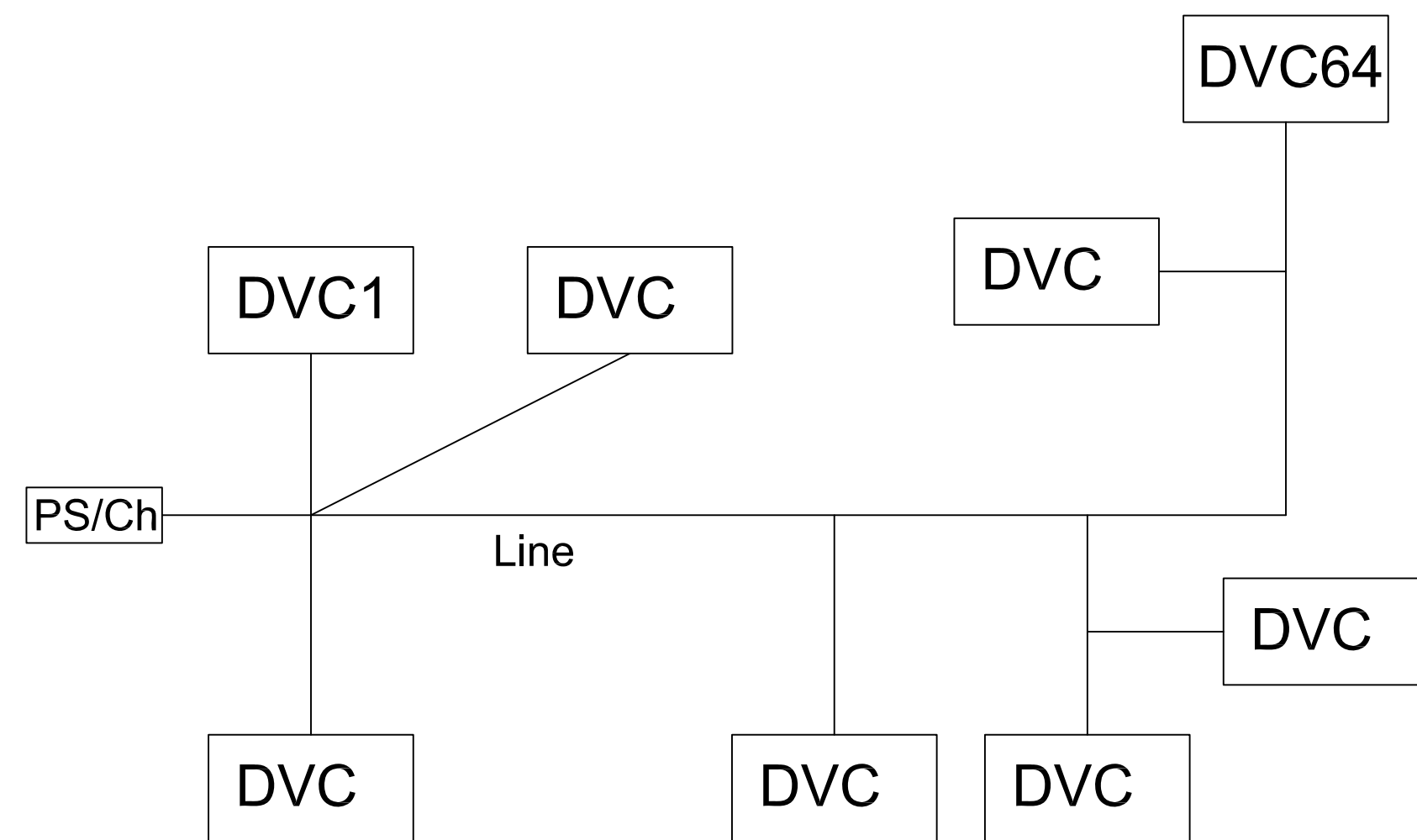


Element/KNX Topology Explained

Line



DVC = Bus Device
PS/Ch = Power Supply Unit with Choke

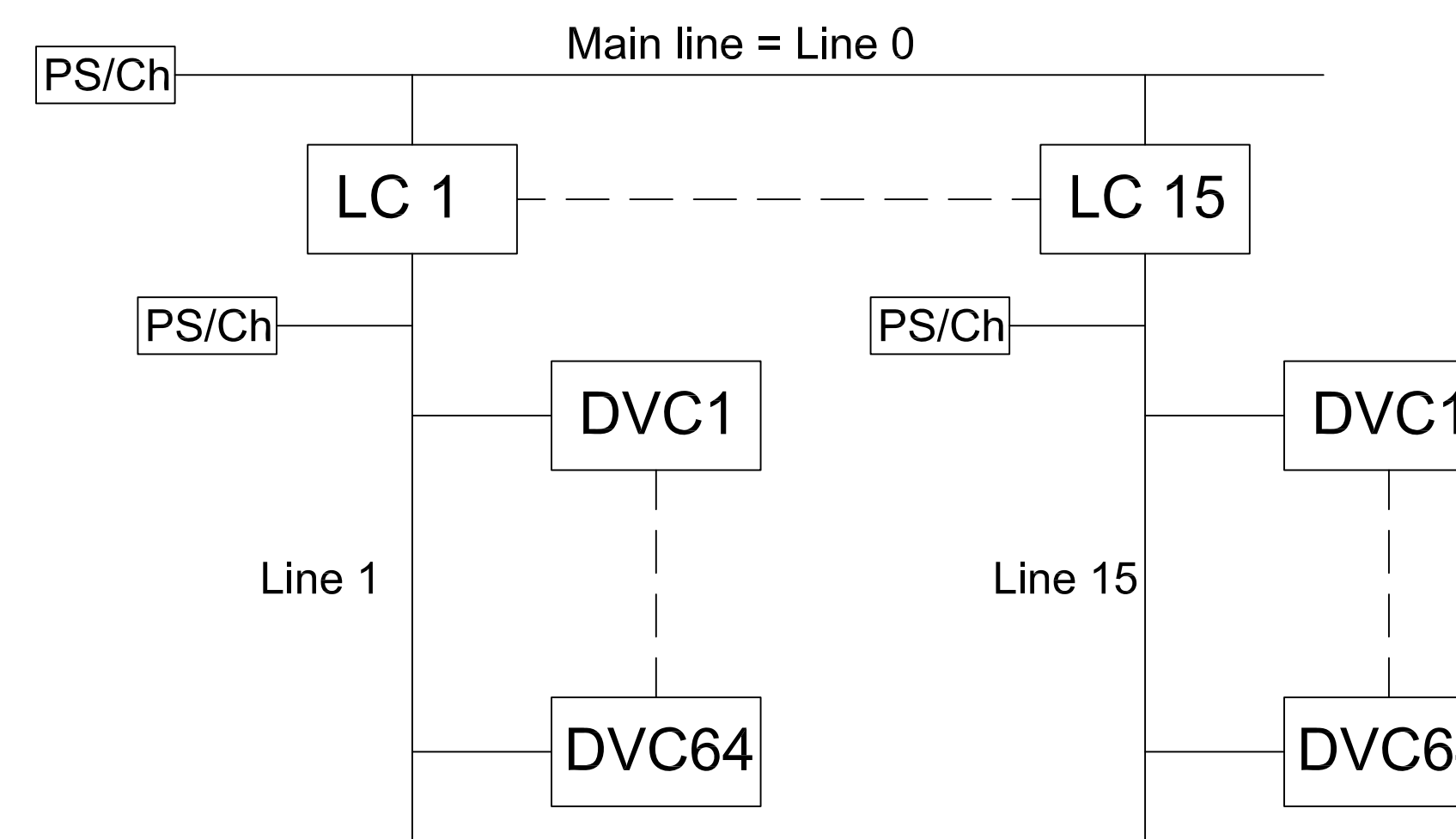
Topology: Line

Each bus device (DVC) can exchange information with any other device by means of telegrams.

One line consists of a maximum of 4 line segments, each with a maximum of 64 bus devices. Each segment requires an appropriate power supply.

The actual number of devices is dependent on the power supply selected and the power input of the individual devices.

Area



LC = Line Coupler
DVC = Bus Device
PS/Ch = Power Supply Unit with Choke

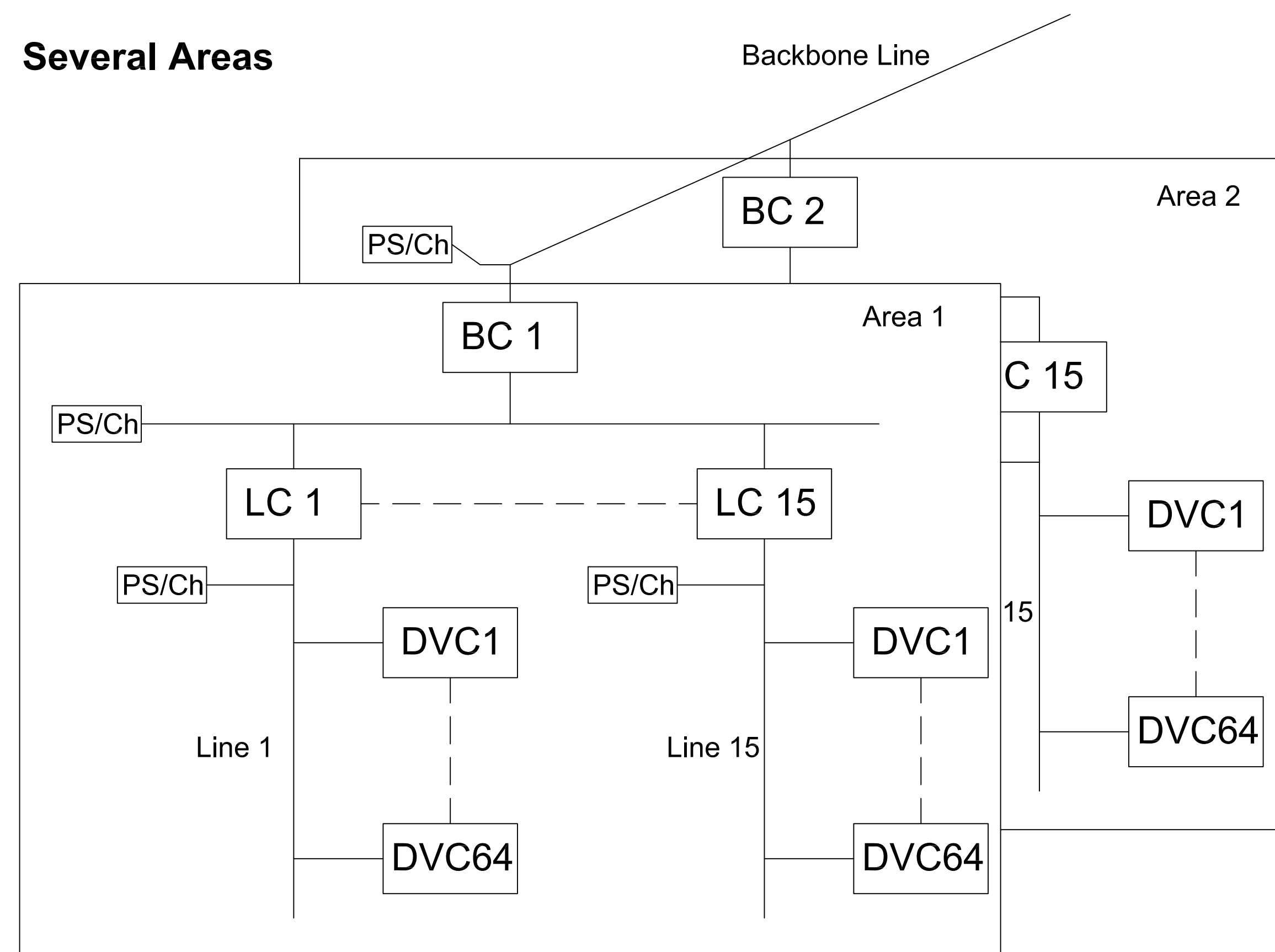
Topology: Area

If more than 1 line is to be used or if a different structure is to be selected, then up to 15 lines can be connected to a main line via a line coupler (LC). This is called an area.

It is also possible to have up to 64 bus devices on the main line. the maximum number of bus devices on the main line decreases by the number of line couplers in use.

Each line, including the main line, must have its own power supply unit.

Several Areas



BC = Backbone Coupler
LC = Line Coupler
DVC = Bus Device
PS/Ch = Power Supply Unit with Choke

Topology: Several Areas

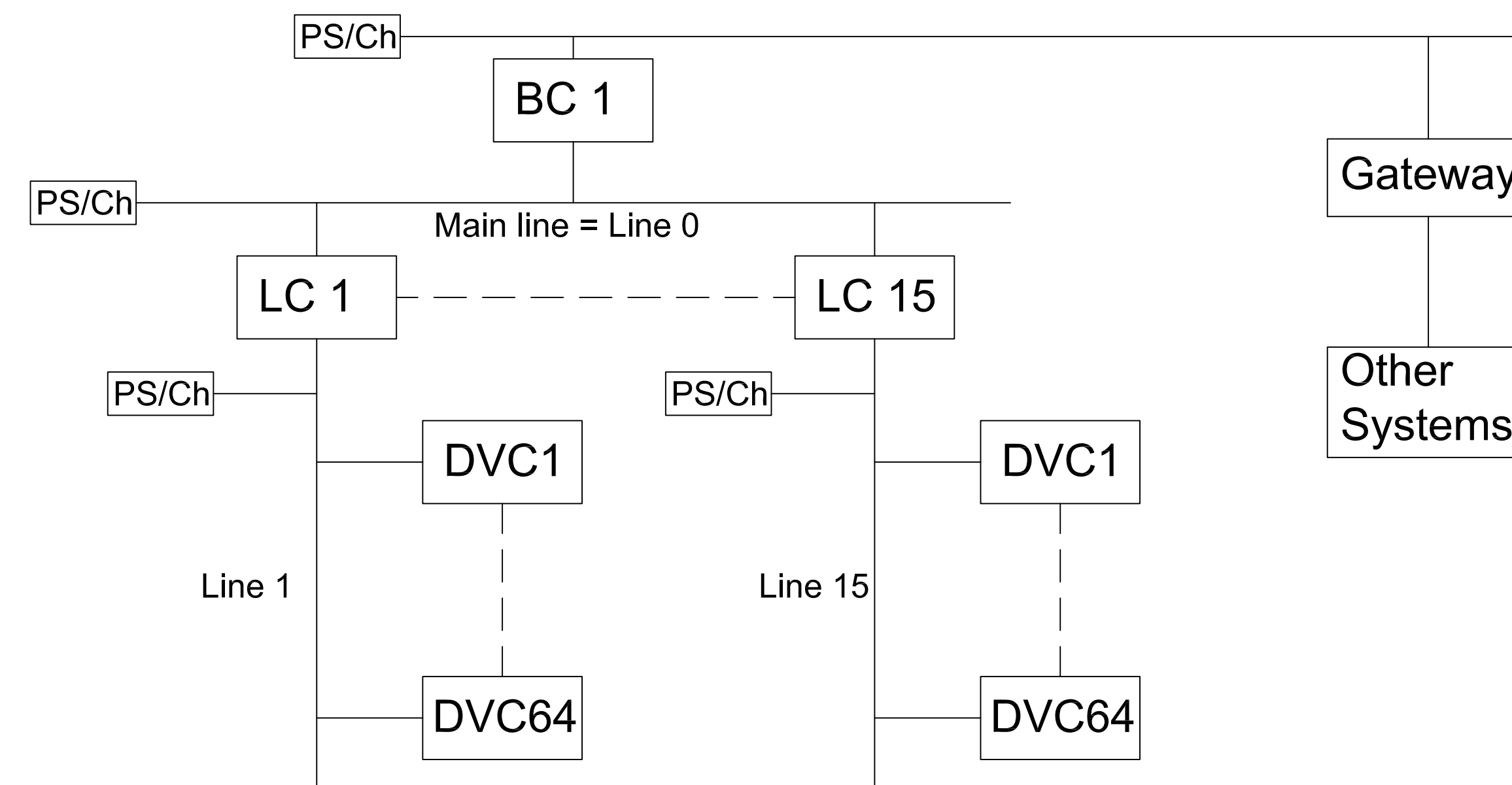
The Element/KNX TP1 bus can be expanded by means of a backbone line.

The backbone coupler (BC) connects its area to the backbone line.

It is also possible to have bus devices on the backbone line. The maximum number of bus devices on the backbone line decreases by the number of backbone couplers in use.

Within a maximum of 15 functional areas, more than 58,000 bus devices can be connected to the bus system. By dividing the Element/KNX TP1 installation into lines and areas, the functional reliability is increased considerably.

Other Systems



Element/KNX - Internal and External Interfaces

Element/KNX is open to any other system. The backbone line (or any other line) can be connected via a gateway unit to e.g. BACnet, SPS, ISDN, Internet etc.

The gateway unit carries out a bi-directional conversion of the protocol.

General Notes

| No. | Revision/Issue | Date |
|-----|----------------|----------|
| 1 | Sui Shen | 02/02/10 |



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Project Name and Address

Company Name

Address

| | |
|----------------|--------------|
| Project Name | Sheet Number |
| Date | |
| xx - xx - 2010 | |
| Scale | |