20 June 2005

TAUTECH (Pty) Ltd

NOTES ON STATION ALARMS

The Vega SAP in basic format serves as an alarms concentrator from where all station alarms are connected to the BTS by way of a single cable directly to the BTS on Sub-D type or similar connector(s) depending on the BTS vendor. The differences in going the Vega SAP route rather than say marshalling on a Krone type frame and concentrating the alarms at that level are:

1. The Vega SAP operating off the station 24 or 48V DC will supply a motion sensor with a 12V DC supply as required by commercial PIR's such as the Racal device;

2. The Vega SAP operating off the station 24 or 48V DC will supply a smoke detector with 24V DC supply as required by commercial ionisation type smoke detector such as the Ziton device;

3. Non-addressable smoke detectors (such as the Ziton product) are generally intended for multiple detector installation on a two-wire multi drop system which doubles as power supply and activation signal route. It is therefore not possible to, without using the Vega SAP or similar, have a dry contact type smoke detector indication as required by the BTS. Non-standard type smoke detectors are available with relay type output but these require special consideration of availability, sourcing and auxiliary supply requirements.

4. The Vega SAP offers the user the option to insert a link that will suppress PIR indication towards the BTS for as long as Entry (door) indication is active (OPEN). This suppresses continuous PIR-driven alarm signalling traffic on the NMC when technicians are on site and the Entry condition is already registered.

5. When the Air-conditioning Control Unit (ACCU) is used with a Vega SAP, the fire Shut-Off output from the standard Vega SAP interfaces directly to the ACCU to provide automatic Air-conditioning unit (and Emergency Ventilation if installed) shut-off in the event of a fire at no extra cost;

6. All the alarm output channels from the Vega SAP that connects to the BTS are opto-isolated to reduce the surge exposure of the Alarms Input Interface on the BTS;

7. The standard Vega SAP cables and wiring looms are intended as a subject of agreement in detail prior to shipment to ensure that the cable set issued with a particular project is best suited to the specific rack and trunking layout routing to make for neat and consistent installation detail. Because point-to-point plug-in connectors are used as much as possible it allows for error free installations on site using minimum skills level;

8. The standard Vega SAP enclosure is pre-configured with Door Switch and Smoke OR PIR Movement sensor already interfaced and tested to the SAP which makes for very easy installation to a high standard.

9. With the (optional) upgrade processor module the Vega SAP gains advanced functionality such as logical Boolean grouping or suppressing etc of alarm functions while still using the standard field or front-end detector installations made with the basic Vega SAP installation. This functionality becomes important when the number of off-site alarm channels is less than the number of alarm conditions that are generated at the site;

10. With the (optional) upgrade processor module the Vega SAP can be supplied with an alarms annunciator LCD display unit that can be configured to display active alarm channel text in a user defined language;

11. With the (optional) upgrade processor module the Vega SAP can be supplied ready to accept analogue input signals (0 – 10V DC etc) on which alarm thresholds can be configured for say fuel level alarming.

End