Suggested Specification: FCU, FFL, UEL

The RTIL or sequenced flashing approach light system shall consist of low-voltage, condenser discharge flashing units.

The systems shall be in full compliance with ICAO Annex 14, FAA L-849 the photometry to E-2159, E-2325, and E-2628. E-2689 and STANAG 3316. Each of the flashing units shall consist of a control unit and an elevated or inset light providing a most similar light output, independent of the distance between the light and the control unit.

The control electronics shall operate properly at any input voltage ranging between 190 and 260 V from a single or three phase (3 or 4 wires) 50 or 60 Hz network, without any need for adjustment taps.

The flashing system shall use a lamp rated 400 V maximum and shall not make use of any high voltage components, except for the triggering function. The control unit shall compensate for various lengths of the cable between the light and the control unit; there will be no reduction of the light output for a length up to 100 meters.

The flashing sequence shall be controlled by a coded signal emitted by one of the control units designated as „master" for the system and acting as the local bus master and the interface card to the airfield lighting control system. Any control unit of the system shall be able to be used as “master".

The communication between the ATC tower and the flashing system shall be realized either via a multi-wire cable, one or two dedicated local buses or a combination of these and shall permit a complete status monitoring and remote control of each individual control unit (over a local bus). The flashing system will be on-site reconfigurable to the conditions prevailing on-site by means of standard laptop PC and a “dongle".

The light fixtures shall incorporate the triggering circuitry and a safety switch, de-energizing its control unit when the light fitting is not perfectly closed. The light shall be equipped with a low-voltage Xenon discharge lamp rated 3.600.000 flashes or 1000 hours minimum at 1 flash per sec. The elevated light shall be low volume and low mass, with a maximum. weight of 1.8 kg, mounted in a frangible way. The 400 V lamp shall have the same housing as the steady burning elevated approach light (see catalogue leaflet A02.630). The inset flashing lights shall produce a light output in compliance with FAA spec E-2628b and E-2689a. The aluminum alloy fitting shall be equipped with a mechanically fastened user replaceable prism, without making use of sealing compounds. The light shall suit for mounting on a 12` shallow base with a depth of 150 mm maximum or, using an adaptor/flange ring, on a standard FAA 12" to 16" deep base.

Between the control unit and its flashing light fixture, a standard 5-core low-voltage cable shall be used.