ICAO concepts. The current Regulations (RA 3515) for the positioning and circuit configurations of Runway Edge lights are significantly different from the previous Regulations (MADS) and are now in line with

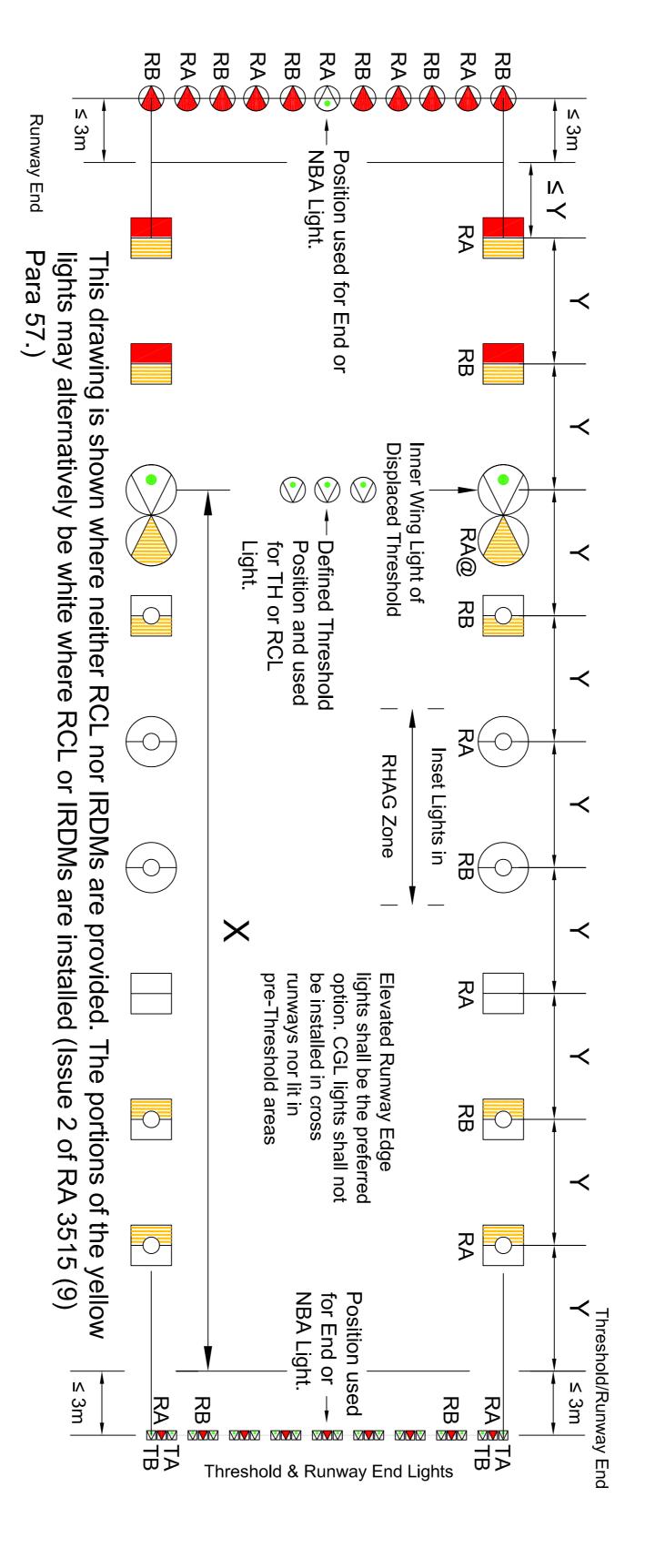
There equal to or less than 60m. is now no requirement for HISL to be Runway Dependent, nor for HISL to be spaced at 30m. LISL spacing is not now required to be at 90m. Spacing of both HISL and LISL shall now be

The Recommended Option shown on this drawing is based on a maximum spacing of 60m.

Where a Combined Light Fixture contains a Low Intensity light, the light is referred to as a Circling Guidance Light (CGL)

Option _ Recommended Option

High Intensity Side Lights (HISL), Circling Guidance Lights (CGL), IRDM's & Runway End Lights are combined over 2 HISL and CGL are provided in a single combined unit, with a maximum height of 36cm above adjacent pavement level. The Runway Edge system is non-Runway Dependent Runway Edge system is interleaved on circuits RA and RB. are combined over 2 No. interleaved circuits as part of the Runway Edge system.



Option

The High Intensity Runway Edge light (HISL) system and IRDM system is non-runway dependent and is interleaved on circuits RA and RB Runway End lights are part of the Low Intensity Runway Edge (LISL) system.
The Low Intensity system is interleaved on circuits RC and RD. The system is non-runway dependent.

RA 3515(9) Para 50 requires Light Fixtures of HISL and LISL to be collocated. In light of recent experience with LED fittings this is difficult. Elevated LED Light Fixtures are all manufactured to be compliant with the 36cm height requirement. Visibility of individual Light fixtures is severely restricted if Light Fixtures are positioned close together. Therefore, although still considered to be collocated, a gap of 2m shall be inserted between the HISL and LISL light fixture (Inset and Elevated) positions, with the low intensity light fixtures positioned upwind of the high intensity light fixtures applicable to the primary approach direction. light fixture (Inset and Elevated) positions, with the low intensity

Option

The High Intensity Runway Edge light (HISL) system and IRDM system is runway dependent and is interleaved Runway End lights are part of the Low Intensity Runway Edge (LISL) system.
The Low Intensity system is interleaved on circuits RE and RF. The system is non-runway dependent. on circuits RA, RB, RC and RD

RA 3515(9) Para 50 requires Light Fixtures of HISL manufactured to be compliant with the 36cm height requirement. Visibility of individual Light fixtures Therefore, although still considered to be collocated, a gap of 2m shall be inserted between all light fixture (Inset and Elevated) positions. and LISL to be collocated. In light of recent experience with LED fittings this is difficult. El requirement. Visibility of individual Light fixtures is severely restricted if Light Fixtures are **Elevated LED Light Fixtures** positioned close together. are

> The distance between def ined Threshold positions.

The calculated distance by etween Runway Edge lights.

Initial Calculation

maximum spacing. = Light Units per side, whe ወ N is the desired

spacing for Edge lights Round up the answer to a wh ole number (Z). Calculate

Ⅱ **≺**

Example:

Runway defined Thresholds are 3268r Runway Edge Spacing Maximum 60m are 3268m apart

 $\frac{3268}{60}$ = 54.47 light units per side

Round up to 55 units.

 $\frac{3268}{55}$ = 59.42m

Therefore initial spacing of Ruequally spaced at 59.42m bet unway Edge Lights are tween defined Thresholds

Where a Displaced Threshold exists, continue installing Runway Edge lights in the pre-Threshold area until the distance between the Runway End position and a Runway Edge light is less than or equal to Y.

the Runway Edge system does not have a gap at the Threshold position. The fixture shall be uni-directional and not have a CGL component. It shall be positioned Light Fixture designated as RA@ is provided to ensure close to the rear of the Thres hold Wing bar light.

Infrastructure Defence **Organisation**

ADDRESS

Technical Services, Engineering & Construction, Electrical Infrastructure Defence Infrastructure Organisation Kingston Road, Sutton Coldfield West Midlands, B75 7RL, United Kingdom

PROJECT

AGL Design Guide Typical Drawings

NOTES

YEY

Regulation RA 3515(9) applies

Elevated or Inset Bi-Directio

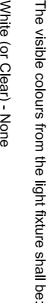












White (or Clear) - None Red - Solid Blue - A Cross Green - Small Circular Solid Disc Yellow - Stripes Blank - Letter B.

ISSUE/R

REVISION	o,
	\bigoplus

SHEET TITLE

Runway Edge Spacing & Configuration Options

SHEET NUMBER

DIO-VA-007