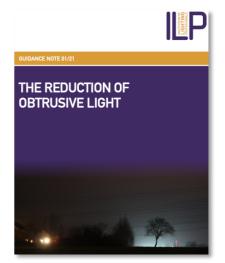
## Appendix 4 – Dark Skies

The NPPF makes little reference to lighting. Section 185 does state that "Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:...c) limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation."



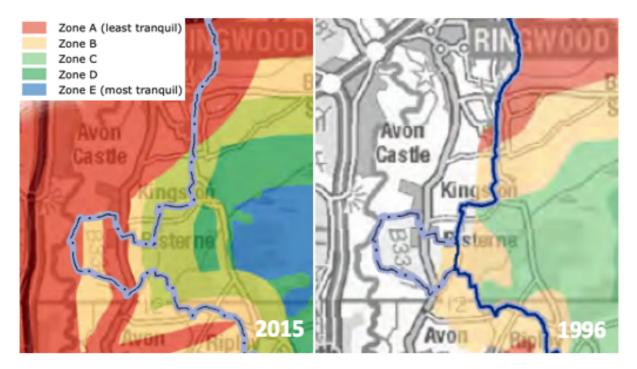
The Government's National Planning Practice Guidance does include a section on light pollution<sup>76</sup>, as does the New Forest National Park Design Guide<sup>77</sup>.

The Institute of Lighting Professionals Guidance Note 1 (2021)<sup>78</sup> defines lighting environment zones from E0 to E4. The table below gives examples ('SQM' means Sky Quality Measurement as referenced by the International Dark Sky Association). It also gives extensive guidance related to design best practice and implementation of lighting in sensitive areas.

Zone	Surrounding	Lighting Environment	Examples
EO	Protected	Dark SQM 30.5+	Astronomical Observable dark skies, UNESCO
			starlight reserves, IDA dark sky places
E1	Natural	Dark SQM 20-20.5	Relatively uninhabited rural areas, National Parks,
			Areas of Outstanding Natural Beauty, IDA buffer
			zones etc.
E2	Rural	Low district brightness	Sparsely inhabited rural areas, village or relatively
		SQM ~15-20	dark outer suburban locations
E3	Suburban	Medium district	Well inhabited rural and urban settlements, small
		brightness	town centres of suburban locations
E4	Urban	High district	Town / City centres with high levels of night-time
		brightness	activity

The ILP Guidance Note also states "Many Local Planning Authorities (LPAs) have already produced, or are producing, policies that within the planning system will become part of their local development framework. For new developments there is an opportunity for LPAs to impose planning conditions related to external lighting, including curfew\* hours. \* Curfew: The time after which stricter requirements (for the control of obtrusive light) will apply; often a condition of use of lighting applied the local planning department. Depending upon application curfew times often commence between 21:00 to 23:00 and may run until 07:00. However, exact curfew hours should be carefully applied to ensure the reduction of obtrusive light is prioritised within the immediate environment and towards sensitive human as well as fauna and flora receptors." From a wildlife perspective, dark skies are essential for certain nocturnal species to flourish, with bats being perhaps the best known example. ILP Guidance Note 08/18<sup>79</sup> 'Bats and artificial lighting in the UK', produced with the Bat Conservation Trust, summarises the impacts on bats from artificial lighting and includes scientific references to peer reviewed journal articles. In summary, artificial lighting can lead to bats deserting roosts (or even becoming entombed in them), can increase predation rates, can lead to a reduction in food sources, can sever routes between roosts and foraging grounds, etc. Similar impacts are seen on other species, such as nightjar<sup>80</sup>, dormice<sup>81</sup> and even, ironically, glow worms<sup>82</sup>.

It is noted that the NFNPA Local Plan Section 5 references 'Policy SP15: Tranquillity' which focuses on intrusion and is separate from local and national planning policies seeking to protect wildlife. It states *"Tranquillity can be damaged by intrusive sights and sounds, particularly from man-made structures such as new roads, poorly designed lighting and overhead power lines...The key criteria used to determine the levels of tranquillity were the amounts of man-made noise and visual disturbance in the natural environment...The Authority will aim to acquire International Dark Sky Reserve status". Tranquillity mapping has been carried out in 2015 by consultants<sup>83</sup> with the area of relevance to Ringwood Parish shown below, 2015 data v. 1996 data. Differences in the methodology account for the uncoloured area in the 1996 map compared to the 2015 map* 



The suggested policy in this document regarding dark skies is anticipated to lead to an increase in tranquillity.