

The current legislative process in France



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Legislative process in France

A three steps process:

1. The « Loi / Law » giving general directions
2. The « Décret / Decree » precisng the application field of the law and general ways to act
3. The « Arrêtés / Ministerial Orders » detailing the ways to act

■ July 12th, 2010 - The Law

Or « Grenelle Act », i.e. law #2010-788, is voted, leading to an updated version of the « [Code de l'Environnement](#) » (Environment Code) :

- A comprehensive regulation aiming at any environmental issues : a few hundreds of articles.
- Among them, a new [article #173](#) on the « Prévention des nuisances lumineuses » (Light nuisance prevention).

■ July 12th, 2011 – The Decree

Decree #2011-831 relative to the « Prévention et limitation des nuisances lumineuses » (Light nuisance prevention and limitation).

■ Under work – The Ministerial Orders

- **The only legislative texts with quantified values (maxima, minima,...).**
- The ANPCEN proposals.



The Law #2010-788 – Art. 173

Main points

- Art. L583-1. To prevent or limit the threats or excessive trouble to people and environment, caused by the emissions of artificial light and to limit energy consumptions, regulations can be imposed to reduce these emissions, to the owners or users of some lighting installations, without compromising the objectives of public safety and national defense, as well as the security of sensible plants and structures.

The lighting installations concerned are defined by decree (...) according to their **total luminous power**¹, the type of application, the location and the type of equipment .

- Art. L583-2
 - I. (...) **after consultation of the professional representatives, the approved associations for the protection of the environment** (...), the national representatives of local authorities, and the national representative of the public distribution of electricity, the minister in charge of the environment establishes through ministerial orders:
 - 1° The technical regulations (...) according to, the conditions of setting and operation of the light sources, the **mean luminous power**¹ **of the lighting settings**, the light fluxes and their space and time¹ distribution, as well as the energetic efficacy of the sources.

¹ Law amendments carried by ANPCEN



The Law #2010-788 – Art. 173

ANPCEN comments

- L583-1.
 - **Total luminous power:** a first step toward the quantification of light emissions into the environment.

- L583-2.
 - Very desirable regulations are listed, allowing full control of light emissions into the environment:
 - space distribution of fluxes (ULOR,...),
 - operating conditions¹,
 - and above all, the **mean luminous power**¹ (in lumens/km, or lumens/m²) which account for the light emissions amount, from the sources, for a given purpose.

¹ Law amendments carried by ANPCEN



The Decree #2011-831

Main points 1/2

- Art. R583-2. To prevent, reduce, and limit light nuisances and energy consumptions, provisions (...) apply to the lighting installations designed for the following uses:
 - **external lighting** intended to support the safety of displacements, people, and goods, and the comfort of the users **on the public and private domain, particularly on roads, paths and squares** (...);
 - lighting beautification (...) of the built framework, parks and gardens;
 - **lighting installations of outdoor or convertible sport facilities;**
 - **lighting of buildings, covering both frontages lighting and interior lighting spilling out the buildings;**
 - **lighting of uncovered (...) car parks;**
 - temporary lighting of external events, of artistical, cultural, commercial or leisures purposes;
 - lighting of exterior working sites.

- R583-3. The present regulations (...) do not apply to illuminated advertisements and signs (...).



The Decree #2011-831

Main points 2/2

- Art. R583-4. The technical regulations (...) are defined according to the setting of the lighting installations, **whether they are located in the qualified zones of urban area by the code road traffic or the zones outside these urban area.**
 - **Inside the natural areas** mentioned in the table annexed (...) **as inside the sites of astronomical observation**, whose list and perimeter are fixed by a decree of the minister in charge for the environment (...), **the lighting installations are subjected to more restrictive regulations (...).**
 - These regulations **may** state the levels of illuminance (in lux), the lighting and energy efficiencies of the installations (in W/lux/m²) and the luminous efficacy of the lamps (in lumens/W), **the mean luminous power¹ of the installations (total flux of the sources divided by the surface intended to be lighted, in lumens/m²),** luminances (in cd/m²), the limitation of glare, **the spectral distribution of the light emissions**, as to the grandeurs characterizing **the spatial distribution of light; they can fix the operating conditions** of certain lighting installations according to their use and the zone concerned.

- Art. R583-5. The minister in charge of the environment can, (...) temporarily or permanently **prohibit or limit, sky tracer type installations, whose flux are above 100,000 lumens,** (...) as well as the lighting installations set in natural areas and sites of astronomical observations (...).

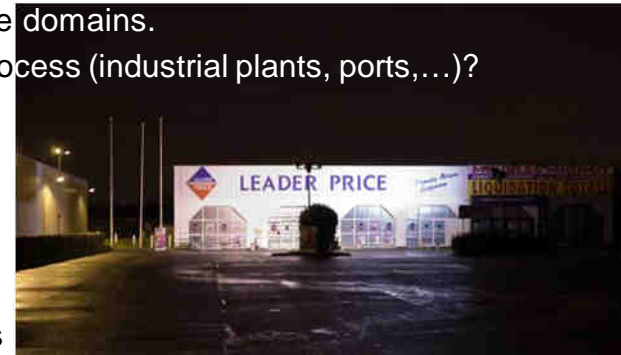
¹ Decree amendment carried by ANPCEN



The Decree #2011-831

ANPCEN comments

- R583-2.
 - All external lighting cases are considered, on the public and private domains.
 - Except when lighting installations are designed for a productive process (industrial plants, ports,...)? Wait and see...
 - Commercial usages are supposed to be concerned:
- R583-3.
 - Advertisements and signs are regulated through luminances and operating conditions in an another dedicated decree. Minor stakes considering the fluxes.
- R583-4.
 - A (french) easy distinction between urban and non urban areas: the highway code.
 - Natural areas (Natura 2000,national parks,...) included.
 - Astronomical observation sites considered: a list of 10 sites is awaited.
 - All desirable regulations (and more) allowing full control of light emissions into the environment:
 - space distribution of fluxes (ULOR,...),
 - operating conditions¹,
 - the spectral distribution,
 - luminance and illuminances,
 - and above all, the **mean luminous power**¹ (in lumens/km, or lumens/m²) which accounts for the light emissions amount, from the sources, for a given purpose: **how much light is emitted to light a road...**



¹ Decree amendment carried by ANPCEN



The Ministerial Orders Under work...

- In accordance with the terms of the Law #2010-788, currently, consultation by the Ministry in charge of the Environment of the professional representatives, the associations for the protection of the environment, the local authorities, on the contents of a first Ministerial Order.
- ANPCEN is consulted as an association for the protection of the environment.
- The first project presented to date by the ministry is related essentially to the ULOR:

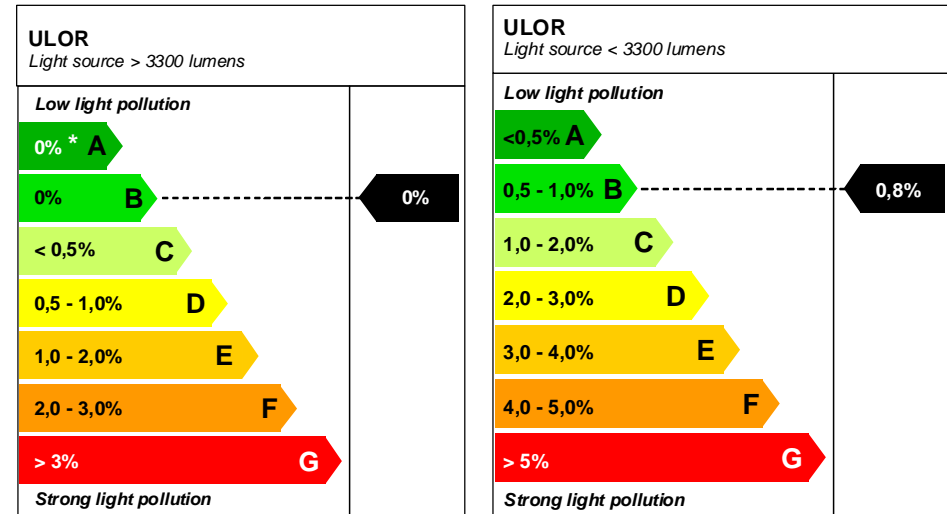
	<i>Exterior functional lighting for automotive traffic</i>		<i>Exterior lighting of the ways and spaces of mixed circulation or pedestrian</i>	<i>Exterior lighting of car parks</i>
<i>ULOR</i>	<i>Outside urban area</i>	<i>0 %</i>	<i>20 %</i>	<i>5 %</i>
	<i>Urban area</i>	<i>3 %</i>		

- The ANPCEN proposes an alternative project which includes ULOR, spectral distribution of the lamps and mean luminous power



Ministerial Orders (under consultation by the ministry) ULOR ANPCEN proposal

- ANPCEN proposal based,
 - on the table 25 of the Commission Regulation (EC) #245/2009,
 - and on its own designed environmental labels:



* Flux 0% within the first 10° under the horizontal

ULOR ANPCEN proposal

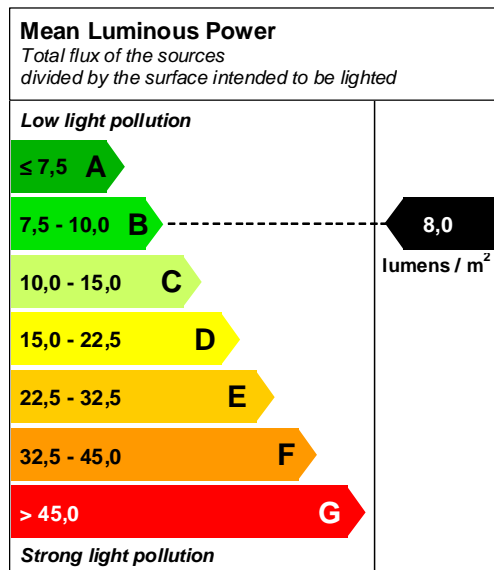
		<i>Exterior lighting All types of way, road, path, square</i>	<i>Exterior lighting Car parks</i>	
ULOR <i>(in operating conditions)</i>	<i>Outside urban area</i>	0 %	0 %	
	<i>Urban area</i>	<i>12000 lm ≤ light source</i>	0 %	0 %
		<i>8500 lm ≤ light source < 12000 lm</i>	3 % – (1 % ¹)	
		<i>3300 lm ≤ light source < 8500 lm</i>	15 % – (3 % ¹)	3 %
		<i>light source < 3300 lm</i>	20 % – (5 % ¹)	

¹ Alternative figures.

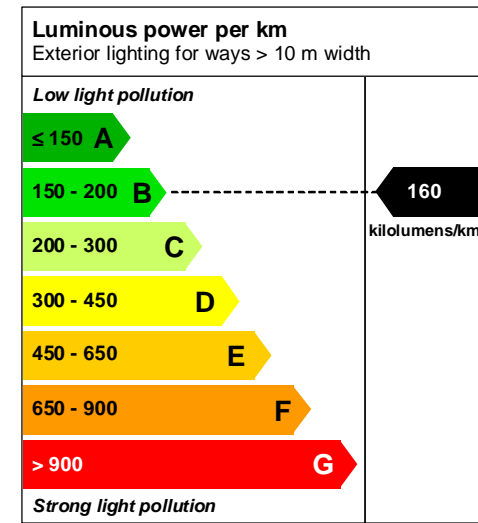
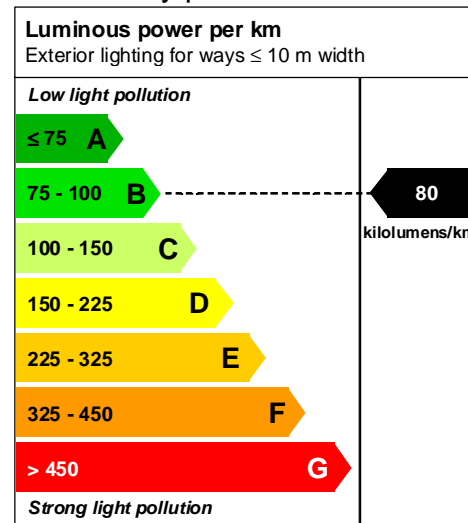


Ministerial Orders (under consultation by the ministry) Mean Luminous Power ANPCEN proposal

- ANPCEN proposal based on its own designed environmental labels:



Or formerly per km:



Mean Luminous Power¹ ANPCEN proposal

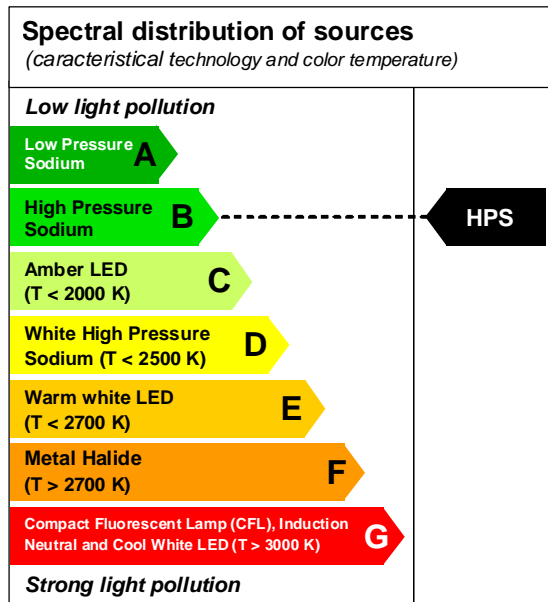
	<i>Exterior lighting Any type of roads, paths, squares</i>	<i>Exterior lighting Car parks</i>
Mean Luminous Power (lumens/m²)	15	10

¹ Total flux of the sources divided by the surface intended to be lighted

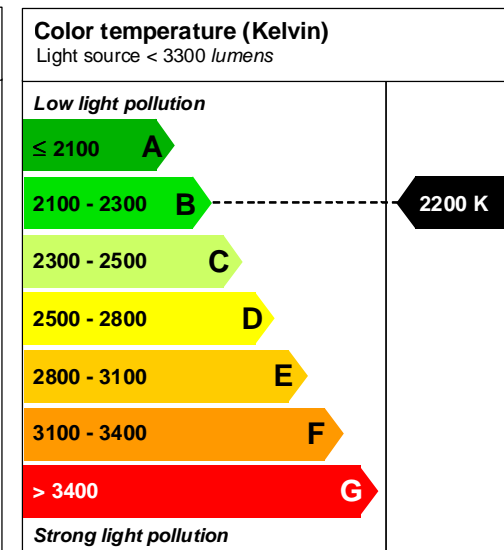
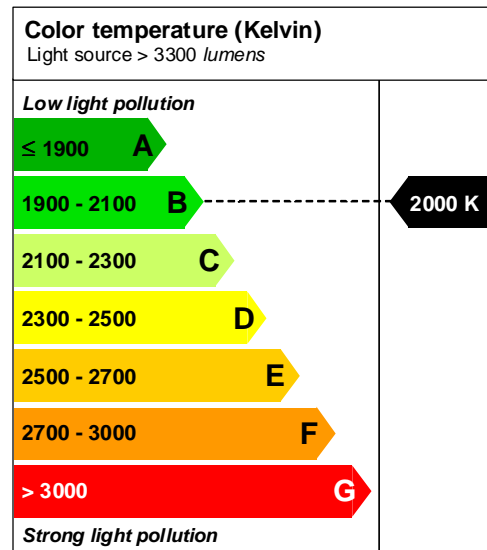


Ministerial Orders (under consultation by the ministry) Spectral Distribution of Sources ANPCEN proposal

- ANPCEN proposal based on its own designed environmental labels:



Or formerly through temperature color:



Spectral Distribution of Sources ANPCEN proposal

		<i>Exterior lighting</i> <i>Any type of roads, paths, squares, and car parks</i>	<i>Lighting of parks and gardens</i>
<i>Color temperature (kelvins)</i>	<i>Light source ≥ 3300 lm</i>	2200	2000
	<i>Light source < 3300 lm</i>	2700	2200



Conclusion

The ANPCEN considers that the French legislative process has produced:

- A convenient Law including all desirable features to tackle light pollution.
- A convenient Decree including all desirable grandeurs to be regulated in order to tackle light pollution: ULOR, Mean Luminous Power, Spectral distribution of lamps, operating conditions,...

But, ANPCEN is at this time not much confident in the figures to be issued through a Ministerial Order on ULOR, Spectral distribution of sources, and Mean Luminous Power; moreover with an unreliable issuing date.

The ANPCEN fears a Ministerial Order of compromise without significant advance.