

International Congress *Smart Noz* 18th to 20th march 2024, University of Brest, France

The perception of night-time as a time devoted solely to rest is becoming less and less true. The broadening of night-time activities in cities and rural areas shows that night-time is also a time for leisure, relaxation and/or (tele)work (Gwiadinski, 2015; AAVV., 2021; Guérin, Hernández-González, Montandon, 2018). In the French context, although we cannot speak of "non-stop" cities operating 24 hours a day, there are occasionally urban areas where night-time activities are concentrated, such as certain districts with a large night-time leisure offer (bars, discotheques), hospitals or police stations open all night. The smooth running of human activities at night (leisure, work, rest, security) requires the use of artificial light, in the knowledge that this has an impact on the health of individuals as well as the natural environment (Zielinska-Dabkowska et al., 2023; Sordello, 2017 and 2018; Challéat and Lapostolle, 2014).

To this end, initiatives are being taken to treat artificial light more respectfully and sparingly, with the adoption of protection tools (such as the International Dark Sky Reserve label), and/or management and monitoring tools (setting up *Schémas Directeurs d'Aménagement Lumière* [guidelines for public lighting] and creating *Trames Noire* [a dark ecological network]). The most common examples are initiatives to reduce the intensity of light in urban areas, or even to turn off lighting altogether at certain times of the day¹. Since 2019, the *Schéma Régional d'Aménagement, de Développement Durable et d'Égalité des Territoires* (SRADDET), the regional plan for sustainable development and territorial equality, has been recommending that all town planning documents should incorporate the fight against light pollution by including the notion of a *Trames Noire*.

In the fight against light pollution, the main measure is the extinction and/or reduction of urban lighting and/or the adoption of a *Trames Noire*. Various studies have assessed the social acceptability of such measures (Beaudet, Tardieu and David, 2022; Franchomme et al., 2019). However, the notion of social acceptability refers to an assessment of the degree of satisfaction of the 'public' (users, residents) with a project or policy. The latter therefore plays the role of guarantor of its success (Barbier and Nadaï, 2015). While the notion of "social reception" can be "qualified by a form of neutrality, dissociated from the necessary adherence of the receivers of a project. It makes it possible to analyse both the interest shown in the principles and objectives sought by a project and the questioning of its stated objectives..." (Amalric and Becu, 2021, p.65). This notion also makes it possible to modify the role of the researcher as the holder of "expert" knowledge vis-à-vis the "lay" knowledge and expertise of use within the implementation of a participatory approach.

¹ According to Scientific Note No. 37 from the Office parlementaire d'évaluation des choix scientifiques et technologiques, more than 12,000 local authorities are affected by the decision to switch off street lighting in the middle of the night.

On the citizens' side, there is a desire to explore ways of improving social acceptance of a more sensible use of artificial light at night. In this context, citizens' organisations involved in projects to reduce night-time lighting (campaigners for sensible energy use and biodiversity, defenders of the cultural and scientific reserve that the night sky represents) are seeking to raise awareness of their cause among a wider public. One of the most high-profile awareness-raising initiatives is *Jour de la Nuit* (Night Day), a national event organised by *Agir pour l'Environnement*, an association for citizen mobilisation, in which several associations are partners². However, outside these population groups that are already sensitive to the issue, the perception of the reduction in artificial light remains linked to the feeling of safety, as it has an immediate effect on everyday life and practices. These measures to reduce night-time lighting may be considered "unfair" because they would endanger certain groups of the population, but they are also perceived as measures designed solely to cut costs on the part of the government and not necessarily linked, or very slightly linked, to ecological issues and lifestyles³.

As part of this approach, a societal and territorial approach is essential in order to gain a better understanding of the relationship, perceptions and representations of artificial light held by different types of users/inhabitants (workers, night owls, etc.) and different socio-economic groups (women, the elderly, LGBTQI+, ethnic minorities.) Cross-disciplinary approaches that move away from a linear (purely scientific or purely technical) approach will enable us to better understand the benefits of such initiatives, as well as the obstacles before them.

To what extent, then, can we reconcile spaces that are accessible to all at night with a reduced environmental impact? How can we better understand the paradox between a concern for energy savings, the desire to take action to protect the environment, and the need for safety at night provided by artificial light? The congress will focus on experiences of social receptiveness to lighting restraint and its evaluation over time within certain groups of the population, as well as the role of associations, artists and researchers in participative approaches towards a more rational use of artificial light at night. The conference will also look at experimental methodologies exploring the contribution of participatory science towards a low-light approach.

The congress covers a wide range of themes, including the following. When submitting your abstract, please mention the theme(s) relevant to your contribution:

- Light efficiency and participatory science.
- Evaluation and social acceptability of measures to reduce the negative impact of artificial light at night.
- Hybrid methodologies and experiments (associations, residents and/or artistic approaches.)
- Research programmes/experiments with a comparative approach with other countries or case studies in the Americas or outside the French context.
- Other themes related to the topics covered by the conference.

² <https://www.agirpourenvironnement.org/campagne/le-jour-de-la-nuit-rallumons-les-etoiles>

³ The French National Assembly's Scientific Note No. 37 reconfirms that the negative effects of artificial light are massive and have an impact at all scales and on all ecosystems. URL: https://www.assemblee-nationale.fr/dyn/16/organes/delegations-comites-offices/opepst/publications/notes_scientifiques_opepst/la-pollution-lumineuse-note-scientifique-n-37-janvier-2023

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Dates

- Abstract Submission before December 31st 2023
- Notification of acceptance of abstracts on 15th January 2024
- Congress registration until 15th March 2024
- Congress dates: 18–20th March 2024

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