Short-term rentals and public policy intervention in the EU

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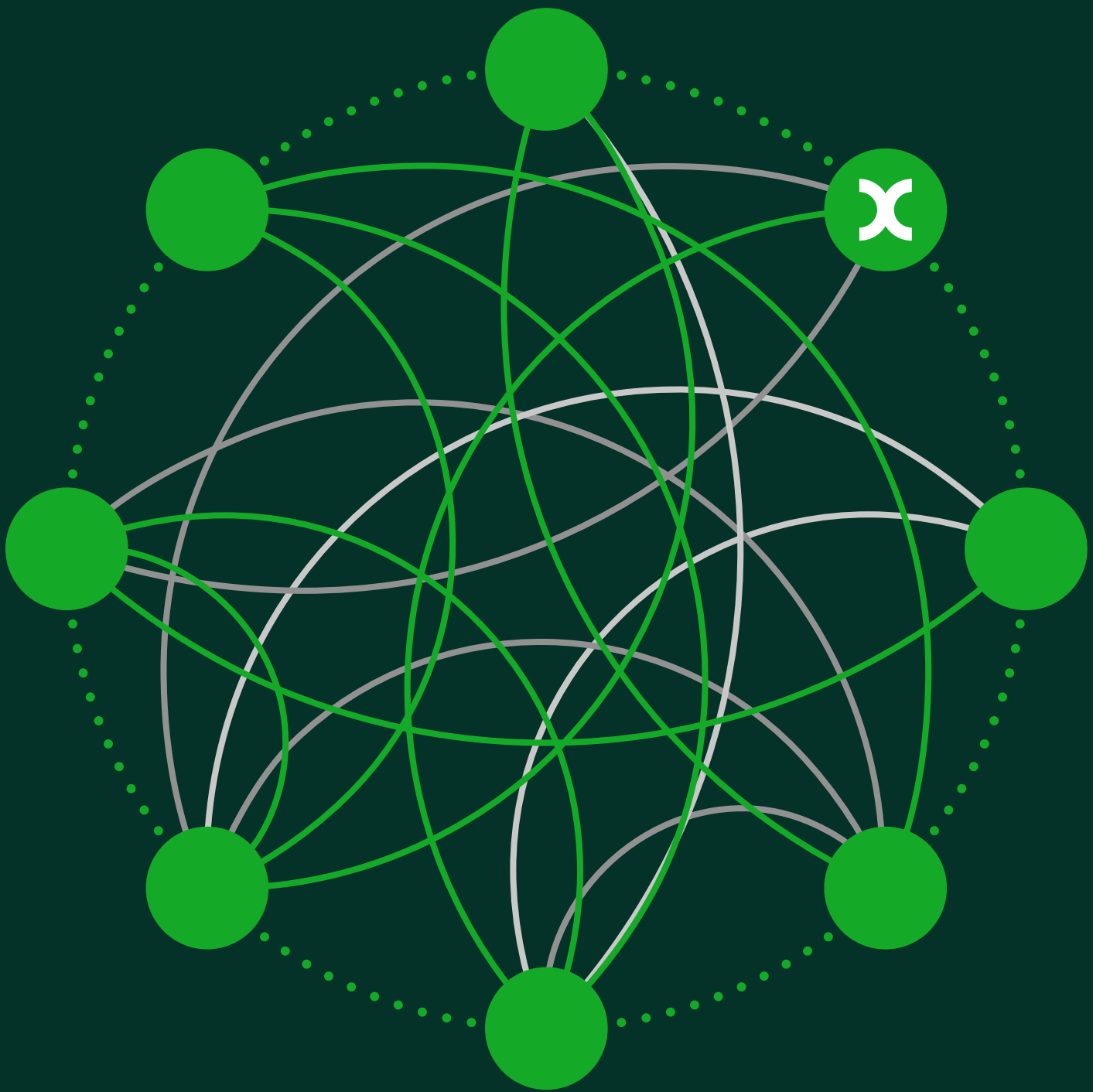
A practical framework to assess necessity, causality and proportionality

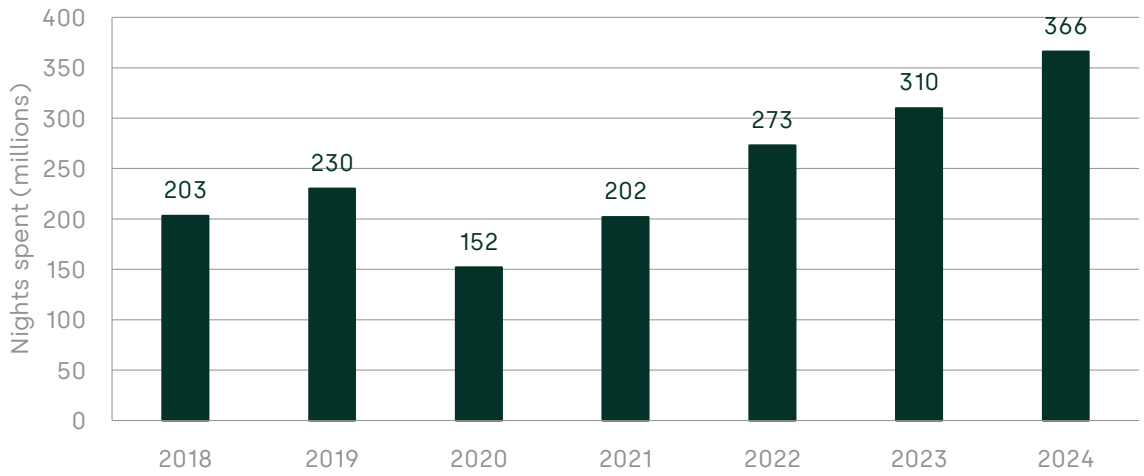
20 February 2026



Overview

Short-term rental (STR) accommodation has become more popular over the last five years. In 2024 there were 366m nights spent in short-stay accommodation booked via online platforms in the EU, compared with 230m in 2019. This growth occurs within the broader context of Europe's standing as the world's most popular tourist destination.[1]

Guest nights spent in short-term accommodation in the EU booked via online platforms (2018–24)



Source: Eurostat CETOUR monthly 202501 F1, Q3 guest nights in the EU, 2018–24, https://ec.europa.eu/eurostat/en/web/products-datasets/-/TOUR_CE_OMR accessed 19 February 2026.

At the same time as demand for STRs has grown, the affordability of housing in many cities has lowered. In some locations, increased tourism has been alleged to have impacted the urban environment, for example, putting more strain on amenities and services. In response, some local authorities in the EU have introduced restrictions on STRs to address housing concerns and protect the urban environment.

While the introduction of STR has coincided with lower housing affordability and environmental concerns, it is not clear whether there is a causal relationship between STRs and these social outcomes. If there is a causal relationship, it may be appropriate to intervene in the market.

When intervention is warranted, best practice is to choose the least distortive measure that remedies the failure—consistent with, and required by, the EU principle of proportionality.

[1] According to the United Nations World Tourism Organisation (UNWTO), Europe accounts for 50% of the world's tourist arrivals, making it the most visited continent. The UNWTO data shows that inbound arrivals into Europe totalled approximately 747m in 2024.

This aligns with the principles of the EU's Better Regulation Agenda,[2] which argues for evidence-based decision-making, impact assessments, and stakeholder consultation. This report, commissioned by Booking.com, provides a methodological framework supporting such an evidence-based approach to STR regulation as a reference for local authorities.

1 The legal framework

The EU's Services Directive[3] establishes rules to ensure the freedom of establishment and provision of services in the EU internal market. The main goals of the Services Directive are to protect service providers (such as STR hosts) and to promote non-discriminatory access to services across Member States.

The Services Directive sets out the conditions that Member States must respect when setting authorisation schemes or requirements for services.[4] In particular, STR measures must be non-discriminatory, necessary and proportionate.[5] To satisfy these requirements, a causal analysis is required to test the impact of STRs on rental prices. This is because rental price increases are also driven by other factors, such as housing supply shortages, improvements in neighbourhood desirability, and inflation. Observing trends shows that these factors may move together (correlation), but it does not establish which factor is driving the change (causation).

A more accurate understanding of the causal impact of STRs enables policymakers to implement more effective and proportionate interventions when necessary. Without causal impact analysis, STR restrictions may be incorrectly applied and distort markets.

2 The necessity test

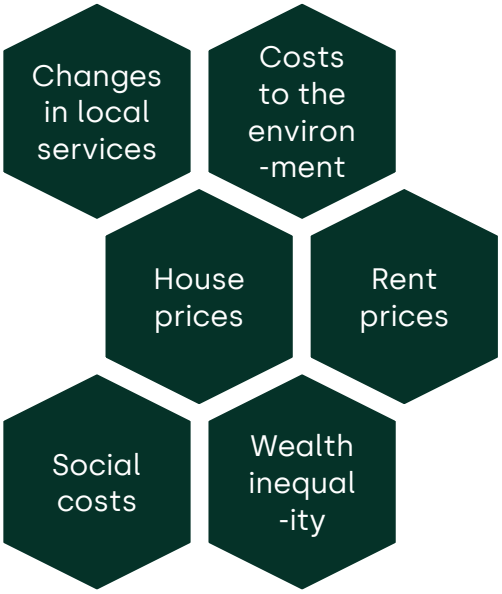
To demonstrate any measure is compatible with the Services Directive, the first step for local authorities is to establish the **necessity** of the measure. The measure must be **necessary** to achieve or further one or more:

- public interest objectives (under Articles 9 and 15 of the Services Directive); or
- reasons of public policy, public security, public health or the protection of the environment (under Article 16 of the Services Directive).

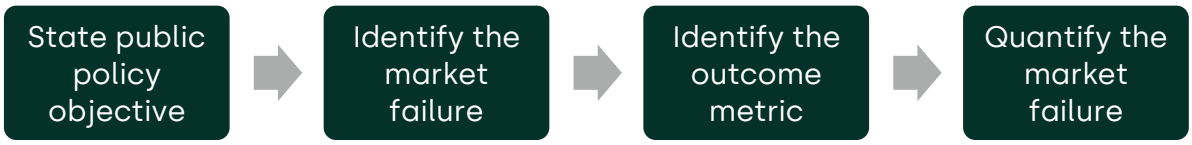
To argue that a measure is necessary to further a public policy objective, it must be justified by means of an economic analysis, and in particular, may be usefully articulated through the framework of **market failure**. Market failures are outcomes that arise due to the failure of the market to allocate resources in a socially optimal way.

[2] European Commission, 'Better Regulation', https://commission.europa.eu/law/law-making-process/better-regulation_en, accessed 29 January 2026.
[3] European Parliament (2006), DIRECTIVE 2006/123/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL, https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32006L0123.
[4] Articles 9, 15, and 16 of the Services Directive.
[5] For an explanation of the relevant EU legal precedents of these tests, see, for example, Sauter, W. (2013), 'Proportionality in EU Law: A Balancing Act?', *Cambridge Yearbook of European Legal Studies*, **15**, pp. 439–66.

In the context of STRs, authorities may be concerned that STR activity imposes costs on third parties in society, such as local residents, the environment and the local authority. These costs are known as negative externalities (examples shown below). If STR hosts do not factor these costs into their pricing decisions, the market may oversupply STRs relative to the socially optimal level, depending on the extent of these external costs.



In the case of STR restrictions, valid public policy objectives according to Articles 9, 15 and 16 of the Services Directive would include housing affordability and protection of the urban environment. To satisfy the necessity test, the authority has to clearly articulate the problem and its materiality and evidence that the intervention is necessary to solve the problem. The diagram below demonstrates the four-step process that local authorities need to follow in order to satisfy the necessity test.



Local authorities must clearly define the market failure's scope, including affected geographic areas, long-term rental (LTR) property types, and specific STR concentrations generating negative externalities. These externalities must be measured quantitatively, possibly against positive externalities. This requires authorities to first determine relevant outcome metrics that reflect the public policy objective. Crucially, establishing a causal link between STR activity and these metrics is essential to justify interventions. Authorities can then use data analysis to test the existence and extent of this causal relationship.

3 Establishing a causal link

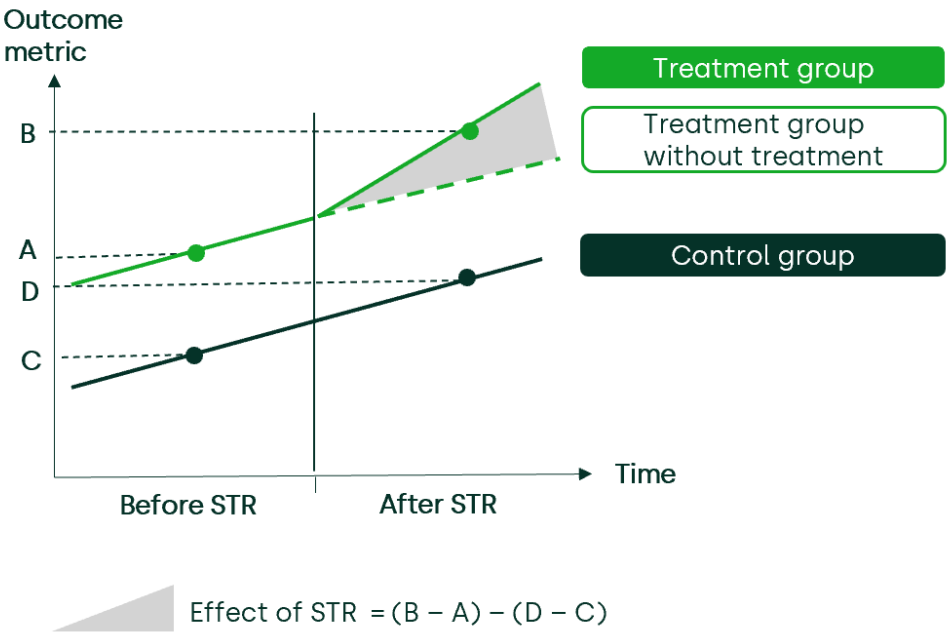
Control and treatment groups

The gold standard for estimating causal effects involves comparing outcomes between control and treatment groups, a method rooted in Randomised Controlled Trials (RCTs). In

the case of assessing the causal impacts of STR, the treatment is the introduction or large increase in STR activity over a specified time period.[6] The treated group corresponds to a geographic area (or set of properties, e.g. dwelling types, in the geographic area) in which STR activity increased over this time period. The control group is an otherwise comparable geographic area (or set of properties) that did not experience an increase in STR activity. To isolate the causal impact of STRs, selecting a suitable control group is crucial. The control group should be similar in characteristics, avoid spillover effects from the treatment and have sufficient historical data to enable comparison.

The causal impact of the treatment is calculated as the difference in the outcome metric between treatment and control, during and after an STR increase, known as a **Difference-in-Differences (DiD)** approach.[7] The DiD method works by controlling for any common time-varying factors (e.g. economic shifts, policy changes) that might affect both groups and any group-specific factors (e.g. population density, public transport links), thereby isolating the causal impact of the STR increase itself. This is illustrated in the diagram below.

Illustration of DiD approach



Source: Oxera.

Regression analysis with an Instrumental Variables approach

Local authorities may face challenges in identifying suitable treatment and control groups with sufficient data for robust causal analysis. While the control and treatment groups

[6] Or, where relevant, a reduction in STR activity following the introduction of restrictions.
[7] In addition to DiD, there are other econometric techniques to identify causal effects such as Regression Discontinuity Design.

approach provides the most robust way to assess causal impacts, an Instrumental Variables (IV) approach offers an alternative for estimating causal effects. This method isolates the causal effect of STR activity on outcomes such as LTR rents by using an IV—a third variable that strongly influences STR activity but not the outcome directly. IV analysis controls for observable factors affecting LTR prices, such as demographics, neighbourhood characteristics, and macroeconomic conditions. The causal effect is then isolated by examining how the IV relates to both STR activity and the outcome.[8]

4 Assessing proportionality

When assessing the impact of intervening in a market, it is best practice to consider a range of interventions (including doing nothing and doing minimum) and identify the most proportionate intervention. A proportionate measure is likely to be one that addresses the market failure with minimal market distortion, i.e. it is the least-restrictive policy intervention. Local authorities should evaluate various options and select the one that effectively addresses the issue while imposing the least cost to society. This applies even if a measure is deemed necessary for achieving public-interest goals.

In practice, the findings from the causal impact analysis are useful in informing local authorities in assessing proportionality. First, the causal impact analysis provides an evidence base on, for example, whether an increase in STR causes a corresponding increase in rental prices and/or shortage of LTR supply in a meaningful way. Second, depending on how the causal impact analysis is set up, it may be able to provide evidence identifying the relevant geographic area(s) where the impact of STR is indeed meaningful and thus would benefit from a measure to restrict STR.

It is important to be aware that if negative market outcomes exist, they are likely to exhibit a non-linear relationship with STR activities. More specifically, a low level of STR activities is unlikely to cause housing affordability and/or urban environment concerns.

To test proportionality, EU legal precedent sets out tests for the 'balancing of costs and benefits',[9] specifically employing the Least-Restrictive Means Test for this purpose, i.e. a test of whether the same level of protection cannot be provided by the alternative measures available (which are 'equally effective'). The proportionality test, therefore, requires local authorities to consider the full costs and benefits of such measures. The more restrictive a measure, the more likely it is to incur a high cost to the wider economy and residents in the form of lost income and employment from tourism.

Moreover, the impact of tourism entails a broad spectrum of (both social and economic) costs and benefits, necessitating a rigorous cost–benefit analysis (CBA) to evaluate the impact of policy interventions effectively. Given this complexity, a prudent policy approach would favour minimally distortive market interventions to mitigate the risk of unintended consequences.

[8] For this approach to be valid, the IV must not suffer from the same confounding problems as STR activity and also must not affect the outcome directly—only indirectly through STR activity.
[9] Sauter, W. (2013), 'Proportionality in EU Law: A Balancing Act?', *Cambridge Yearbook of European Legal Studies*, **15**, pp. 439–66.

Oxera report, commissioned by Booking.com

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