Booking.com

Digital Services Act

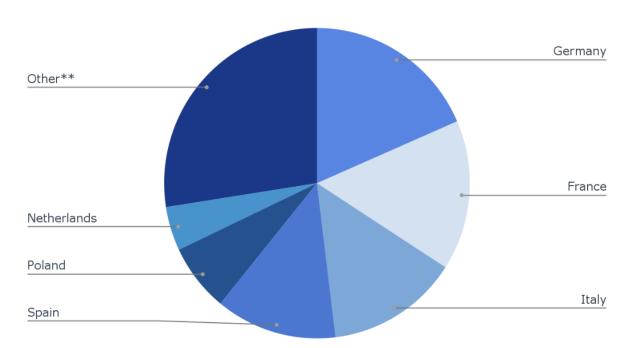
27 October 2023 - Transparency Report prepared by Booking.com B.V. under the Digital Services Act

About this report

At Booking.com, our mission is to make it easier for everyone to experience the world. We believe that travel can bring out the best in humanity. Travel promotes a better understanding of different cultures and ways of life. We also believe in and work towards making travel a force for good in the world - one that enriches people's lives through a range of experiences, big and small. As a travel platform, it is at the core of our activities to facilitate travel experiences centred on our customers and underpinned by our values.

Our long-held values as well as our guidelines and terms and conditions for all users of our platform - travellers and supply partners - are designed to foster safe and welcoming travel experiences for all. To maintain that environment and ensure the safety of our travellers and supply partners, we take action upon content that violates the law, our Content Guidelines or Terms and Conditions.

As required under the Digital Services Act (DSA), this report provides insights into the content moderation activities that we engaged in during the reporting period, including the volume and nature of content removed from our platform and removal requests received from public authorities and users.



Section 1 - EU Member State MAR information from 1 February 2023 up to and including 31 July 2023

Figure 1 - EU Member State MAR Information*

*As reflected on <u>Booking.com's DSA webpage</u>, the MAR information is an estimate and is based on the data available to Booking.com at this time, and the limited guidance in the DSA. This estimate is required to be published under the DSA and should not be used for any other purpose. The methodologies used to estimate average monthly recipients as defined in the DSA require significant judgement and design inputs, are subject to data and other limitations, and inherently are subject to statistical variances and uncertainties. This estimate may be revised as Booking.com refines its approach and in response to the publication of methodology by the European Commission.

**For ease of reference we have grouped under "Other" all other EU Member States where Booking.com MAR estimates represent less than 4% of the total.

Section 2 - Information on number of governmental orders

The section below provides insight into the volume of government data or removal requests we received during the reporting period, categorised by type of illegal content.

Metric	Total number	Member States of the European Union								
		BE	DE	ES	FR	HR	IT	NL	PT	Other ¹
Information on number of orders										
Number of data requests received	10	1	2	2	1	1	1	2	0	0
Number of illegal content orders received ²	4	0	0	2	0	0	1	0	1	0
Median time to inform the authority of the receipt of the order	0 (instantly upon submitting)	0	0	0	0	0	0	0	0	N/A
Median time to give effect to the order ³	10 days	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Moderation divided by category										
Unsafe and/or illegal products ⁴	14	1	2	4	1	1	2	2	1	0

¹ Includes all other Member States where no data requests or orders were received.

² Includes illegal listings orders received.

³ Calculated on the basis of the orders processed as at 30 September 2023.

⁴ Under the DSA, we are required to categorise orders by the type of illegal content concerned. All orders received concern regulatory compliance issues which fall under the category of 'Unsafe and/or illegal products'.

Section 3 - Information on number of notices

Metric	Total number	Notice and Action mechanism (NAM)			
		NAM total	Trusted Flagger		
Number of notices received ⁵	15	15	0		
Median time to take action on the basis of the notice ⁶	6.8 days	6.8 days	N/A		
Number of actions taken on the basis of the law	0	0	N/A		
Number of actions taken on the basis of the terms and conditions of service	9	9	N/A		

Section 4 - Information on own-initiative content moderation

Own-initiative	Total	Visibility restriction		Monetary	Provision of th	e service	Account restriction	
content moderation	number	Removal	Other	restriction	Suspension	Termination	Suspension	Termination
Number of items moderated ⁷	Approx. 21 million	N/A	N/A	N/A	N/A	N/A	N/A	N/A

 ⁵ Includes notices of illegal listings in the EU only.
 ⁶ Calculated on the basis of the notices processed as at 30 September 2023.

⁷ Comprises items moderated by our human moderators and our core ML models.

Number of items detected solely using automated means ⁸	868,637	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of restrictions imposed ⁹	159,817	151,719	0	0	28	8,069	0	1
Moderation div	ided by catego	ory						
Animal welfare	339	339	0	0	0	0	0	0
Data protection and privacy violations	64,494 ¹⁰	64,494	0	0	0	0	0	0
Illegal or harmful speech	357	357	0	0	0	0	0	0
Intellectual property	269	269	0	0	0	0	0	0

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⁸ Comprises items detected solely using our core ML models.

⁹ Comprises restrictions on content applied in the EU, and restrictions on EU listings and EU accounts related to the provision of information that is illegal or incompatible with our terms and conditions.

¹⁰ Includes instances of travellers or partners erroneously sharing personal data about other persons, including but not limited to sensitive or special-category personal data.

infringements								
Negative effects on civic discourse or elections	0	0	0	0	0	0	0	0
Non-consensu al behaviour	0	0	0	0	0	0	0	0
Pornography or sexualised content ¹¹	155	155	0	0	1	0	0	1
Protection of minors	0	0	0	0	0	0	0	0
Risk for public security	0	0	0	0	0	0	0	0
Scams and/or fraud ¹²	39,617	31,548	0	0	0	8,069	0	0
Unsafe and/or illegal products	61	34	0	0	27	0	0	0
Violence	4	4	0	0	0	0	0	0
Scope of	54,520	54,520	0	0	0	0	0	0

¹¹ Comprises content uploaded by travellers or partners which violates our content guidelines as it contains content of a sexual nature.

¹² Includes restrictions imposed on inauthentic EU listings and inauthentic user reviews.

platform				
service				

Section 5 - Suspensions imposed on repeated offenders

Metric	Total number
Number of suspensions enacted for the provision of manifestly illegal content	0
Number of suspensions enacted for the provision of manifestly unfounded notices	0
Number of suspensions enacted for the provision of manifestly unfounded complaints	0

Section 6 - Out of court dispute settlement bodies and internal complaints mechanism

Metric	Number
Out-of-court dispute settlement bodies	
Number of decisions submitted to out-of-court dispute settlement bodies	0
Internal complaints mechanism	
Number of complaints submitted to the internal-complaints mechanism	3192

Procedural complaints	0
Substantive complaints on the illegality or incompatibility	3192
Number of decision reversals	635

Section 7 - Use of automated means for content moderation and human resources

Metric	Total number	Internal complaints	Own-initiative	Notice and Action mechanism (NAM)		Languages of the MS of the EU
				NAM total	Trusted flagger	
Accuracy rate of the items processed solely by automated means ¹³	99.122%	N/A	99.122%	N/A	N/A	English - 99.7 Estonian - 98.9 Finnish - 99.2 French - 99.9 German - 99.9 Greek - 99.7 Hungarian - 97.8 Irish - N/A Italian - 99.5 Latvian - 98.4 Lithuanian - 98.9 Maltese - N/A

 $^{^{13}}$ The accuracy rate is calculated for our core ML models only, and excludes our ancillary ML models.

						Polish - 99.9 Portuguese - 99.7 Romanian - 94.7 Slovak - 99.7 Slovenian - N/A Spanish - 99.9 Swedish - 99.7
Accuracy rate of the items processed partly by automated means	N/A	N/A	N/A	N/A	N/A	N/A
Error rate of the automated means applied ¹⁴	0.878%	N/A	0.878%	N/A	N/A	N/A
Human resource	ces dedicated to cont	ent moderation				
Number of internal moderators employed by	22	7	22	2	2	English 22 Dutch 3 German 1 Italian 3

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 $^{^{14}}$ The error rate is calculated for our core ML models only, and excludes our ancillary ML models.

the provider ¹⁵						Spanish 5 French 2 Greek 1
Number of external moderators contracted by the provider	13	0	13	0	0	English 13 Romanian 13 German 2 French 2 Spanish 1

Section 8 - Statement on content moderation

Information about content moderation	
Own initiative moderation	
Summary of the content moderation engaged in at our own initiative	Booking.com aims to reflect the most up-to-date reviews from our travellers. That's why we have a fast turnaround on our content moderation, using both moderation by automated Machine Learning (ML) models and manual review.
Meaningful and comprehensible information regarding the applied detection method	Our core ML algorithms swiftly review various types of content, such as guest reviews, partner responses, photos and more. Most content is approved within seconds and goes live on

¹⁵ Comprises resources fully dedicated to content moderation activities and does not include all resources in our Fraud and Trust and Safety teams whose scope is larger than content moderation.

	Booking.com. Anything not approved by our core ML algorithms is sent to our moderators for further review when potential guideline violations are detected. Approved content is accessible on our platform and apps, while policy-violating content won't be published. Our decision can be appealed or	
	the content can be resubmitted.	
Use made of automated means		
Summary of the use made of automated means for the purpose of content moderation	Booking.com maintains two core ML models in 43 different languages to detect inappropriate content. We handle the bulk of content moderated through automation, one core model for text content and the other core model for images. In addition to our core ML models, we utilise human and machine intelligence to monitor offerings on our platform and to safeguard its integrity against fraudulent actors. For this purpose, we maintain four ancillary ML models: three for inauthentic listings and one for inauthentic reviews.	
Qualitative description of the automated means	The core ML models Booking.com applies are content classifier models which are tuned to identify context. The ancillary ML models use numerous different data points and fraud indicators to detect inauthentic listings and inauthentic reviews.	
Specification of the precise purposes to apply automated means	The core ML models are designed to detect both illegal content and content that violates Booking's content policies. Illegal and violating content identified by the core ML models is sent to our content moderators for human review. Content moderators will make the final decision. The ancillary ML models are designed	

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	and used to detect inauthentic listings and inauthentic reviews at scale.	
Safeguards applied to the use of automated means	We perform constant random sampling of the automatically approved items and send them to moderators to ensure that the quality of ML automated content approvals is within the acceptable range.	
Specific elements of the human resources dedicated to content moderation		
Qualifications of the human resources dedicated to content moderation	1 senior manager, 3 team leads, 2 project managers, 4 associates, 22 content moderators, 13 vendor content moderators.	
Training given to human resources dedicated to content moderation	When new policies are launched or a new content moderator is onboarded, training decks and videos are provided to introduce the new content policies. Content moderators spend on average approximately 6 hours monthly receiving training, reviewing content guidelines and policy clarifications, reviewing their errors and asking questions. Frequently asked questions are compiled, and grey areas are clarified on a regular basis.	
Support given to human resources dedicated to content moderation	Internal employees can reach out to the employee assistance program that provides counselling services, practical information and digital content to support employees' mental, physical, social and financial well-being. All moderators have followed a course about dealing with distressing content, designed to increase awareness, learn about prevention of potential issues and to understand what support is available. Our external partner contracted for moderation has a consistent approach towards employee safety utilising SGS audits and	

participating with repower partners
participating with renown partners.