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# **DRAFT REPORT**

on addictive design of online services and consumer protection in the EU  
single market  
(2023/2043(INI))

Committee on the Internal Market and Consumer Protection

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## MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION

### on addictive design of online services and consumer protection in the EU single market (2023/2043(INI))

*The European Parliament,*

- having regard to the Treaty on the Functioning of the European Union, and in particular Article 169 thereof,
- having regard to the Commission notice entitled ‘Guidance on the interpretation and application of Directive 2005/29/EC concerning unfair business-to-consumer commercial practice’ (2021/C 526/01),
- having regard to the Commission notice entitled ‘Guidance on the interpretation and application of Directive 2011/83/EU on Consumer Rights’ (2021/C 525/01),
- having regard to the Commission notice entitled ‘Guidance on the interpretation and application of Council Directive 93/13/EEC on unfair terms to consumer contracts’ (2019/C 323/04),
- having regard to the Commission study entitled ‘Behavioural study on unfair commercial practices in the digital environment: dark patterns and manipulative personalisation: final report’, Directorate-General for Justice and Consumers, 2022,
- having regard to the report of the consumer organisation umbrella group BEUC of 2022 entitled ‘EU Consumer protection 2.0. Protecting fairness and consumer choice in a digital economy’,
- having regard to the Commission consultation entitled ‘Digital fairness – fitness check on EU consumer law and its summary report’,
- having regard to the EPRS study of 2019 entitled ‘Harmful internet use. Part I: Internet addiction and problematic use’,
- having regard to the United Nations report of 2021 entitled ‘Our Common Agenda – Report of the Secretary-General’,
- having regard to its resolution of 12 March 2009 on the protection of consumers, in particular minors, in respect of the use of video games<sup>1</sup>,
- having regard to Regulation (EU)2022/2065 on a single market for Digital Services (Digital Services Act)<sup>2</sup>,
- having regard to the Proposal for a Regulation laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) (COM(2021)0206),

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<sup>1</sup> [OJ C 87E, 1.4.2010, p. 122.](#)

<sup>2</sup> [OJ L 277, 27.10.2022, p. 1.](#)

- having regard to Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation)<sup>3</sup>,
  - having regard to Rule 54 of its Rules of Procedure,
  - having regard to the report of the Committee on the Internal Market and Consumer Protection (A9-0000/2023),
- A. whereas many digital services, such as online games, social media, streaming services for films, series or music, online marketplaces or web shops and dating apps are designed to keep users on the platform for as long as possible so as to maximise the time and money they spend there; whereas consequently many online services are designed to be as addictive as possible; whereas the terms ‘addictive design’ or ‘behavioural design’ of online services describe features that lead to behaviour-related forms of digital addiction, such as, ‘excessive or harmful internet use’, ‘smartphone addiction’, ‘technological or internet addiction’, ‘social media addiction’; whereas there is a growing consensus among academics that phenomena, such as ‘social media addiction’ exist;
- B. whereas 16-24 year-olds spend an average of over seven hours a day on the internet; whereas one in four children and young people display ‘problematic’ or ‘dysfunctional’ smartphone use, meaning behavioural patterns mirroring addiction; whereas research suggests that problematic smartphone use continues to rise; whereas research also suggests that the rise in mental health problems in adolescents might be related to excessive social media use;
- C. whereas internet-use-related addiction displays similar side effects to substance-related addictions, including evidence of tolerance and relapse; whereas strict regulation exists for addictive products, such as drugs, alcohol, tobacco and gambling to prevent addiction and protect consumers from harm; whereas problematic smartphone or internet use has been linked to lower life satisfaction and mental health symptoms such as depression, low self-esteem, body-image disorders, eating disorders, anxiety, high levels of perceived stress, neglect of family and friends, loss of self-control, lack of sleep and obsessive-compulsive symptoms, such as compulsive buying among young adults; whereas heavy users of digital media are twice as likely to have mental-health issues, including risk factors for suicide and self-harm; whereas children and young people are more vulnerable to these symptoms; whereas mental-health conditions established in childhood can shape an individual’s subsequent life course; whereas excessive internet use is associated with problems with daily obligations, declining grades, poor school and academic performance or poor job performance;
- D. whereas according to some research, excessive screen time or problematic use impacts brain development; whereas increases in social media use problems are linked to attention deficits, shorter attention spans, impulsiveness and attention deficit hyperactivity disorder (ADHD) symptoms; whereas intensive social media use has been associated with lower levels of grey matter in certain areas of the brain, just as is the case with other addictive substances, such as alcohol and heroin; whereas excessive screen time (more than 2-3 hours a day in front of a screen) can have effects on

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<sup>3</sup> [OJ L 119, 4.5.2016, p. 1.](#)

neurodevelopment, learning and memory, and the sedentary lifestyle linked to time spent on electronic media brings a potential increased risk of early neurodegeneration;

- E. whereas addictive design can be seen to have a negative impact on everyone, not just individuals showing problematic usage patterns; whereas addictive design, especially of smartphones and social media, makes it hard to focus on the task in hand owing to distractions such as messages and notifications constantly disrupting peoples' concentration, even at school or while driving; whereas the addictive design of online services leads to increased pressure to perform and social pressure to be permanently online and connected, increasing the risk of stress and burnout; whereas consumers online are increasingly confronted with an information overload and excessive sensorial stimuli throughout the day, constraining their cognitive ability, and user interfaces offer only limited control over their data; whereas the time people spend behind screens is time not spent being active, moving, being outside, or shutting down and relaxing, all of which are associated with physical and mental well-being; whereas adolescents who spend a small amount of time on electronic communication are generally the happiest; whereas people that stop using social media for a week experience significant improvements in well-being;
- F. whereas on average, adolescent girls spend more time online, on smartphones, social media and texting than boys; whereas boys spend more time on gaming and electronic devices in general; whereas girls show a stronger association between screen time and poor mental health than boys and are more than twice as likely to have clinically relevant levels of depressive symptoms than boys; whereas addictive online services such as such as Facebook, TikTok and Instagram are often targeted at minors;
- G. whereas the interfaces of some digital services exploit similar psychological vulnerabilities to those involved in an addiction to gambling; whereas addictive design features intentionally play into consumers' vulnerabilities, making them spend much more time on applications and consuming more than intended; whereas platforms deploy gamification techniques, meaning behavioural design using game mechanics to reward the completion of tasks and giving users the illusion of choice and control, while being subjected to a deliberately highly curated timeline;
- H. whereas addictive design features are often linked to psychosocial patterns playing on consumers' psychological needs, vulnerabilities and desires, such as social belonging, social anxiety, fear of missing out (encouraged by information being available only temporarily, such as 'stories', 'is typing...'), network effects, the urge to finish tasks in a flow, even if interrupted (endless scrolling, taking a number of seconds to load your newsfeed) and loss of self-control; whereas design features can be addictive for different reasons, such as an intermittent variable reward, leading to a dopamine surge, just like the dynamics of slot machines, such as push notifications, or social reciprocity leading to chemical brain reactions, where on the one hand people receive social gratification, such as likes, and on the other hand people feel social pressure to respond to people, such as with read-receipts;
- I. whereas addictive practices have been empirically studied and widely documented and include design features such as 'infinite scroll', 'pull-to-refresh' page reload, 'never ending auto-play' video features, personalised recommendations, 'recapture notifications', meaning notifications to regain users' attention after leaving a service or

app, ‘playing by appointment’ at certain moments during the day, design leading to ‘time fog’ causing a diluted perception of time or ‘fake social notifications’ creating the illusion of updates within the user’s social circle online, whereas such features are often to be found in conjunction with personalised elements and manipulate consumers into spending more time on these platforms; whereas other persuasive design features are elements are the ‘like-button’, ‘read-receipt functions’, ‘is typing’ displays, but also the number of followers collected on a platform, the colours platforms use, interaction-based recommendations and personalisation of content, push notifications and time restrictions of content, such as temporarily available stories;

- J. whereas recommender systems, which are based both on personalisation and on interaction such as clicks and likes, represent an important persuasive, addictive or behavioural design feature; whereas such recommender systems are solely aimed at keeping users on the platform and cause harm both to them and society at large;
- K. whereas the addictive design features outlined above cannot be solved simply by imposing time-limits on online services, as this approach shifts the burden onto the individual instead of addressing the core issue of the intentionally addictive design of online services for profit; whereas none of the ‘solutions’ platforms have implemented have led to a serious change or decrease in usage of online services; whereas teenagers do not readily accept parental regulation of their social media use and often find it easy to bypass any technical constraints imposed;
- L. whereas the Digital Services Act (DSA) introduces provisions against the use of ‘dark patterns’ but these are limited to choice architecture and influences choices and do not address behavioural design that is addictive per se, moreover they are limited in scope as they only apply to online platforms, not to all online services; whereas the AI Act<sup>4</sup> seeks to ban AI systems that deploy subliminal features but is limited to systems that ‘are purposefully manipulative or deploy deceptive techniques’;

### *Addictive design of online services*

1. Is alarmed that platforms and other tech companies exploit psychological vulnerabilities to design digital interfaces for commercial interests that maximise the frequency and duration of user visits, so as to prolong the use of online services and to create engagement with the platform; stresses that addictive design can cause psychological and material harm to consumers; calls on the Commission to urgently close existing regulatory gaps with regard to consumer vulnerabilities, dark patterns and addictive features of digital services;
2. Stresses that despite its legislative efforts in the digital field, such as the DSA or the AI Act, the issue of addictive design is not sufficiently covered in existing EU legislation, and if unaddressed could lead to further deterioration in the area of public health, especially affecting minors; considers that if the topic gets further delayed, Parliament should use its right of legislative initiative;

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<sup>4</sup> [Proposal for a regulation laying down harmonised rules on artificial intelligence \(artificial intelligence act\) \(COM\(2021\)0206\)](#).

3. Calls on the Commission to present legislation against addictive design; urges the Commission in its review of the Unfair Commercial Practices Directive<sup>5</sup> (UCPD), Consumer Rights Directive<sup>6</sup> and Unfair Contract Terms Directive<sup>7</sup> (Fitness check) to pay particular attention to and tackle the growing issues around the addictive and manipulative design of online services;
4. Recalls that the Commission study on unfair commercial practices in the digital environment has found that transparency provisions against dark patterns and manipulative personalisation practices both for average and vulnerable consumers are insufficient to counter the negative consequences; calls on the Commission to prohibit the most harmful practices, which are not yet blacklisted in Annex I of the UCPD or other EU legislation, and to impose a fair/neutral design obligation on traders;
5. Recalls that the Commission assessment on taxonomies of dark patterns clarifies that certain addictive design features are not taken into account in the current legislation, including the infinite scroll and the default auto play function present in services such as YouTube, Netflix, and Spotify; stresses that other addictive design features such as interaction-based recommender systems, constant push notifications or read receipt notifications are not covered by existing legislation either; recalls that the Commission in its Guidance on the interpretation of the Unfair Commercial Practices Directive expressed concern over uncertainty regarding the rules applicable to addictive interface designs;
6. Demands that a revision of the Unfair Commercial Practices Directive should take into account consumers' susceptibility to the exploitation of the unequal power in the trader-consumer relationship resulting from internal and external factors beyond the consumer's control; stresses that the autonomy of consumers should not be undermined by traders' commercial practices, in particular the design and operation of the interface;
7. Calls for a ban on interaction-based recommender systems, in particular hyper-personalised systems that are designed to be addictive and keep users on the platform as long as possible rather than to serve users information in a more neutral manner; underlines that it is evident from whistle-blowers' testimonies that safer alternative recommender systems are possible, such as those based on chronological order, those with more real user control over the content is displayed or those based on more secure settings, but that these alternatives are less profitable for social-media platforms;

### ***Ethical design of online services***

8. Demands that, in its legislation on addictive design, the Commission puts forward a digital 'right not to be disturbed' including design that would turn all attention seeking features off by default;
9. Urges the Commission to promote and ensure ethical design of online services; calls on the Commission to create a list of good practices of design features that are not

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<sup>5</sup> [Directive 2005/29/EC of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market \(OJ L 149, 11.6.2005, p. 22\).](#)

<sup>6</sup> [Directive 2011/83/EU of 25 October 2011 on consumer rights \(OJ L 304, 22.11.2011, p. 64\).](#)

<sup>7</sup> [Council Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts \(OJ L 95, 21.4.1993, p. 29\).](#)

addictive or manipulative and ensure users are fully in control and can take conscious and informed actions online without facing an information overload; stresses that policy actions in this area should not place a burden on consumers but address the harm caused by the businesses; notes the best practices of ‘think before you share’, turning all notifications off by default, more neutral online recommendations, such as those based on chronological order or increased user-control, up-front choice between colour and greyscale apps, or warnings when users have spent more than 15 minutes or 30 minutes on a specific service;

10. Stresses the significant impact of addictive design on children and youngsters and calls on the Commission to make additional international efforts to regulate addictive design online in this regard;

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11. Instructs its President to forward this resolution to the Council and the Commission.



## EXPLANATORY STATEMENT

In an increasingly digital world, nearly everyone is familiar with the urge to grab a phone, look at their screen and check for notifications, sometimes without even knowing why. According to some research, people even reach for their phones more than a hundred times a day and young people spend on average more than seven hours a day online. Problematic smartphone use has been on the rise and the research is clear: digital services are designed intentionally to be addictive and attention grabbing. In an online world, which has become dominated by commercial interests, money is made by amplifying the maximum amount of time or money spent online. This is why online services, such as social media, streaming services, dating apps and web shops rely on psychological tricks to keep consumers online.

Addictive online services can have harmful effects on people, such as increased pressure, stress, poor sleep, information overload, lack of concentration and constant distraction. Young people and children, and in particular girls, are more vulnerable to the symptoms of more serious problematic internet use, such as depression and anxiety, but also a negative impact on learning, memory and shorter attention spans.

This needs to change. While the EU has been effective in cracking down on other services, products and substances that can lead to addiction, such as tobacco, gambling and alcohol the urgent problem of addictive design of online services is currently not regulated. This is striking, considering that Internet-use-related addictions display similar side effects to substance-related addictions, including evidence of tolerance, relapse, and even impact on the brain. Action is urgently needed.

When facing a daily storm of distraction, such as notifications, likes, buzzes, endless scrolling, read-receipts, social pressure and being recommended the most addictive content, we cannot rely on individuals to simply resist temptation. Neither can we rely on an industry to solve, contrary to their own financial interests, the very issue it has created. Therefore, we need strong European rules for a high level of consumer protection against addictive design of online services, including to protect their health and safety, and to ensure a safe level playing field for businesses.

Online services have an enormous potential to enlarge consumers' access to services, information and allow people to connect, communicate and maintain friendships. Consumers must be able to benefit fully from online services without being manipulated or addicted. Only then can the EU fully and safely foster the opportunities of the digital single market for consumers, businesses and society.

**ANNEX: LIST OF ENTITIES OR PERSONS  
FROM WHOM THE RAPPORTEUR HAS RECEIVED INPUT**

The following list is drawn up on a purely voluntary basis under the exclusive responsibility of the rapporteur. The rapporteur has received input from the following entities or persons in the preparation of the draft report:

<b>Entity and/or person</b>
BEUC
Stiftung Neue Verantwortung
World Health Organisation
Regina van den Eijnden, Professor University of Utrecht
Thijs Launspach
Bureau Jeugd en Media
Trimbos Instituut
5Rights Foundation
Bits of Freedom
AlgorithmWatch
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