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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 Commission Notice – 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 Commission Notice – Guidance on the interpretation and application of Directive 2011/83/EU on Consumer Rights (2021/C 525/01),
- having regard to Commission Notice – 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 Behavioural study on unfair commercial practices in the digital environment: dark patterns and manipulative personalisation: final report. Commission, Directorate-General for Justice and Consumers, Lupianez-Villanueva, F. Boluda, A., Bogliacino, F. et al. Publications Office to the European Union, 2022,
- having regard to BEUC (2022) EU Consumer protection 2.0. Protecting fairness and consumer choice in a digital economy,
- having regard to the Commission consultation Digital fairness – fitness check on EU consumer law and its summary report Ares(2023)2578495,
- having regard to the EPRS study Harmful internet use. Part I: Internet addiction and problematic use (2019) PE 624.249,
- having regard to “Our Common Agenda – Report of the Secretary-General” published by the United Nations 2021,
- having regard to the European Parliament resolution of 12 March 2009 on the protection of consumers, in particular minors, in respect of the use of video games (2009/2173(INI)),
- having regard to Regulation (EU)2022/2065 on a single market for Digital Services (Digital Services Act),
- having regard to the Proposal for a Regulation laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) COM(2021)0206 final,

- 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),
  - 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),
1. whereas many digital services, such as online games, social media, streaming services for films, series or music, online marketplaces or webshops and dating apps are designed to keep users on the platform, so they spend their maximum amount of time or money on the platform; whereas many online services are designed to be as addictive as possible; whereas “addictive design” or “behavioural design” of online services describe features that play into 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 growing consent among academics for phenomena, such as “social media addiction”.<sup>1</sup>
  2. whereas 16-24 year olds on average spend over 7 hours a day on the internet<sup>2</sup>; whereas one in four children and young people display ‘problematic’ or ‘dysfunctional’ smartphone use, meaning behavioural patterns mirroring addiction<sup>3</sup>; whereas research suggests that problematic smartphone use continues to rise<sup>4</sup>; whereas research suggests that the rise in mental health problems in adolescents might be related to excessive social media use<sup>5</sup>;
  3. whereas internet-use-related addiction displays similar side effects to substance-related addictions, including evidence of tolerance and relapse<sup>6</sup>; 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

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<sup>1</sup> Boer, M., van den Eijnden, R. J. J. M., Finkenauer, C., Boniel-Nissim, M., Marino, C., Inchley, J., Cosma, A., Paakkari, L., & Stevens, G. W. J. M. (2022). Cross-national validation of the Social Media Disorder-scale: Findings from adolescents from 44 countries. *Addiction*, 117(3), 784-795. <https://doi.org/10.1111/add.15709>;

<sup>2</sup> Average daily time spent using the internet by online users worldwide as of 4th quarter 2022, by age and gender, Statista, 22 May 2023, <https://www.statista.com/statistics/1378510/daily-time-spent-online-worldwide-by-age-and-gender/>.

<sup>3</sup> O. Lopez-Fernandez & D. Kuss, Harmful Internet Use Part I: Internet addiction and problematic use, EPRS, STOA, p. 51, [https://www.europarl.europa.eu/RegData/etudes/STUD/2019/624249/EPRS\\_STU\(2019\)624249\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2019/624249/EPRS_STU(2019)624249_EN.pdf) .

<sup>4</sup> ay A. Olson, Dasha A. Sandra, Éliisa S. Colucci, Alain Al Bikaii, Denis Chmoulevitch, Johnny Nahas, Amir Raz, Samuel P.L. Veissière, Smartphone addiction is increasing across the world: A meta-analysis of 24 countries, *Computers in Human Behavior*, Volume 129, 2022, 107138, ISSN 0747-5632, <https://doi.org/10.1016/j.chb.2021.107138>

<sup>5</sup> Twenge, J.M., Cooper, A.B., Joiner, T.E., Duffy, M.E., & Binau, S. (2019). Age, Period, and Cohort Trends in Mood Disorder Indicators and Suicide-Related Outcomes in a Nationally Representative Dataset, 2005–2017. *Journal of Abnormal Psychology*, 128, 185–199.

<sup>6</sup> O. Lopez-Fernandez & D. Kuss, Harmful Internet Use Part I: Internet addiction and problematic use, EPRS, STOA, p. 51, [https://www.europarl.europa.eu/RegData/etudes/STUD/2019/624249/EPRS\\_STU\(2019\)624249\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2019/624249/EPRS_STU(2019)624249_EN.pdf) .

internet use has been linked to lower life satisfaction<sup>7</sup> and mental health symptoms among others depression, low self-esteem, body-image disorders<sup>8</sup>, 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<sup>9</sup> whereas heavy users of digital media are twice as likely to have mental health issues, including risk factors for suicide and self-harm<sup>10</sup>; whereas children and young people are more vulnerable to these symptoms<sup>11</sup>; whereas mental health conditions established in childhood can shape the subsequent life course<sup>12</sup>; whereas excessive internet use is associated with problems with daily obligations, declining grades, poor school and academic performance or poor job performance<sup>13</sup>;

4. Whereas according to some research, excessive screen time or problematic use impacts the development of our brains; whereas increases in social media use problems are linked to attention deficits, shorter attention spans, impulsivity and ADHD-symptoms<sup>14</sup>; whereas intensive social media use has been associated with lower levels of grey matter in certain areas of the brain<sup>15</sup>, just as is the case with other addictive substances, like

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<sup>7</sup> M. Boer, #ConnectedTeens Social media use and adolescent wellbeing, 2022; E. Neophytou, L.A. Manwell, R. Eikelboom, Effects of excessive screen time on neurodevelopment, learning, memory, mental health, and neurodegeneration: a scoping review, *Int J Ment Health Addiction*, 19 (2019), pp. 724-744..

<sup>8</sup> Learning to deal with Problematic Usage of the Internet, Revised Edition / COST Action 2023, See Internet Social-Media/Forum Addiction and others, p.18-19;

<sup>9</sup> Sohn, S., Rees, P., Wildridge, B., Kalk, N. J., & Carter, B. R. (2019). Prevalence of problematic smartphone usage and associated mental health outcomes amongst children and young people: a systematic review, meta-analysis and GRADE of the evidence. *BMC Psychiatry*, 19. <https://doi.org/10.1186/s12888-019-2350-x>; Peterka-Bonetta J, Sindermann C, Elhai JD, Montag C (2019) [Personality associations with smartphone and internet use disorder: a comparison study including links to impulsivity and social anxiety](#). *Front Public Health* 7:127; [Samra, A., Warburton, W. A., & Collins, A. M. \(2022\)](#). Social comparisons: A potential mechanism linking problematic social media use with depression. *Journal of Behavioral Addictions*.; [Cross-cultural study of Problematic Internet Use in nine European countries](#) / Stéphanie Laconi et al. In: *Computers in Human Behavior*, 84 (July 2018), pp.430-440; O. Lopez-Fernandez & D. Kuss, Harmful Internet Use Part I: Internet addiction and problematic use, EPRS, STOA, p. 51, [https://www.europarl.europa.eu/RegData/etudes/STUD/2019/624249/EPRS\\_STU\(2019\)624249\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2019/624249/EPRS_STU(2019)624249_EN.pdf);

Glued to your phone? Generation Z's smartphone addiction and online compulsive buying / Michela Cesarina Mason, Gioele Zamparo, Andrea Marini, Nisreen Ameen. In: *Computers in Human Behaviour*, Vol.136, November 2022

<sup>10</sup> [Twenge & Martin \(2020\)](#). Gender differences in associations between digital media use and psychological well-being: Evidence from three large datasets. *Journal of Adolescence*.

<sup>11</sup> Sohn, S., Rees, P., Wildridge, B., Kalk, N. J., & Carter, B. R. (2019). Prevalence of problematic smartphone usage and associated mental health outcomes amongst children and young people: a systematic review, meta-analysis and GRADE of the evidence. *BMC Psychiatry*, 19. <https://doi.org/10.1186/s12888-019-2350-x>.

<sup>12</sup> Sohn, S., Rees, P., Wildridge, B., Kalk, N. J., & Carter, B. R. (2019). Prevalence of problematic smartphone usage and associated mental health outcomes amongst children and young people: a systematic review, meta-analysis and GRADE of the evidence. *BMC Psychiatry*, 19. <https://doi.org/10.1186/s12888-019-2350-x>.

<sup>13</sup> O. Lopez-Fernandez & D. Kuss, Harmful Internet Use Part I: Internet addiction and problematic use, EPRS, STOA, p. 51, [https://www.europarl.europa.eu/RegData/etudes/STUD/2019/624249/EPRS\\_STU\(2019\)624249\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2019/624249/EPRS_STU(2019)624249_EN.pdf);

[Learning to deal with Problematic Usage of the Internet, Revised Edition](#) / COST Action 2023, See Internet Social-Media/Forum Addiction and others, p.18-19.

<sup>14</sup> M. Boer, #ConnectedTeens Social media use and adolescent wellbeing, 2022; M. Boer, G. Stevens, C. Finkenauer, R. van den Eijnden, Attention Deficit Hyperactivity Disorder-Symptoms, Social Media Use Intensity, and Social Media Use Problems in Adolescents: Investigating Directionality, *Child Development*, 91, 4, 2020.

<sup>15</sup> Montag, C.; Markowitz, A.; Blaszkiewicz, K.; Andone, I.; Lachmann, B.; Sariyska, R.; Trendafilov, B.; Eibes, M.; Kolb, J.; Reuter, M.; et al. Facebook Usage on Smartphones and Gray Matter Volume of the Nucleus Accumbens. *Behav. Brain Res.* 2017, 329, 221–228.; E. Neophytou, L.A. Manwell, R. Eikelboom Effects of excessive screen time on neurodevelopment, learning, memory, mental health, and neurodegeneration: a scoping

alcohol and heroin;<sup>16</sup> whereas excessive screen time (more than 2-3 hours in front of a screen) can have effects on neurodevelopment, learning, memory and a sedentary lifestyle linked to time spent on electronic media brings a potential increased risk of early neurodegeneration<sup>17</sup>;

5. whereas negative impact of addictive design can be observed among all individuals, not only those showing problematic behaviour in their use; whereas addictive design, especially of smartphones and social media, makes it hard to focus on tasks with distractions, such as messages and notifications, constantly disturbing peoples' concentration, even in schools or while driving<sup>18</sup>; whereas the addictive design of online services play into increased pressure to perform and a social pressure by permanently being online and connected<sup>19</sup>, increasing risks stress and burn-out;<sup>20</sup> whereas consumers online are increasingly faced with an information overload and excessive amounts of sensorial stimuli throughout the day, which leads to limited cognitive ability, as well as limited control over data through user interfaces<sup>21</sup>; whereas the time people spend behind screens is time not spent being active, moving, being outside, shutting down and relaxing, which are all associated with physical and mental well-being<sup>22</sup>; whereas adolescents who spend a small amount of time on electronic communication are

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review Int J Ment Health Addiction, 19 (2019), pp. 724-744.

<sup>16</sup> Montag, C.; Markowitz, A.; Blaszkiewicz, K.; Andone, I.; Lachmann, B.; Sariyska, R.; Trendafilov, B.; Eibes, M.; Kolb, J.; Reuter, M.; et al. Facebook Usage on Smartphones and Gray Matter Volume of the Nucleus Accumbens. *Behav. Brain Res.* **2017**, *329*, 221–228; Makris, N.; Oscar-Berman, M.; Jaffin, S.K.; Hodge, S.M.; Kennedy, D.N.; Caviness, V.S.; Marinkovic, K.; Breiter, H.C.; Gasic, G.P.; Harris, G.J. Decreased Volume of the Brain Reward System in Alcoholism. *Biol. Psychiatry* 2008, *64*, 192–202; Seifert, C.L.; Magon, S.; Sprenger, T.; Lang, U.E.; Huber, C.G.; Denier, N.; Vogel, M.; Schmidt, A.; Radue, E.-W.; Borgwardt, S.; et al. Reduced Volume of the Nucleus Accumbens in Heroin Addiction. *Eur. Arch. Psychiatry Clin. Neurosci.* **2015**, *265*, 637–645.

<sup>17</sup> E. Neophytou, L.A. Manwell, R. Eikelboom Effects of excessive screen time on neurodevelopment, learning, memory, mental health, and neurodegeneration: a scoping review Int J Ment Health Addiction, 19 (2019), pp. 724-744.

<sup>18</sup> Du J, Kerkhof P, van Koningsbruggen GM. The reciprocal relationships between social media self-control failure, mindfulness and wellbeing: A longitudinal study. *PLoS One.* 2021 Aug 4;16(8):e0255648. doi: 10.1371/journal.pone.0255648. PMID: 34347832; PMCID: PMC8336798; T. Launspach, Asociale Media, Uitgeverij Unieboek | Het Spectrum bv, 2023.

<sup>19</sup> 1. Vorderer P, Krömer N, Schneider F. Permanently online—Permanently connected: Explorations into university students' use of social media and mobile smart devices. *Comput Human Behav.* 2016; *63*: 694–703. doi: 10.1016/j.chb.2016.05.085.

<sup>20</sup> T. Launspach, Asociale Media, Uitgeverij Unieboek | Het Spectrum bv, 2023; Montag C, Lachmann B, Herrlich M, Zweig K. Addictive features of social media/messenger platforms and freemium games against the background of psychological and economic theories. *Int J Environ Res Public Health* [Internet]. Multidisciplinary Digital Publishing Institute; 2019 [cited 2020 Mar 31];16:2612. Available from: <https://www.mdpi.com/1660-4601/16/14/2612>; Learning to deal with Problematic Usage of the Internet, Revised Edition / COST Action 2023, See Internet Social-Media/Forum Addiction and others, p.18-19.

<sup>21</sup> BEUC Consumer protection 2.0

<sup>22</sup> Du J, Kerkhof P, van Koningsbruggen GM. The reciprocal relationships between social media self-control failure, mindfulness and wellbeing: A longitudinal study. *PLoS One.* 2021 Aug 4;16(8):e0255648. doi: 10.1371/journal.pone.0255648. PMID: 34347832; PMCID: PMC8336798.

generally the happiest;<sup>23</sup> whereas people that stop using social media for a week experience significant improvements in well-being<sup>24</sup>;

6. whereas on average, adolescent girls spend more time on smartphones, social media, texting and online; whereas boys spend more time on gaming and electronic devices in general<sup>25</sup>; whereas girls show a stronger association between screen time and poor mental health than boys and female internet users show more than twice the likelihood of having clinically relevant levels of depressive symptoms than boys<sup>26</sup>; whereas online services are often targeted at being addictive for minors, such as Facebook, TikTok and Instagram;
7. whereas the interfaces of some digital services exploit similar psychological vulnerabilities as those related to gambling addiction;<sup>27</sup> whereas addictive design features intentionally play into consumers' vulnerabilities, making users spend much more time on applications and consuming more than intended<sup>28</sup>; whereas platforms deploy gamification techniques, meaning behavioural design using game mechanics to reward the completion of tasks<sup>29</sup> and giving users the illusion of choice and control, whilst being subjected to a deliberately highly curated timeline.<sup>30</sup>
8. whereas addictive design features are often linked to psycho-social patterns, therefore playing into psychological needs, vulnerabilities and desires of consumers such as social belonging, social anxiety, fear of missing out (temporarily available information, 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<sup>31</sup>; whereas design features can be addictive for different reasons, such as a intermittent variable rewards, leading to a dopamine surge, just like the dynamics of slot machines, such as push notifications<sup>32</sup>, or social reciprocity leading to

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<sup>23</sup> Twenge, Martin, & Campbell (2018). Decreases in psychological well-being among American adolescents after 2012 and links to screen time during the rise of smartphone technology. *Emotion*; T. Launspach, *Asociale Media, Uitgeverij Unieboek | Het Spectrum bv*, 2023.

<sup>24</sup> Lambert, Barnstable, Minter, Cooper, & McEwan (2022). Taking a One-Week Break from Social Media Improves Well-Being, Depression, and Anxiety: A Randomized Controlled Trial. *Cyberpsychology, Behavior, and Social Networking*

<sup>25</sup> Twenge, & Farley (2020). Not all screen time is created equal: Associations with mental health vary by activity and gender. *Social Psychiatry and Psychiatric Epidemiology*.

<sup>26</sup> Twenge, & Farley (2020). Not all screen time is created equal: Associations with mental health vary by activity and gender. *Social Psychiatry and Psychiatric Epidemiology*.

<sup>27</sup> Alberto Monge Roffarello, Kai Lukoff, and Luigi De Russis. 2023. Defining and Identifying Attention Capture Deceptive Designs in Digital Interfaces. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems (CHI '23)*. Association for Computing Machinery, New York, NY, USA, Article 194, 1–19. <https://doi.org/10.1145/3544548.3580729>

<sup>28</sup> Chauncey Neyman. 2017. *A Survey of Addictive Software Design*. 1, 1, Article 1 (June 2017).

<sup>29</sup> Chauncey Neyman. 2017. *A Survey of Addictive Software Design*. 1, 1, Article 1 (June 2017).

<sup>30</sup> Chauncey Neyman. 2017. *A Survey of Addictive Software Design*. 1, 1, Article 1 (June 2017).

<sup>31</sup> Montag C, Lachmann B, Herrlich M, Zweig K. Addictive features of social media/messenger platforms and freemium games against the background of psychological and economic theories. *Int J Environ Res Public Health* [Internet]. Multidisciplinary Digital Publishing Institute; 2019 [cited 2020 Mar 31];16:2612. Available from: <https://www.mdpi.com/1660-4601/16/14/2612>; Learning to deal with Problematic Usage of the Internet, Revised Edition / COST Action 2023, See Internet Social-Media/Forum Addiction and others, p.18-19; .Chauncey Neyman. 2017. *A Survey of Addictive Software Design*. 1, 1, Article 1 (June 2017).

<sup>32</sup> Chauncey Neyman. 2017. *A Survey of Addictive Software Design*. 1, 1, Article 1 (June 2017).

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 read-receipts<sup>33</sup>;

9. whereas practices<sup>34</sup> have been empirically studied and widely documented and include addictive design features such as “infinite scroll”, “pull-to-refresh” page reload, “neverending autoplay” 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 a day, design leading to “time fog” leading to a diluted perception of time or “fake social notifications” creating illusion of updates within the users social circle online, whereas such features are often to be found in conjunction with personalised elements and manipulate consumers into spending more time on platforms<sup>35</sup>; 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 used on the platforms, interaction-based recommendations and personalization of content, push notifications and time restrictions of content, such as temporarily available stories.<sup>36</sup>
10. whereas an important persuasive, addictive or behavioural design feature is recommender systems based both on personalisation and on interaction, such as clicks and likes; whereas such recommender systems are solely aimed at keeping users on the platform and cause users and our society at large harm;
11. Whereas the addictive design features above are not solved by solely introducing time-limits on online services<sup>37</sup>, as platforms offering time limits shift the burden to the individual instead of addressing the core issue of intentional addictive design of online services for profit; whereas none of the ‘solutions’ implemented by platforms have led to a serious change or decrease of usage of online services; whereas adolescents do not

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<sup>33</sup> Chauncey Neyman. 2017. A Survey of Addictive Software Design. 1, 1, Article 1 (June 2017).

<sup>34</sup>Alberto Monge Rofarello, Kai Lukof, and Luigi De Russis. 2023. Defining and Identifying Attention Capture Deceptive Designs in Digital Interfaces. In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems (CHI '23), April 23–28, 2023, Hamburg, Germany. ACM, New York, NY, USA, 19 pages. <https://doi.org/10.1145/3544548.3580729>; Flayelle, M., Brevers, D., King, D.L. *et al.* A taxonomy of technology design features that promote potentially addictive online behaviours. *Nat Rev Psychol* 2, 136–150 (2023). <https://doi.org/10.1038/s44159-023-00153-4>; Montag, C., Elhai, J.D. On Social Media Design, (Online-)Time Well-spent and Addictive Behaviors in the Age of Surveillance Capitalism. *Curr Addict Rep* (2023). <https://doi.org/10.1007/s40429-023-00494-3>.

<sup>35</sup> Xiaowei Chen, Anders Hedman, Verena Distler, Vincent Koenig, Do persuasive designs make smartphones more addictive? - A mixed-methods study on Chinese university students, *Computers in Human Behavior Reports*, Volume 10, 2023, 100299, ISSN 2451-9588, <https://doi.org/10.1016/j.chbr.2023.100299>.

<sup>36</sup> Montag, C., Elhai, J.D. On Social Media Design, (Online-)Time Well-spent and Addictive Behaviors in the Age of Surveillance Capitalism. *Curr Addict Rep* (2023). <https://doi.org/10.1007/s40429-023-00494-3>; Montag C, Lachmann B, Herrlich M, Zweig K. Addictive features of social media/messenger platforms and freemium games against the background of psychological and economic theories. *Int J Environ Res Public Health* [Internet]. Multidisciplinary Digital Publishing Institute; 2019 [cited 2020 Mar 31];16:2612. Available from: <https://www.mdpi.com/1660-4601/16/14/2612..>

<sup>37</sup> Montag, C., Elhai, J.D. On Social Media Design, (Online-)Time Well-spent and Addictive Behaviors in the Age of Surveillance Capitalism. *Curr Addict Rep* (2023). <https://doi.org/10.1007/s40429-023-00494-3>.



easily accept parental regulation of their social media use<sup>38</sup> and bypassing technical limits is often easy for adolescents;

12. whereas the Digital Services Act introduces provisions against the use of dark patterns, which is limited to choice architecture and influencing choices, not behavioural design that is addictive per se and is limited in scope as it only applies to online platforms, not to all online services; whereas the AI Act seeks to ban AI systems which deploy subliminal features which are however limited to systems that “are purposefully manipulative or deploy deceptive techniques”;

### *Addictive design of online services*

1. Is alarmed that that platforms, apps and other tech companies exploit psychological vulnerabilities to design digital interfaces for commercial interests that maximise the frequency and duration of user visits, to prolong the use of online services and to create engagement with the platform; stresses addictive design can cause psychological and material harm to consumers; Calls on the Commission to urgently close existing regulatory gaps with regards to consumer vulnerabilities, dark patterns and addictive features of digital services;
2. Stresses that despite its legislative efforts in the area of digital, 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, the EP will use its right for legislative initiative;
3. Calls on the Commission to present legislation against addictive design; urges the Commission in its review of the Unfair Commercial Practices Directive, Consumer Rights Directive and Unfair Contract Terms Directive (Fitness check) to pay particular attention to and tackle the growing issues around 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 not enough to counter the negative consequences; calls on the Commission to prohibit the most harmful practices, which are not yet blacklisted in the Annex I of the UCPD or other EU legislation, and the imposition of a fair design obligation on traders.<sup>39</sup>
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 autoplay function present in services such as YouTube, Netflix, and Spotify; stresses that other addictive design features as interaction-based recommender systems, constant push notifications, 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

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<sup>38</sup> P.M. Valkenburg, J.T. Piotrowski, *Plugged in: how media attract and affect youth*, Yale University Press, New Haven, NJ (2017).

<sup>39</sup> Commission study, *Behavioural study on unfair commercial practices in the digital environment* (2022);

expressed concern over uncertainty regarding rules applicable to addictive interface designs;

6. Demands that a revision of the Unfair Commercial Practices Directive should take into account the susceptibility of consumers to the exploitation of differences in power in the trader-consumer relationship resulting from internal and external factors beyond the control of the consumer; stresses that the autonomy of consumers should not be undermined by commercial practices of the trader, in particular the design and operation of the interface<sup>40</sup>.
7. Calls for a ban on recommender systems based on interaction, in particular hyper personalised systems, 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 whistleblowers' testimonies that more safe alternative recommender systems are possible, such as those based on chronological order, those with more real user control about which content is displayed or those based on more secure settings, but that these alternatives are less profitable for social media platforms;
8. Demands that the Commission in its legislation of addictive design puts forward a digital "right not to be disturbed" including design that would turn all attention seeking features off by default;

### *Ethical design of online services*

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 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 the consumers but address the harm caused by the businesses; Notes the examples 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<sup>41</sup>, warnings if you have spent more than 15 minutes or 30 minutes on a specific service.<sup>42</sup>
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;
11. Instructs its President to forward this resolution to the Council and the Commission.

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<sup>40</sup> BEUC Consumer protection 2.0

<sup>41</sup> Alex J. Holte & F. Richard Ferraro (2023) True colors: Grayscale setting reduces screen time in college students, *The Social Science Journal*, 60:2, 274-290, DOI: [10.1080/03623319.2020.1737461](https://doi.org/10.1080/03623319.2020.1737461).

<sup>42</sup> T. Launspach, *Asociale Media*, Uitgeverij Unieboek | Het Spectrum bv, 2023.

## 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:

Entity and/or person
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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