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RECENT EU LEGISLATION RELATING TO DRONES IN THE LIGHT OF RIGHT TO PRIVACY

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I. INTRODUCTION

On 4th of July 2018, the European Parliament and the Council adopted the EU regulation No. 2018/1139 on common rules in the field of civil aviation (hereinafter: Regulation), which consists of provisions also for the operations of Unmanned Aircraft Systems (UAS), so-called drones[1]. The implementing acts relating to UAS are actually under preparation, the Commission has already adopted the delegated act on 12th March 2019, and the implementing regulation will also come into force as the scrutiny period will end[2]. These acts will be directly applicable in all Member States. The draft of implementing regulation contains the main features of the UAS category (open, specific and certified), the competence of drone pilots, the rule for airworthiness, for conducting an operational risk assessment, the authorising the operations in the specific category, etc. The delegated regulation contains the technical requirements of drones in open category, and for CE marking also, which markings will be certify the airworthiness of the given UAS devices instead of any special authorisation process.[3]
The process of EU regulation of drones had already started in 2014 with the EU Commission's Communication (COM(2014)207) about "A new era for aviation - Opening the aviation market to the civil use of remotely piloted aircraft systems in a safe and sustainable manner", and it was followed by the Riga Declaration on *Remotely Piloted Air Systems: Framing the future of aviation*, of 6th March 2015.[4] The latter document laid down the main principles to guide the regulatory framework in Europe. There are the followings: (1) Drones need to be treated as new types of aircrafts with proportionate rules based on the risk of each operation. (2) EU rules for the safe provision of drone services need to be developed now. (3) Technologies and standards need to be developed for the full integration of drones in the European airspace. (4) Public acceptance is a key to the growth of drone services. (5) The operator of a drone is responsible for its use.

[1] Classically, the drone means a remotelly piloted arcraft systems (RPAS) propelled by multi rotors (multi rotors helicopters, i.e. multicopters). They are also called as unmanned aerial vehicle (UAV), unmanned aircraft system (UAS). Hereby the drone and unmenned aircraft terms are used for the same meaning, for the sake of simplicity, paralelly with the Regulation definition of unmanned aircraft. The scope of the EU regulation covers all types of unmanned aircrafts (for recreational or for business but for only in civil aviation); such as remotelly piloted, autonomous or optionally piloted UAs, with the exception of so-called tethered aircrafts.
[2] Draft for implementing regulation of the Commission ref.No. Ares(2018)5119803
[3] C(2019) 1821 final
[4] Riga Declaration on Remotely Piloted Air Systems: Framing the future of aviation, of 6 March 2015, and the Resolution of the European Parliament on the safe use of remotely piloted aircraft systems (RPAS), commonly known as UAVs, in the field of civil aviation (2014/2243(INI)) (October 20, 2015)

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The European Aviation Safety Agency (EASA) has got a key role in preparing and proposing new measures. Therefore the EASA Opinion (hereinafter EASA proposal) No. 01/2018, published on February 2018, entitled "Introduction of a regulatory framework for the operation of unmanned aircraft systems in the 'open' and 'specific' categories" was a significant step towards the regulation of drones as aircraft vehicles within the framework of the Single European Sky airspace concept. The main features of this regulatory proposal to the Commission were the risk-based approach and the principle of proportionality and flexibility.
Among the negative societal impacts of the new devices of the technical development, both material and immaterial harms are also concerned by the regulation. The rules regarding unmanned aircraft should contribute to achieving compliance with relevant rights guaranteed under Union law, and in particular the right to respect for private and family life, and with the right to protection of personal data.
The Annex IX of the Regulation lays down the essential requirements for unmanned aircrafts, for the registration of devices and of operators and for the marking of unmanned aircraft, as well. The operators should be registered if they operate an unmanned aircraft which, in the case of impact, can transfer, to a human, kinetic energy above 80 Joules; or unmanned aircraft the operation of which presents risks to privacy, protection of personal data, security or the environment (etc.)[5]
Some kind of inconsistency can be observed here. For the lesser drones which are produced in large-scale for the EU market, the first requirement of their outdoor usage is the obligation of the manufacturer to perform a conformity assessment process. However, these devices, even the smallest ones could be equipped by cameras or microphones and could infringe personal rights. Despite of that, according to the Annex of the delegated act[6] of the Commission, the operations of UAS belonging to the lesser subcategory (C0 class characterised by being toys) do not need to be registered, not the operators, not their devices. The implementing acts deal only with the sound emission as a disturbing factor.
On the following, the legal instruments and the liability questions for compensation of non-material harms occured from drone utilisation will be discussed. For this aim, it is essential to review these issues as a part of a whole regulation method. Therefore, it is necessary to make a short exposition about the aforementioned opinion of EASA[7]
As it is seen, the opinion of EASA has not been taken over yet by the regulation process in this stage, the EU implementing acts now are being adopted one by one, and it is taking shape which issues will be left to national law level.

II. OPINION OF EUROPEAN AVIATION SAFETY AGENCY

The prerequisite of the EASA proposal was the fact that the competence of the EU has been extended to cover the regulation of all civil unmanned aircraft systems

[5] Section 4.2. Annex IX
[6] C(2019) 1821 final
[7] EASA Opinion No 1/2018. Introduction of a regulatory framework for the operation of unmanned aircraft systems in the 'open' and 'specific' categories. https://www.easa.europa.eu/document-library/opinions/opinion-012018

involved international air navigation[8] falling under the category of 150 kilograms take-off masses (MTOMs). According to the risk and type of the usage, the EASA has elaborated rules for two category of drones, that is the ″open″ and the ″specific″ category. In the open category, the drones can be operated without special authorization or prior notification about the actual use. In this category, however, the compliance of the operational rules, the limitations of free manoeuvres and for restricted areas, and the requirements for the competency of the remote pilot are also required.

In the case of drones which fall under the specific category, further requirements are to be fulfilled, so that the expectations for operators to make a prior risk assessment or to chose one of the standard scenarios (prepared in advance) or to have a special license.

The aim of the EASA proposal was to introduce a proportionate system of protective measures scaling to the assumed risks. For this purpose detailed data analysis has been carried out in the preparatory process and it has been demonstrated that incidents such as airborne accidents (collisions with other drones or aircrafts) occurs much more frequently than personal injuries or damage due to falling down (collision with persons or infrastructure).

For this reason, the maximum flight altitude, the operation in visual line of sight (VLOS) were imposed, so as the training and the competence of the remote control pilots. In addition to, for some types, the opinion proposed other sensors for scanning landmarks and natural features, maximum altitude limits, and it proposed zones, which are limited and restricted for drones, e.g. close to aerodromes.

The main objective of the proposal is determining all the requirements for the safe usage of drones in the open category and in the specific category. The EASA proposal intended to implement an operation-centric, proportionate, risk- and performance-based regulatory framework for all UAS operations conducted in the ‘open’ and ‘specific’ categories. Its further aims are to ensure a high and uniform level of safety for UAS operation, to foster the development of the UAS market; and to contribute to addressing citizens’ concerns regarding security, privacy, data protection, and environmental protection.[9]

In the ‘open’ category the essential operational conditions are the following: operations conducted with a UAS with an MTOM of less than 25 kg, below a height of 120 meters, and in VLOS. In the open category, there are three subtypes: the subtype A1 may fly above humans, except for public events. The subtype A2 may fly close to humans, but must keep a safe distance. The subtype A3 must be operated far away from humans.

The special category involves all drones not belonging to the open category. As a general rule, this category requires pilots to prepare a prior risk assessment and an action plan to avoid incidents. These plans will be analysed a competent authority in order to authorize it. Alleviating the administrative burden, EASA also proposed to develop standard plans (standard scenarios) which are to be chosen instead of specific risk assessments and individual measures.

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[8] See Chicago Convention on international civil aviation of year 1944. The Chicago Convention deals with unmanned aircrafts and lays drown the general priority rule in favor of manned aircrafts in Article 8.

[9] See executive summary of Opinion EASA No. 01/2018.

III. INNOVATIVE SOCIETY AND VULNERABLE PRIVACY

3.1. Ethic codes are preferred than legal rules

Technological progress has an enormous impact on both human individuals and society itself. The application of intelligent systems has already left the industrial scenes and the laboratories and it has become a boosting factor for the transport sector. In particular, the economic usefulness of commercial drones and the potential of their versatility and dexterity are indisputable. They serve as a mean of socio-economic innovation.

Nonetheless, the remote-controlled aircrafts being able to conquer the skies easily and at small costs can only be operated in a restrictive and strict legislative framework for the sake of other persons rights. Yet by using them, the individual can extend the physical boundaries of his abilities and his perception on an incredible scale. New paths are opened to the communication with others and to the freedom of movement by conquering the airspace.

However, the question is, whether the user himself is sufficiently skilled and prepared. As children in kindergartens everybody has learnt the basic rules of human cohabitation, and also the basic elements of traffic rules, so they also should learn the proper usage of these new intelligent devices not harmfully to theirselves or to the environment. In our opinion, the role of ethical codes or of codes of conduct will become much more significant. Thus self-regulative soft law instruments such as the code of ethics of drone operators' associations will have decisive influence upon the everyday drone usage. [10] Especially in the case when the instructor emphasizes the importance of these rule of conduct during the training of drone operators. The obligatory training is not only important because of the elemental skills and knowledge for operating a drone will be given to the pilots, but also they will be instructed of the elementary rules for social co-existence.

Beyond many positive effects, the drones' use has certain downsides. The abusive or deviant acts or acts representing danger to society are in a wide spectrum, from little pranks, or trespass to data gathering to prepare a crime.[11] Not only the mere novelty of the technology, but its incredible utility is the reason why the drone usage requires all branches of law to elaborate adequate defending measures and, among them, the civil law solutions are only one kind of, even not the most important ones.

4.2. The very adaptive nature and the great utility of drone technology …

In the introduction of the recommendation on data processing with drones, the Hungarian National Authority for Data Protection and Freedom of Information (hereinafter: the Authority or NAIH) noted that the drones' functions and features are

[10] See e.g. the draft of code of ethics published by the civil association of Drónpilóták Országos Egyesülete (Country-wide Association of Hungarian Drone Pilots). https://doe.hu/sites/default/files/uploads/2019/temp/doe_kodex_v20190114pre.pdf

[11] Peter N. Borden, The Peering Predator: Drone Technology Leaves Children Unprotected from Registered Sex Offenders, 39 Campbell L. Rev. 167 (2017)

quite different from the sport-aircrafts and model aeroplanes, hot-air balloons or the other light aircrafts, by reason of which the drone technology means, generally speaking, a dramatic novelty compared to the old ones.[12]
These differences can be summarized in the following. The drone's data proccessing system is fully automated, it is able to process and store a great deal of data during the flight, thus, it is capable of data stockholding, and it is able to do all this a long distance far beyond human capabilities.
According to the Authority, the corollary of these facts is the necessity for extending or maintaning the protection zone of privacy which has been shrunk dramatically, since the citizens should also take into account the impact of their most intimate privacy in areas where no such intervention has been anticipated so far, from the air. Apart from the strict public and civil law rules limiting and restricting the freedom of drone usage, the fear of flying eyes and ears may also have an effect that make the citizens protect their own private zone even more intensively, and two-meters high concrete fences are not enough to achieve this.
Ben Jenkins did also compared certain features of drones with other devices and highlighted the following: the UAVs are small, silent propelled and able to hover for hours, to conduct surveillance virtually unnoticed, because they are practically invisible at their maximum altitude of flight. At the meantime, they are able to perform fast manoeuvres.[13] Alongside these physical parameters, the drones can be equipped with a large variety of smart devices and applications, such as thermal-imaging devices, license plate reader, facial recognition software, mobile phone interception capabilities etc.

3.3. … and a threat to privacy

How can we define the private zone into which the drone penetrates? The short determination of North American judicial practice and literature says the privacy is the right for loneliness. The place where this right is exercised first and foremost is our home. Our home belongs to the private zone, undoubtfully, but still the question remains, is there any other place not bordering by walls and roof in which we can feel at home? The North-American judicial practice shown by Jenkins' work differentiates between open fields and curtilage (i.e. garden or yard surrounding the house). The curtilage is deemed as private zone as well which depends on four factors to be assessed: how much closed from public, there is a fence or not, what aim the real estate is used for and how much it is shielded from observation by passersby.[14]
It is obvious that the general standards and limitations relating to the drone usage, even the principle of operating in VLOS (visual line of sight) are not an adequate means against the abusive use.[15]

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[12] A Nemzeti Adatvédelmi és Információszabadság Hatóság ajánlása a drónokkal megvalósított adatkezelésekről. https://www.naih.hu/files/ajanlas_dronok_vegleges_www1.pdf (2018.07.01.)
[13] Jenkins, Ben: Watching the Watchmen: Drone Privacy and the Need for Oversight. Kentucky Law Journal vol. 102. (2012) 161–182 p. 171
[14] Jenkins, Ben im. 167.
[15] Villasenor, John: Observations from above: Unmanned Aircraft Systems and Privacy, 36 Harv. J. L. & Pub. Pol'y 457 (2013) pp. 474–475

Summarizing the data and privacy protection problems, in 2017 the Senate of United States of America had enacted a bill (Drone Aircraft Privacy and Transparency Act of 2017) on guidance and limitations regarding the integration of unmanned aircraft systems into United States airspace, which amend the Federal Aviation Administrative Act of 2012. Our opinion is that the main goal of this bill was to address the privacy issues occurring from the public or civil drone usage.[16]

3.4. Data processing via drone usage and the strict liability rule

Returning to the recommendation of the Hungarian Authority and taking into account the present legislative environment, the Authority created opinions only about the civil drone use, not the public one. It can be clearly seen that the effective sanctions which can prevent mal- or abusive uses of drones are negative consequences of crimes and administrative offences, not the civil law sanctions. The Authority highlights that the data processing via drone usage falls under the *Info Act* of 2011[17] until or failing that special provisions would be adopted on drones.

The specialities of the field of data protection law and the relatively autonomy of its regulations forecast for us that the future EU regulation of civil unmanned aircrafts does not need to be extended to these issues, the drone usage as data processing can be regulated as a special way of data processing.

The recommendation says that persons involved by data processing should be informed in the manner that they are facilitated to enforce their personality rights and defend their information privacy. With the help of unmanned aircrafts (mainly multicopters) a great deal of personal data can be gathered even incidentally. Consequentially, it could be a serious infringement of privacy, which will be defend through this recommendation and the provision of Info Act. Drone is not allowed to be used for monitoring, tracking a person (with the exception of a prior consent given by the holder), it is forbidden to take pictures or photos of another persons infringing human dignity, for any aim, not even for private use.

It should be mentioned here that the wrongful data processing, which infringes personal rights and personal data protection, triggers a strict civil liability for pecuniary and non-pecuniary harms, similarly to the liability for damages caused by highly dangerous activities.[18] Literally, it means that the data processor and/or the data controller can exempt himself from liability only in case of *vis maior*[19] But no compensation shall be paid and no restitution may be demanded where the damage was caused by, or the violation of rights relating to personality is attributable to, intentional or negligent conduct on the part of the person whose rights had been violated.[20]

The Opinion of NAIH is based on the Opinion No. 01/2015 on Privacy and Data Protection Issues adopted by the Article 29 Data Protection Working Party (so-called

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[16] https://www.congress.gov/bill/115th-congress/senate-bill/631/text

[17] Act CXII of 2011 on the Right of Informational Self-Determination and on Freedom of Information

[18] Section 24 subsection 3 of Info Act: „The data controller shall be exempt from liability for damages or for payment of restitution *if he proves* that the damage was caused by or the violation of rights relating to personality is *attributable to reasons beyond his control*."

[19] The cause of the infringement was an outward and unavoidable event.

[20] Section 24 subsection 6 of Info Act.

W29).[21] The W29 examined all the criteria[22] laid down in the Data Protection Directive for making data processing legitimate in the viewpoint of the equipment of drones. All of them may be a ground for lawful data processing via drone usage

In summary, the faceless or unidentifiable operation of drone may engender a fear of persistent surveillance and constitutes a serious infringment of privacy. However, almost all types of drones are able to be equipped by devices for mass data processing, so the infringement of personal data rights is a paralell problem occurring from drone usage. Although the EU can adopt regulations and measures guiding the drone usage as a new branch of civil aviations, but the data protection issues and right of privacy oblige the national legislators to create appropriate rules for these issues of droning, in order to protect privacy and personal data in this challenging and technologically renewed social environmental.

It should also be here mentioned that Hungarian Civil Code (hereinafter HCC) expressly protects the privacy and the familiy life[23] in accordance with the Fundamental Law of Hungary[24], with the European Convention of Human Rights[25] and with European Charter of Fundamental Rights[26]

The infrigement of the privacy or of other right of personality may result mainly non-material harm. Under HCC provisions, any person whose rights relating to personality had been violated shall be entitled to restitution for any non-material violation suffered. This payment of restitution (Schmerzengeld, kind of grievance reward) is for compensating the non-material violation suffered, but its judicial practice is not worked out yet. In the following, the liability for material harms will be discussed.

Other liability issues related to infringing property right or the possessor's right are also not discussed here. The injury, however may be materialized in material harm, damage and it constitutes a claim for damages.

In our opinion, the infringment of neighborhood rights[27] may be also a special ground for civil liability (for damages also) even if it is not the most attractive, but the analogical application of rules for trespassing domestic animals may have a possibility (claims for damages caused by animals and the right to capture and withhold them until then).

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[21] https://ec.europa.eu/justice/article-29/documentation/opinion-recommendation/files/2015/wp231_en.pdf 7

[22] (a) Freely given, specific and informed consent, (b) processing necessary for the performance of a contract to which the data subject is a party (c) processing necessary for compliance with a legal obligation or for the sake of public interest (d) processing necessary in order to protect the vital interest of the data subject; (e) for the purposes of a legitimate interest.

[23] Section 2:42 subsection 1 of HCC: ″Everyone is entitled to freely practice his personality rights, in particular the right to privacy and family life, home and communications with others in any way of form, and the right to protection against defamation of character, within the framework of the law and within the rights of others, and to not be impeded in exercising such rights by others.″

[24] See Article 6 of Fundamental Law of Hungary. It is articulated in its explanatory memorandum that: ″As a result of technological advancement, digitalisation and the increase of media publicity, the protection of the privacy of the individual faces new challenges that the regulation must respond to;″

[25] See Article 8

[26] See Article 7 and 8

[27] Section 5:23 HCC says: ″When using a thing, the owner shall refrain from engaging in any conduct that would needlessly disturb others, especially his neighbors, or that would jeopardize the exercise of their rights.″

IV. CONCLUSIONS

The implementing acts at EU and at Member states level are now being elaborated. In this phase it is an important issue whether the regulation of EU will create sui generis liability rules for damages and/or for immaterial harms. Our reflection is that the special precept for establishing strict liability by Data Protection Act can serve as a transient solution, but the drones have a very specific nature, not in the field of liability for causing material harms, but in the field of high risk of infringement personality rights.

Reviewing the present state of Hungarian civil law and the available legal grounds to claim for restitution or for compensation of infringements, our opinion is that the current legal environment is not adequate to answer all the legal questions emerging from the utilization of drones.

However, it is not the legal rules that are to govern the acts of individuals at basic level, but the ethics, other standars of human co-existence including the professional codes of ethics. Therefore, we see a significant role of the education and the proper training of drone pilots, to promote and raise the awareness of situations when someone personal rights may be injured through drone usage.

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