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Harmonization over Maximisation: European choice of law solutions to aviation accidents

Chris Thomale*

Abstract

Legal discourse on aviation widely fails to appreciate the private international aspects of the topic, notably comprising international jurisdiction and choice of law. The article sketches out a subset of issues brought up by typical law-suits on international aviation accidents. That includes questions like where to find an international venue according to Art. 33 Montreal Convention and which substantive law to apply as a complement to the harmonised framework given by the Montreal Convention, according to European Rome I and Rome II Regulations. Finally, the regulative issue of moral damages is raised. The article argues for a new approach, stressing deterrence and equality rather than corrective justice.

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Introduction

A spectre is haunting international air law - the spectre of private international law. The reason due to which many of us haven't noticed is precisely why we can justifiably call it a spectre. Spectres are present but at the same time invisible - to the unlearned eye, that is. And indeed, unlearned and illiterate lawyers prove to be as soon as they get dragged out of their comfort zone, tenderly called *lex fori*. However, against this background a reality call seems alright: At least in Europe¹, choice of law rules, i.e. laws designating whose legal system's substantive law is applicable to a question or a case, are not as much left to judicial discretion and arbitrariness as they are clearly laid down, for commercial purposes, in mainly two regulations, the so-called Rome I and Rome II Regulations². Their underlying rationale is twofold: For once, forum shopping is supposed to be diminished as any European court seized with a particular matter will have to apply the same rules of decision as uniformly interpreted by the European Court of Justice. What is more, however, these common rules are based on an assumption of mutual trust between Member States, i.e. a sufficient degree of cohesion and congruency so as to allow the imposition of any Member State's substantive law to any other's courts in terms of being the officially applicable substantive law, only subject to an extremely narrow carve-out for public policy exceptions and overriding mandatory provisions (Art. 9, 21 Rome I; Art. 16, 26 Rome II). One may wonder, why all this matters, as my title suggests, in aviation accidents. Hasn't the substantive law in this field been harmonised by, first, the Warsaw and then, since 1999, the Montreal Convention? The answer is yes and no: Yes, the Montreal Convention provides for "certain [emphasis added] rules for International Carriage by Air", but it does not resolve the conflict of laws issue altogether. This is quite obviously the case, when the Montreal Convention does not apply, be it because there is no international carriage between State parties according to Art. 1 para 2, or be it because manufacturers, or other Third Parties beyond the contracting and the actual carrier are being sued (Art. 37). More surprisingly for some, however, not even in the clear paradigmatic case of a carrier being held responsible for the death or injury of passengers according to Art. 21 does the Montreal Convention offer a straightforward unified solution as it leaves out a wide range of important issues amongst which, perhaps most importantly, the measure and personal entitlement to claim damages³. As explicitly stated in Art. 29, the Montreal Convention contains no "prejudice to the question as to who are the persons who have the right to bring suit and what are their respective rights." In other words: The Montreal Convention exercises self-restraint, providing a *framework* for such claims by e.g. granting a capped strict liability (Art. 21 para 1) while excluding punitive damages (Art. 29 2nd) as well as imposing a limitation clause (Art. 35). Beyond this framework, the Convention depends on the court seized to fill the gaps. This is good and well, one may oppose, but what has this to do with choice of law rules? Is not any court simply going to apply his *lex fori*? As intuitive as this contention may be, it is plainly false. To be sure, the Convention itself refers certain questions to the substantive *lex fori*, such as advance payments (Art. 28), procedure (Art. 33 para 4) and the calculation of the limitation period (Art. 35 para 2). Beyond these explicit provisions, however, any court, before applying the substantive law of the forum, will have to consult the choice of law rules of the forum - choice of law rules, which inside the EU are unified by Rome I and II regulations. Reason enough to have a look at what European choice of law has to say on aviation accidents. Before that, however, we must establish which *fora* may be available in European incidents, i.e. whose courts enjoy international personal jurisdiction to hear a case on compensation for death of a passenger (II.). Resting, for the

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sake of argument, on the assumption that a European court is being seized, we can then move on to ask, which substantive law applies according to choice of law rules contained in Rome I and II (III.). As it turns out, this face value of European choice of law asks for refinement through transindividual adjustment, eventually rendering applicable the law of the carrier's real seat to all passengers (IV.). From a regulative perspective, it can be shown that this harmonizing approach prevails over the rather pointless debate on how much is "enough" in order to compensate for the loss of human life (V.).

International (personal) jurisdiction

Once an aviation dispute is brought to the litigation stage, the first step is finding a court competent to hear the case. As oftentimes there are several international *fora* available, this will exert deep strategic analysis from the plaintiffs: Each forum will apply its own procedural and choice of law rules. But even more importantly, it will also tend to apply harmonized rules as contained e.g. in the Montreal Convention in its very own way⁴. Hence, the question of international jurisdiction is the cornerstone of any international lawyering.

Art. 33 Montreal Convention bestows a definitive rule on international jurisdiction, which, as a *lex specialis*, is notably superior to European jurisdiction rules as laid down in the Brussels I^{bis} Regulation⁵. Art. 33 para 1 Montreal Convention offers four optional international venues, which are more or less straightforward: Apart from its domicile (1) or principal place of business (2), a carrier can be sued at any place of business where the contract has been concluded (3) as well as before the courts at the place of destination (4). Two observations shall be made in this regard: First, the multitude of venues in itself gives a valuable privilege to plaintiffs, who have an effective *choice of forum* at their disposal. Second, venues (3) and (4) highlight the typical Janus-faced nature of aviation claims, being at the same time contractual and tortious in nature. This has a bearing on the choice of law side of things, of which further below.

In case of aviation accidents leading to the death of a passenger, a fifth optional venue is bestowed by Art. 33 para 2 of the Convention: Proceedings can be brought before the courts of the passenger's principal and permanent residence, if the carrier operates services for the carriage of passengers by air to or from the place⁶. In the aftermath of the recent Germanwings incident, we could read a lot of sabre-rattling by plaintiffs' counsels, threatening to bring suits before US courts due to the fact that there had been several US citizens on board. This is evidently inaccurate: If anything, it would be the passengers' principal and permanent residence in the US that could establish a sufficient link so as to render US courts competent to entertain proceedings for damages. However, even this corrected version of the plaintiffs' contention turns out futile, failing to appreciate the subtle intricacies of US law on personal jurisdiction: In the US, the question whether a defendant can be sued before US courts is *constitutional* in nature. As a matter of "traditional notions of fair play and substantial justice"⁷ under the Due Process Clause of the Fifth and Fourteenth Amendment, corporations are subject to general personal jurisdiction "when their affiliations with the State are so 'continuous and systematic' as to render them essentially at home in the forum State"⁸. It hence follows that, in the US, Art. 33 para 2 Montreal Convention only formulates a necessary rather than a sufficient condition for international jurisdiction. In the Germanwings incident, for example, even if Germanwings were operating services for the carriage of passengers by air to some passengers' principal and permanent

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residence or if its wrongdoings were in some way attributable to its 100% parent company, Lufthansa, which in its own right should certainly fulfil that last condition, none would have to submit to US jurisdiction: Neither Germanwings nor Lufthansa can be considered essentially at home in the US, which is why US courts have no general personal jurisdiction over them.

This lack of personal jurisdiction obliges US courts to dismiss claims right away, without any further inquiry. Therefore, it logically precedes the *forum non conveniens* exception, which, first, requires an explicit motion by the defendant, second, offers a lot of discretion to the court and, finally and most importantly, in itself presupposes personal jurisdiction of the court granting the motion. Hence, as far as carrier's liability for European accidents is concerned, European courts should usually be the only international venues available. It is for this reason that in the forthcoming we shall focus on them and on their choice of law rules.

The Rome regime on choice of law in aviation accidents

As could already be seen with regard to Art. 33 Montreal Convention, in the event of an aviation accident, it is essentially contractual and tortious claims for compensation, which come into consideration. Choice of contract and choice of torts law is unified across the EU by Rome I and Rome II Regulations, each providing a different choice of law regime. In general, this analytical divide persists even when concurring claims both in contract and tort are being pursued on the same factual basis in one single legal action.

As to contractual claims, the applicable choice of law rule is Art. 5 para 2 Rome I Regulation. According to this rule, priority must be given to contractual choice of law clauses as long as they choose one of the options exhaustively listed in Art. 5 para 2 subpara 2, among which, in lit c), the law of the carrier's place of central administration, also called its real seat as opposed to statutory seat. Quite surprisingly, however, many airlines until now do not seem to make use of this option in their General Terms and Conditions. For the time being, therefore, one is oftentimes left with the default choice of law according to sub-para 1, leading to a different substantial law for each passenger: If the passenger has his habitual residence at the place of departure or the place of destination, the substantive law of that State applies. Otherwise, e.g. as far as transit flights are being concerned, Art. 5 para 2 subpara 1; 19 para 1 Rome I Regulation designate the law of the carrier's real seat.

The default choice of torts law rule, as contained in Art. 4 para 1 Rome II Regulation, follows the *locus delicti*, or more precisely: the *locus damni* principle: "(...) the law applicable to a non-contractual obligation arising out of a tort/delict shall be the law of the country in which the damage occurs (...)" From this general rule, however, Art. 4 para 3 Rome II Regulation recognises an exception, whenever a manifestly closer connection with another country is evident from the specific circumstances of the case. Such a connection may "(...) be based in particular on a pre-existing relationship between the parties, such as a contract, that is closely connected with the tort/delict in question." It is submitted that a contract of carriage provides exactly that kind of a pre-existing relationship, "colouring" the legal relationship between the carrier and its passengers as a whole. To be sure, as also the passengers' families and dependants are affected by this choice of law, one at first glance may wonder why they should be governed by a contract they are not even a party to.

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However, this misapprehends the derivative nature of the families' and dependants' actions: Whatever rights and entitlements they may enjoy, those entitlements - even if they can claim them in their own right, i.e. not merely in their capacity as the passengers' heirs - are still a direct result from the primary damage done to the passenger himself. Therefore, whatever legal framework is incumbent upon the passenger, in general should also apply to those "beneficiaries". It thus follows that choice of torts law will simply mirror the choice of law made by or in the contract of carriage. That seems entirely plausible with regard to plane crashes, where the *locus damni*, i.e. the point of impact, seems completely fortuitous, lacking any inherent connection to the merits of the case⁹.

In sum, while both contractual and tortious claims resulting from aviation accidents follow the same default choice of law rule, that choice of law differs depending on the passenger's habitual residence: As far as this place of habitual residence coincides with the place of departure or the place of destination, that substantive law applies. All other passengers are treated in accordance with the substantive law of the carrier's real seat.

Second thoughts on first choices of law: equality in demise

Let us revisit the prima facie result we could derive from European choice of law rules. Leaving individual choice of law clauses out of the picture for the moment, one plane crash is supposed to be governed by up to three substantive laws at the same time. Now, this would cause the less of a problem the closer European substantive laws on damages were. As a matter of fact, however, European legal systems differ heavily from each other when it comes to damages. The following contrasting juxtaposition of German and French law is merely to adumbrate some striking aspects of this spread:

German private law is built around the basic idea that only the creditor in contract or tort can claim damages for the debtor's wrongdoing. The general rule for liability in tort brings out this policy decision most clearly: According to Section 823 para 1 German Civil Code, "A person who, intentionally or negligently, unlawfully injures the life, body, health, freedom, property or another right of another person is liable to make compensation to the other party for the damage arising from this." Compare this to the more general *Grundnorm* of French law of torts, Art. 1382 French Civil Code: "Any act whatever of man, which causes damage to another, obliges the one by whose fault it occurred, to compensate it." It flows from this seminal divide that e.g. under French law, dependants can claim damages for the pain suffered from the loss of the passenger on a regular basis, while according to German law this is limited to very exceptional cases, in which a dependant's suffering reaches a degree so as to constitute a mental or psychosomatic health injury of its own. But the issue does not settle with different treatments of shock damages. The approach to the passenger's original claims in moral damages may also vary a lot from system to system. Take the question of inheritability of those claims: It took until the early 90s for German courts to recognize that despite the strictly personal focus of moral damages, claims of this kind, if it were only in order to avoid misleading incentives, also have to be considered as simple assets capable of subrogation. It is not evident that this had even been considered a

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problem under French law. Be this as it may, it is only the structural, doctrinal side of things. Simple practices in according damages, far beyond differences obvious from the substantive law itself, will differ up to a factor of ten or twenty. Under the so-called foreign court theory, such practices have also to be abided by if a certain law is chosen to apply. This is all to prove but one thing: choice of law *does* matter. Indeed, applying one substantive law or another - albethey of common European provenience and framed by one uniform Montreal Convention - will turn a case around completely.

Having emphasised the seminal relevance of choice of law, it is time to talk about the pink elephant in our room: discrimination. How can it be right that the Spanish sitting on seat 22 A should be treated differently in any way from the German or French on 22 B and C, given they have taken the same flight 4 U 9525 from Barcelona to Düsseldorf? One may, of course, point to the fact that our world is full of discrimination of so many sorts - especially Economy rate passengers like those in our example should know. But then, do we not have to discriminate between different kinds of discrimination, some being justified or “earned” while others are not? Indeed, choosing the right kinds of discrimination may well be what law is all about. That being said, with regard to lethal aviation accidents, EU law as it stands, taken at face value, simply seems a bad choice. It is no one lesser than *Seneca* himself, reminding us in *De Consolatione ad Marciam* that death is one, maybe *the* only thing incumbent upon all human beings alike. While circumstances, age, and state of mind may differ, death as such is the same for everyone. This categorical levelling force of death notably extends to fortune and possessions: A shroud has no pockets, a coffin no drawers. The law should live up to this value, deeply entrenched in at least European culture, of equality in demise. Just as human life allows for no discrimination, even no quantitative balancing, neither should human death.

The foregoing raises two questions: *First*, is their, apart from its moral dignity, a *legal* basis within choice of law in order to uphold equality in demise i.e. to apply one substantive law to all passengers of the crashed aeroplane? And *second*, if so, *which* substantive law should most adequately be applied to the crash as a composite phenomenon? I will tackle these questions in turn.

As to the legal basis, there are in fact two: First, both Rome I and Rome II are governed by the overarching ideal of designating the substantive law with the closest connection to the case. This is, why both Art. 5 para 3 Rome I and Art. 4 para 3 Rome II yield to specific circumstances justifying an exception to the general choice of law as prescribed by their foregoing paragraphs. Now, the common mortal fate of a multitude of passengers should be seen as exactly that: Special circumstances designating another, namely a common choice of law for all passengers. The same result can be achieved through the universally recognised private international doctrine of adjustment: Just as the analytical method of private international law, choosing different substantive laws to every severable legal aspect of a case, can lead to contradictory, incoherent results, so can the designation of different substantive laws to a single aviation accident. While the first is uncontestedly governed by the doctrine of adjustment and hence is open to corrections in hard cases, so should, on a transindividual level, be the second.

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That leaves us with but one last problem to resolve: Which law to choose. Art. 5 para 2 subpara 1 2nd and Art. 5 para 2 subpara 2 lit b) and c) Rome I Regulation give a first indication: Both the catch all default for contracts of carriage and the most prominent option for a contractual choice of law is the law of the carrier's real seat. That makes good sense: The carrier's real seat is, figuratively speaking, equidistant to all passengers. It is transparent, hence easy and cheap to verify, offering a high degree of legal certainty and simplicity. Finally, there simply is no better connecting factor available: If one were to revive the *locus damni*, this would solve the equality and equidistance problem, but would still seem arbitrary for being completely fortuitous. The *lex fori*, although lowering the costs of proceedings, would be open to the same kind of criticism, essentially giving up on the whole undertaking of both the Rome Regulations and choice of law in general, to find the substantive law with to closest connection to a case. Using a majoritarian analysis, i.e. for example choosing the law designated prima facie for most passengers, bears the severe disadvantage that the composition of passengers is entirely opaque to each individual passenger as it is probably even to the carrier itself. Hence, our analysis provides a simple result: In a lethal aviation accident, absent contractual choice of law clauses, all passengers' and their dependant's claims are governed by one substantive law, namely the law of the carrier's real seat.

On the futility of measuring human life and equality before the laws

Both in general media and in academic discourse, we find a strong interest in a different take on our subject, the debate focussing on the global question whether moral damages awarded in aviation accidents are "enough". Statements would usually start with the commonplace that human life cannot be adequately represented in monetary terms and right after would move on to saying that whatever sum a given court's practice yields were in any event insufficient. This, I would argue, is already inconsistent: If human life is indeed *price-less*, which for a myriad of moral reasons we can assume it is, then there is simply no evidentiary, rational basis for *any* monetary compensation. By this, I am not advocating that there should be no moral compensation at all. Rather, I would introduce an epistemic scepticism as to the measure of human life and human suffering. We simply cannot rationally put a price tag on these phenomena, which is why we immediately fall into more or less arbitrary decisionism when forced to determine what is the right compensation in a given case.

The foregoing highlights the defective design of Art. 29 Montreal Convention: As we could see, in fatal aviation accidents, there is no rational way of promoting corrective justice via moral damages, because there simply is no criterion by which to measure these damages. That leaves the award of damages in these cases with but one rational social function: deterrence, setting up an incentive structure in order to induce precautions to be taken by the carrier. One should bear in mind, however, that while clearly the carrier must be seen as the cheapest cost avoider in aviation accidents, the degree of his liability is a problem rather of optimisation than maximisation. This is so, because eventually, from a regulative perspective *ex ante*, all passengers of global aviation will be paying and hence cross-subsidising whatever compensation to victims will be deemed just. Thus, what we are really looking for is that degree of damages that will induce the efficient amount of precautions so as to represent an acceptable investment of all passengers in air traffic safety. It is very likely that the availability of punitive as opposed to merely compensatory damages would further that cause, constituting a powerful threat to carriers.

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What is more, it is precisely punitive damages that alone maintain a plausible, rationally justifiable cause in lethal aviation accidents, relying on deterrence rather than compensation. Why then is it that precisely this one rational prong of claims in damages is excluded under Art. 29 2nd Montreal Convention? As much as we can admire carriers' lobbying from a strictly competitive point of view, it is socially regrettable that they succeeded at this point, which provides a compelling case for reform, should a recast of the Montreal Convention be brought to the table in any near future.

So, while there is a weak case at best for maximising moral damages in terms of corrective justice, they maintain some limited importance for the sake of optimal deterrence. A second important function of moral damages in the promotion of justice appears, when we move away from absolute compensation towards relative equality. What I mean, is this: We cannot tell what human life is worth, but we can justly hold that whatever value one may deem appropriate in absolute terms, it should be the same value across the board. As our brief tour through European private international law brought about, on a choice of law level, this is a rather counter-positivist if not revolutionary claim. How can it be that this broad and even more fundamental problem of equality in demise is only rarely being discussed?¹⁰

In the absence of better knowledge to the contrary, I will attribute this ignorance to a certain reluctance of courts to get into and discuss choice of law as well as eventually applying foreign law at all. This reluctance, on an academic level, grows on a conceivable phlegm and illiteracy with regard to private international law and comparative law as such. If anything, I hope to have shown that these fields deserve more attention, also in aviation law. An effort in private international law is an effort made against unjustified discrimination, is an effort to promote *equality before the laws*. We should get to it rather sooner than later.

¹The US do not have a uniform set of choice of law rules, leaving that for each State to determine independently. Still, the Restatement (Second) of Conflicts of Law (1971) gives at least a vague indication of a common solution most States's legal practice clusters around. See further on US choice of torts law: Thomale, *The Forgotten Discipline of Private International Law: Lessons from Kiobel v. Royal Dutch Petroleum*, in: *Transnational Legal Theory*, 2015, forthcoming.

²Regulation (EC) No 593/2008 of the European Parliament and of the Council of 17 June 2008 on the law applicable to contractual obligations, OJ L 177/6, 4 July 2008 (Rome I) and Regulation (EC) No 864/2007 of the European Parliament and of the Council of 11 July 2007 on the Law Applicable to Non-Contractual obligations, OJ L 199/40, 31 July 2007 (Rome II).

³Cf. Giumulla/van Schyndel, in: Giumulla/Weber (Editors), *International and EU Aviation Law* (2011), 262: "As the MC also does not itself produce any findings on the scope of the obligation to pay compensation in the event of passengers being killed or suffering bodily injury, claimants or parties entitled to claim are referred to National Laws."

⁴On this seminal issue, see in further detail: Thomale, (n. 1), sub III. 1. c).

⁵See Art. 71, Regulation (EU) No 1215/2012 of the European parliament and of the Council of 12 December 2012 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters (recast), OJ L 351/1, 20 December 2012 (Brussels I^{bis}).

⁶See on the history of this provision: Havel/Sanchez, *The Principles and Practice of International Aviation Law* (2014), 304.

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⁷*Int'l Shoe Co. v. State of Wash., Office of Unemployment Comp. & Placement*, 326 U.S. 310, 316, 66 S.Ct. 154, 158, 90 L. Ed. 95 (1945) relying on *Milliken v. Meyer*, 311 U.S. 457, 463, 61 S.Ct. 339, 343, 85 L. Ed. 278 (1940).

⁸*Daimler AG v. Bauman*, 134 S.Ct. 746, 751, 187 L. Ed. 2d 624 (2014); *Goodyear Dunlop Tires Operations, S.A. v. Brown*, 131 S.Ct. 2846, 2851, 180 L. Ed. 2d 796 (U.S.N.C. 2011); *Int'l Shoe Co. v. State of Wash., Office of Unemployment Comp. & Placement*, 326 U.S. 310, 317, 66 S.Ct. 154, 159, 90 L. Ed. 95 (1945). See also *Perkins v. Benguet Consol. Min. Co.*, 342 U.S. 437, 72 S.Ct. 413, 96 L. Ed. 485 (1952); *Helicopteros Nacionales de Colombia, S.A. v. Hall*, 466 U.S. 408, 104 S.Ct. 1868, 80 L. Ed. 2d 404 (1984). We shall not further investigate bases for specific jurisdiction, i.e. “the power to adjudicate with respect to issues deriving from, or connected with, the very controversy that establishes jurisdiction to adjudicate,” as these typically would not be given in connection with European aviation accidents. On the general issue of general and specific jurisdiction see: von Mehren/Trautmann, 79 HARV.L.R. (1966), 1121.

⁹*Cf. Antoni, Conflict of tort laws in international air accidents; Evolution of lex fori and lex loci delicti in the EU & US, The Aviation & Space Journal, XIV (2015) No. 2, 2 at 6.*

¹⁰To be sure, the debates leading to the Warsaw system and still persisting under the Montreal Convention have always been stressing the importance of universally applicable rules governing liability, see: *El Al Israel Airlines, Ltd. v. Tsui Yuan Tseng*, 525 U.S. 155, 169, 119 S. Ct. 662, 671-72, 142 L. Ed. 2d 576 (1999): “The cardinal purpose of the Warsaw Convention, we have observed, is to achieve uniformity of rules governing claims arising from international air transportation.”; Havel/Sanchez, *The Principles and Practice of International Aviation Law* (2014), 275.

¹¹For a more general argument in favor of private international analysis see: Thomale, “Private International Law sans frontières”, *Hague Yearbook of International Law* (2013), 1.

Safety Oversight over Disputed Airspace

Ntorina Antoni*

Abstract

Daedalus was an engineer who was imprisoned by King Minos in the Labyrinth in Crete. With his son, Icarus, he made wings of wax and feathers to escape by air as Minos controlled the sea around Crete. He gave instructions to Icarus: "With these wings you will fly like a bird, but be careful. Make sure you do not fly too close to the Sun, or the wax that holds the feathers together will melt and not too low or the spray from the sea will weigh down your wings." Daedalus flew successfully from Crete to Naples, but Icarus ignored his father's instructions and flew too high. The wings of wax melted and Icarus fell to his death in the ocean. Daedalus' flight long has stood as a symbol of safety, success and progress in flight.

Greek Myth of Icarus and Deadalus Apollodorus, Epitome, I, 11-13

Flight safety instructions were already conceived in Greek mythology -in the first flight ever mentioned- as intrinsically connected with the ability to fly. Throughout the times the concept of safety has been widely recognized by many, while it has been introduced as one of the fundamental elements of the Chicago Convention. This article presents the delicate relationship of ICAO's role and functions with the principle of sovereignty of States in the context of safety oversight. The analysis focuses on the responsibility of States to ensure safety in the airspace above their territory in the particular case of conflict zones. The nature of the State responsibility will be assessed in light of the Chicago Convention, ICAO Annexes and well-established principles of public international law.

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Disclaimer: The views and opinions expressed in this article are those of the authors and thus may not in any circumstances be regarded as an official position of Swiss Space Systems Holding SA

Introduction

Safety is described in Oxford's and Cambridge's dictionaries as "the condition of being safe", "freedom from danger or risks" and also "a state in which or a place where you are safe and not in danger or at risk" or "the state of being protected from or guarded against hurt or injury". A more realistic approach about safety in air transport and safety oversight has been adopted by H. A. Wassenbergh according to whom safety means "no avoidable accidents" or "as few accidents as possible". These definitions on safety are relatively "objective" and it would be an ideal situation if they could apply as such in the field of aviation. However, the absolute freedom of danger or risks can only be guaranteed in air transport when we stay on the ground, as aviation is inherently risky venture.

International Civil Aviation Organization's (ICAO) primary indicator of safety in the global air transport is the rate of accidents in the context of scheduled commercial international and domestic air transport involving aircraft with a maximum take-off weight above 5700 kg¹. Pursuant to the 2015 ICAO Safety Report the number of accidents in 2013 was the lowest since 2000; 90 accidents along with 173 fatalities corresponding to 3.1 billion passengers. The situation changed dramatically in 2014 with the increase of the number of accidents to 98 that brought about 904 fatalities, the highest number of fatalities in commercial scheduled air transport in the last five years. This was basically, to a large extent, immediate result of the two tragic events occurred in 2014; the disappearance of flight MH370 with 239 passengers -scheduled international passenger flight that disappeared on Saturday, 8 March 2014, while flying from Kuala Lumpur to Beijing- and the downing of flight MH17 with 298 fatalities -scheduled international passenger flight from Amsterdam to Kuala Lumpur that crashed on 17 July 2014 in Ukraine, presumed to have been shot down, killing all 283 passengers and 15 crew on board-. The latter events along with some more recent aircraft incidents in 2015 -apparent mid-air break up of Metrojet Flight 9268 possibly due to terrorist bomb with 224 fatalities and the deliberate crash of Germanwings Flight 9525 because of suicide by the first officer with 150 fatalities- have influenced at large the public perception of safety. It is after the occurrence of these horrific aircraft accidents and incidents that the average aircraft passenger acknowledges even more the aspects of safety.

In terms of regulations, aviation safety has become more important ever since more people have had access to this means of transport compared to the past. Its significance has been recognized by the Convention on International Civil Aviation (Chicago Convention), which has given safety mandate to ICAO to oversee and ensure the safety of international civil aviation through the development of Standards and Recommended Practices (SARPs), as incorporated in the Annexes to the Chicago Convention². The legal status of SARPs will be addressed in this article as part of the role and functions of ICAO in exercising the safety mandate while subject to the constraints of the principle of sovereignty of States. The responsibility of States for safety oversight becomes crucial in the event of conflicts taking place in their territory. While the legality of such conflicts does not fall under the scope of this study, the associated obligations for the oversight of the airspace above the conflict zone will be explored from the legal standpoint of the Chicago Convention and existing public international law principles, as most of the content of aviation law is generated by public international law.

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Responsibilities with regard to aircraft being downed over disputed airspace - namely the prohibition of use of weapons against civil aircraft, the obligation to inform on threats to safety of civil aircraft and the right to close airspace- will be assessed for their application to the recent tragic occasion of the flight MH17.

The Chicago Convention and the role of SARPs on safety

In 1944, representatives from 54 nations attended the Chicago Conference in International Civil Aviation with the aim to decide on a legal framework for international air transport. The conference led to the adoption of the Chicago Convention that established ICAO. Safety of international civil aviation was regarded as a key element during the negotiations and was inserted in the Preamble of the Chicago Convention:

“The undersigned governments having agreed on certain principles and arrangements in order that international civil aviation may be developed in a safe and orderly manner”.

Safety constitutes the *raison d'être* of ICAO³. Among the primary obligations of ICAO, as stated in Article 44(a), (d) and (h) are respectively the “safe and orderly growth of international civil aviation throughout the world”, “meet the need of the peoples of the world for safe [...] air transport” and the “safety of flight in international air navigation”. The mandate given to ICAO under Article 44 is to ensure safety on behalf of the member States. To achieve these goals ICAO has developed since its inception a set of safety related SARPs -over 10,000 SARPS in 19 Annexes- that functions as a mechanism aiming at the uniform regulation of safety worldwide.

Definition for SARPs is not provided in the Chicago Convention but instead in the Resolution A36-13 2007 “Consolidated statement of continuing ICAO policies and associated practices related specifically to air navigation”:

“Standard — any specification for physical characteristics, configuration, material, performance, personnel or procedure, the uniform application of which is recognized as necessary for the safety or regularity of international air navigation and to which Contracting States will conform in accordance with the Convention; in the event of impossibility of compliance, notification to the Council is compulsory under Article 38 of the Convention;

Recommended Practice — any specification for physical characteristics, configuration, material, performance, personnel or procedure, the uniform application of which is recognized as desirable in the interest of safety, regularity or efficiency of international air navigation and to which Contracting States will endeavor to conform in accordance with the Convention”.

These standards are adopted and amended by the ICAO Council as stipulated in Articles 54 and 90 of the Chicago Convention. They are applicable to all member States unless they file differences to ICAO by immediate notification regarding those they

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are not able to comply with, pursuant to Article 38. In accordance with Article 37 States are encouraged to adopt international standards and recommended practices to ensure the highest practicable degree for uniformity in regulations, standards and procedures. Milde supports that the language of the Convention “collaborate” rather than “comply” means that the provision does not generate an obligation for States, as the State is the only authority to decide what is “practicable” and what is not⁴. In the same line of thought, Buergenthal holds that while it is expected from States to “act in good faith” when determining the degree of “practicability” nothing can oblige a State to refrain from non-compliance with international standards⁵. The above distinction made between “standards” as any specifications “the uniform application of which is considered to be necessary”, and “recommended practices”, the adoption of which is quite desirable, does not lead to the conclusion that standards are binding upon States⁶. An additional argument reinforcing this position is found on the unwillingness of the drafters of the Convention to violate the principle of sovereignty of States. This is obvious by the fact that the standards are not integral part of the Convention but come in the form of Annexes “for convenience”, as said in Article 54(1) and thus the effect of them cannot be equal to the main body of the Convention.

In spite of the reasonable arguments mentioned above, we should not neglect the main purpose of the Convention, as clarified in the Preamble: to promote through the development of international civil aviation in a “safe and orderly manner”. States are expected to meet their international obligations deriving from the Chicago Convention “to the greatest possible extent”. Article 89 is the only provision that gives States the complete freedom not to follow their duties from the Convention in case of war or emergency. The discretion given to States to file differences with an international standard is another way for States to avoid the applicability of those standards. On the other hand, nothing on the Convention excludes the binding force of these standards to the States that have not filed differences. J. Huang argues in his Doctoral Thesis “Aviation Safety and ICAO” that the term “becomes effective” and “coming into force” could only demonstrate the intention of the drafters of the convention to give binding effect to the standards. As supported by Kotaite “the Convention does not allow for a middle situation where States do not comply and do not file difference”⁷ as this would be considered a gap that the drafters would not have intended to. Such a gap would not serve the purpose of the Convention, as well as Article 38, for safety of civil aviation and consequently would create legal uncertainty.

The different opinions supported demonstrate the different perspectives from which the provisions are viewed. This is a thin line between the principles of state sovereignty on the one hand, and the uniformity for the safety of aviation as required by the Convention on the other hand. It has been upheld by J. Huang that these standards might have acquired *erga omnes* binding effect due to the vital interests they protect. Obligations *erga omnes* are those obligations whose fulfilment is on the interest of the whole international community (see for *erga omnes: ICJ Barcelona Traction Light and Power Co Ltd, 1970*). Uniformity of safety regulations in international civil aviation can be considered on reasonable grounds an interest of the whole *international community, due to the global nature of aviation. A threat to civil aircraft -par excellence tool of air transport- affects the interests of many States.*

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Although the Chicago Convention has provided for an adequate regulatory framework to promote safety in the field of aviation, the new era of globalization and the emergence of new needs among sovereign States have brought new challenges for ICAO in the uniform application of the safety standards in aviation.

It is supported that ICAO should become the international regulatory authority to ensure harmonization of safety rules in aviation⁸. However, the aforementioned lack of clear binding effect of SARPs deprives ICAO from any enforcement power to achieve this goal.

Ensuring compliance has proven to be the biggest challenge in the effectiveness of safety regulations. To overcome this shortcoming, ICAO has asserted safety oversight tasks to assess the level of compliance of States with SARPs.

Safety oversight under ICAO

Safety oversight is regarded as “a function by means of which States ensure effective implementation of the safety-related SARPs and associated procedures contained in the Annexes to the Convention on International Civil Aviation and related ICAO documents”⁹. It is a mechanism that ensures the safety level of civil aviation within each State equals to or is better than the one defined by SARPs.

ICAO SARPs do not preclude the development of national standards which may be more stringent than those contained in the Annexes. In all phases of aircraft operations, minimum standards are the most acceptable compromise as they make aviation viable without prejudicing safety. Nonetheless, this does not guarantee uniformity of standards as it is left upon the will of each State. The power of each State to decide upon the safety standards applied to aviation within its borders is according to the principle of sovereignty. The average level of implementation worldwide of these standards is estimated at only around 57.7%” according to the “Report on the Implementation of the ICAO Universal Safety Oversight Audit Program (USOAP) under the Comprehensive Systems Approach and Evolution of the ICAO USOAP beyond 2010” at the 37th Session of the ICAO Assembly. The difficulty of States to fully implement the conditions provided at an international level concerning safety of civil aviation, combined with the deficiencies or inconsistencies of the national civil aviation authorities to control and supervise the operation of aircraft, and could pose a “threat” to the body of international civil aviation.

About two decades ago, the ICAO 29th Assembly emphasized, in the working paper A29-WP/107 P/30 22/9/92, its concerns about the variation in practice and commitment of the Contracting States to comply with the ICAO airline safety oversight SARPs and the consequent impact on the world-wide aviation safety. The inadequate regulatory framework, if even in place, or lack of financial and technical resources, prevented some States from fulfilling their safety oversight responsibilities; both for air carriers based in their territory and aircraft on their national registries. As it was highlighted by the US, even the most highly developed Contracting States are unable to undertake oversight of every aircraft that overflies into their territory. A considerable number of States was completely unaware of the contents of the Annexes and their obligation to file a difference if necessary. The issue of implementation of the ICAO safety standards is depicted by the metaphoric words Milde uses from the “Emperor’s new clothes” that “while everybody was praising the clothes, the Emperor was actually naked¹⁰”.

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This shortcoming is a result of the growing movement of the operational bases of aircraft across national boundaries and the increasingly multinational character of many air carrier operations. A proposal to solve this solution was given during the Assembly by the European Civil Aviation Conference (ECAC) for a common application of adequate safety standards and the development of enhanced standards at worldwide level within ICAO, while their application would be monitored by an ICAO mechanism.

As a result of this Assembly, Resolution A29-13 on “Improvement of Safety Oversight” reaffirmed that individual State’s responsibility for safety oversight is one of the tenets of the Chicago Convention, as its implementation ensures the continued safety of international air transport. It additionally called on States to re-establish their obligations for safety oversight over the whole spectrum of civil aircraft operation in their State and also of aircraft registered in their State but operating in other contracting State. Thus, the basis the responsibility of the State for safety oversight, as enunciated by ICAO, is found on the nationality and registration criteria.

In a following resolution ICAO decided the establishment of USOAP comprising regular, mandatory, systematic and harmonized safety audits to be carried out by ICAO in order to assess the level of capability of State’s for safety oversight. These audits are applicable to all Contracting States as to the effective implementation of safety related SARPs. Although the nature of audits is mandatory, this concerns only the full disclosure of information since the audits are carried out upon the consent of the State to be audited by signing a Memorandum of Understanding (MoU). The principle of consent, being compliant with the sovereignty of States, raises the question of the role of ICAO and its relationship to the member States. It seems that ICAO seeks to assert larger enforcement powers through these audit programs, but that cannot be realized without the consent of the sovereign states, who are the only ones with supreme authority above their territory. Safety oversight might be considered intrusive and offending the sensitivities of sovereign States when conducted by an international authority. Would that be true, if we consider the competence of ICAO for this action within the mandate of the Chicago Convention? Safety concerns affecting the whole international community shouldn’t be sufficient for flexibility of strict sovereign rights? Shall we consider the existing provisions adequate for the ICAO mandate or we would need an amendment of the Chicago Convention?

Nevertheless, safety oversight responsibility is twofold with ICAO and States playing an equal role in the protection of aviation safety. In line with Article 37 of the Chicago Convention, ICAO reiterated in a recent resolution the responsibility of Contracting States, both collectively and individually, for the safety of international civil aviation. The principle justification for the responsibility of States flows from the “complete and exclusive sovereignty” within their territory.

Responsibility of the State for safety oversight

Pursuant to Article 1 of the Chicago Convention “every State has complete and exclusive sovereignty over the airspace above its territory and Article 2 defines territory as “the land areas and territorial waters adjacent thereto under the sovereignty, suzerainty, protection or mandate of such State”. This constitutes the basis for the responsibility of States for safety oversight over their airspace within its territory. It is also confirmed in Article 6 of the Chicago Convention where it is stated that “no scheduled international air service may be operated over or into the territory of a contracting State, except with the special permission or authorization of that State, and in accordance with the terms of such permission or authorization”.

The principle of sovereignty above the airspace is not a novelty of the Chicago Convention as it was recognized already during the roman years. The Latin maxim *cujus est solum, ejus est usque ad coelum*, meaning he who owns the land owns it up to heaven, expresses under Roman law the exclusive rights of use or ownership of the landowner in usable space above his land¹¹. Accordingly some authors support that State sovereignty extends downwards *usque ad inferos* and upwards, where a State is sovereign over the airspace above its land territory and the territorial sea, *usque ad coelum*¹². The principle of complete and exclusive sovereignty above airspace was developed very quickly the years before and during the First World War for national security reasons. It was eventually recognized by Article 1 of the International Convention on Air Navigation. The codification of the sovereignty principle as a rule of customary international law was recognition of its normative power upon all States, even non-contracting parties. The rule of sovereignty is reiterated, later on, in Article 1 of the Chicago Convention, on the basis of which a lot of powers have been attributed to the sovereign States; one of the most absolute expressions being the right to shoot down an unauthorized aircraft. An additional link of the responsibility of State's with safety oversight above their airspace is also found on the provisions of the Chicago Convention regarding the nationality and registration of the aircraft (Articles 12, 17, 18, 31, 32) as well as the territorial jurisdiction (Articles 12, 25, 26).

The principle of sovereignty above the State's airspace is subject to certain limitations implied by safety considerations within the scope of the Convention. Article 3 (d) stipulates that “the contracting States undertake when issuing regulations for their State aircraft, that they will have due regard for the safety of navigation of civil aircraft”. It can be assumed in the context of this provision that the parties to the Convention recognized to give up a part of their sovereign rights by showing due regard to the safety of navigation of civil aircraft entering their airspace.

Furthermore Article 28 (a) establishes State responsibility for facilitation of international air navigation within its territory, as connected to the concept of sovereignty in the air, with the aim to ensure aviation safety. Although it imposes limits to the exercise of the State's sovereign rights, it might reasonably be regarded as attributing flexibility to the principle of sovereignty; “so far as it may find practicable”. As it has been highlighted by Huang, “the obligations undertaken by the contracting parties are subject to limitations and safeguards which will make it impossible for a State to be compelled to take action against its will”.

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It becomes obvious that legal issues arising from sovereignty are subject to the political will of the States and this is a balance that the Chicago Convention attempts to maintain in the above articles. The principle of sovereignty shall by no means though be interpreted as defying risks associated to air navigation safety but could be subject to limitations as seen above. In this respect ICAO should exercise all possible means -based on the safety mandate of Article 44- to create consistency on the regulations among States for safety oversight.

Safety oversight over conflict zones

The responsibility for safety oversight faces complications as regards the airspace above the territory of a conflict zone. Conflict zones are not rare nowadays and aircraft do fly over the airspace of these territories; to name a few Syria, Libya and Iraq. With regard to this issue ICAO is limited only to issuing recommendations. As a reaction to the Flight MH17, ICAO set up with States, regional organizations and wide-ranging industry leaders the Joint Task Force on Risks to Civil Aviation arising from Conflict Zones (TF RCZ) with the goal to initiate specific recommendations to mitigate the threat to civil aircraft flying above or near conflict zones”¹³.

The aim of this section is to analyze the responsibility of States, based on the complete and exclusive sovereignty above their airspace, and subsequently the responsibility for any potential risks to civil aviation occurring in their airspace. The obligations that the Chicago Convention imposes on States in case of a conflict zone will be analyzed under the public international law principles, in the context of the downing of a civil aircraft; the case of Malaysian Airlines Flight MH17. In particular the obligations to the prohibition of use of weapons against civil aircraft, the obligation to notify on threats to safety of civil aircraft and the right to close the airspace will be presented.

- **Article 3bis as obligation *erga omnes***

Article 3bis of the Chicago Convention -one of its major amendments -came as a condemnation from the international community of the numerous events of civil aircraft being downed with intent or by mistake; El Al, 27 July 1955; Libyan Airlines, 21 February 1973; Congo Airlines, 10 October 1998. The culmination of the tragic events came with the Korean Airlines Flight 007 on 1 September 1987 with 269 fatalities.

The prohibition of the use of weapons against civil aircraft in flight, as prescribed in Article 3bis, is one of the first and foremost obligations with regard to the safety of civil aircraft and has been very recently emphasized by the ICAO Council Resolution of 28 October 2014 condemning the downing of MH17. Although immediately after the downing it was arguable whether Article 3bis could be applied in the event of the flight MH17, this is disputable according to the recent information we have from the October 13th, 2015 Final Report entitled “Crash of Malaysia Airlines Flight MH17” of the Dutch Safety Board. The conclusion in the latter is that MH17 crashed as a result of a Russian-made Bulk surface-to-air missile; pro-Russian rebels were in charge of the eastern Ukraine area from where the missile that hit MH17 had been fired. However, even in this case the application of Article 3bis might be questionable, as it could be claimed by Ukraine that Article 89 would apply by virtue of

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States not to be affected by the Convention in war or emergency situations, without providing definitions for these situations. This paper will assume that the conflict in the territory of Ukraine falls under the scope of the latter, since the aim is to assess the underlying rationale of Article 3bis and find out its effect beyond the body of the Convention.

Pursuant to the Preamble of the 1984 Protocol amending the Chicago Convention, it is necessary to promote the safe development of international civil aviation by taking into account the “elementary considerations of humanity”; to assure the safety and the lives of persons on board. The drafting history of the Article supports the conclusion that “Article 3bis is declaratory of existing international law” with respect *inter alia* to a) the obligation of States to refrain from resorting to the use of weapons against civil aircraft in flight and b) the obligation, in case of interception, not to endanger the lives of persons on board and the safety of aircraft.

The obligation not to use weapons derives from the prohibition of use of force and the only exception allowed is justified on the right of self-defense of Article 51 of the UN Charter, which creates a very stringent obligation. In this instance, we do not have any information from which we could conclude that the right of self-defense was exercised against the Malaysian aircraft. As for the second international law obligation, it is based on the fundamental right to life which shall be protected against any use of force as “elementary considerations of humanity”. The latter has been a long standing principle and a well-known passage of “sentiments of humanity” by Judge Alvarez in the ICJ 1949 *Corfu Channel Case, (United Kingdom v Albania)*; this has been extensively invoked by many authors for the prohibition of use of force against civil aircraft. The principle is believed to contain *erga omnes* obligation with binding normative status¹⁴, starting from the *Corfu Channel Case* to the 1986 *Nicaragua* judgment (*The Republic of Nicaragua v. The United States of America*). Precursor of this principle has been the Martens Clause, which is the first demonstration of humanity of positive normative principle per se. Pursuant to Cassese “in spite of its ambiguous and its undefinable purport, [the Martens Clause] has responded to a deeply felt and widespread demand in the international community”¹⁵.

Consequently, the prohibition of Article 3bis aims at the obligation to protect the safety of civil aircraft and the human lives of the persons on board; obligations of normative nature which are binding upon all States as concerning the whole international community and, thus, are fundamental for the safe development of international civil aviation and the protection of the right to life. Responsibility for the safety of the civil aircraft and the lives of passengers is attributed to the country over the territory of which the aircraft is shot down, as the only supreme authority exercising sovereignty therein.

- **Obligation to notify on threats to safety**

After the absolute prohibition of shooting down a civil aircraft follows the obligation to share any information that might threaten the safety of international civil aviation. This obligation is not prescribed in the Chicago Convention, but in Annex 11 to the Convention which requires “coordination of potentially hazardous activities to civil aircraft” between the appropriate air traffic service and the military authorities.

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The coordination shall be effected early enough so that there will be Notice to Airmen (NOTAMs) according to Annex 15. The obligation to issue NOTAMs has the objective to “avoid hazards to civil aircraft and minimize interference with the normal operations of such aircraft”. To this end ICAO has published a manual concerning military activities potentially hazardous to civil aircraft, which provides guidance for coordination. It might be argued that this is not an obligation of States as it is contained on the standards and not on the provisions of the Convention. As it was previously mentioned, the safety considerations set out in the Preamble and article 44 of the Convention, are binding upon all states and any ICAO safety related Annexes aviation shall be regarded as fulfilling the purpose of the Convention. Therefore, the duty to notify on potentially hazardous activities to civil aircraft shall be considered as highly important for the safety of aviation irrespective of the normative status of SARPs. This duty relies on the State responsible for providing air traffic services in the airspace affected by the conflict, as the only appropriate State.

The obligation to notify is rooted in international customary law as illustrated in the *Corfu Channel Case*. The Court upheld Albania’s responsibility for the obligation to notify other ships in their territorial waters of the existence of minefield which posed imminent danger. It was stated that this obligation was based on the principle of “elementary considerations of humanity” which has been analyzed in the aforementioned. Albeit restricting State’s sovereignty, the paramount importance of safety makes the coordination on sharing information related to threat a customary law obligation of States. For an act to be attributable to a State there should be a breach of obligation and an act of the State or of its officials and organs¹⁶. According to the *Corfu Channel case* the subjective or fault-based test required that Albania must have known that there was imminent danger in its waters and neglected to act. Subjective responsibility is based on some element of fault of the State, either intent (*dolus*) or negligence (*culpa*). If this test applies, then in the MH17 case Ukraine might claim that it did not have any information for potential threat to the Malaysian aircraft in order to warn to avoid the danger. In the *Caire Claim judgment (French-Mexican Claims Commission in 1929)* the objective test was applied, pursuant to which the State is responsible for the acts of its officials and organs even if in the absence of any fault of its own¹⁷. Accordingly, Ukraine could be held responsible for the act of its air traffic controllers to lead the aircraft over the airspace of potentially hazardous military activities taking place, irrespective of the information Ukraine had for these activities and any fault thereof.

The importance of this obligation has also been recently invoked by International Air Transport Association (IATA) and ICAO in a Joint Statement by requesting dissemination and coordination of information¹⁸. To this end in April 2015, ICAO announced that it has launched a centralized repository issuing warnings about risks to aircraft in conflict zones as recommended directly by the member States. According to the press release “this centralized repository is meant to enhance the existing global framework whereby each State is responsible for assessing risks to civil aviation in their airspace, and for making that information promptly available to other States and airlines.

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It is astonishing that before the tragic event some airlines and States had information to avoid the airspace of Ukraine and it brings us to the question if these accidents in the future might be prevented by making the obligation to inform binding upon States through the provisions of the Convention. This issue, even though politically delicate, shall not impede the guarantee of safety above conflict zones, which is a matter of concern of the international community.

- **Right to close airspace**

As mentioned above each State has sovereignty over the airspace over its territory and it opens its airspace to operators from another state upon prior mutual agreements. In December 1918 the drafters of the “International Convention in Regard to Aerial Navigation” suggested the introduction of provisions empowering a State to “restrict or prohibit the navigation of foreign aircraft for reasons of security or others”¹⁹. On 11 September 2011, the United States decided to close their airspace after two civilian aircrafts hit the twin towers of the World Trade Centre. Nearly 3000 people died in these attacks. No aircrafts could fly to, or take off from any airport in the USA for an unprecedented 96 hours for national security reasons. Also, after the Icelandic volcanic eruption of 2010, several European States decide to close their airspace for safety reasons, while Iceland decided to temporarily suspend all flights to and from its biggest international airport, Keflavik airport, because a plume of ash and smoke rendered visibility in the sky too low. Nowadays skies over trouble spots, such as Libya and Syria, are avoided by airlines in an ad hoc basis; North-Korea is the truly no-go area for any airline in the world.

Under certain circumstances the contracting States to the Chicago Convention have the emergency power²⁰ to designate areas that are restricted or prohibited for flying. Article 9 of the Chicago Convention provides that “[e]ach contracting State may, for reasons of military necessity or public safety, restrict or prohibit uniformly the aircraft of other States from flying over certain areas of its territory” and “[s]uch prohibited areas shall be of reasonable extent and location so as not to interfere unnecessarily with air navigation”. It adds that information associated with such prohibitive areas shall be disseminated to the contracting States and to ICAO. Annex 15 to the Chicago Convention gives the definition of prohibited, restricted and danger areas:

“An airspace of defined dimensions, above the land areas of territorial waters of a States, within which the flight of aircraft is prohibited”;

“An airspace of defined dimensions, above the land above the land areas of territorial waters of a States, within which the flight of aircraft is restricted in accordance with certain specified conditions”;

“An airspace of defined dimensions within which activities dangerous to the flight of aircraft may exist at specified times”.

Article 9 dates back to the Paris Convention of 1919 which in Article 3 contained provisions related to military necessity or public safety. Both Articles reflect the principle of sovereignty of States above their territory and the priority given to safeguard their own interests.

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Any decision of the ICAO contracting States to establish or change boundaries of any of these areas shall be included in NOTAM as a significant notice to the airmen of other States. This was required initially by the ICAO Council in 1951 at the 13th Session. It was also recently recommended in the ICAO State Letter, AN 13/4.2-14/59, 24 July 2014, in the aftermath of the MH17 tragic event. It is evident from the provisions of the Convention that only the country affected can close the airspace.

In practice, States embroiled in an armed conflict rarely close their airspace. In the MH17 tragic event Ukraine had decided to close its airspace through NOTAM issued by UkSATSE and covering an area of the eastern part of Ukraine but only up to 32,000 feet, which did not guarantee the safety of civil aircraft above its airspace, as the accident occurred at 33,000 feet. It follows from this event that the right of State to close the above conflict zone does not fulfil the responsibility for safety oversight pursuant to the purpose of Chicago Convention, and, thus only a mandatory obligation can ensure the safety of international civil aviation. As the Dutch Safety Board Report on MH17 emphasized it is important that State's responsibility for closing parts of its airspace above an armed conflict zone shall be formulated in a clearer and less non-committal manner. At this point the political sensitivity of States with regard to the restriction of their sovereign rights might not be easy to overcome in pursuit of more stringent obligations for safety oversight. However, in pursuit of safeguarding aviation safety it is necessary that it is clear either in the Chicago Convention or in SARPs what are the cases that the airspace shall be closed and what are the consequences of potential violation with regard to State responsibility.

Conclusions

Upon the drafting the Chicago Convention the Contracting States had realized the importance of safety considerations for international civil aviation and inserted them in the provisions thereof. To this end they authorized in to act on behalf of them in order to ensure safety through the regulatory development of SARPs. The lack of their binding effect, due to the acknowledged sovereignty of States, has not enabled ICAO to enforce SARPs and achieve the uniform application of safety standards worldwide. An assertion of enforcement powers has been attempted through the Safety Oversight Audit Program, which cannot be exercised without the consent of States in respect of the principle of sovereignty.

This principle -the basis for the responsibility of States to exercise safety oversight over their airspace- creates an imbalanced relationship between the organization and the member States and leaves room for threats to safety of civil aviation due to the interdependence of all the factors. Safety oversight becomes more complicated in the event of conflict zones, over the disputed airspace of which aircraft accidents might occur. The tragic event of MH17 reflects the inability of States to exercise their responsibilities for safety oversight and the violation of *erga omnes* obligations arising from existing public international law.

The purpose of this article was not to apportion blame to any specific actors in case of such events, but to demonstrate the responsibilities of States related thereto so as to ensure flying of civil aircraft in safe airspace. The principle barriers to safeguarding this concern, in particular over conflict zones, are the political sensitivities

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of States in giving up some of their sovereign rights on behalf of ICAO. In this respect the Convention has made some slight attempts to ascertain flexibility of States. However, the new challenges we are faced with call for more dynamic approaches even if that would be in violation with the absolute application of sovereign rights. The prohibition of Article 3bis shall be reinforced by making obligatory the notification on threats to safety and the right to close the airspace over conflict zones. The progress of civil aviation and the emerging challenges cannot be solved by traditional principles of public international law. Those can only provide us with guidance as to the steps we should take in protecting the interests of international community. The sooner States realize that safety should be the ultimate goal of any political considerations, the more accidents we will be prevented in similar situations in the future.

¹IICAO 2014 Safety Report, at 8, Available at http://www.icao.int/safety/documents/icao_2014%20safety%20report_final_02042014_web.pdf The definition of aircraft accident is provided under International Standards and Recommended Practices, Annex 13 to the Chicago Convention: "Aircraft Accident and Incident Investigation", 10th Edition, July 2010, at Chapter I: Definitions.

²B.F. Havel & G.S. Sanchez, *The Principles and Practice of International Aviation Law* (2014) Cambridge University Press, at 11.

³R. Abeyratne, *Convention on International Civil Aviation: A Commentary* (2013) E-book, Springer Science and Business Media, at 24; J. Huang, Aviation "Safety, ICAO and Obligations Erga Omnes", (2009) 8 No. 1 Chinese Journal of International Law, at 63.

⁴M. Milde, *International Air Law and ICAO* (2008) Eleven International Publishing, at 159: "ultra posse nemo tenetur".

⁵T. Buerghental, *Law Making In The International Civil Aviation Organization* (1969) Syracuse University Press, at 78.

⁶I.H.P. Diederiks-Verschoor, *An Introduction to Air Law*, (2006) Kluwer Law International, Revisited by Prof. Dr. P. Mendes de Leon, at 15; Resolution A36-13, *Supra* Note 12.

⁷A. Kotaite, "Sovereignty under great pressure to accommodate the great need for global cooperation" (1995) 50:10, *ICAO Journal* 21, in J. Huang, *Ibid*, at 60.

⁸O. Onidi, "A Critical Perspective on ICAO" (2008) *Air and Space Law*, 33:1, at 43.

⁹ICAO Doc 9734, AN/959, *Safety Oversight Manual, Part A, The Establishment and Management of a State's Safety Oversight System, Chapter 2*, at 9.

¹⁰M. Milde, "Enforcement of Aviation Safety Standards" (1996) *German Journal of Air and Space Law (ZLW)* 45, at 9.

¹¹P.P.C. Haanappel, *The Law and Policy of Air Space and Outer Space* (2003), Kluwer Law International, at 1; J.C. Cooper, "Roman Law and the Maxim Cujus est solum", (1968) in selected essays edited by I.A. Vlasic, McGill University Press; Professor Haanappel questions in his book the inception of the notion of sovereignty already in Roman times, when there was assertion of private rights only above airspace while public law aspects of sovereignty appeared in the 18th century.

¹²F. Lyall and P.B. Larsen, *Space Law: A Treatise* (2013) Ashgate, at 153.

¹³Joint Statement by ICAO Secretary General Raymond Benjamin, Directors General of IATA Tony Tyler, ACI Angela Gittens and CANSO Jeff Poole "Civil Aviation and Conflict Zones" (2014), *ICAO Journal*, vol. 69:3, at 3,5

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¹⁴ G. Fitzmaurice, “The law and procedure of the International Court of Justice: General Principles and Substantive Law”, (1950) *British Yearbook of International Law* 27, at 4; M. Akehurst, “Equity and General Principles of Law”, (1976) *International and Comparative Law Quarterly*, 25, at 806.

¹⁵ A. Cassese, “The Martens Clause: Half a Loaf or simply Pie in the Sky?” (2000) *European Journal of International Law* 11, at 188-189; In M. Zagor, “Elementary considerations of humanity”, ANU College of Law, at 13.

¹⁶ *Yearbook of the International Law Commission* (2001) United Nations, Vol. II:2, *Responsibility of States for Internationally Wrongful Acts, Article 2; Factory at Chorzow Jurisdiction, 1927, PCIJ, Series A, No. 9.*

¹⁷ T. Hillier, *Sourcebook on Public International Law* (1998) Cavendish Publishing, at 338.

¹⁸ IATA & ICAO & ACI & CANSO, *Joint Statement on Risks to Civil Aviation Arising from Conflict Zones*, 29 July 2014: “safe channels for essential threat information to be made available to civil aviation authorities and industry”; The Joint Task Force will look into the way to improve NOTAMs by a better dissemination of conflict risk zone information; “Safety regarding conflict zones cannot be ensured only by the recommendations and ICAO SARPs, but the support of States is required” in the message of Olu-mujiwa Benard Aliu, ICAO Council President, “Civil Aviation and Conflict Zones” (2014), *ICAO Journal*, vol. 69:3, at 3.

¹⁹ *Report of the Civil Air Transport Committee, Appendix A, International Convention in Regard to Aerial Navigation, Chapter III (1&2).*

²⁰ A. Kean, *Essays in Air Law* (1982) Brill, at 56.

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Explaining The Rise Of The European Union Space Policy: A Theoretical Introduction

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Abstract

Much of the European space policy (ESP) literature is atheoretical which means that important questions, such as where did the ESP come from, how and why, remain unanswered. The present article makes the first step in identifying a suitable theory. It examines four grand theories of European integration (classical and liberal inter-governmentalism, neo-functionalism and historical institutionalism) making a case for historical institutionalism. I argue that the concepts of path dependence, institutional autonomy, critical junctures and unanticipated consequences are very useful for explaining the rise of the European Union space policy.

Keywords: *European Space Policy, European Union, Historical Institutionalism, Space*

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**The views expressed here are strictly personal.

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Introduction: The Puzzle

Since the Treaty on the Functioning of the European Union (Lisbon Treaty) came into force in 2009 Europe has officially its own outer space policy. Its biggest and best-known programme is Galileo, a global navigation satellite system (GNSS)¹. After some initial difficulties Galileo is now under way and a third of the total number of satellites (27 plus 3 reserve) is already in orbit. Full operational capacity is planned for 2020². It is the first infrastructure owned by the EU, a symbol of European unity and power.

Unlike ordinary public policies, which are developed by a single authority, the European Space Policy (ESP) unfolds in three levels: the national, the international and the supranational. In other words, competences are shared among national governments agencies and industries, the European Space Agency (ESA) and the European Union (EU).

Intergovernmental cooperation on space matters is easily justified. Space-related activities tend to be complex, expensive and risky. No European country can go completely on its own. As long as this cooperation remains at the intergovernmental level European governments can safeguard the sovereignty of their country. Cooperation through ESA allows that. The principles of *juste retour*, unanimity, and participation flexibility leave national sovereignty largely intact.

The entry of the EU in space affairs, however, breaks away from the tradition of intergovernmental cooperation. The ESP falls under the EU's ordinary legislative procedure, which means that the European Parliament (EP), representing the European citizens, decides together with the Council of EU Ministers, representing the governments of the EU member-states. If there is disagreement between the Council and the EP, the latter prevails. In addition, the Council decisions are based on qualified majority voting, which means that a member state can be outvoted. Strictly speaking, therefore, national sovereignty can be compromised.

Given the growing importance of outer space in terms of national security and economy, the supranationalisation of space policy is intriguing. The present article is a first step towards finding an explanation to this puzzle. In particular, it aims to lay the foundations for understanding the development of the ESP by looking at it through the prism of the main European integration theories. The article concludes that Historical Institutionalism (HI) offers possibly the best analytical tools for explaining the EU's growing role in outer space.

Theory and Space

Theory is a Greek word. Its literal meaning is seeing, but in its fullness the concept of theory goes beyond the sense of vision. Theory refers to viewing and understanding. It offers the means not only for acknowledging, but also for interpreting reality. Without a theory the world is nothing but a collection of random events. Conversely, we can understand and make sense of the world only if we have a theory.

In the social scientific context theories are necessary, to understand, explain and predict the social world (Hollis 1994). The emergence of the ESP and, in particular the role of the EU in this respect, is a social phenomenon in need of meaningful interpretation. Space plays an important role for national security, and it is remarkable

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that Europe's nation-states decided to proceed in pooling their national sovereignty in this policy area. How can this move be explained?

Whereas other EU policies have received at least some theoretical attention or treatment, the ESP has not received any. Much, if not all, the literature dealing with the ESP remains largely atheoretical. While unfortunate, it is not surprising. First of all, outer space is primarily the research area of engineers and astrophysicists. Consequently, the largest part of the literature dealing with outer space has research priorities that are more or less indifferent to policy related questions, which is usually the field of social scientists. Secondly, the ESP is a relatively new policy area. Compared to well-established EU policies, such as the common agricultural policy or the common market, the ESP is a newcomer. Thirdly, outer space is not as popular or attractive as it used to be, although this may be slowly changing. Limited social attractiveness or relevance often results in limited academic interest.

Therefore, as far as the policy dimension of Europe's space endeavours is concerned, the literature is not only limited, but also revolving around a relatively small circle of practitioners and policy-makers. The few publications dealing with the origins or the development of European collaboration on space focus primarily on historical details, rather than on the broader theoretical framework explaining the ESP (cf. Suzuki 2003, Sheehan 2007, Krige 2014, Hörber 2016)³. Initiatives such as the recently published book on the ESP (Hörber and Stephenson 2016) are welcome, but there is still some distance to cover.

Developing a theory explaining the developmental path of the EU space policy and then subjecting it to empirical tests is a long and arduous process. The present article makes a small yet necessary step in this direction⁴. The first step of the theory-building process involves the screening of the already existing theories, to determine which one could possibly help explain the emergent supranationalisation of the ESP. Since the grand theories of European integration aim to explain the expansion of EU's competences, it is only natural to narrow the theory quest there. The main European integration theories are outlined below.

The Main European Integration Theories

By the term 'grand' theories of European integration I mean the fully-fledged theories that have the ambition to explain how European integration proceeds. Over the years a number of other EU-related theories have been proposed by scholars, which despite their merits, do not fully explain what drives the deepening of European integration. Such theories are, for instance, social constructivism or multi-level governance (Diez and Wiener 2004). These theories tend to highlight the weaknesses of the grand theories, but they do not counter-propose an alternative holistic explanation of European integration. Because of this, I will not be dealing with them here⁵.

The grand integration theories can be roughly divided in two, more or less, opposing camps: those that emphasise the role of the nation-states in controlling the European unification process, and those that insist that there are other more influential actors or processes at play beyond the control of the national governments. Intergovernmentalism and liberal intergovernmentalism (LI) belong to the former camp, whereas neo-functionalism and historical institutionalism (HI) to the latter. The four are not the only grand integration theories, but they are the main theories still in use. Nowadays classical intergovernmentalism and neo-functionalism are not as popular as LI and HI,

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but they are their predecessors, which is why I briefly deal with them as well.

Intergovernmentalism, as expressed in the work of Hoffman (1966) or Milward (1992), places the nation-state at the heart of the integration dynamics. For Hoffman (1966) it is the national interests, as defined by the leadership of national politicians, the domestic contingencies, and the wider historical context, that drive the European integration process (Bieling 2006). Similarly, for Milward (1992) Europe's integration allowed the nation-states to reinvent themselves after the end of the devastating Second World War and to start anew.

For intergovernmentalists the survival and prosperity of the nation-state is the end and the EU is the means. European integration deepens as long as it serves the national interests of its member-states. Hence, if the EU acquired treaty competences on outer space it is only because such a move served the national interest of the member-states. But is this really the case? The UK and the Netherlands were sceptical about the Galileo programme, which does not sit well with the notion that the national interests of all the member-states converged on a common European space policy⁶.

Like classical intergovernmentalism, the liberal variant of Andrew Moravcsik (1993, 1998), gives precedence to the national governments as the drivers of the integration process. Unlike the classical account, however, the member-states' position is not determined by a monolithic national interest. The reality of electoral politics in liberal democracies compels the government to take into account the demands of the electorate and of the more organised interest groups (Moravcsik 1993). Simultaneously to the domestic level preference formation, negotiations take place at the European level. This strengthens the domestic bargaining position of the government relative to the opposition, because the government has access to EU information the opposition has not. 'National leaders undermine potential opposition by reaching bargains in Brussels first and presenting domestic groups with an "up or down" choice [...] Greater domestic agenda-setting powers in the hands of national political leaders increases the ability of governments to reach agreements by strengthening the ability of governments to gain domestic ratification for compromises or tactical issue linkages' (Moravcsik 1993: 515). Thus, European integration is a two-level (domestic and European) game, an iterative process that strengthens rather than weakens the national governments. According to LI, the EU is not a state-in-the-making, but 'the world's most successful system of market regulation, without aspirations ever to be the United States of Europe' (Moravcsik quoted in Steinhilber 2006: 186).

Liberal intergovernmentalism is a significant integration theory with explanatory potential. The reason is obvious. It is hard to believe that Galileo, Copernicus, and in general the partial supranationalisation of space policy could have taken place against the wishes of the EU member-states. Trade-offs and package deals in EU decision-making, as LI stipulates, may indeed explain why all member-states agreed on a common space policy, although the benefits deriving from it are unevenly distributed between them.

This sounds like a plausible explanation, but we cannot be sure without systematic empirical evidence. More importantly, LI cannot explain well why the EU acquired formal competences on space at this particular moment of history and not earlier or later. Similarly, LI does not appear to have a convincing answer why space was included in the Lisbon Treaty in the first place. Galileo and Copernicus were conceived

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long before the signature of the Lisbon Treaty and treaty competences were not necessary for their progress⁷.

Liberal intergovernmentalism has been praised as transparent, lucid or parsimonious, but it has also been criticised as ahistorical or simplistic (Steinhilber 2006). The theory tends to focus on the historical decisions (i.e. the signing of EU treaties), which are dominated by the national governments. However, this only offers a snapshot of the European integration process. In between the historical moments non-state actors and processes continue to operate and their potential influence is wilfully ignored or underestimated.

In contrast, neo-functionalism, developed first and foremost by Ernst Haas (2004), emphasises the role of the supranational institutions and the incremental and self-sustaining nature of European integration⁸. Neo-functionalism maintains that European unification expands to ever-new policy areas, because of a 'spillover' effect. That is, supranational cooperation in one policy area puts pressure for cooperation in kin policy areas. Consequently, once initiated European integration becomes an unstoppable process culminating in the creation of a supranational state.

As interest groups realise that the new centre of power is in Brussels rather than in the national capitals, they start shifting their attention, efforts and eventually loyalty toward the EU. The supranational institutions have an important role to play in this process. Given that a stronger EU with more competences implies upgraded and more powerful supranational institutions, they have a lot to gain from maintaining and advancing the integration momentum.

Like liberal intergovernmentalism, neo-functionalism attracted a lot of attention both favourable and unfavourable. The scholarly community remains divided on the validity of the theory, despite the fact that it reached its heyday in the 1950s and 1960s. Nevertheless, even if it is not as fashionable as it used to be, neo-functionalism continues to inspire new research (e.g. Andersson 2015) and offers useful insights for the explanation of the rise of the ESP.

One such insight is that the creation of the ESP may have been the result of a functional spillover. Prior to the Lisbon Treaty, the EU dealt with space in the context of transport and research. As these policies were developing, it is possible (but not confirmed) that the importance of space for the EU's research and transport programmes was growing as well. Similarly, outer space may have been growing in importance for other policy areas and the EU member-states may have been persuaded by the Commission that it makes sense to give the EU treaty competences on space. Alternatively, the socialisation of national and European bureaucrats in Brussels may have given rise to a common transnational or supranational identity that made the political decision to supranationalise space easier.

Without empirical data confirming or disproving these tentative explanations, it is impossible to pass a judgement on the usefulness of neo-functionalism in relation to the ESP. The socialisation explanation is probably the least convincing. Evidence about the impact of European integration in the emergence of a common European identity is mixed (cf. Green 2007, Fligstein 2008, Sigalas 2010). Similarly, existing evidence on the supranational socialisation of EU *fonctionnaires* in Brussels is inconclusive (Laffan 2004). EU officials are indeed more likely to profess a European identity (Wodak 2004), but this is not due to socialisation in the EU institutions (Hooghe 2005).

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The explanation suggesting that space grew in importance for the flourishing of the other EU policy areas, and that the supranational institutions did all in their power to convince the member-states to act upon this, is more convincing, although it is conditional on empirical verification. Existing evidence suggest that one of the lesser studied supranational institutions, the European Parliament, has always been in favour of a European space policy (Sigalas 2016), and that it did all it could to influence the EU's space activities (Sigalas 2012). Thus far, however, we know little about the role of the other major supranational institution, the European Commission, and even less about the dynamics that enabled space to be included in the Lisbon Treaty. What we do know, though, is that the ESP was not born *ex nihilo*. In other words, ESP has a history that precedes the Lisbon Treaty. Historical institutionalism, as its name implies, is a theory that takes explicitly into account the historical dimension of European integration. Because of this, HI merits comparatively more attention than the other integration theories.

Historical Institutionalism as an Analytical Tool

Historical institutionalism is neither new, nor EU-specific. HI became popular again in political science in the 1980s (Sanders 2006), and was adapted, primarily by Pierson (1998) and Pollack (1998), to explain European integration in the 1990s.

Historical institutionalism is one of the three neo-institutionalist theories, the other two being rational choice and sociological institutionalism. All three are concerned with institutions, their processes and their consequences, but their focus differs. Rational choice institutionalism assumes actors' rationality, relies on cost-benefit analyses and tends to be formal and quantitative (Sanders 2006). Sociological institutionalism looks at the inter-relationship between harder institutions (organisations) and softer institutions (norms, values, identities), and gives precedence to social context and culture over rationality and utility (Hall and Taylor 1996). Historical institutionalism combines elements from both rational choice and sociological institutionalism, but it introduces also some novel concepts of its own⁹.

Perhaps the best definition of HI is given by Pierson (1998: 29) himself: It is '*historical* because it recognizes that political development must be understood as a process that unfolds over time. It is *institutionalist* because it stresses that many of the contemporary implications of these temporary processes are embedded in institutions -whether these be formal rules, policy structures, or norms'¹⁰. HI 'is interested in how ideas, interests, and positions generate preferences, and how (and why) they evolve over time' (Sanders 2006: 43), but it is also interested in the 'construction, maintenance and adaptation of institutions' (ibid., p. 42).

What makes HI so useful for the study of the EU space policy is, that this 'approach lends itself much better to the study of incremental growth around an original path than to sudden, drastic change' (Sanders 2006: 41). If it is possible to trace the developmental path of the ESP in the past, then it is easier to have an idea of where the ESP is heading. In other words, HI is useful not only for understanding the EU's role in space affairs so far, but also for assessing if the EU will play an even more important role in the years ahead. Pierson (1998) offered a detailed account of how historical institutionalism can explain European integration. Therefore, I confine myself here to a summary of his main points.

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First of all, the relationship between national governments and EU's supranational institutions is that between principal and agents. According to HI, the European Commission, the European Parliament (EP) and the European Court of Justice (ECJ) are the agents. They were founded to serve the tasks allocated to them by the principals, the governments of the EU member-states. The principals designed the EU treaties thus, to circumscribe the powers and competences of the agents. In practice, however, the supranational agents have more autonomy than what the official rules suggest. Compared to the supranational institutions, national governments have more limited time-horizons, their preferences are more susceptible to change and they have to struggle to follow EU policy developments closely. As a result, the principals cannot and do not control their agents fully. To tighten their grip on the supranational institutions the national governments would have to change the existing EU treaties, which is a difficult and lengthy process. The autonomy of the Commission, the EP and the ECJ is not completely accidental. On the one hand, the EU member-states designed them this way, in order to ensure flexibility and impartiality. On the other, the EU institutions are bound to strive for more autonomy. Like individuals, institutions fight for self-preservation. It is in their interest to use every opportunity to enhance their own powers. If successful their autonomy will grow over time. By analogy, the EU's supranational institutions will use their expertise and resources to promote European integration, which subsequently will enhance their own usefulness and importance further. In short, the Commission, the EP and the ECJ will take advantage of any opportunity to expand the EU's competences in new policy areas, HI maintains.

Secondly, the concepts of path dependence, critical juncture and unintended consequences are essential to HI. According to Caporaso (1998: 350), '[i]f a process is path-dependent, its present behavior is heavily constrained by the past'. That is, policy choices that were made in the past restrict the range of available choices for the future. Furthermore, '[p]ath-dependent processes are strongly biased in one direction' (ibid.), which means that what has been done cannot be undone (or at least it is very difficult). For example, once the Galileo programme was set in motion it was difficult to stop it, even after the public-private partnership (PPP) collapsed. Doing so would have resulted in a huge waste of already invested resources. However, path-dependence does not necessarily imply a linear or continuous developmental process. Historical institutionalism maintains that exogenous shocks can and do occur. As a result, a policy or an institution can find itself at a 'critical juncture'. Depending on the turn taken, the final outcome can be very different.

Finally, the notion of unanticipated consequences explains why governments made certain choices in the past that they normally would not have made. Choices that eventually led to the enhanced autonomy of the EU's supranational institutions, or to the expansion of the EU's competences in new policy areas. It is because of the increased complexity of an EU growing in depth and breadth, and because of information asymmetry, that the national governments cannot foresee all the consequences of their actions (Morisse-Schilbach 2006). Thus, HI argues, European integration advances and the supranational institution grow in importance without the member-states being in full control of either process.

The Potential of HI to Explain the EU Space Policy

As noted in the introduction, a detailed empirical proof of historical institutionalism is beyond the scope of the present article. Nevertheless, it is useful to highlight the existing, albeit preliminary, evidence, which indicates that HI has the potential to explain the rise of EU's space policy.

Path-dependence development: Galileo and Copernicus are EU programmes, which means that there is an EU space policy already, even if it is not called by its name yet. The term 'European Space Policy' made its first official appearance in 2007 in the Lisbon Treaty, but the policy's roots go decades back. Thanks to Suzuki (2003) and Krige (2014) we know that the build-up of European cooperation on space has been incremental. Furthermore, we know that the EU's supranational institutions, especially the EP, were campaigning for a European space policy as early as 1979, if not even earlier (Sigalas 2016). Thus, the ESP did not come out of nowhere, but developed gradually. In the early days the EU played only a small role through the funding of space research. Gradually the transport and industrial policies, where the EU had treaty powers, served as the stepping-stone for the EU's space initiatives, including for the Galileo programme. As already mentioned, once the decision to launch Galileo was taken, it was too late to go back. Thus, as historical institutionalism suggests, the EU member-states did not create the ESP because they suddenly realised that it was in their benefit. Granting the EU formally with treaty powers on space was one more step in a long developmental process that had made such an outcome likely.

Autonomy of supranational institutions: Köpping-Athanasopoulos (2016), Marta and Stephenson (2016), Forganni (2016) and Sigalas (2016) look at how space has been framed in the official discourse by the Council, the Commission, the ECJ and the EP, respectively, but we still know relatively little how autonomously the supranational institutions acted. Sigalas (2012) and Sigalas (2016) demonstrate that the EP has always been supportive of an ESP and that it tried to persuade the member-states to take action accordingly. Of course, the EP cannot create an EU policy on its own, but we now know that there is at least one supranational institution that has been pushing for more EU competences on space since 1979. The forthcoming edited volume by Hörber and Sigalas will hopefully enrich our knowledge about the role of the other EU institutions.

Critical junctures: There are at least two critical junctures that played a decisive role in the development of the ESP. Firstly the Kosovo war of 1999, and secondly the collapse of Galileo's public-private partnership in 2007. The first critical juncture is the one that gave a huge push to the cause of an independent European GNSS. As is well known, the American military authorities blocked the civilian GPS signal during their operations in former Yugoslavia, having a significant impact on aviation functions in the wider area. This is the moment when the European leaders were convinced that GNSS is too important to be left at the exclusive discretion of the American military authorities. Galileo might have happened even if the war and its consequences did not take place, but almost certainly it would have taken much more time. The second critical juncture was the make-or-break moment of Galileo and consequently of the ESP as a whole. The collapse of the public-private partnership placed the EU member-states in front of an inescapable dilemma: either abandon it completely and lose the money they already invested, or make a big step forward and

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fund Galileo solely from the EU purse. Proving historical institutionalism right, they went for the latter option making Galileo an EU owned product.

Unanticipated consequences: Both the Kosovo war and the public-private partnership demise had grave consequences that were largely unanticipated by the European governments. Both incidents were more or less impossible to predict. However, the former was the result of largely uncontrollable developments, whereas the latter could have been avoided. Had the European ministers scrutinised the potential implications of their actions more carefully, they might have realised that the PPP was not workable. Furthermore, it seems that the ministers did not have a contingency plan for the case of PPP falling apart. As a result, the only viable option was to supranationalise Galileo, which certainly was not part of their original planning. Hence, historical institutionalism's central premise that the national principals are not in full control of the European cooperation outcome, because of limited insight into the future and the unintended consequences of their choices, appears to hold in the case of space policy.

Conclusion

Space endeavours are very expensive and risky. In addition, there is a security dimension that makes international cooperation difficult and precarious. Nevertheless, the Lisbon Treaty allows for a European Space Policy where the EU has an active role to play. Unlike ESA, the EU is a supranational organisation, which means that there is no guarantee that national sovereignty on space matters will always be respected. This marks an important step forward for European space cooperation, but it also begs the questions how and why sovereign states let this happen. Different theories have a different answer to offer. In this article I looked at four of the more important European integration theories trying to determine which one is more promising in terms of explaining the emergence and development of the ESP.

Liberal intergovernmentalism and its predecessor classical intergovernmentalism emphasise the role of the national governments as gatekeepers of European integration. Whereas liberal and classical intergovernmentalism differ on the definition of national interest, both agree that states commit to more integration when it is in their interest. This sounds like a credible answer, but it is more of a truism rather than a satisfactory explanation. Intergovernmentalism fails to answer why ESP was adopted at this particular point in history. Even if the case can be made that different national interests happened to converge around the time the Lisbon Treaty was negotiated, it the backbone of ESP, Galileo, precedes Lisbon. In other words, the emergence of the ESP is the result of historical development, and neo-functionalism and historical institutionalism are better equipped to explain change over time.

Neo-functionalism and historical institutionalism emphasise the autonomy of the EU's supranational institution at the expense of the supposed omnipotence of the national governments. Both theories highlight that European integration is a process where past decisions influence future outcomes. If neo-functionalism's notion of functional spillover is correct, then ESP emerged because space became increasingly important to other, pre-existing EU policies. However, evidence supporting this claim has yet to surface. On the contrary, there is some, albeit still incomplete, evidence that historical institutionalism can offer a more convincing explanation.

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The gradual involvement of the EU in space affairs and programmes, the longstanding campaigning of the European Parliament for an ESP, and two unpredictable events acting as catalysts for the ESP (the Kosovo war of 1999 and the collapse of the PPP in 2007), seem to prove historical institutionalism right. The concepts of path dependence, supranational autonomy, critical junctures and unanticipated consequences are crucial for understanding the rise of the EU's space policy.

Clearly, more work is needed to complete the match between HI's theoretical propositions and empirical evidence. Hopefully future research will finish what I started here. Should historical institutionalism prove the right choice to explain the common space policy, one HI proposition in particular should be noted. European integration is difficult to do, but equally difficult to undo. While no one can argue that the ESP is unstoppable, the chances are that the EU's role in space will grow instead of diminish. This is something for both policy-makers and academics to take into account.

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¹See <http://ec.europa.eu/growth/sectors/space/galileo/>

²http://ec.europa.eu/growth/tools-databases/newsroom/cf/itemdetail.cfm?item_id=8194&lang=en&tpa_id=0&title=EU-successfully-launches-two-Galileo-satellites

³Even though Suzuki (2003) draws on an elaborate theoretical framework, his chapter on the EU's role in space is confined to a historical presentation.

⁴The forthcoming collective volume edited by Hörber and Sigalas will hopefully undertake some of the remaining steps.

⁵The interested reader may wish to consult Diez and Wiener (2004).

⁶Personal interview with Jack Metthey (Director General for Research and Innovation of the European Commission).

⁷Personal interview with Peter Van Nes (Adviser for Evaluation and Scientific Integrity, Joint Research Centre, European Commission).

⁸The work of Haas (2004) was originally published in 1958.

⁹There is a rational choice and sociological strand also within historical institutionalism. For a detailed description of HI see Hall and Taylor (1996).

¹⁰Emphasis in the original.

RECENT DEVELOPMENTS IN AVIATION
JURISPRUDENCE IN GERMANY

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Compensation for bringing forward flight time- Strengthening of Passengers' Rights under (EU)**No. 261/2004** - Judgment of the German Federal High Court of Justice dated 09/06/15 (X ZR 59/14)

In a consent decree delivered by the German *Bundesgerichtshof* (Federal Court of Justice, "BGH"), in the case Möller ./. TUIfly GmbH judgement of the X. Senate in Civil Law; X ZR 59/14, 9th June 2015 the Claimants were awarded compensation pursuant to EC No. 261/2004 for a flight which was advanced nine hours ahead of the scheduled departure. The courts below dismissed the claim. The Claimants appealed to the BGH. Whilst the Defendants prevented a landmark decision by acknowledging the compensation claimed, the BGH issued a press release¹ putting forth its opinion which it had made clear at the hearing. In the judicial proceeding the BGH stated that the advancement of a flight for "more than an insignificant time" has to be treated as the cancellation of the scheduled flight under EC No. 261/2005, combined with the offer of the conclusion of a new contract of carriage . This may entitle to a compensation under Art. 7 EC No. 261/2004. According to the BGH the defining fact for a cancellation is the definitive relinquishment of the original schedule, even if the passengers are rebooked on a different flight. In this regard the BGH relied on two rulings of the Court of Justice of the European Union ("ECJ") in the Sturgeon/Condor case (ECJ - C-402/07) and the Sousa Rodriguez/ Air France (ECJ C - 83/10)) which draw a line between "cancellation" and "significant delay". The original schedule is relinquished if the flight is brought forward by several hours.

The recent BGH judgment puts an end to the confusion surrounding compensation rights when scheduled flights are brought forward and previous rulings on regulation EU 261/2004. In the underlying case the Claimant claimed compensation for a return flight from Düsseldorf to Fuerteventura. The return flight was scheduled for November 5th 2012 at 17.25 hours. On November 2nd the Defendant informed the Claimant that the flight was brought forward to 8.30 hours, i.e. some 9 hours.

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The lower courts had dismissed the claim

The Lower District Court of Hannover and the second instance, the District Court of Hannover, dismissed the claim on the grounds that advancing the flight time did not amount to a cancellation or a delay potentially triggering a compensation right. The first instance court, the District Court of Hannover, argued that there was no gap in legislation allowing an analogy, because the wording of the EC No. 261/2004 made it clear that the legislator did not see a need to extend passengers' rights beyond events of denied boarding and of cancellation or long delay of flights. Further, the advancement of a flight would produce a different effect: whereas the delay and the cancellation have to be seen as time delays in terms of lateness thus allowing an analogy to cancellation bringing forward a flight has to be seen as "earliness" which did not allow such analogy.

In its straight forward press release the BGH made clear that it aims at strengthening passenger rights. In the past the BGH always ruled in favor of the passengers when considerable delays were involved and when such delays gave rise to legal claims in the light of controversial interpretations of the EU regulation. In the wake of Möller ./. TUIfly GmbH passengers will henceforth be in a better position when facing disputes arising from delays or the bringing forward of scheduled flights. It can be expected that in the future more passengers will make claims if a scheduled flight is brought forward. Carriers will now be well advised to bear in mind that the practice of consolidating two under booked flights by cancelling one flight, and rebooking passengers on to other flights might trigger a large number of compensation claims.

No compensation for industrial action losses down the line

Under German law a business directly targeted by industrial action is entitled to damages from the union if the industrial action is unlawful.

For the first time the Federal Employment Court (25.08.2015, 1 AZR 754/13) came to decide on claims brought by companies which were only indirectly affected by industrial actions. The union concerned in both instances was the *Gewerkschaft der Flugsicherung e.V* (GDF), the air navigation services union, a so called "Spartengewerkschaft" or niche union representing a smaller group of specialised professionals.

Two appeals were made by several airline companies (amongst them Lufthansa, Air Berlin and TUIfly) in relation to losses suffered to the tune of some € 3.2 million due to industrial action in the shape of a supporting strike by apron security staff against air traffic control at Stuttgart Airport in 2009. The air traffic control was managed by the *Deutsche Flugsicherungs GmbH* (DFS). The second set of claims concerned a nationwide call for industrial action on all airports 2011 including Frankfurt. In injunctive proceedings before the Frankfurt labour court the strike was held illegal for violating industrial peace. In the end the union and Frankfurt airport settled the trade dispute.

The claimants pursued the GDF union claiming damages in tort on the basis that the industrial actions were unethical ("*sittenwidrig*") and constituted an illegal disruption of their proprietary business right ("*eingerichteter und ausgeübter Gewerbebetrieb*")

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to operate and to commercially exploit the airlines which included the use of the airport and the runways. The courts below dismissed the claims but granted leave to appeal.

The Federal Court dismissed the appeals on the grounds that the claims required that the claimants' operations were the targets of the industrial actions which they were not. The target in the supporting action in Stuttgart was the DFS GmbH and not the airlines. Further, even if the legality of the industrial action were uncertain did it not constitute a violation of third parties' rights whose losses were a mere reflection of industrial action against a different - the targeted - business. Moreover were runways not for the claimants' exclusive business use but available for the common use of all lines. In the second appeal the court held that the obligation to keep industrial peace did bind the parties to the collective bargaining agreements but did not extend to include third parties such as the claimants. The airline companies would have to absorb their losses as so called socially acceptable risks (*sozialadäquates Risiko*): it is inevitable that third parties down the line are affected by industrial action. Only in the most disproportionate actions and obvious violations of the law might third parties hope to be awarded damages but these conditions were far from fulfilled in the appeals.

The decision is of substantial significance in particular for the transport industry heavily relying on an undisrupted logistics network. The domino effect of industrial action on businesses gathers much more momentum in a globalized setting. Nevertheless, the court's decision is correct on the law although clearly the industry is dissatisfied. Industrial action can become the bane of business operations but allowing claims by third parties would sound the death knell to tariff autonomy and the principle of freedom of unionization which is a constitutional right and is here to stay. It remains to be seen if the new German *Tarifeinheitsgesetz* or collective bargaining consolidation act attempting at curbing the leverage of niche unions is of any help.

Do not stray from bargaining agreement

The Lufthansa pilots' strike declared illegal by injunctive relief by Hessian district employment court

The Hessian district employment court in Frankfurt ruled the pilot union's (Cockpit) strike in September 2015 illegal allowing an application by Lufthansa for injunctive relief (Court Folio 9 SaGa 1082/15). So far this ruling is the most recent in a string of applications and appeals in relation to a total of 12 rounds of industrial actions involving Lufthansa since April 2014 causing a reported loss of approx. € 300 million. The Lufthansa management and the pilots union (Cockpit) have been fighting over a number of issues including the out-sourcing of personnel to so-called budget or low-cost airlines and the retirement benefits package for Lufthansa pilots.

Cockpit started their recent strike action September 8th, 2015. Lufthansa applied to the first instance Frankfurt employment court to have the strike action declared illegal. The court dismissed the application where upon Lufthansa appealed to the district employment court.

The strike affected middle and short distance flights. Some 1000 flights out of a total of 1520 were affected with approx. 140.000 passengers grounded.

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The Frankfurt district employment court reversed the decision below allowed the carrier's appeal and granted an injunction ruling that with the strike action in September the union had pursued an objective which was outside the collective bargaining agreement, namely the carrier's business strategy of implementing of short-haul and long-haul low-coast services which are opposed by Cockpit. The court held that the restructuring of a company was a business objective which lay outside of the collective bargaining agreement and could not be contested by the unions; therefore the strike action was illegal. Industrial action was limited to objectives covered by the tariff agreement (*Tarifvertrag*). The issue of setting up low-budget carriers was no such objective. At the time the union considered a further appeal but eventually decided to accept the ruling.

The ruling of the Frankfurt court is significant. Traditionally courts are reluctant to interfere with workers' rights and strike actions which are considered a high valued and constitutionally protected right. This applies in particular in the event of an injunctive relief. A union's decision to take industrial action requires their member's ballot (*Streikbeschluss*). Here the court did not just consider the ballot which was formally in line with the tariff agreement but also looked at the surrounding circumstances including pronouncements by the pilots union to their members and Lufthansa as the opposite number in the collective bargaining negotiations. The court drew the overall conclusion that the overriding objective of the strike was not the pilot's retirement package but the restructuring of the company.

This decision gave the carrier a welcomed relief but it does not protect against further strike actions on the retirement package. It appears that there are still difficult times ahead for Lufthansa in their struggle against low cost or heavily subsidized overseas carriers.

¹Press release by the BGH Nr. 89/2015 dated June 9, 2015

THE NEW ITALIAN REGULATION ON UAV: IN FORCE FROM SEPTEMBER 2015

Irene Otero Fernández*

As mentioned in previous issues¹, the Italian Civil Aviation Authority (ENAC) has been working on an update of its Regulation on drones under 150 kg, which was much-awaited due to their dramatic increase in use in Italy since 2013, when the first edition was published. The product of the lessons learned from the practical application of the Regulation in the previous year, and of the demands put forward by the industry and operators, the draft second edition was published last March on the website of ENAC and submitted to a consultation process. However, it was not until the 16th of July that a final version was agreed on and published.

The second edition of the ENAC Regulation on Remotely Piloted Aerial Vehicles comes into force on the 14th of September this year, 60 days after the date of publication². As in the previous edition and the draft second edition, it makes a distinction between two types of UAV: above and below 25 kg of take-off weight. Along with this weight-based classification, the Regulation classifies drone operations according to their criticality. This is linked to the difference between the operational conditions VLOS (visual line of sight) or BLOS (beyond line of sight), i.e. the pilot's capacity to visually track the drone.

The specific rules on UAVs of less than 25 kg of take-off mass introduce a new obligation for operators: from the 1st of July 2016, every unmanned aircraft in Italy will have to display an electronic identificative device that allows the transmission and recording of data related to the operation in real time. Furthermore, the vehicle and its ground station must both have a license plate that identifies the system and its operator. Non-critical operations must be assessed by the operator as regards the vehicle's airworthiness, the planned activity and the relative risks. A declaration of compliance must then be submitted to ENAC. The critical nature of operations depends on the location: flying over urban or congested areas, buildings or important infrastructure would be considered critical. In this case, a specific authorisation must be obtained from ENAC beforehand, which is granted only after satisfactory assessment of the drone's airworthiness, the pilot's reliability, the type of operation and the location. Critical operations with UAVs under 25 kg over urban areas are now allowed under several conditions: the vehicle needs to have an acceptable level of safety, i.e. a command and control system whose software complies with the EUROCAE ED-12 standards (reliability level D, at least); the aircraft must also be equipped with a system that ensures that control is maintained if the data link is lost, or at least that the effects of the loss are minimized, and it must also have an independently-controlled flight termination system. Flying over groups of people remains prohibited in any case.

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It is noteworthy that special provisions on RPAS lighter than 2 kg have been adopted. The Regulation states that operations with RPAS whose maximum take-off mass is less than or equal to 2 kg are always considered non-critical, provided that the RPAS' design characteristics are of an inoffensive nature, as assessed by ENAC.

As for UAVs with a maximum take-off weight of 25 kg or more, they must also display a license plate that identifies the system, operator and relevant ground station. Vehicles of this type must be registered with ENAC, who carries out an airworthiness assessment test. Drone manufacturers may request a certificate of airworthiness for any given standard model of UAV directly to ENAC. Otherwise, UAVs may only be operated with an *ad hoc* flying permit. In any case, ENAC authorization is always required, regardless of the criticality of the operation, and the operator must set up a proper maintenance programme in order to ensure on-going airworthiness.

There is still a third category: model aircrafts which are regulated separately. They are defined as a remotely piloted device used solely for recreational and sport purposes, which is under constant visual control by the operator, without the help of any instruments. This category is subject to a more lenient framework, and does not include any declarations or authorisation. The technical requirements for model aircraft in order to avoid applying to ENAC for temporary reserved airspace are: maximum take-off weight of less than 25 kg, maximum wing surface of 500 dm², maximum wing loading of 250 g/dm², maximum piston engine size of 250 cm³, maximum electric engine power of 15 kW, maximum turbine engine thrust of 25 kg (250 N), maximum turboprop engine power of 15 kW. Other requirements include that operations take place in non-populated areas far from buildings and infrastructure, within a maximum radius of 200m, and within a height of 70m. Assessing compliance with these requirements is the operator's responsibility. If they are not met, model aircraft operations can only take place in a dedicated space selected by ENAC, or after a temporary reserved airspace is instituted.

A very important amendment has been made with regard to permits for pilots: in order to operate RPAS under 25 kg in VLOS conditions a 'Remote Pilot Certificate' (*'Attestato di Pilota remoto'* - Article 21) will be required, while a 'Remote Pilot License' (*'Licenza di Pilota remoto'* - Article 22) will be compulsory for operating heavier RPAS and BLOS operations. New aeronautical titles have thus been introduced into the Italian system, specifically for UAV pilots. The new Certificate will be issued by a series of authorized centres after passing an exam, while the exam for the License may only be taken with ENAC. A training period is envisaged in both cases.

Finally, all drones must come with a flight manual or equivalent, and all research and development activities must be authorized by ENAC. Operators must keep detailed records of their flights and submit them to ENAC every year. The Regulation also provides for mandatory third-party insurance for any kind of drone operation, in compliance with the EU Regulation 785/2004, and subordinates the processing of personal data collected through UAV to the provisions of the Italian Data Protection Code.

¹See "The New Italian Regulation on UAV" in The Aviation & Space Journal Year XIV no 2 April-June. (<http://www.aviationspacejournal.com/wp-content/uploads/2015/09/The-Aviation-Space-Journal-Year-XIV-no-2-April-June-2015.pdf>)

²Regolamento ENAC "Mezzi aerei a pilotaggio remoto" (ENAC Regulation "Remotely Piloted Aerial Vehicles"), 2nd edition, published on July 16th 2015, accessible in Italian at: https://www.enac.gov.it/repository/ContentManagement/information/N122671512/Reg_APR_Ed%202_2.pdf

EU PASSENGER NAME RECORD: DRAFT PROPOSAL
APPROVED IN PARLIAMENTAnna Masutti*
Irene Otero Fernández**

On the 15th July 2015, the draft EU Directive on the diffusion and protection of the Passenger Name Record (PNR) data of people flying to or from the EU, and its use by Member States and Europol to fight terrorism and serious transnational crime, was approved by the Civil Liberties Committee (LIBE) at the European Parliament.

PNR data is information provided by passengers and collected by air carriers during reservation and check-in procedures. PNR data can be used by law enforcement authorities to fight serious crime and terrorism, thus involving the processing of personal data.

The agreed draft allows indeed the collection of personal data of flight passengers entering or leaving the EU. According to the European Commission proposal, up to 60 different categories of PNR data should be collected, including contact information, travel routes, computer IP-addresses, hotel bookings, credit card information and diet preferences. The EU PNR rules set out in the draft Directive would not only apply to air carriers, but also to non-carriers such as travel agencies and tour operators, with respect to international flights, while intra-EU flights would not be covered.

The overall purpose of the proposed directive is to set up a coherent EU-wide system on flight passenger data. As a result, all air carriers flying on routes covered by the new rules would need to provide PNR data to Member States' law enforcement authorities, which would only be allowed to use the data for the prevention, detection, investigation and prosecution of terrorist offences and serious transnational crime. The advantages of a single EU PNR net over a patchwork of national systems are clear, and constitute the argument that has been put forward in favour of the EU PNR. However, the PNR Directive would require more systematic collection, use and retention of data and would thus have an impact on passengers' rights to privacy and data protection. This is why some have expressed their concern that the EU PNR could jeopardise those fundamental rights.

The proposal for a "*Directive on the use of Passenger name Record data for the prevention, detection, investigation and prosecution of terrorist offences and serious crime*"¹ was first presented by the European Commission in February 2011.

In 2012, the Council of Ministers agreed on a general approach on the draft², according to which the scope of the Directive could be extended in order to include select EU internal flights, at the discretion of each Member State.

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However, the draft proposal was rejected by the LIBE Committee in 2013, due to concerns related to its necessity and proportionality. As time went by and the legislative procedure remained suspended, the Council and several Member States repeatedly called on the Parliament to resume negotiations. In the meantime, an increasing number of Member States established national PNR systems. Other stakeholders, such as the International Air Transport Association (IATA) and the Association of European Airlines (AEA), also urged the Parliament to rapidly reach an agreement. As they noted in September 2014, airlines were confronted with PNR data requests from Member States' authorities and from more than 15 non-EU countries. In the absence of EU-wide rules, airlines had to deal with different national systems, which represented a burden for them, and also had a negative impact on passengers, since data protection standards vary according to the laws of each Member State³.

The ordinary legislative procedure was eventually revived after the terrorist attacks of early 2015 in Paris and Copenhagen, when the EU PNR data collection system started to rank high on the political agenda as a measure to prevent and combat terrorism. Before resuming negotiations, the Parliament adopted a resolution in its plenary of February 2015 calling on the Council to make progress on the Data Protection package in order to guarantee a solid background that could act as a safeguard of passengers' rights to privacy and data protection. Moreover, following debate in Parliament and at the request of members of LIBE, the Commission produced a letter explaining its position on the implications of the Data Retention Directive annulment for the EU PNR proposal^{4,5}.

Finally, the draft Directive has been approved by LIBE, but only after numerous safeguards were added. Overall, MEPs wanted to ensure that the proposal complied with the proportionality principle, was limited in scope and included strict data protection safeguards. In this regard, a key issue of concern has been the retention period of the data. The current version of the proposal provides that PNR data are retained for an initial period of 30 days, after which all data elements which could serve to identify a passenger would have to be "masked out"; the data would be accessible only to staff with special training and clearance for up to four years in cases involving serious transnational crime, and five years for terrorism cases. The entire programme would also be reassessed after four years.

Regarding the scope of the Directive, PNR data may be processed "only for the purposes of prevention, detection, investigation and prosecution of terrorist offences and certain types of serious transnational crime". The list approved by LIBE includes trafficking in human beings, sexual exploitation of children, drug trafficking, trafficking in weapons, munitions and explosives, money laundering and cybercrime, inter alia.

Other safeguards inserted include the following requirements: national PIUs (Passenger Information Units) would be entitled to process PNR data only for limited purposes, such as identifying passengers who may be involved in a terrorist offence or serious transnational crime and who require further examination; PIUs would have to appoint a data protection officer; all processing of PNR data would have to be logged or documented; passengers would have to be clearly and precisely informed about the collection of PNR data and their rights, and stricter conditions would govern any transfer of data to third countries. Data protection provisions prohibiting the use of sensitive data or the transfer of PNR data to private parties were also backed by MEPs. Moreover, provisions requiring Member States to share PNR data with each oth-

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er and with Europol and stipulating conditions for doing so were added. Finally, according to the Parliament, as opposed to the Council general approach, the PNR rules should not apply to intra-EU flights.

As for the next steps in the legislative procedure, this latest vote gives the Parliamentarian rapporteur a mandate to start negotiations with the Council in order to reach an agreement on a final version of the Directive. The trialogue talks between Parliament, Council and Commission negotiators are expected to bear fruits by the end of 2015.

Nonetheless, some issues remain to be sorted out. For instance, trialogue talks could bring back PNR collection for intra-European flights. Furthermore, the necessity of the new scheme has been questioned by the European Data Protection Supervisor, who expressed uneasiness regarding the idea of mass surveillance and that targeting specific categories of flights, passengers and countries may be more effective. He is set to give a formal opinion on the law in September 2015.

¹ European Commission, *Proposal for a Directive of the European Parliament and of the Council on the use of Passenger Name Record data for the prevention, detection, investigation and prosecution of terrorist offences and serious crime*, 2nd February 2011, accessible at: [http://www.europarl.europa.eu/RegData/docs_autres_institutions/commission_europeenne/com7201170032/COM_COM\(2011\)0032_EN.pdf](http://www.europarl.europa.eu/RegData/docs_autres_institutions/commission_europeenne/com7201170032/COM_COM(2011)0032_EN.pdf)

² Council of the European Union, Interinstitutional File: 2011/0023 (COD), *Proposal for a Directive of the Council and the European Parliament on the use of Passenger Name Record data for the prevention, detection, investigation and prosecution of terrorist offences and serious crime*, 23th April 2012, accessible at: <http://register.consilium.europa.eu/doc/srv?l=EN&f=ST%208916%202012%20INIT>

³ *Letter from IATA and AEA to the European Commission, September 2014*, accessible at: https://netzpolitik.org/wp-upload/2014-09_AEA_IATA_Joint_letter_on_EU_PNR.pdf

⁴ A judgment by the Court of Justice of the EU - commonly known as “Digital Rights Ireland” - ruled blanket data retention for law enforcement purposes to be an illegal violation of privacy and fundamental rights. See *Judgment of the Court (Grand Chamber) of 8 April 2014 (requests for a preliminary ruling from the High Court of Ireland (Ireland) and the Verfassungsgerichtshof (Austria)) - Digital Rights Ireland Ltd (C-293/12) v Minister for Communications, Marine and Natural Resources, Minister for Justice, Equality and Law Reform, The Commissioner of the Garda Síochána, Ireland and the Attorney General, and Kärntner Landesregierung, Michael Seitlinger, Christof Tschohl and Others (C-594/12)*, accessible at: http://curia.europa.eu/juris/document/document.jsf?jsessionid=9ea7d2dc30ddd5cc964796e84949a731f19bc83a6ffd_e34KaxiLc3qMb40Rch0SaxuQchz0?text=&docid=153045&pageIndex=0&doclang=EN&mode=req&dir=&occ=first&part=1&cid=1412703

⁵ *The letter from the European Commission is accessible at:* <http://statewatch.org/news/2015/mar/eu-com-eu-pnr-letter.pdf>

EU DATA PROTECTION WATCHDOG DELIVERS
OPINION ON DRONESAnna Masutti*
Irene Otero Fernández**

Drones - also known as UAS or RPAS - are under the focus of the European legislator these days. The quick development of this technology for civil uses has raised concerns regarding the necessity of reviewing, or even creating, the regulations that would govern the safety, security, liability, insurance and privacy aspects of drone operations. One of the latest developments in this regard has been an important report on privacy and data protection issues related to RPAS, published in June 2015. Indeed, the “Article 29 Working Party” has delivered its much awaited Opinion 01/2015 on the topic¹.

The Article 29 Working Party (also “Working Party” or “WP29”) consists of a representative from the data protection authority of each EU Member State, along with a representative from the European Data Protection Supervisor and another from the European Commission. This body was set up under Directive 95/46/EC, the Data Protection Directive. It has advisory status and acts independently.

The Working Party’s Opinion under analysis regards the use of drones in the aviation market for civil purposes. It responds to a request from the Commission in May 2014, through which the Working Party was invited to issue recommendations on how privacy and data protection issues could be addressed at both national and European levels in order to contain the risks related to RPAS. It must be noted that, in the view of the WP29, those guidelines should apply to data processing arising from the use of any aerial vehicles for civil operations, regardless of whether they are manned or unmanned, spatial or aeronautical.

On the whole, WP29 considers UAS to be a potential threat to data protection and privacy rights, stating that drones have a “unique vantage point that magnifies the effectiveness of any on-board sensors and implies a reduced transparency and increased privacy intrusion compared to a similar fixed sensor”. Reference is made in the Opinion to the so called “chilling” and “panopticon” effects arising from a large-scale use of drones, which can result in an increased feeling of being under surveillance and a subsequent decrease in the legitimate exercise of civil liberties and rights. It is then rightfully noted that the effective application of data protection law in this area may contribute to the acceptance of drones by society, and thus the further development of the industry.

Several privacy risks are identified in the Opinion in relation to the processing of data carried out by the equipment on-board a drone; these risks range from a lack of transparency of processing due to the difficulty of being able to spot drones from the

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ground, to a difficulty to know which data processing equipment is on-board, for what purposes personal data are being collected and by whom. The Working Party sees even higher risks when the processing of personal data by means of drones is carried out for law enforcement purposes.

Whilst it acknowledges that there is no specific legislation on the data protection implications of the use of drones in Member States, WP29 states that the relevant legal framework in this area consists of the Data Protection Directive 95/46/EC and a patchwork of other laws, such as the e-Privacy Directive 2002/58/EC as amended by Directive 2009/136/EC, and national legal provisions applicable to CCTV systems.

The Opinion fully supports the legal requirement, as specified in the Data Protection Directive, that personal data must only be collected for specified, explicit and legitimate purposes and not further processed in a way incompatible with those purposes, unless there is an autonomous legal basis for the additional purpose. Moreover, personal data can only be processed if it is adequate, relevant and not excessive in relation to the purpose for which it is collected. The Working Party confirms that the necessity and proportionality of the processing must be strictly assessed.

As for the exemptions provided for in the Data Protection Directive - i.e. household exemption, processing for journalistic purposes and for law enforcement purposes, WP29 follows the case law of the European Court of Justice. It considers that the household exemption should be narrowly construed, i.e. it does not apply to personal data that have been published on the internet and are accessible to an indefinite number of people². Where Member States provide exemptions or derogations from provisions of the Data Protection Directive relating to data processing for journalistic purposes, the Working Party recommends that the duties and responsibilities of journalists are clearly identified and advises that a code of conduct is adopted.

Moreover, the Opinion emphasises the importance of the limitations on the use of drones for law enforcement purposes: there must be a valid legal base, which must be necessary and appropriate to achieve a specific purpose; a prior evaluation by the Data Protection Authority may be applicable; the principles of proportionality, data minimisation and transparency must be complied with, and a strict retention period of data should be set. The Working Party highlights the need for a regime that includes an approval mechanism in the law enforcement hierarchy. It is also reminded that data can only be processed for the purposes laid down in legislation and should not be used for indiscriminate surveillance, bulk data processing, data pooling, profiling, or automated enforcement of decisions. Courts should be able to review the use of drones for intelligence and law enforcement purposes.

After that assessment of the legal framework, the Opinion contains a series of recommendations to the different stakeholders involved in the operation of civil drones. In this regard, the importance of clearly identifying the role of each party (i.e. data controller or processor) for each type of operation is highlighted.

First of all, operators should check the following before using a RPAS: the need for a specific authorisation from civil aviation authorities (CAAs); the most suitable legal basis for legitimate processing; compliance with the purpose limitation, data minimisation and proportionality principles, along with the transparency principle.

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Similarly, during and after drone operations, it is necessary to adopt all the suitable security measures and to delete or anonymise any personal data which are not strictly necessary for the purpose of the processing. The Opinion recommends that operators avoid the collection of unnecessary personal data, inform people that they are processing their personal data using a "multi-channel approach", make the drone and operators visible and identifiable, and avoid flying over or near private areas and buildings.

Moreover, it is advised that manufacturers and operators embed privacy friendly design choices and privacy friendly defaults, as part of a privacy by design approach, and involve a data protection officer. The introduction of data protection impact assessments is also encouraged. Furthermore, the adoption of codes of conduct is claimed to help the industry stakeholders and operators to prevent infringements and to enhance the social acceptability of drones. In this regard, in order to raise awareness among users, a specific recommendation is proposed to manufacturers to provide sufficient information within the packaging with respect to the potential intrusiveness of this technology and, where possible, of maps that clearly identify where its use is allowed.

The Opinion then specifically urges policy makers to introduce data protection aspects among the key features of national provisions regulating the commercial use of drones, e.g. in connection with pilot qualification and training, among airworthiness and certification requirements, while issuing or revoking operating licenses and aerial work permits. It also calls for a strict cooperation between data protection authorities and CAAs, involvement of relevant stakeholders in the debate, the introduction of an obligation for manufacturers to market small drones jointly packaged with sufficient information, and the promotion of data protection certifications in order to improve operators' awareness and understanding of data protection issues as well as with a view to monitoring compliance.

Finally, specific recommendations for the use of personal data collected by means of drones for law enforcement purposes are also set out. In particular, law enforcement data processing carried out by means of drones should, as a rule, not allow for constant tracking and technical and sensing equipment used must be in line with the purpose of the processing.

The Working Party's Opinion 01/2015 is not the only report on the topic of civil drones and privacy in the EU that has been recently published. In June 2015, a specialized Parliamentary research group delivered "Privacy and Data Protection Implications of the Civil Use of Drones³." Produced at the request of the Committee on Civil Liberties, Justice and Home Affairs at the EU Parliament (LIBE), it looks into the EU policy on drones and the potential impacts on citizens' right to privacy and data protection, as well as on security and safety. The report concludes that a number of important pre-conditions still need to be dealt with in order to ensure that drones do not pose serious risks for citizens' fundamental rights to privacy and data protection, to security and to safety.

MISCELLANEOUS MATERIAL OF INTEREST

¹ Article 29 Working Party, Opinion 01/2015 on Privacy and Data Protection Issues relating to the Utilisation of Drones, adopted on 16th June 2015, accessible at: http://ec.europa.eu/justice/data-protection/article-29/documentation/opinion-recommendation/files/2015/wp231_en.pdf

² See cases C-212/13, *František Ryněš v Úřad pro ochranu osobních údajů*, 11th December 2014, accessible at: <http://curia.europa.eu/juris/document/document.jsf?text=&docid=160561&pageIndex=0&doclang=EN&mode=req&dir=&occ=first&part=1&cid=440706>
C-101/01, *Bodil Lindqvist*, 3rd November 2003; accessible at: <http://curia.europa.eu/juris/document/document.jsf?docid=48382&doclang=en>

³ Policy Department C: Citizens' Rights and Constitutional Affairs, *Privacy and Data Protection Implications of the Civil Use of Drones*, June 2015, accessible at: [http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/519221/IPOL_IDA\(2015\)519221_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/519221/IPOL_IDA(2015)519221_EN.pdf)

AIR TRANSPORT SECTOR: NEW CORE PRINCIPLES ON CONSUMER PROTECTION ADOPTED BY ICAO

Isabella Colucci

Last June 2015 during its 205th session, the International Civil Aviation Organization (ICAO) Council adopted global core principles on air transport consumer protection in order to foster harmonization in air transport regulation worldwide.

These principles refer to three phases of a customer's experience: before, during and after travel.

Before traveling, the ICAO core principles recommend that passengers should benefit from sufficient levels of prior information and customer guidance, given the wide variety of air transport products in the market and associated legal and other protection which may apply. Product and price transparency is also suggested as a basic customer right.

During travel, the ICAO core principles call for passengers to be provided with regular updates on any special circumstances or service disruptions which may arise, as well as due attention in the event of a service disruption. This could include rerouting, refund, care, and/or compensation. The core principles also call on airlines and other stakeholders to have planning in place for situations of massive disruption characterized by multiple flight cancellations, and reiterate the fundamental right to fair access for persons with disabilities. In particular the latter, without derogating from aviation safety, must have access to air transport in a non-discriminatory manner and to appropriate assistance.

After travelling, the ICAO core principles recommended that efficient complaint handling procedures be established and that they be clearly communicated to customers.

This marks an important step for air transport consumer protection as from now on the ICAO core principles will be taken into consideration by the 191 ICAO Member States and implemented when they develop or review their national regimes.

FORTHCOMING EVENTS

hosted by University of Bologna - Italy

The Fifth Sesar Innovation Days

The SESAR Innovation Days are the main vehicle through which SESAR disseminates the results of its long-term and innovative research programme (WP-E) and have become a landmark event in the European research calendar. Presently WP-E comprises 26 research projects, 3 research networks and 20 PhD studies and overall has funded more than 75 organisations. With the transition to SESAR 2020 and its Exploratory Research programme Europe will continue to benefit from similar arrangements, building on the success of the present research programme, and attracting new researchers and scientific disciplines to ATM. The SESAR Innovation Days (SIDs) support this by disseminating results of SESAR research projects and inviting research from the broader community via an open call for contributions, thus providing an ideal forum for networking.

The 5th edition of the SESAR Innovation Days will be hosted by Università di Bologna, Italy from 1st - 3rd December 2015. Unlike other scientific events in ATM research, the SESAR Innovation Days focus explicitly on long-term and innovative research. Three SESAR Research Networks have been established to date: ComplexWorld - Mastering Complex Systems Safely; HALA! - Higher Automation Levels in ATM and ALIAS - Addressing Liability Impact of Automated Systems and these are involved in the organisation of the SIDs. The SESAR Innovation Days will include technical paper sessions, keynote presentations, contributions from the WP-E Research Networks together with an exhibits and posters. In particular we seek contributions from the wider ATM research community through this open call.

Call for Contributions

Researchers from research institutions, universities, airlines, air traffic service providers and industry are invited to submit papers (limited to 8 pages) presenting the results of their long-term or innovative research within the areas of interest listed below. Papers will be evaluated based on the innovative nature of the ideas, as well as the approach and methods applied. Areas of interest include:

- ATM system architecture and system design
- Human factors and decision support tools
- Safety and security in a highly automated environment
- Paving the way to full automation

FOR COMING EVENTS

- ATM system architecture and system design
- Human factors and decision support tools
- Safety and security in a highly automated environment
- Paving the way to full automation
- Designing resilient ATM systems
- Uncertainty, applied modelling and optimization techniques
- CNS technical enablers
- Complexity, data science and information management
- Application of economics to facilitate a paradigm shift in ATM
- Enabling change, including legal and regulatory aspects and the ATM innovation process
- Innovative approaches in meteorology
- Remotely-piloted aerial systems

For all enquiries please contact sesarinnovationdays@sesarju.eu

FORTHCOMING EVENTS THE EUROPEAN AVIATION CLUB Brussels 8th December 2015

Drones: who is in the cockpit?

Integration of Drones at the International level

Dr. Ludwig Weber, Senior Civil Aviation Policy and Management Adviser, Project Coordinator, International Civil Aviation Organization - ICAO;

Ms. Jacqueline Foster MEP, Conservative MEP- North West England, Deputy Leader of the Conservatives in the European Parliament, Conservative Spokesman - Transport & Tourism;

Mr. Mike Lissone, RPAS ATM Integration Programme Manager, Eurocontrol and Secretary General of JARUS - Joint Authorities for Rulemaking on Unmanned Systems

JARUS combines experts from the National Aviation Authorities and regional aviation safety organisations. Its purpose is to recommend a single set of technical, safety and operational requirements for the certification and safe integration of Unmanned Aircraft Systems into airspace and at aerodromes;

Mr. Allan Storm, International Staff - Aerospace Capabilities, Defence Investment Division, NATO Headquarters, Brussels;

How can we, how should we regulate Drones?

Mr. Stefan Ronig, RPAS, Balloons & Airships Section Manager, EASA;

Ms. Maria Dipasquantonio, Senior International Program Manager, FAA Air Traffic International Organization.

Dealing with Drones at the European level

Mr. Filip Cornelis, Head of Unit, Aviation Safety, DG Move, European Commission
Filip will speak about what is in the works at the EU level. The proposal for a general, high level drone safety framework should be tabled by the time of the conference;

Mr. Francis Schubert, Chief Corporate Officer, Skyguide - Swiss Air Navigation Services Ltd.

FOR COMING EVENTS

View of the manufactures. Drones headed for commercial use

Ms. Mildred Trögeler, Director Technical & Regulatory Affairs, Boeing;

Mr. Patrick Rudloff, Head of EU and NATO Affairs, Airbus;

Mr. Luc Lallouete, Director of SESAR Program, Thales.

Apart from the immediate safety risk, mid-air collision with aircrafts, harm to people and damage to property and critical infrastructure, there are other public interests concerned such as privacy and security of citizens, data protection etc.

Mr. Alan Meneghetti, Locke Lord LLP;

Prof. Anna Masutti, LS LexJus Sinacta, Professor of Air Law at the University of Bologna;

Ms. Catherine Erkelens, Bird & Bird;

Ms. Ulla Norrhall, Claims Lawyer Aviation, Munich Re.

Belgian, UK and Spanish national regulations

Mr. David Kendrick, Head Airline Licensing & Consumer Issues, UK Civil Aviation Authority;

Mr. Enrique Navarro, Clyde & Co;

Ms. Sarah Moens, Crowell & Moring.

Venue: Hotel Bristol Stephanie, Avenue Louise 91-93, 1050 Brussels

Date: 8th December 2015

Time: 09.30 Start of the Conference

The full programme will be available shortly on: www.europeanaviationclub.com