

**Policing Aviation
Keeping the Peace
Intelligence-Fed Security!**

ABSTRACT

This article discusses the development of Intelligence-Led Policing as applied to the ‘policing’ of transport systems. It explores the adaption of ILP, particularly when justified as a mechanism to keep air travelers secure by minimizing the risk of terrorism. The focus is on lessons learnt from aviation, the systems and processes, that have been argued to minimize the reoccurrence of such events: ‘*Intelligence-Fed-Security*.’ The scope covers the United Kingdom and the European Union, with wider discussions given to the implications of the United States approaches, particularly after 9/11. Various governance structures are considered so as to provide contextualization. The methodology is predominately by way of a historical-socio-legal approach.

Finding are: that intelligence gathering via the transmission of aviation passenger data, runs the risk of returning to past inefficient practices that breach human rights, and, at the same time, are not viewed as an effective mechanism to keep the peace and prevent terrorist attacks.

Key Words: *Passenger Names; Aviation; Intelligence-Led-Policing; Intelligence/Information-Fed-Security*

1. Introduction

In today’s modern society, there is a requirement for transport to be both safe and secure.

Ultimately, part of this requires policing and regulating; and, increasingly, given the security challenges of late, this requires the sharing of information based upon a concept of -

Intelligence-Led Policing (ILP). Invariably, there are lessons to be learnt from past experiences; and, predominance, in this research, is given to aviation and the implementation of systems and processes, which have been argued to support the gathering of intelligence, so as to minimize the reoccurrence of such events – particularly terrorist attacks.

The construction and presentation of this research is by way of a circular journey, wherein, it commences by exploring the need to adapt policing methods and, specifically the

development and arguably, extension of ILP in a security (transport) related context. Hence, the methodology and approach of this research is predominately by way of a historical-socio-legal approach.

Contextualization is given as to the challenges of policing the movement of persons, and transport modes (users and infrastructure systems) with early deliberations relating to the United Kingdom (UK) before consideration is given to the wider scope of the European Union (EU). Discussion is then provided as to the legacy and implications of the United States (U.S.) stance with particular focus being given to the post 9/11 requirements. The impact of certain processes and systems is considered alongside various governance structures (such as the EU and international ‘*willingness*’). This serves to provide insight of issues and difficulties – not least in respect to competences and human rights that have been and continue to be encountered in relation to security measures and the sharing of data.

1.1. *What do you mean?* – Definitions and Interpretations

Policing is a term that is not isolated to ‘*the police.*’ Reiner (2010) identifies that ‘policing’ is an expression that implies a set of processes within society that address specific social functions, whereas, the police are a specific social institution. Even in the latter sense, the definition of *the police* has now been expanded from what was initially interpreted as a ‘State’ (public) entity by many, to institutions and organizations that perform the function of being *the police* and hence policing specific areas. These areas still may include the wider society, but also extend to isolated and confined areas within a social entity or social or private locality – for example, parks, a university campus, nuclear locations, etc. In many instances these police groups are now privately owned and controlled (Bayley and Shearing, 1996). However, one of the primary aims of the police worldwide is to keep the peace,

alongside maintaining safety. Whilst one of the most important abilities within society is the means and method to ‘*move*’ or to ‘*transport*’ from one location to another – sometimes over extensive distances and sometimes within smaller *bordered* areas, such as a city, which is policed by a geographically defined police entity. Normally, this will include the jurisdiction of a *police service* or *police force* (depending upon terminology) which is public by nature (and hence publicly (national *State*) funded) viewed as the more familiar (county or state) force, but, depending upon the country, this may also include a local entity (for towns in particular – i.e. local police) or even national (federal) police organizations.¹ However, increasingly, across the globe, there is a need for specialist police, or divisions and private policing entities to supplement such regional, national or local police forces within the respective transport systems and transport modes that facilitate our lives, aiding our very existence (Fox, 2017). Increasingly transport has been targeted by those that would seek to disrupt society and compromise the peaceful movement of persons.

Taking London, England, for example, The Metropolitan Police Service (MPS or the Met²) ‘police’ the Greater London area, (excluding the City of London, which has a separate police service – the City of London Police³) and its 8.6 million permanent residents plus a very transient population of visitors and workers. In relatively recent years both the Met (and the City of London Police - working closely together) have implemented a system or a group of police officers dedicated to keeping people safe on the local transport network – this is known as the Safer Transport Team (STT). Their remit is to, ‘*patrol on buses, at bus stations*

¹ In this paper it is accepted that various models of policing exist across the globe in terms of the police and their organisation and structure. However, this is contextualised by providing a UK perspective (England and Wales in the main) to show application – where relevant and prudent to include.

² For further information on the Met. see: <https://www.met.police.uk>

³ The City of London police, police Policing what is defined as one ‘Square Mile’ which is said to ‘*bring with it particular challenges, quite unlike any other policing area within the UK.*’

For further information on the City of London Police see:
<https://www.cityoflondon.police.uk/Pages/default.aspx>

and other transport interchanges, and on London's roads.... [to] tackle local issues like bicycle theft or antisocial behaviour, respond to road traffic incidents and make sure traffic is moving safely' (MPS website⁴).

Whilst the STT approach is an example of a very isolated initiative in the UK, it nevertheless shows both the vulnerability that exists on transport systems and the imperative need to keep society moving. As the United Nations (UN) Secretary-General Ban Ki-moon acknowledged, “[t]ransport is vital for everyone.”⁵ Transport is an enabler of economic, social, and cultural survival (Fox, 2017) but it is constantly challenged in terms of both safety and security incidents and events and arguably it is advocated that this recognized fact has been a driver of police interaction and organized initiatives, such as the SST approach. SST clearly recognizes that there must be coordination across police forces and jurisdictions, which in this instance includes the Home Office Forces (the Met and the City of London Police) plus the private police service – the British Transport Police (BTP).⁶ This approach consists of working together, supporting each other and sharing information, which includes data and other intelligence – a form of what is recognized as *intelligence-led policing* (ILP), by the police, but also extending to other agencies such as Transport for London⁷. Part of the ability to collect intelligence and support the safety and security of transport systems and users, also today relies increasingly on surveillance technology (Fox, 2018⁸). The streets of London

⁴ Safer Transport Teams - information at: <https://www.met.police.uk/a/your-area/safer-transport-teams2/>

⁵ Press Release, United Nations, New UN Group Seeks Solutions for Harnessing Rising Investments in Transport While Reducing Harmful Pollutants for Sustainable Future (Nov. 18, 2014).

⁶ Although the name ‘might’ imply that BTP have jurisdiction across all transport modes, in actual fact their remit remains limited to the railway system in Britain. See further information available at

⁷ Transport for London (TfL) is a local government body responsible for the transport system in Greater London, England. This includes the DLR (Docklands Light Railway) the tube, London Overground, TfL rail and tram – extending across, road, rail, and the river transport services.

More information is available at: <https://tfl.gov.uk>

⁸ This publication develops from a presentation given at the United Nations - S. J. Fox: Policing Society: Utilising “*cool gadgets and tools.*” Safety, Security and Disasters – UN, Geneva. 19-23 March, 2018. (WSIS Forum - EC Medici Framework).

remain paved with Closed Circuit Televisions (CCTV's) which are heavily utilized by all transport operators, this includes the positioning of such on the respective transport mode and on the supporting infrastructure – for example Automatic Number Plate Recognition systems (ANPR⁹). Increasingly, technology, extending to intelligent-transport systems (ITS) is feeding into ILP.

1.2. Intelligence-Led *Police* to Intelligence-Led *Policing*: A Background perspective – the UK and beyond....

Whilst ILP is said to have had its inception or at least primary development in the early 1990's,¹⁰ (Gill, 1998; Ratcliffe, 2003 and 2016) there remains no one agreed, absolute definition or indeed affirmed date which launched ILP.¹¹ That said, it is recognized to be a developing and progressing model or concept, whereby today's ILP practices are largely attributed to being an extension of an initiative by Kent Police, England, under the leadership of Sir David Philips (John and Maguire, 2003). Perhaps somewhat ironically, the county of Kent (policed by Kent Police) is the closest, in terms of distance, to mainland Europe – the border with France, separated, only by the English Channel. And, this said, Kent Police were previously involved with a cross border initiative - the *Cross-Channel Intelligence Community* (CCIC), which may have served as the inspiration for ILP, potentially pointing to earlier origins for such.

CCIC is a regional alliance between police forces (and includes other law enforcement agencies) that deal with cross-border crime between the UK and immediate mainland Europe.

⁹ More information on the UK ANPR system is available at: <https://www.police.uk/information-and-advice/automatic-number-plate-recognition/> [Accessed April, 1, 2018]

¹⁰ Whilst there were indications of earlier models and initiatives, stemming back to the Peelian days, and the creative of the earlier detective branch circa 1833) the late 1980's-earlier 1990's and the rapid development and accessibility of computers, no doubt provided a natural opportunity for effective collection, efficient storage and analysis of data and information and it is this era which is credited with ILP.

¹¹ It is interpreted by some 'that ILP refers to conducting threat assessments, while others claim that it refers to the process of gathering data and information.' Chapter 3. Defining intelligence-led policing in the OSCE Guidebook Intelligence-Led Policing. TNTD/SPMU Publication Series Vol. 13. June 2017.

It was established 40 years ago to aid forces and agencies in the sharing of intelligence on issues, such as counter-terrorism and illegal immigration.¹² This was no doubt due to the high volume and movement of persons travelling between the UK and mainland Europe through the county. While this preceded the construction and opening of the Channel Tunnel,¹³ which was to further increase the numbers passing through the county (and at the same time aid the ease of movement), the entry at this time (1970's) was still via sea, by ships (into Kent ports) as well as by air.

The CCIC is in itself an evolving entity, that is now made up of a number of law enforcement and government agencies, namely;

- Kent Police
- Essex Police
- National Crime Agency
- Home Office
- Police in France, Belgium and the Netherlands

Initially, ILP was viewed as an operational tactic to reduce crime through proactive policing (by the police) based upon criminal intelligence, so as to apply a more 'businesslike' approach to fight crime (James, 2003). ILP recognized the need not only to gather intelligence but to analyze it too, although initially it was geographically limited and hence confined by what was then a county led force initiative. Whilst police services and nations States' place boundaries around their institutions and countries, invariably, those perpetrating

¹² The aim of CCIC is to tackle criminals who exploit the borderless EU region by the following objectives:
To:

- promote cross-border co-operation
- contribute to reducing crime across borders
- protect the public from harm by sharing best practice
- increase communication across member organisations

¹³ The Channel Tunnel was officially open on 6 May 1994. It links Folkestone in Kent, with Coquelles, Pas-de-Calais, near Calais in northern France, going beneath the English Channel - the Strait of Dover.

crime have neither respect or regard to such, artificial and often meaningless, demarcations of jurisdiction (as the CCIC model points to). Precincts, county lines and other borders ultimately (artificially) limit and marginalize the effectiveness of the police (and those policing society) which have as their aim the safety and security of all citizens. Whilst the Kent initiative was later expanded across the UK, leading to a National Intelligence Model (NIM), this was still very much a model for police resources and activities at the outset. It was the Police Reform Act 2002¹⁴, which provided the statutory basis for the introduction of NIM across England and Wales; and, the minimum standards and its basic principles, as specified by the then Association of Chief Police Officers (ACPO¹⁵) within a Code of Practice.¹⁶

At the beginning of this century, ILP had become a significant and recognized policing practice model and approach within the respective police services across the globe, with, for example, Canada's – Royal Canadian Mounted Police (RCMP¹⁷) adopting it in 2000 (Deukmedjian and de Lint, 2007), the New Zealand Police a few years later (NZP, 2002;¹⁸

¹⁴ *'An Act to make new provision about the supervision, administration, functions and conduct of police forces, police officers and other persons serving with, or carrying out functions in relation to, the police; to amend police powers and to provide for the exercise of police powers by persons who are not police officers....'* Police Reform Act 2002.

¹⁵ ACPO has now been replaced by the National Police Chiefs Council
More information is available at: <http://www.npcc.police.uk/About/AboutNPCC.aspx>

¹⁶ This was issued in January 2005 by the Home Secretary.

The code of Practice was made under:

1. section 39 of the Police Act 1996, which permits the Secretary of State to issue codes of practice relating to the discharge by police authorities of any of their functions;
2. section 39A of the same Act, as inserted by Section 2 of the Police Reform Act 2002, which permits the Secretary of State to issue codes of practice relating to the discharge of their functions by chief officers for the purpose of promoting the efficiency and effectiveness of police forces in England and Wales;
3. sections 28 and 73 of the Police Act 1997, which permits the Secretary of State to issue codes of practice relating to the discharge by the National Criminal Intelligence Service and the National Crime Squad Authorities of any of their functions; and
4. 28A and 73A of the Police Act 1997, as inserted by Schedule 1 of the Police Reform Act 2002, which permits the Secretary of State to issue codes of practice relating to the discharge by the Director General of the National Criminal Intelligence Service and the Director General of the National Crime Squad of any of their functions.

¹⁷ More information on the RCMP is available at: <http://www.rcmp-grc.gc.ca/en>

¹⁸ NZP, 2002 – Police Strategic Plan to 2006, Wellington, New Zealand Police.

Ratcliffe, 2006) and every Australian police service referring to it on their website by the end of 2003 (Ratcliffe, 2003).

In the EU there was a concerted intention to see the UK NIM expanded to include all of the Member States; and, in November 2004, the Hague Programme¹⁹ adopted the goal of setting up and implementing a methodology for intelligence-led law enforcement at an EU level. The two key objectives were to:

- (i) establish intelligence-led policing as a concept within Europe, and;
- (ii) ensure that intelligence and the analysis of that intelligence led to a good quality threat assessment.

Both objectives were realised in the adoption of a new and better Organised Crime Threat Assessment (OCTA²⁰), and a European Criminal Intelligence Model (ECIM), a business model for intelligence-led policing aimed at an international level, stemming from the UK NIM. However, questions as to the effectiveness were raised from the outset, mostly emanating from competence aspects and commitment issues of the respective States and police agencies.

One of the greatest challenges for ILP remains the willingness and sometimes the means to share and coordinate information and data within or across agencies and bodies, whether this is internally or locally, (within the same organization, or/and across counties and States), regionally, (for example, within the EU) or internationally, limitations and unwillingness exist. Where there sometimes is a choice, as opposed to legal necessity, there remains both reluctance and reticence to do so, sometimes there is the inability, the method to efficiently

¹⁹ This acknowledged, that, '*[n]otably in the field of security, the coordination and coherence between the internal and the external dimension has been growing in importance and needs to continue to be vigorously pursued.*' The Hague Programme: Strengthening Freedom, Security and Justice in the European Union. (2005/C 53/01) COM (2004) 401 final. (See also P6_TA-PROV (2004) 0022 A6-0010/2004).

²⁰ The Hague Programme (2004-2009) instructed Europol to draft the first OCTA for the year 2006.

facilitate the movement and transfer of information that has been effectively gathered. So, whilst the safe and secure movement of persons remains a challenge, so equally does the transfer of data and information.

This potentially is further hampered by the mere use of the word ‘*intelligence*,’ which can also, by its very nature, cause a negative connotation in regards to activities that are perceived (and may truly be) subversive or secretive (as Grieve, 2009:29 also notes). And, of course, there are other concerns with regards to the transmission of such sensitive and personal information, particularly outside areas where agreements are in place.²¹

Ratcliffe (2016: 22) reinforces this, referring to the past practices in the U.S. and the historic legacy relating to ILP – specifically ‘*intelligence*’-gathering methods used by both the police, the Federal (and other security) agencies, which spanned the 1960 - black and civil rights era of Martin Luther King, the Cold-War era, through to the 1970’s which saw the closure of criminal intelligence units (White, 2004). The repercussions of this are said to be still felt in the U.S. today – with even the word *intelligence* having to be substituted by the word *information*. (Ratcliffe, 2016). As such, ‘intelligence’ arguably became ‘demonized’ because of previous ‘police’ and ‘policing’ practices – and the *abuse of ethics in the intelligence process*.

1.3. *Intelligence, rights and freedom*

There is no denying, that on many occasions, there remains a conflict between what is needed or viewed as being in the interests of security (and safety) and what is acceptable in terms of

²¹ See later discussions in relation to the transfer of Passenger Names Records (PNR). Also see, for example, the implication of the newly introduced Regulation (EU) 2016/679 Of The European Parliament and of The Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) – recently introduced – May, 2018.

ensuring compatibility with human rights. Fox (2017; and in press publication²²) discusses this in further detail, whereby reference is made to an international perspective, referring to the United Nations (UN), Universal Declaration of Human Rights (UDHR²³) and the identification that “[e]veryone has the right to life, liberty and *security* of person.”²⁴ Words in themselves which have, or have the potential to, cause divergence and conflict.

The preamble to the UDHR reaffirms the intention of Member States to ensure, through their ‘pledge,’ that they work in ‘*cooperation*’ with the UN to achieve that the human rights of citizens’ of the world are observed and ensured.

In many ways, this could be interpreted, or extended, to the willingness to share information (and data) or, the more contentious use of the word, ‘intelligence,’ that is gathered and/or sought by bodies or entities when the security of a State is threatened or compromised – as for example, due to terrorism/terrorist targeting.

Arguably, there is a noticeable difference here in terms of security measures which are intelligence-led or driven, and those that routinely exist because of requirements. The latter, ‘by-enlarge’ having arisen due to perceived risks and historic events – whereby data and information is then systematically required and fed through as intelligence to mitigate against such reoccurrence or likelihood of similar occurring. What the author distinguishes as *intelligence-fed security* (or more accurately, data and information-fed security) as opposed to intelligence-led policing. This said, the reference to ‘by-enlarge’ (as above) also is suggestive of the fact that information and intelligence is sometimes gathered routinely under

²² Fox, S. J. - Future Trends: Preventative Security. *Edward Elgar* (Law Legal Reference Series). Edited by Brian Havel (expected late 2018/19).

²³ The Declaration was proclaimed by the United Nations General Assembly in Paris on 10 December 1948 – (General Assembly resolution 217A).

²⁴ Article 3 - United Declaration of Human Rights. Paris 10 December 1948.

the auspices of security protection.

Security measures that have been put in place due to intelligence-led policing have sometimes been challenged as being contrary to, and an interference on, a persons' (or society's) privacy. Article 12 of the UDHR adds that, "[e]veryone has the right to the protection of the law against such interference or attacks." This said, intelligence-fed data and information stands to be more often challenged in terms of systematic processing when it is routinely gathered, becoming arguably a habitual violation. However, the contrary is also able to be contended, namely that routinely and systematically required information becomes customarily accepted, as the 'norm' – whether legal or otherwise (and therefore normal or normalized).

In recent times ILP is now becoming synonymous with the ability to both identify and to mitigate risks, not just as viewed, or applied and implemented by the police but by all agencies that have as the objective to keep society (or areas of it) safe and secure. Risk identification and management is an integral part of modern policing and general law enforcement and security agencies.

There is no doubt that ILP has significant potential, not just within and throughout the respective global police service(s) but across the wider modern law enforcement/security model, however, its success greatly dependent upon affective use. A properly functioning ILP approach to data and information gathering and analysis allows for more accurate identification and assessment of risks. This includes across geographic areas and across various types of crime, serious criminals and criminal networks. One main challenges of

today's law enforcement bodies remains the ever-increasing complexities of transnational crime, including crimes that harm society – such as acts of terrorism.

2. Terrorism: ILP developments and ‘lessons from aviation’

‘*Terrorism*’ is far from a new phenomenon²⁵ (Fox, 2016). That said, arguably, there remains no worldwide-accepted definition of terrorism (Fox, 2015a; Blackburn et al., 2012; Weinberg et al., 2004; Saul, 2005); however, in December 1972, the UN Sixth Committee referred to the need to take,

*“Measures to prevent international terrorism which endangers or takes innocent human lives or jeopardizes fundamental freedoms, and study the underlying causes of those forms of terrorism and acts of violence which lie in misery frustration, grievance and despair and which cause some people to sacrifice human lives, including their own in an attempt to effect radical change.”*²⁶

Inevitably this Resolution affirmed the need for international cooperation to tackle actions that strike at liberty and freedom, and, which invariably transcends boundaries and borders which, as discussed, makes the task of policing – *preventing, detecting, mitigating and responding*, challenging.²⁷ The interesting perspective here, perhaps, being that the reference is to the *acts of terrorism* compromising fundamental freedoms as opposed to any measures put in place which could equally stand to infringe such rights and entitlements.

Transport has been vulnerable to attack for centuries. Both users and systems have been

²⁵ This publication was Part delivered to UN – S. J. Fox; Challenges for the future: preparedness! – In the face of cyber-terrorism. 2-6 May, 2016 – UN, Geneva.

As Fox explores, ‘*Terrorism is recognised worldwide by States, and hence has been on the international agenda since 1934. The League of Nations, the forerunner to the United Nations (UN), actually began drafting a convention for the prevention and punishment of terrorism, at this time, although it was never actually to result in the instrument coming into force.*’

²⁶ Resolution XXVII – 2114th plenary meeting, 18 December 1972.

²⁷ Loosely as described in the EU Counter Terrorism which refers to four pillars – namely:

- Prevent
- Protect
- Pursue
- Respond

(In 2005, the Council adopted the EU counter-terrorism strategy to fight terrorism globally and make Europe safer.)

subjected to various offences, often referred to by the respective transportation mode – for example, ‘*highway*’-robbery and ‘*maritime*’ -piracy (Fox, 2017). Transportation lends itself to being ‘*a high-profile risk*’ particularly from acts of terrorism, whereby the mode is targeted and/or used to take lives. Aviation, the *newer* transport mode, is no exception. Air travel, like no other mode, crosses borders, boundaries and jurisdictions with relative ease. It facilitates opportunities, whether these are for personal mobility, or for trade and business development, including those pursuits which are of a criminal nature (including terrorism).

Due to various acts of terrorism perpetrated against it, aviation, now arguably leads the other transport modes, in terms of security initiatives to protect users and other interested and relevant third-parties (Fox, in press). Over the years, various security measures have been implemented as a direct result of events aimed at aviation, which were not predicted, or prevented, many of which, arguably should have been (this includes near misses). Subsequent inquiries into such revealing fallibilities in the various security systems in place – particularly in relation to screening techniques and other methods at airports. This said, Giovanni Bisignani states that it was the events of September, 11, 2001 “*that changed the world.*”²⁸

2.1. 9/11 – *And aviation*

As Fox (2017) explains, “the actions, results, and consequences of September 11, 2001 resounded in an intense shockwave across all continents. Not only was the world shocked by the events, but there was genuine fear – the risk of using transport (alongside the risk to other infrastructures) suddenly became elevated in people’s minds as a real, modern-day *reality.*” Aside from the catastrophic loss of life and physical destruction, the attack virtually brought aviation to its knees – particularly from an insurance perspective and had a substantial effect

²⁸ Bisignani is the former CEO of the International Air Transport Association (IATA) who made reference to in his 2013 publication – which is discussed in depth by Fox (see all publications listed, including those in press).

on the global economy.

However, given that 9/11, was by no means the first terrorist attack aimed at aviation (Fox, in press²⁹) arguably lessons along the way should have been learnt, including from an intelligence perspective (Fox, 2014; 2015a,b; 2016; 2017).

It is identified that prior to 9/11, cooperation in the field of counter-terrorism was largely informal and ad-hoc. This is despite international measures, which existed prior to 2001 and were driven by other terrorist events (including specifically within the field of aviation³⁰). Security was largely reactive, rather than pro-active, this “*resulted in delayed responsive mechanisms, whereby policies and practices have been put into place to largely mitigate the reoccurrence of attacks already experienced*” (Fox, in press).

Ultimately, there remained (and arguably remains) intense reluctance to coordinate, to implement best-practices and to share information and data – including security related-criminal intelligence. One key issue is that international cooperation is just that, a means that seeks to unify different systems and approaches of individual nations – which, has at the primary aim to prevent and minimise conflicts and maintain peaceful societies. Unification of law seeks to replace the disparity that exists regarding substantive law and jurisdiction, clarifying mutual rights and obligations whilst providing transparency. However, international law is also concerned with the ‘political will’ of States (as expressed through treaties or international custom) providing the means by which contracting states stipulate the

²⁹ Fox outlines various cases, for discussion, with reference to Aviation Security Management [3 volumes] edited by Andrew R. Thomas, within Chapter 10, Mary, F Schiavo, ‘A Chronology of Attacks Against Civil Aviation. (Praeger Security International). Greenwood Publishing Group.

³⁰ Fox (in press) gives the example, that between 1973 and 1985 there were 25 attacks at various airports across the globe, which directly led to the Protocol for the Suppression of Unlawful Acts of Violence at Airports, supplementary to the Convention for the Suppression of Unlawful Acts Against the Safety of Civil Aviation (1971, Montreal) was signed at Montreal on 24 February 1988.

rules of private law which is then agreed within their national law (and related processes) (Fox, 2015b).

It is widely known that the subsequent 9/11 Report makes critical reference to the liaison and coordination (or lack of such) by the respective security agencies, stating that, “*the intelligence community is not organized well for joint intelligence work.*” Whilst it was said, that the “*U.S. government has access to a vast amount of information.*” It was, furthermore, acknowledged to have, “*a weak system for processing and using what it has.*” The recommendation was that the “*system of ‘need to know’ should be replaced by a system of ‘need to share’.*” While most of these comments were aimed at national failings within the U.S., it is arguably even more tragic that such failing occurred, given similarities to an earlier aviation terrorist event – Lockerbie,³¹ which again identified not only national failings, within country borders but cross-borders and therefore internationally also.

The Lockerbie investigation showed the inability to communicate and share intelligence of impending or possible (risk based/assessed) attacks. It reported that the U.S. intelligence services had earlier identified to Pan Am that it was at risk, but the airline had repeatedly ignored warnings that its security measures for interlining baggage were not sufficient.³² The investigating Presidential Commission placed much of the blame for the bombing of Pan Am Flight 103 on the ‘*seriously flawed*’ aviation security system, beginning with inept and confused Pan Am security at Frankfurt and London and furthermore compounded by the

³¹ On December 21, 1988 Pan Am flight 103 exploded over the Scottish town of Lockerbie. The death toll was 243 passengers, 16 crewmembers, and 11 local people on the ground. It was determined that the cause of the explosion was a bomb hidden inside a radio-cassette player within a suitcase. See Fox, ‘*CONTEST*’ing Chicago, and Sarah Jane Fox, *Flying Challenges for the Future: Aviation Preparedness – In the Face of Cyber-Terrorism*, for further comments.

³² During the Court proceeding it was concluded that the responsible suitcase(s) came from the Pan Am feeder flight (Pan Am 103A) from Frankfurt.

Federal Aviation Administration's (FAA) failure to enforce its rules (Fox, in press).

This led to a subsequent recommendation by the Commission that a new assistant secretary of transportation for security and intelligence should be created to oversee aviation safety, and that the FAA's security division should be elevated so as to report directly to the FAA Administrator).

The Commission Chair referred to the fact, that, “[t]he sad truth,” was “*that the aviation security system administered by the FAA has not provided the level of protection the traveling public demands and deserves. The system [then, being declared as] seriously flawed and must be changed.*”

Whilst some changes did occur it was 9/11 that arguably led to more substantial (international) changes being called for and at times also undertaken (Fox, 2014; 2015a, b; 2016). These were largely said to be ‘*crisis-driven*’ (LIBE, 2017) certainly, that is, from an EU perspective – where counter-terrorism was not officially part of the institutional structure of the then European Communities.

2.2. The EU dimension and the call for action.....

Less than ten days after 9/11, the EU called an Extraordinary Meeting³³ to discuss the events, the implications, and the response.

As a consequence of the Extraordinary Meeting, several key areas were identified as necessitating action, including,

- **Police and judicial co-operation** (including cooperation between police and intelligence services)

³³ Meeting on the 21 September 2001, the European Council adopted a Plan of Action to Combat Terrorism. Brussels. Press release 12019/01 (Presse 327 refers).

Note: that The Council of the European Union, asked at its meeting of 12 September 2001 the Ministers of Transport to evaluate the measures taken to ensure air transport security and any additional measures which should be taken.

- **Air transport security**
- **Reconstruction of Afghanistan**
- **Humanitarian Aid**
- **The diplomatic front** (this included solidarity with the U.S. to build a global coalition against terrorism³⁴; and measures at borders – this extended later to including calls to relating to document security and security of international transport at border controls)
- **Economic and financial measures**

And,

- **Emergency preparedness**

The Brussels European Council on 21 September 2001 included a series of measures, to support this, including: joint investigation teams of police and magistrates from throughout the EU³⁵; a common list of terrorist organisations; routine exchange of information about terrorism between the Member States and Europol; a specialist anti-terrorist team within Europol; a co-operation agreement on terrorism between Europol and the relevant US authorities; and Eurojust, a co-ordination body composed of magistrates, prosecutors and police officers (to be launched on 1 January 2002).³⁶

However, the Pillar structure (see Table 1) of the then European Community, (technically Communities) (before the now Lisbon Treaty³⁷) and more specifically the positioning of Police (and Judicial Cooperation in Criminal matters - PJCC) within the Third Pillar,³⁸ was arguably not conducive to decisive implementing provisions, particularly of a legislative

³⁴ This included a commitment to the implementation in full of Security Council Resolution 1373 (2001) on the fight against terrorism, in areas where it is competent to do so.

³⁵ Technically the European Arrest Warrant based on intelligence sharing and cooperation has already been discussed prior to 9/11 but nevertheless added vigor was given by the event of that day (see Conclusions of the Tampere European Council 15-16 October, 1999). Tampere ran from 1999-2004.

³⁶ EU Response to the 11 September: European Commission action. MEMO/02/53, Brussels, 12 March 2002. See the common position 2001/931/CFSP also in order to implement UN Security Council Resolution 1373.

³⁷ Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community (OJ C 306, 17.12.2007); entry into force on 1 December 2009.

The Lisbon Treaty improved the architecture by removing the provisions of Police and Judicial Cooperation in Criminal Matters (PJCC) – the Third Pillar from the Treaty of the European Union to the new Treaty of the Functioning of the European Union, which integrated matters dealing with Visa, Asylum, etc in the new Title V, renamed the Area of Freedom, Security and Justice (AFSJ).

³⁸ Third Pillar aspects related to the areas of Freedom, Security and Justice (FSJ) – governing Police and Judicial Cooperation, in Criminal matters.

nature, to respond in the way that the EU had wanted in some instances.³⁹ This relates to the level of competence – ability to be able to act. And, this, in essence, led to some of the difficulties regarding the EU NIM and the two objectives within the implementation for intelligence-led law enforcement at an EU level (see earlier in this paper). Ironically Pillar One – the Community Pillar provided a modicum of solution, specifically where responses could be applied under the Transport Chapter⁴⁰ – where the normal supranational methods of decision making could be applied. However, even in this regard, prior to 9/11, the EU had no legislative competence in the field of aviation security, as it has been the responsibility of each of the individual Member States at a national level to determine. The events and consequences of 9/11 were to lead to a quick rethink of the provisions within not only the transport-aviation framework in Europe but across the respective Pillar structure (Fox, 2014). While recognizing many of the areas to be sensitive from a National, State perspective – related to the core area of sovereignty, there were clearly failings in respect to both the security provisions and the ability to coordinate, including the key issue of sharing intelligence.

³⁹ This was an intergovernmental structure. Since the Lisbon Treaty acts adopted in this (former) area are now made subject to the ordinary legislative procedure (qualified majority and co-decision), using the legal instruments of the Community method (regulations, directives and decisions) unless otherwise specified.

⁴⁰ Title V – Transport, Articles 70-80 EC now Title VI – Transport, Articles 90-100.

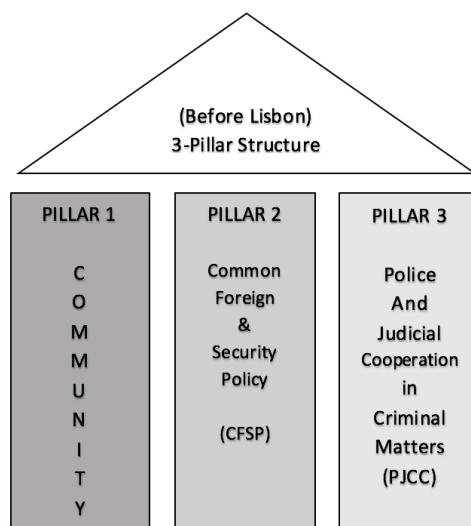


Table 1: Pillar Structure of the European Community
(Before the Lisbon Treaty)
(Origin – Author)

There is no doubting that the events of 9/11 provoked a significant response, not only in the EU but globally, leading to various initiatives and declared actions (including immediate ‘posturing’ which was not later supported – Fox, 2015a). The later attacks in the first decade of the 21st century within the EU – Madrid⁴¹ and London⁴², for example, against other transport systems only sought to elevate and maintain sustained responses and plans, including in respect to solidarity of nations. This was also no doubt intensified by failed attacks, for example against buses and trains⁴³ and also against aviation.⁴⁴ In the latter case,

⁴¹ Madrid, March 11, 2004 and the attack against another transport system – commuter trains. Ten bombs exploded on four trains in and around Atocha Station in Madrid, the city’s centre, leaving 191 dead and more than 1,800 injured.

Source: <https://www.britannica.com/event/Madrid-train-bombings-of-2004>

⁴² The events in this regard relate to 7/7 (July, 7, 2005) and the organized, systematic attacks in London on the underground (subway) and buses. This resulted in over 50 deaths.

⁴³ In recent years use of the transport CCTV infrastructure has played a vital role in bringing offenders to justice. For instance, the use of high quality CCTV images helped to secure convictions for conspiracy to murder of those involved in a failed follow-up attack to the London bombings on 7/7. In this example nearly 28,000 CCTV recordings gathered, were gather by the police from CCTV cameras on buses, trains and at stations as part of their analysis and intelligence-gathering process.

Source: <https://www.intelligenttransport.com/transport-articles/473/cctv-surveillance-in-focus-for-transport-security/> [Accessed April, 27, 2018].

⁴⁴ Most memorably the following two:

December, 22, 2001: Flight 63 (American Airlines) Richard Reid (known as the shoe bomber/plot).

December, 25, 2009: Flight 253 (Northwest Airlines) The transatlantic terrorist plot to detonate liquid explosives – sewn into the underwear of Umar Farouk Abdulmutallab (known as the under-pant plot)

(against aviation) despite the drive to coordinate and share intelligence, some attacks were only thwarted by the quick response of fellow travelers – who took action when the aircraft was in the sky.

3. Aviation: Passenger Transfer Information – *Intelligence-Fed Security*

In 2011 the UK Government held a consultation aimed at revising its regime for aviation security.⁴⁵ The initiative was aimed at ‘*Better Regulation for Aviation Security*’ that was to be built on risk management systems and therefore take the ‘direct and inspect’ method to an outcome focused risk-based approach (OFRB). One of the stated objectives was so as to give operators (including air transport carriers) the *flexibility* and *responsibility* to design security processes that deliver more ‘*specified outcomes*.’ Debatably, this could also perhaps be viewed as being contrary to a flexible approach that is grounded upon a risk-based assessment, which is built upon analysis and arguably intelligence (relevant to the current or anticipated threat level).

3.1. *Passenger Name Records*

There was perhaps a degree of further irony as to the approach proposed by the UK, particularly given the EU’s direction and intensity to take action to combat terrorism collectively. In 2004 (the reinforcement coming in the wake of the Madrid attacks) related to one initiative which declared that the intention was to harmonize the “*use*” of passenger name records (PNR) in the EU (NOTE; the reference to ‘*use*’ rather than the ‘*collection*’ of it) by the creation of a Council Directive on the *obligation of carriers to communicate passenger data*.

⁴⁵ It should be noted that while aviation security now comes under the EU remit the UK applies More Stringent Measures over and above that required at an EU-level.

The PNR is a list of data and information which, despite the title, contains much more than just the transmission of a name. It relates to personal details and travel information that is created by the commercial air carriers – which includes (as identified by the U.S):

- The passenger's names (contact details) - PLUS
- Travel dates
- Destination/itineraries
- Method of payment details
- Flight details

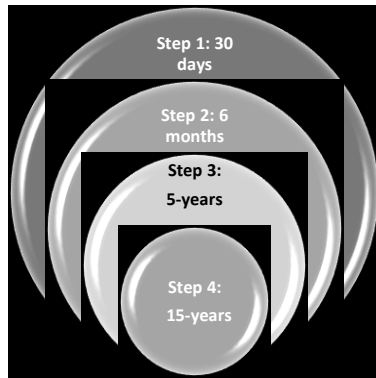
However, other information also includes – apart from the active portion (detailed above); supplemental details (baggage information, frequent flier information, special requests, etc.) and a historic portion, relating to changes to the active portion.

The history of the PNR approach (and the subsequent EU Directive⁴⁶) is visibly linked to post 9/11 initiatives and specifically the measures taken and 'required' by the U.S. It has and continues to however remain controversial – '*allegedly*' bordering on (or blatantly) compromising individual freedom and rights (not least privacy) and has consequently been challenged in both the U.S. and by the EU (see Fox, in press).

One concern has been the retention period of the data and information stored by the U.S. authorities. This was clearly identified, by the U.S. (in 2013) - within the PNR lifecycle for data (See Diagram 1).⁴⁷

⁴⁶ Directive (EU) 2016/681 of the European Parliament and the Council of 27 April, 2016 on the use of passenger name record (PNR) data for the prevention, detection, investigation and prosecution of terrorist offences and serious crime. OJL 119, 4 May, 2016, p. 132-149.

⁴⁷ A Report on the Use and Transfer of Passenger Name Records between the European Union and the United States. Privacy Office. U.S. Department of Homeland Security. July, 3, 2013.



Step 1: PNR filtered – authorized categories stored. Sensitive terms and codes are deleted – cannot be re-created after 30 days.

Step 2: After 6 months PNR data is depersonalized.

Step 3: At 5-years the PNR data is made dormant.

Step 4: At 15-years the PNR is fully anonymized. (*NOTE: these periods are subject to no enforcement processes occurring.*)

Diagram 1: Cycle for U.S. data retention (under the PNR initiative)

(Origin: authors based upon data from Homeland Security)

The Aviation and Transportation Security Act of 2001 (ATSA⁴⁸) authorized the U.S. Customs and Border Protection (CBP) to process PNR information, for screening individuals traveling to and from the U.S. However, in 2003 the EU Commission contacted the U.S. about a potential conflict of laws between the ATSA and the European approach to privacy. It was not until 2004 that the EU-U.S. came to an initial agreement regarding the processing of EU citizens PNR information. However, in 2006, the European Court of Justice (the CJEU) stated that there was not sufficient and appropriate EU legal authority – *competence*, to undertake this agreement and it was therefore said to be invalid. Hence, it went ‘*provisionally*’ into force, whereby information was willingly (or, arguably reluctantly) supplied by various EU nations (including the UK – which, like the U.S. has been undertaking similar practices before 9/11). Final agreement, however, was not ratified until the entry into force of the Lisbon Treaty. The 2011 U.S.-EU PNR Agreement was signed on December, 14, 2011 and ratified by the EU Parliament in April, 2012.

The main controversy lies in the fact that this is information collected by airlines. In general, it is for the purpose of their (commercial) business; although, it is *now* being *required* by law and is subsequently used by government agencies to analyze data on individuals – many of

⁴⁸ 49 U.S.C. §44909 (c)(3).

them never being a threat or perceived threat to an airline, or State.⁴⁹ Concern lies additionally in the fact that the data is said to be of a non-verified nature (and which arguably fails to comply with the principles of the Intelligence Models – such as the UK NIM). This data is then subject to being shared extensively with domestic and foreign government authorities that have counter-terrorism or law enforcement functions. Furthermore, the worry is that rather than being intelligence led and, hence asked for - based on known or perceived risk factors, it is indiscriminately *demande*d – leading to a furtherance of intelligence-led policing functions becoming information-fed security methods. In many ways, this invariably runs the risk of intensifying, what the 9/11 Commission referred to as, the “*U.S. government [having] access to a vast amount of information*” but not having the ability, capability, and/or the resources to actually acquire meaningful intelligence from the mountain of information and data obtained. What Ratcliffe (2016) refers to as being “*information rich but knowledge-poor.*”

From an EU perspective, the latter PNR Directive clearly makes reference to the fact that data is collected for the ‘*prevention, detection, investigation and prosecution of terrorist offences and other serious crimes.*’ It also refers quite specifically, in the background information, to the “*need for increased cooperation between law enforcement authorities with respect to passengers on international flights*⁵⁰ to and from the Member States, including more **systematic** use of Passenger Name Record (PNR) data of such passengers for law enforcement purposes.”⁵¹ It is stated that the information is able to be used in a *re-active*,

⁴⁹ PNR information can be sent by airlines electronically (the ‘*push*’ method) or be accessed by appropriate authorities via their reservations systems where it is stored (the ‘*pull*’ method).

⁵⁰ The Directive applies to the transfer of passenger data outside of the EU (*extra-EU flights*) but Article 2 of the Directive allows Member States to also apply it to intra-EU flights.

⁵¹ 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 crimes. File 2011/0023 (COD) European Commission Proposal, 3 February, 2011. Council of the European Union, Brussels, February, 4, 2011.

real-time or pro-active way, which potentially also identifies the potential ineffectiveness of this method in terms of being purely pursued with a pro-active – pre-emptive intention.

EU Member States were subsequently required to bring into force the laws, regulations and administrative provisions necessary to comply with the Directive by May, 25, 2018. The legal basis for such is to be found within the area of Judicial Cooperation in Criminal Matters and Police Cooperation within the newly formed Area of Freedom Security and Justice of the Lisbon Treaty.⁵²

It should be noted that the PNR may also include elements that are reported under the Advance Passenger Information (API⁵³) which predates the newer EU PNR Directive. And, so from this perspective, this leads to the obvious question as to why two such systems are needed – which arguably points to the lack of ability or implementation of systems to collect ‘*intelligence*’ that can be reliably processed; and reinforces the collection and hence, over-supply of data and information. In this instance an initiative, which has been insisted upon by the U.S.

API also includes information and data obtained via the identification details from the machine-readable zone of Machine Readable Travel Documents (MRTD). This relates to a system that was conceived by the Customs and Immigration services within States but nevertheless, still requires carriers to transmit this data. That said, the information collected is said to be somewhat more reliable and of a verified nature – thus providing arguably better

⁵² Article 82 TFEU (ex. Article 31 TEU) & Article 87 TFEU (ex. Article 30 TEU)

⁵³ Advance Passenger Information (API - this may also be Interactive – IAPI) System (or APIS). Council Directive 2004/82/EC of 29 April, 2004 on the obligation of carrier to communicate passenger data. OJ L 261, 6 August 2004, p. 24-27.

and more reliable intelligence from the outset, if not as before, being routinely collected and transmitted.

The information required, in this instance, relates to (as per Article 2 of the EU Directive):

- the number and type of travel document used,
- nationality,
- full names,
- the date of birth,
- the border crossing point of entry into the territory of the Member States,
- code of transport,
- departure and arrival time of the transportation,
- total number of passengers carried on that *transport*,
- the initial point of embarkation.

As can be seen, the application of this extends past aviation to other *transport modes*.

4. Conclusion

There is no doubting the value of transport to individuals and society. Transport, by its actual nature, adheres to the very principles enshrined in the rights of the world's citizens – it provides freedom for individuals – the right of movement. Safety and security of all transport users must be seen as part of this equation; and, hence it is paramount to operators and, arguably, governments alike to insure. Given this, transport and the supporting infrastructure remains in need of protection, particularly from those that would seek to use it as a political tool, by causing injury to its users and devastation to the supporting infrastructure and also the wider economy. History has shown us the consequences of various attacks where transport has been targeted or used to target others in acts of terrorism. History has also provided other valuable lessons regarding the methods used to '*protect*' society, including the safeguarding of transport modes and systems. At times, this has been contradictory and conflicting in nature, particularly in respect to the gathering and use of 'intelligence' which has 'allegedly' been undertaken in the name of affording such protection. On the one hand,

there remains a clear need to share ‘intelligence,’ - the failure of not doing so has often been, subsequently criticized (Lockerbie and 9/11) in terms of preventing or mitigating such attacks. And, yet, on the other hand, there must be legitimacy and reason, and the power to act within defined areas of legal competence.

Whilst the recognition of ILP is said to be attributed to the 1990’s – the gathering of ‘intelligence’ is traceably back to before this period. The lessons of the 1960-1970’s – specifically the United States practices, should not be forgotten. Arguably, this could be said to serve as crucial lessons in the evolutionary process and further developments of ILP, particularly in terms of ethical approaches and procedures.

Although intelligence gathering serves to protect society the mal-practices of the past and the abuse of rights should not be forgotten.

In Europe, post 9/11, the EU Lisbon Treaty clarified the powers of the Union and the levels of competences⁵⁴ – in respect to collaboration and collective Union action (i.e. relating to factors, such as terrorism, policing and cross-border matters,⁵⁵) part of this also related to providing the strength of legal personality in regards to some of these aspects⁵⁶ – however, importantly, the Treaty also strengthened the application of democracy within the EU, plus

⁵⁴ It distinguishes three types of competences: exclusive competence, where the Union alone can legislate, and Member States only implement; shared competence, where the Member States can legislate and adopt legally binding measures if the Union has not done so.

⁵⁵ The Treaty of Lisbon completes the absorption of the remaining third pillar aspects of the area of freedom, security and justice (FSJ), i.e. police and judicial cooperation in criminal matters, into the first pillar. The former intergovernmental structure ceases to exist, as the acts adopted in this area are now made subject to the ordinary legislative procedure (qualified majority and codecision), using the legal instruments of the Community method (regulations, directives and decisions) unless otherwise specified.

⁵⁶ Article 47 of the Treaty on European Union (TEU) explicitly recognizes the legal personality of the European Union, making it an independent entity in its own right.

The conferral of legal personality on the EU means that it has the ability to:

- conclude and negotiate international agreements in accordance with its external commitments;
- become a member of international organisations;
- join international conventions, such as the European Convention on Human Rights, stipulated in Article 6(2) of the TEU.

the respect for fundamental freedoms and the rights of individuals.⁵⁷ Given this, it is somewhat ironic and could certainly be argued, that the final agreement with the U.S. concerning the transmission of aviation passenger data lies contrary to these developments.

Transport systems have the means and mechanisms to gather intelligence from a whole array of sources, such as from;

- The physical deployment of personnel (be it the police and other policing agencies undertaking patrols on buses and trains; or border force personnel at airports and ports, etc.)
- Technological means – such as CCTV and ANPR;
- And, from data collection and information mining – such as the PNR system.

And, today's intelligent-transport systems (ITS) also provide a wealth of information on users. However, arguably some of these methods run the risk of returning to an era where rights stand to be violated – for example, the lesson from aviation - the PNR system, has clearly led to criticism, for what has been viewed as, the creation of '*terrorist risk assessments*' on '*all*' passengers, which involves the storing of profiles for extensively long period, wherein passengers have no right to see, to modify or to correct un-verified data.

In essence, this could debatably be said to returning to a *weak system*, involving the *vast collection of information* – which is far from intelligence based and led, but is instead, security-fed and in contradiction to individuals' rights. In this respect, quantity does not

⁵⁷ The Treaty of Lisbon expresses the three fundamental principles of democratic equality, representative democracy and participatory democracy. Participatory democracy takes the new form of a citizens' initiative. The Charter of Fundamental Rights through Article 6(1) TEU, gives the Charter the same legal value as the Treaties.

equate to quality. Inevitably, this could also have far reaching security consequences too, not least to aviation users.

Ultimately, such a systematic approach runs the risk of going full-circle and returning to holding a mountain of data but missing real intelligence that will thwart attacks, including even failing to gather such ‘intelligence’ in the first instance. Gathering too much information does not equate to the same as sharing real intelligence across services and particularly across borders. And legislative necessity (such as the PNR) does not negate for States’ *willingness*, or, arguably *unwillingness*, to communicate intelligence.

Information-fed security, as opposed to *intelligence-led policing*, might (have) become acceptable to aviation users by way of a ‘customary norm,’ but there may well be consequences to such, including the awakening the previous criticism of - *demonizing intelligence*,’ which potentially could affect all intelligence-led policing activities moving forward.

References

Bayley, David, H. and Shearing, Clifford, D (1996). The future of policing. *Law and Society Review*. Volume 30 (3), pp 585-606.

Bisignani, Giovanni (2013). *Shaking the Skies*, LID Publishing Ltd., London, UK

Blackbourn, J., Davis, F.F. and Taylor, N.C. (2012) ‘Academic consensus and legislative definitions of terrorism: applying Schmid and Jongman’, *Statute Law Rev.*, 19 November, doi:10.1093/slr/hms041 [online] <http://slr.oxfordjournals.org>

Deukmedjian, John Edward and de Lint, Willem (2007). Community into Intelligence: Resolving information uptake in the RCMP. *Policing and Society*. Volume 17, No. 3, pp 239-256.

Fox, S. J. (2014) 'Safety & Security: *The influence of 9/11 to the EU Framework*.' Research in Transportation Economics – Special Edition DOI: 10.1016/j.retrec.2014.07.004 Vol. 45 (2014), pp. 24–33

Fox, S. J. (2015a) CONTEST'ing Chicago origins and reflections: lest we forget! *Int. J. Private Law* 8(1):73–98

Fox, S. J. (2015b) 'To practice justice and right' – international aviation liability: have lessons been learnt? *International Journal of Public Law and Policy*, (2015) Vol. 5, No. 2, pp. 162-182. DOI: 10.1504/IJPLAP.2015.071027

Fox, S. J. (2016) *Flying challenges for the future: Aviation preparedness – in the face of cyber-terrorism*. *Journal of Transportation Security*. First published online Sept. 2016. December 2016, Volume 9, Issue 3, pp 191–218.

Fox, Sarah Jane (2017). "Mobility and Movement Are 'Our' Fundamental Rights" . . . Safety & Security – Risk, Choice & Conflict! *Issues in Aviation Law and Policy*. Volume 17, No. 1. Autumn, 2017, pp 7-43.

Fox, S. J. (2018) Policing - the technological revolution: Opportunities & Challenges!..... *Technology in Society*
<https://doi.org/10.1016/j.techsoc.2018.09.006>

Fox, S. J. (in press- expected 2018/19) - Future Trends: Preventative Security. *Edward Elgar* (Law Legal Reference Series). Edited by Brian Havel.

Gill, P. (1998). Making sense of police intelligence? The use of a cybernetic model in analysing information and power in police intelligence processes. *Policing and Society*. Volume 8, pp. 289-314.

Grieve, John (2009). Developments in UK criminal intelligence. In *Strategic Thinking in Criminal Intelligence* (2nd edition) edited by Jerry H. Ratcliffe. Sydney: Federation Press.

James, Adrian (2003). The advance of intelligence-led policing strategies: The emperor's new clothes? *The Police Journal*. Volume 76 (1) pp. 45-59.

John, Tim and Maguire, Mike (2003). Rolling out the National Intelligence Model: key challenges.' In *Crime Reduction and Problem-orientated Policing*, edited by Karen Bullock and Mick Tilley, 38-68. Cullompton, Devon: Willan Publishing.

OSCE Guidebook Intelligence-Led Policing. TNTD/SPMU Publication Series Vol. 13. June 2017.

LIBE Committee (2017): Study on 'Citizens' Rights and Constitutional Affairs (C) - The European Union's Policies on Counter-Terrorism. Relevance, Coherence and Effectiveness. Directorate-General for Internal Policies (European Parliament).

Ratcliffe, Jerry, H (2003). Intelligence-led policing. *Trends and Issues in Crime and Criminal Justice*, 248:6 (available at: <http://www.jratcliffe.net/wp-content/uploads/Ratcliffe-2003-Intelligence-led-policing.pdf>)

Ratcliffe, Jerry (2006) The Effectiveness of Police Intelligence Management: A New Zealand Case Study, *Police Practice and Research*, 6:5, pp. 435-451

Ratcliffe, Jerry (2016) *Intelligence-Led Policing*. Routledge. Abingdon, Oxon.

Reiner, Rob (2010). *The Politics of the Police*. 4th edn. Oxford: Oxford University Press.

Saul B (2005) Definition of ‘terrorism’ in the UN Security Council: 1985–2004. *Chinese Journal of International Law* 4(1) pp141–166

Schiavo, Mary, F (2008) ‘A Chronology of Attacks Against Civil Aviation.’ *Aviation Security Management* [3 volumes] edited by Andrew R. Thomas, within Chapter 10 (Praeger Security International). Greenwood Publishing Group.

The 9/11 Commission Report - Final Report of the National Commission on Terrorist Attacks Upon the United States (originally published) 22 July 2004.

Weinberg L, Pedahzur A, Hirsch-Hoefler S (2004) The challenges of conceptualizing terrorism. *Terrorism and Political Violence* 16(4) pp 777–794.

White, Jonathan, R (2004) *Defending the Homeland: Domestic Intelligence, Law Enforcement and Security*. Belmont, CA: Wadsworth.