IAA Response to request for information from the Commission for Aviation Regulation of 4th September 2014 – Ref: Airport Charges Determination

1. *"Can you please provide your latest assessment of new or amended security requirements that an airport may have to comply with in the next 10 years, detailing when you currently expect the requirement to take effect and what actions (including possibly investments) that you think Dublin Airport will need to take."*

Political and social unrest across the globe has seen the dramatic and alarming rise of groups of increasingly resourceful and well-funded extremists that are prepared to use acts of terrorism to further their aims. For example, the chaotically violent situation in Syria and political turmoil in parts of Iraq has seen the emergence of the ultra-extremist terrorist group currently known as Islamic State that has made it clear that it wants to establish a "Caliphate" which will "rule" the Muslim Arab world and will use whatever means are necessary to do so.

Recognising the significant threat that such ambitions present to the stability of the region and for the security of the rest of the world, a coalition of States, including the United States and a number of Western European Nations, has signalled its intent to fight the threat posed by Islamic State. This significantly increases the risk that Islamic State militants may retaliate against what they see as unlawful interference in their affairs by bringing the "fight" to the home territory of the members of that coalition. Previous terrorist acts by similar groups, both successful and unsuccessful have targeted civil aviation and it would be imprudent to suggest that terrorists will ignore such a high profile target in future.

These extremists have repeatedly demonstrated that they are prepared to sacrifice their own lives to further their ambitions and this provides a significant problem for the security services to overcome. This is a constantly evolving situation and security mechanisms will be continually upgraded to meet the changing threats. In this regard, we are likely to see an increase in the security requirements placed on aviation to ensure the continued safety of passengers, air crew and airport personnel.

Although Ireland, as a non-aligned State, does not participate militarily in offensive actions against the aforementioned terrorist organisations, there are numerous daily flights from our airport to cities in States that are members of the coalition which could be targeted. It is vital therefore that Ireland and Irish Airports maintain a first class security system (equipment and procedures) in line with all relevant legislation/Regulation and international best practice. Ireland, for security and reputational reasons, cannot afford to become a soft target or a weak spot in the global security system.

Aviation security is a combination of means and methods to prevent acts of unlawful interference. Its components include well trained people, technology and process together with physical security measures. The following is an overview of key trends that are relevant to the provision of a high quality aviation security system:

Security Domain	Trends
Personnel	Certification: The new Security Personnel certification process requires that a high standard of competence combined with ongoing training in the areas of inter alia passenger, baggage, cargo and airport supplies is maintained. This now independent process requires it to be demonstrated that an appropriate standard of screening is continually achieved. In addition to periodic ongoing (refresher) training, ad-hoc skills upgrading will be necessary to counter any perceived change in the nature of threats or any significant increase in threat level. Re-certification for Screeners is required every 3 years and failure to be certified will result in an individual being removed from screening and any other security sensitive duties. As Security Personnel are in the front line of defence against terrorist attempts to defeat the security system, it is vital that sufficient, appropriately trained and certified personnel are made available at the airport.
Technology/ Equipment	Personnel screening: - The European Regulatory emphasis in this area is moving to explosives detection systems away from the current metal detection equipment. Dublin Airport must maintain pace with regulatory requirement and ensure that it has leading edge detection systems to reduce to as low as is reasonably possible, the threat of explosives being carried on board an aircraft.

Items carried/cabin baggage screening: - The emphasis here is moving towards integrated and explosives detection systems. New technology to screen liquids and gels (LAGs) to comply with the European Commission's roadmap for replacing restrictions on the carriage of LAGs, is required. This is vital to minimise the ever evolving threat to civil aviation posed by liquid explosives.

Hold baggage screening: - European Regulations require the standard of detection capability of the hold baggage screening process to Standard 3 by 2020 at the latest with earlier implementation recommended. At Dublin, this will require the airport to use Standard 3 compliant equipment which is larger and significantly more expensive than the Standard 2 equipment currently in use. Additionally, Standard 3 equipment has a lower throughput of hold baggage in any given period and would therefore require an increase in the physical area within the baggage sortation areas to accommodate it without reducing the overall efficiency of the airport's baggage handling facility. The new equipment is required to reduce the risk of any prohibited articles and/or substances being loaded into the holds of aircraft at the airport to as low a level as is reasonably possible.

Airport supplies: - There are increasingly complex requirements for screening airport supplies (e.g. aircraft engines, construction materials, products for sale in airside retail outlets) resulting in requirements for increased and improved detection technology and increased manpower for screening on site and surveillance. Hand held explosive detection systems are one example of additional technology required to address the |

	ever present threat of terrorists using non-passenger means to smuggle explosives and/or other weapons on board aircraft. Cyber threats: - There is increasing concern about the confidentiality, availability and integrity of aviation related data. Outdated data systems / software will need to be upgraded or replaced to ensure that they and the data that they hold and/or use are secure from cyber terrorist attacks (e.g. automated explosive detection systems must be hardened against the threat of hacking – a system might be instructed to ignore a particular bag). Given the increasing incidence of breaching the integrity of what were believed to be very secure systems, it is vital that ongoing investment in timely upgrades continues to counter any known threat.
Processes	Remote screening processes are increasingly becoming a feature of aviation security systems. This will require investments in specific technology, checkpoint layouts, personnel training and communications procedures to keep pace with industry best practice and to ensure that Ireland and Irish airports do not become the weak point in the global security chain. Access control systems are becoming more complex to ensure that different highly effective boundary controls can be established and maintained. The system must keep inappropriate, unauthorised persons away from sensitive areas and must keep pace with evolving threats in the area of unauthorised electronic manipulation. Response to perimeter control breaches - swift detection of deficiencies or breaches is required by the regulation. Airports will have to deploy increasingly sophisticated perimeter and intrusion detection systems to manage the potential levels of risk. Increasingly complex management systems and processes for security will be required to prepare for and manage constantly changing levels of threat. They must also ensure ongoing reviews of internal quality control, contingency planning and incident response take place. Secure communications infrastructure – effective communications are at the heart of a fit for purpose aviation security regime. Robust means of securely transmitting and receiving information is integral to the effectiveness of the policing and security organisations. It can be expected that these systems will be enhanced within the 10 year timeframe as technological upgrades become available so as to keep pace with the increasingly well-resourced organisations that might seek to further their aims by attacking civil aviation.
Physical security	Fencing, lighting, CCTV cameras and patrols form a key part of the suite of physical security measures at airports. Fencing will need to be replaced and or upgraded within a 10 year timeframe. Lighting systems in the areas of aircraft parking stands will have to meet lux (brightness) requirements to ensure that unauthorised access to aircraft can be detected at night. CCTV systems are increasingly used for monitoring and investigation and are needed at critical points in the security systems including access points, checkpoints and other high risk areas (e.g. where passengers are separated by procedural rather than physical measures).

	Current technology deployed at Dublin is behind state of the art in certain areas and needs to be upgraded to ensure that the probability of detection of security events is commensurate with the level of activity / risk / threat.

2. Can you please describe how you will satisfy yourself that DAA has an adequate number of FTE's to meet security requirements? For example, will you be looking for a certain number of staff per lane to be available? Or will you want a certain number of staff per million passengers at the airport? What is the basis on which you are satisfied that DAA is currently complying with security requirement in terms of being adequately resourced?

The IAA in its capacity as the Appropriate Authority in Ireland for the purposes of EC Regulation 300/2008 has been responsible for oversight of aviation security in the State since January 2013. The IAA satisfies itself that Dublin Airport meets all security requirements through an ongoing comprehensive series of audits. The IAA requires a minimum staffing level that is commensurate with the prevailing level of threat. This is reviewed periodically with relevant DAA Security personnel, including Michael Feehan, Chief Security Officer.

In 2012, a European Commission security audit found that Dublin Airport was not compliant, with EU regulation. The non-compliances led to Dublin Airport being subject to Article 15 of EU Regulation 72/2010 as the Commission concluded that Dublin Airport had serious deficiencies which were "deemed to have a significant impact on the overall level of aviation security in the Community". This finding had serious implications for the State, both from security and reputational perspectives. DAA worked with the IAA to put in place mitigations to these deficiencies, including the recruitment of additional security personnel and by 8th May 2013, the European Commission determined that all issues had been addressed and closed the file.

Airport Security Personnel provide the first line of defence against attempts by terrorists to carry out high profile attacks on civil aviation by smuggling explosives and/or other weapons onto an aircraft.   They must be ever vigilant to ensure that Ireland is not seen as a soft target by the terrorists. It is therefore vital that sufficient, appropriately trained and certified personnel are made available at the airport to ensure a high quality security system in line with international best practice, is maintained.

To ensure full compliance with security regulations and procedures while at the same time maintaining the level of efficiency demanded by the various stakeholders, the Airport must deploy the number of personnel that is appropriate to the prevailing level of threat.

Separately, regarding the runway 16/34, can you please provide data for the number of days (if any) in each of the last five years when Dublin Airport would have been closed to all aircraft for (a) part of the day or (b) the whole day if the crosswind runway was not in service? How many additional days would be lost to operators of smaller passenger planes?

The IAA does not maintain records of meteorological conditions. The Met data is presented to our Controllers in real time but our Air Traffic Control system does not have functionality to record that data. The situation is further complicated as each aircraft type has its own certified crosswind limit. Additionally, each aircraft operator will have its own crosswind limit, almost always below the certified limit for the aircraft type in question to ensure that there is a buffer between normal operations and the maximum capability of an aircraft.

The IAA can provide you with information on the number of days on which RWY16 and RWY34 were operational over the past 40 months (we do not retain earlier data) and this is set out in the table below. The airlines will not voluntarily use RWY 16/34 as it is shorter than 10/28, does not have the same level of instrumentation and does not have as efficient a taxiway infrastructure to allow for entrance and exit of aircraft. It may therefore be taken as a reasonable estimate of the number of days on which it was necessary to have 16/34 available, to allow something resembling normal operations at the airport take place. The data is based on arrivals only so any effect of dual runway operations is eliminated and days with less than 5 movements on the runway have also been discounted.

It is the IAA's preference that the crosswind runway (16/34) is retained at Dublin Airport. It is the only north-south aligned runway in the State that is available on a H24 basis and that can accept the larger aircraft types. It is necessary to facilitate safe operations when meteorological conditions are outside the limits for Runway 10/28.

18 September 2014

RUNWAY 16/34 USEAGE – MAY 2011 – AUGUST 2014

MONTH	DAYS WITH >5 MVTS WHEN 16	MONTH	RWY 16 OR 34 ARRIVALS	TOTAL DUB ARRIVALS
May-11	8	May-11	579	7038
Jun-11	6	Jun-11	293	7037
Jul-11	3	Jul-11	41	7370
Aug-11	2	Aug-11	34	7399
Sep-11	7	Sep-11	243	6904
Oct-11	7	Oct-11	559	5479
Nov-11	10	Nov-11	956	5693
Dec-11	3	Dec-11	124	5694
Jan-12	5	Jan-12	137	5755
Feb-12	4	Feb-12	74	5218
Mar-12	5	Mar-12	161	6259
Apr-12	9	Apr-12	757	5290
May-12	7	May-12	110	6652
Jun-12	4	Jun-12	69	6286
Jul-12	5	Jul-12	141	7715
Aug-12	11	Aug-12	651	7622
Sep-12	7	Sep-12	269	7282
Oct-12	4	Oct-12	285	6793
Nov-12	12	Nov-12	397	5988
Dec-12	8	Dec-12	150	5873
Jan-13	7	Jan-13	235	5845
Feb-13	5	Feb-13	236	5479
Mar-13	4	Mar-13	171	6540
Apr-13	5	Apr-13	633	6904
May-13	11	May-13	515	7599
Jun-13	4	Jun-13	242	7832
Jul-13	12	Jul-13	308	8312
Aug-13	3	Aug-13	41	8115
Sep-13	15	Sep-13	315	7671
Oct-13	10	Oct-13	477	7012
Nov-13	5	Nov-13	83	6303
Dec-13	17	Dec-13	1184	6234
Jan-14	12	Jan-14	730	6290
Feb-14	13	Feb-14	937	5797
Mar-14	4	Mar-14	293	6677
Apr-14	5	Apr-14	65	7513
May-14	8	May-14	246	8155
Jun-14	6	Jun-14	202	8088
Jul-14	7	Jul-14	260	8579
Aug-14	1	Aug-14	46	8335
AVERAGE DAILY USAGE PER MONTH	**7.025**	**40 MONTH TOTAL ARRIVALS**	**13249**	**272627**
			% ARRIVALS ON 16/34	**4.9%**