Commission on the Defence Forces
Public Consultation Response Template

Capabilities – In this regard, you may wish to consider future integrated capability development and the planning and delivery requirements to support a joint force approach in terms of new equipment, professional military education and training, maintenance and development of infrastructure, developments in military doctrine, and transformative concepts, including specialist capabilities, that prepare and support the Defence Forces for future operations.

The Irish Air Corps has typically been equipped based on a "No change Basis" operational budget. Since I joined the Irish Air Corps in 1999 aircraft have been replaced effectively on a like for like basis in terms of numbers albeit in some instances with a capability change commensurate with developing aviation technology, Marchetti SF260 to Pilatus PC9, Cessna 172 to Pilatus PC12, Gazelle to EC135, Dauphin to AW139, Casa CN235 to Casa Cn295, Kingair 200 to Learjet 45, Squirrel to EC135. Where capability has taken a leap forward this has been as a direct result of innovative purchasing on the part of the IAC management in specifying aircraft with greater capability during the replacement program. In the same period IAC have retired the Gulfstream GIV and as a result the IAC/State has lost the capability to project itself across the globe at short notice. All aircraft within the fleet have historically multi tasked being purchased for one mission in mind but in practise being utilised to their maximum capability in a number or varied roles. For instance, Casa CN235 maritime patrol aircraft being used for — Air Ambulance, Parachute operations, ARW ops, Wildlife surgery's, C2 aircraft,

With that in mind lets examine the capabilities that should be replaced and enhanced over the coming years. It has to be said that in many areas the AC is playing catch up, capabilities that are "par for the course" for a mature military force.

GLOBAL REACH

The loss of the Gulfstream IV reduced the states capability to react to global events and placed the state into a situation of relying on the help of other nations to repatriate Irish Citizens in time of global crisis. In 2006 such a developing situation occurred after the incursion of the Israeli Army into South Lebanon. Ireland dispatched its Gulfstream IV to coordinate the repatriation effort on the ground in Damascus.¹

The lessons learned from this conflict are as follows, We no longer have the capability to put more than 6 DFA personnel on the ground at short notice in the event of a conflict unless that conflict takes place within the range of the current fixed wing fleet (Easter Mediterranean and North Africa) We do not and never did have the ability to repatriate large numbers of Irish citizens from a conflict zone except by chartering a civilian airline or relying on foreign governments to facilitate same. It has to be said that civilian charter will not always be an option.

Ireland needs to invest in an aircraft with a One Stop Global reach. Such a capability is a standard for comparable military forces.² By the definition of "Global Reach" these types of aircraft have

¹ https://www.rte.ie/news/2006/0718/78438-lebanon/

² https://www.army.cz/scripts/detail.php?id=8627

significant range and passenger carrying capability. The aircraft should have the ability to disembark passengers and cargo without ground support. The Air Corps should look to exploit opportunities in the second-hand market for aircraft types that would suit this role. An aircraft of this nature would permit the AC to support overseas deployments through resupply and the rotation of troops into mission areas.



Blue – UN WFP project countries
White – Current DF mission areas
Yellow – UNHRD supply depots
Green – DFA Irish Aid project countries

AIR TRANSPORT

Ireland possesses very limited Air transport capability centred around small turboprop and jet aircraft which can deliver a small payload (roughly 1-2 tonnes / 15 pax) to Europe, North Africa and the Eastern Mediterranean. Historically the Army has reluctantly used the Air Corps to resupply its overseas missions for routine cargo and personnel resupply chalks. It is only in recent times as a result of COVID 19 that the Army has been forced to rely on the Air Corps to provide logistical assistance.³

If we take a whole of Government approach to Air Transport, we can see that Irelands Foreign policy is centred on the Middle East and Sub Saharan Africa. Ireland through DFA interacts with various UN agencies such as World Food Programme, UN Humanitarian Air Service ⁴, UN Humanitarian Supply

 $^{^3 \, \}underline{\text{https://www.irishtimes.com/news/ireland/irish-news/air-corps-uses-newest-craft-to-rotate-troops-in-disputed-african-region-1.4316724}$

⁴ https://www.wfp.org/unhas

Depots⁵, EU ECHO Flight Service⁶ to deliver Aid to its target regions again centred on the African sub-Continent. While DFA provides funding to UN Humanitarian Resource Depots to store and deliver non-perishable humanitarian aid in times of crisis, I believe scope exists to assist these agencies using organic Irish Air Transport in the delivery of aid in times of humanitarian disasters. The capability required to make a credible donation in this regard is informed by the type of operations that take place post natural disaster. For instance, after Hurricane India in Mozambique in one day 450metric tonnes or cargo was offloaded from 7 aircraft. ⁷

The DF have historically used the private sector to provide logistical capability when deploying resupply in and rotating our troops overseas. Historically we have deployed a BN sized force to the Middle East and we know this was increased to 2 BNs serving overseas when the DF deployed to Tchad. Yet despite this we retain zero capability to deploy, resupply and rotate our troops organically relying on the private sector in the majority of cases and other militaries when this is not possible. The 2019 Defence Forces review contains a paper on small state capabilities written by Mr Brendan Flynn and its conclusion in respect of Air Transport are very valid and should be considered by the commission. Specifically, he discussed pooling any asset into the European Defence Agency network – the European Air transport Command. We need also to consider integrating into Training and Depot maintenance structures setup by the EDA for large transport aircraft programs. In Ireland also need to consider adopting NATO STANAGS in relation to Air Transport in order to retain interoperability if pooling and sharing is perused.

The Commission need to asses the requirement for an Organic Air Transport capability which can resupply and rotate a BN size contingent and the relevant airmobile equipment. Considering Irelands Foreign Policy target region any capability must be able to project a force in to this target area. The commission needs to reflect on the kind of assets Ireland will wish to deploy in the future whether that be APCs, Helicopters, etc and wether the capability to airlift these assets directly into theatre will be a requirement for any future deployable force.¹¹

⁵ https://unhrd.org/ https://unhrd.org/yir/

⁶ https://ec.europa.eu/echo/files/aid/countries/factsheets/thematic/humanitarian air services en.pdf

⁷ https://docs.wfp.org/api/documents/WFP-0000114166/download/? ga=2.248703623.1463326909.1612866383-397786863.1612866383

⁸ https://www.independent.ie/irish-news/irish-troops-in-chad-at-mercy-of-other-forces-for-transport-26476668.html

⁹ https://military.ie/en/public-information/publications/defence-forces-review/df-review-2019.pdf

¹⁰ https://www.japcc.org/portfolio/air-transport-training-exercises-interoperability/

¹¹ https://www.ipinst.org/wp-content/uploads/2017/10/1710 Keeping-Peace-from-Above-1.pdf

ROTARY WING OPERATIONS

Arriving in Air Corps service in 2006, the oldest of the AW139 fleet is now approaching 15 years old. Originally bought for Army support and ATCP tasks in the then benign security environment, it was expected that they would last for up to thirty years. Experience gained through operational and maintenance experience, and actual usage versus that which was forecasted, means that a life time closer to twenty years will be more accurate. Beyond that time, maintaining a fleet as small as six aircraft as a viable means of delivering required capabilities will prove increasingly unlikely, as major unscheduled maintenance tasks becomes more probable. The aircraft have been put through the mill compared to some of the more benign types of civilian flying that other AW139s with higher hours might endure. The time to start looking at the eventual replacement for the primary operational helicopter fleet is now.

In looking at a replacement fleet for the AW139, Ireland must consider the capability we are trying to replace. AW139 was selected as a winner in a tender competition, the final entrants of which also included the Blackhawk and EC145. That competition recognised the domestic security situation at the time as benign. Roles such as EAS and fire fighting were not envisaged, there was no NVG capability at the time and the main effort was envisaged to be preparing a pre–Re-org Army for overseas missions and air ambulance tasks. The Brexit referendum was a decade away and notions of successful foreign interference in Western elections would have seemed paranoid. Syria and Ukraine were both intact countries and the vast movement of refugees across the Mediterranean had not yet occurred. In that seemingly distant past, the purchase of the AW139 was not entirely inconsistent with reality, although the initial assessment that four airframes (numbers five and six were options on the contract) would be adequate was always overly optimistic. Experience has shown that, not only has the operational picture changed, but that the initial maintenance related availability figures were optimistic too. The numbers of machines available each day to fly is not as high as it was initially promised to be. Being able to rely on a fleet of just six aircraft to replace the eight Allouettes and five Dauphins has not fulfilled the same level of capability.

A relative like for like replacement program would seem to be the sensible option as well as augmenting the fleet numbers to successfully account for additional taskings which has taken place since the fleet was introduced. A fully militarised models currently on the market, namely the AW139M of the Italian Air Force, or the MH139 of the USAF would provide for the kind of battlefield protection required for possible deployment on peace enforcement missions while also catering for any domestic ATCP/ATCA tasks. The selection of additional AW139s has several bonuses for this scenario. Firstly, they are actually a highly capable aircraft for their size. Secondly, the training burden associated with introducing a new aircraft is dramatically reduced but not eliminated. Thirdly, it reduces the draw on the existing fleet meaning that, if a Mid Life Upgrade is carried out, they could well last out to the originally planned thirty years. Supplementing the fleet now will reduce the burden on the overall thus the continuing demands of ops and training will be met by an adequate number of aircraft each day.

To summarise the current fleet of 6 AW 139s is not sufficient to meet the current domestic level of tasking that is expected of the AW139 fleet, the fleet should therefore be increased in order to prolong the in-service life.

Increased Activity

At no stage over Ireland's history of Peacekeeping and Peace enforcement deployments has it deployed helicopters in support of our own troops. In Lebanon this capability is provided by ITALAIR and in tChad helicopter operations for the EU deployment were contracted in and post transition to

MINURCAT a similar arrangement was made available. DPKO continue to highlight the desperate lack of helicopter support for UN missions¹². Ireland should posses the capability to deploy helicopters into a Peacekeeping/ Enforcement mission either in support of its own troops or in support of other UN Troop contributing nations. This should not be limited to deployment on land and should take cognisance of any capability development in the Naval service for maritime Helicopter operations. With this in mind maritime helicopter variants should be considered. Ireland typically deploys a mechanised infantry to UN missions. Helicopters play a logistical support role to deployed forces. CASEVAC, Resuppply, ISR, and QRF roles would be typical in a deployment of this nature. If this is consistent with future deployments then Ireland should invest in the capability to deploy a helicopter force for this purpose. Ireland must be able to support this deployment organically and so the points made above in relation to Air Transport become even more applicable. Indeed, the type of helicopter you are going to deploy will inform the type of Air Transport capability you need to support that deployment. The command and control of these deployed units should promote integration between the three services depending on the location of the deployment.

AID TO THE CIVIL POWER / AUTHORITY

The Air Corps has significant responsibilities in relation to ATCA/ ATCP missions through numerous Service Level Agreements. SLA between the DOD and the respective Government department. For instance, the highly successful Emergency Aeromedical Service based in Athlone barracks. These ATCP/ATCA duties provide a most relevant service directly to the Irish public. Their impact on the lives of people cannot be undervalued. While some might argue that these missions are not truly "military" roles they are specifically provided for under the White Paper and remain a core function of the Defence Forces. They highlight how relevant the DF is to the Irish public. However, these services provided by the Air Corps must continue and must be resourced properly. Issues surrounding resources are a direct result of the Static operational budget but also the governance issues between DOD and DF and also DOD and other Govt Depts. Other Govt departments are reluctant to divest budget and resources to DOD specifically for the provision of the SLA. The end result is the Air Corps trying to fulfil increasing roles with a static pot of resources namely personnel and aircraft.

Looking forward the Air Corps should be considered as a provider of helicopter SAR services when the next contract comes to an end in 2033. I understand efforts are underway to have the Air Corps take over responsibility for SAR on the East Coast of the country but this should be extended to all 4 SAR bases at the end of the upcoming SAR contract. When we benchmark against other Nations, we can see that in the vast majority of cases SAR is a function either of the military or paramilitary Coast Guard. With the exception of the UK, Spain and the Netherlands all of whom are NATO members requiring all Helicopter assets to be deployed in support of combat operations.

AIR POLICING

The White paper update and equipment plan make provision for a primary air defence radar network for Irish sovereign airspace. This project should be implemented without delay. Within that project their needs to be provision made for an air defence command and control structure and rules of engagement provision for the interception and possible downing of hostile aircraft. A very

https://peacekeeping.un.org/en/un-news/guterres-lauds-un-peacekeeping-highlights-need-to-bridge-critical-gaps

short chain of command between Air Defence controller and Government representative with authorisation to discharge weapons must be provided for.¹³¹⁴

In tandem to a primary air defence radar network, we need interceptor aircraft to both identify rogue targets but to also prosecute intruders that turn out to be hostile. This demands aircraft that are armed and equipped with the relevant sensors to be able to operate by day and night. In the development of an air defence network, we need to be aware that funding will dictate both the numbers and capability of the aircraft that are purchased. We also need to be cognisant of the critical mass required in terms of Piloting skill to be able to declare an air defences network operational. Moving from having never operated an air defence fighter aircraft may well be a step too far for a pilot body of 50+ fixed wing pilots. With this in mind and given the trends around the world where Air Forces are adopting new light supersonic training aircraft such as the Israeli LAVI and the Saab Tx developed for the USAF, there will exist extremely good value in the second-hand Lead in fighter trainer market. It would make sense for Ireland to exploit this market coupled with third party engineering firms that specifically deal with upgrading airframes and avionics to the latest standards. ¹⁵The latest in avionics coupled with proper tactics (stationing QRA aircraft on the West and East coast) could offset the need for a supersonic interceptor. An older generation fighter upgraded with the latest in avionics and weapons package could prove very cost effective for a first step into the air defence business. This would generate corporate knowledge before a further investment into supersonic fighter aircraft was made in the future alongside a replacement program for the PC-9M fleet

ISTAR

The AC have recently taken delivery of 3 PC12 SPECTRE aircraft which are equipped for the ISTAR role. It is clear that in any current or future UN Peace Keeping or Peace enforcement mission that ISTAR assets will be an integral part of the Mission. ¹⁶The AC should seek to develop a niche capability of manned ISR which should be employed overseas with the UN.¹⁷

Unmanned ISR is an area in which the AC is being left behind. While Army and Naval units have sought to employ tactical Unmanned Air vehicles it should rest with the AC to develop larger Medium Altitude over the horizon Unmanned Aerial Systems. These systems should be developed

¹³https://www.japcc.org/nato-air-policing-unmanned-aircraft-considerations-new-approach-2/

¹⁴https://www.japcc.org/small-nations-in-joint-air-power-protectorates-or-valuable-partners/

¹⁵ https://www.patriagroup.com/newsroom/patria-magazine/case/new-capabilities-for-hawks

¹⁶ https://www.japcc.org/satisfying-isr-requirements-in-stabilization-missions-is-contracting-the-right-option/

¹⁷ https://pcrs.un.org/Lists/Resources/16-%20UAS%20Workshop/1-%20Reference%20Documents/2020.15%20PK%20ISR%20Staff%20Handbook%20(2020%20JAN).pdf?
Mobile=1&Source=%2F%5Flayouts%2F15%2Fmobile%2Fviewa%2Easpx%3FList%3D2f346e67%2Dff8
6%2D44f2%2D9242%2D0022ddd6df62%26View%3Dba3b3224%2D08c9%2D4d00%2D897f%2D85d8
7221488c%26RootFolder%3D%252FLists%252FResources%252F16%2D%2BUAS%2BWorkshop%252F
1%2D%2BReference%2BDocuments%26wdFCCState%3D1

with the express intention of maritime surveillance of our EEZ and secondary tasking of search and rescue. 18

MARITIME PATROL

The AC presently has placed an order for 2 CN 295 maritime patrol aircraft to replace the ageing fleet of CN235. These aircraft are approaching 30 years old and have accumulated approximately 40,000 flying hours between them. They are the worldwide fleet leading airframes in terms of flying hours which demonstrates the utility that has been squeezed out of them since delivery. They have been employed in a multitude of roles not just maritime patrol, being used for Air Ambulance, parachute operations, cargo transport, air transport etc etc. The like for like replacement of the fleet does not reflect the reality that the high tempo of operational tasking justifies a larger fleet of aircraft. The current fleet also does not support the potential for deployment overseas in support of EU maritime patrol operations such as Operation Irini ¹⁹, Operation Sophia or Operation Atlanta ²⁰and indeed the potential to be deployed in support of MAOC-N ²¹ in combatting Narco terrorists within the decreasing security situation in the Guinea Basin. ²² Further the commission should recommend developing the capability to see what lies beneath the surface equipping the future maritime patrol fleet with the appropriate sensors to achieve this capability.

¹⁸ https://elbitsystems.com/pr-new/elbit-systems-introduces-a-uas-based-long-range-maritime-rescue-capability/

¹⁹ https://www.operationsophia.eu/wp-content/uploads/2018/03/ESP-CN-235-Vigma-D4.pdf

²⁰ https://eunavfor.eu/deployed-units/mpras/#news-tabs

²¹ https://maoc.eu/

²² https://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_BRI(2020)649333

INFRASTRUTURE



The AC is sitting on a prime piece of state infrastructure ²³ the potential of which has never really been fully realised as a logistic hub for the wider Defence Forces. The Government should consider a CPO on farm land adjacent to the existing Camp with a view to extending hardstanding and hangarage as the existing parking space is not suitable for any type of expansion of logistical operations that this submission is proposing. The existing runways should be lengthened at either end providing for a minimum of 2500m for the longest runway and 2000m for the secondary runway. This will facilitate the operation of larger transport aircraft in the future. A study should be considered to amalgamate all army barracks located in the city centre to Casement Aerodrome. certain economies of scale could be achieved by such an exercise. Monies realised by the sale of prime real estate in the city centre could be directed in to equipment programs as described in this

https://sdcc.ie/en/download-it/publications/south-dublin-county-council-development-plan-2016-2022-index-map.pdf

proposal. By developing Casement Aerodrome as a logistic hub for the DF it could then be made available to the commercial aviation sectors as a logistics cargo hub secondary to Dublin Airport. Cargo operations generally take place at night and therefore do not interfere with the day to day training routine that takes place. Its location bisecting the M7 and M4 place it at a logistics sweet spot for distribution of goods across Ireland. By opening the aerodrome up to commercial operators would guarantee a revenue stream which could be ringfenced for airfield maintenance, ATC, Fire and Crash rescue services and navigational aids.

2. Structures – In this regard, you may wish to consider the most effective high-level Command and Control (C2) structures within the Defence Forces to ensure an agile and balanced approach that can function across all domains at home and overseas.

Additionally, you may wish to address appropriate future force structures for the Army (including its brigade structure), the Air Corps, and the Naval Service, individually as component services and collectively as part of an integrated joint force approach.

Furthermore, you may wish to address the changing nature of reservists, which presents an opportunity for the Reserve Defence Force to further integrate and support the Permanent Defence Force through the provision of enhanced collective and specialist capability across all domains.

AIR CORPS vs AIR FORCE

Like any other aviation unit in any other military the Air corps should stand alone as a separate entity and on a par with both the Army and Navy. It should be rebranded as Air Force. This would be in keeping with the Joint Force concepts outlined by Lt Cdr Paul Hegarty noted below. Further The commander of this AIR FORCE should be given command authority to reorganise their Force to suit operational needs. For example, the introduction of the PC12 SPECTRE aircraft carriers with it ISTAR capabilities. These capabilities cannot be presently employed as there exists no personnel establishment or Tech Pay assignment for Mission system operatives / Intelligence Analysts. GOC AC does not have the authority to reorganise his establishment to cater for this new capability.

JOINT FORCE CONCEPT

Lt Cdr Paul Hegarty produces a paper published in the 2019 Defence Force review which addressed the issue and concepts of Joint Force Command. I think his recommendations should be seriously considered by the commission.

3. Staffing – In this regard you may wish to consider the HR policies that support the requirement for an agile and adaptive modern military force. You may wish to consider issues such as recruitment and retention, organisational culture and values, gender and diversity, career progression, and industrial relations machinery.

STAFFING INCREASED CAPABILITY

The ideas proposed in this submission will require detailed assessment in terms of staffing numbers which cannot be archived overnight. Generating the kind of personnel capability will take many years to achieve. In terms of pilots, you need to be able to boost numbers but you also need these pilots to fly regularly to gain experience in order to become aircraft commanders. The same is applicable to any technical trade. The AC currently has 106 flying officers and 332 aircraft technicians and a total establishment of 886 personnel. Although within those numbers are supervisory nonflying and non-operational technical positions. The proposals within this submission would require a substantial increase in those numbers which could only take place over a sustained period of growth over a number of years. As a comparison organisation the New Zealand Air Force has an establishment of 2500 personnel

FIRST LINE RESERVE

Air Corps First Line reserve was discontinued many years ago. When in existence retrieving personnel, who had served on. "Short service commissions" would then commit to a period on the reserve. The current commitment to service is 12 years from becoming a military pilot. Other service commitments for ATC officers, and technicians vary depending on undertakings signed. Aviation is an experience business, the more experience you have the better informed you become which filters into the ability to make correct decisions when operating and maintaining aircraft. The Air Corps is a small organisation and could benefit immensely from the experience that its retired personnel have garnered in civil aviation. This is achievable through a firsts line reserve. HOWEVER, this is a two-way street and while returning personnel cannot expect to be remunerated in line with private sector benchmarks they should be remunerated appropriately for their time and service, without which the idea will founder. Further no age limit should be set on returning Officers or NCOS as the most experience in the trade rests with the eldest

LEAVE OF ABSENCE

Historically the AC have taken a dim view on offering Leave of Absence to pilots and technical staff. The opportunity to take a break in service would go a long way to refreshing the spirit of personnel giving a different perspective on life which can only be a good thin g in the long run for both their person and the organisation. To give an example of the differing approaches of the AC vs the RAF, in 2015 British Aerospace conducted a recruitment drive to poach Qualified Flying Instructors from the AC to work for the Saudi Air Force training in their Cadet Flying School. The package was generous but due to the lack of Leave of Absence opportunities nobody was prepared to retire to avail of the opportunity. Within two years the majority of those who attended that recruitment drive had retired to work in the airline industry. The takeaway point of this is if people had been given the opportunity of a Leave of Absence to pursue financially attractive package for two years then the impact on long

term retention of highly trained pilots could very well have increased. This theory is proven as many of the AC helicopter pilots who retired to pursue attractive packaged in Qatar were recommissioned when the scheme was introduced in 2018. If we look at the RAF, they have an almost symbiotic relationship between themselves and their Defence Industry allowing secondments on Leave of Absence to the Middle East for their Pilots Missions system operators and technical personnel to pursue opportunities directly linked to the export of military hardware to these countries.

CAREER PROGRESSION / CAREER STRUCTURE

The AC career profile is structured around a 12-year career undertaking from the time an Officer gains his/her Wings. Within this 12-year period the AC must maximise its return from these Officers before they either choose to retire to pursue other opportunities in the private sector or remain within the organisation through career advancement. I would propose that in that 12-year period a pilot performs 4 tours of 3-year duration. One of those tours must be of a ground-based nature in which the officer will fulfil a ground appointment, overseas tour of duty, career course etc. Two of the first three tours will be purely operational flying where a pilot will consolidate and develop the skills required to become an aircraft commander which can be exploited in their final tour of duty before a decision to retire or remain would take place in year 12. Ideally then if an officer wishes to remain in the organisation, they can then pursue academic qualifications for career advancement. By adopting a structured approach to an officer's career this would give certainty to a career profile in the AC. On paper this may sound a very reasonable course of action however in a small organisation this may result in lack of availability of key skills in certain areas as officers' transition between tours. In this instance if the AC had a fully functioning first line reserve of pilots to call from, they could plug operational gaps as required and as First line reserve pilots made themselves available for full time or even part time duty

EXCHANGE TOURS WITH OTHER AIRFORCES

While this has occurred on a limited basis it should be exploited to a greater degree

4. Any other comments you may wish to make in relation to the Defence Forces having regard to the Commission's Terms of Reference

There needs to be a root and branch review of how the DOD influences the day-to-day operation of the DF. In my opinion the relationship between the DOD and the DF needs to be symbiotic as one cannot function effectively without the other. That will require integration to the fullest extent possible. Take for example executive branch. There is no reason why personnel from the DF could not work hand in hand with DOD personnel sharing the responsibilities of that section. Over staffing of the DOD could then be redeployed to other parts of the public sector. The culture of both organisations is so different to the point where trust has obviously been eroded. We can see this in the recent furore over the 2020 DF review. But where we see the DOD and DF working extremely well together was in the purchase of the PC12 aircraft with was concluded over a period of two weeks in March 2020. It cannot be stressed enough how critical the relationship between these two organisations is in order for any development of the DF over the next number of years.

