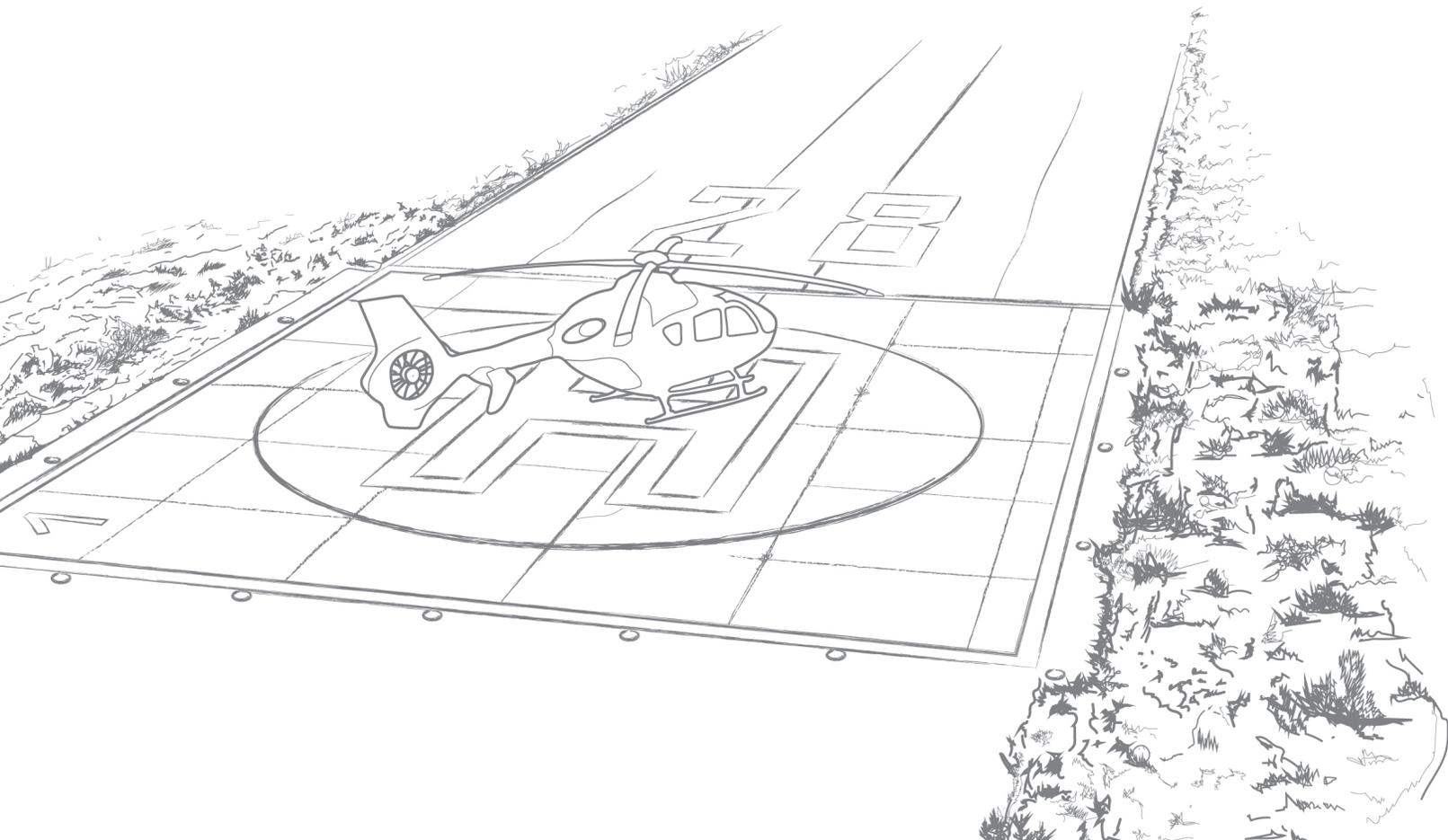




GOZO REGIONAL
DEVELOPMENT AUTHORITY

Gozo Rural Airfield

Regional Impact Assessment



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Gozo Rural Airfield Regional Impact Assessment

1. Introduction

The Airfield Regional Impact Assessment report is being prepared by the Gozo Regional Development Authority (GRDA) following a public consultation with community members and all relevant stakeholders on the proposed development of the Gozo Rural Airfield, as part of the Regional Impact Assessment Study which is mandated by Article 8(f) of the GRDA Act. Reference can be made to the GRDA RIAS Non-Technical Guide, which explains the objectives of the RIA Study and the process involved. The GRDA RIAS Non-Technical Guide can be accessed on GRDA's website: [GRDA Documents – Gozo Regional Development Authority](#).

The Impact Assessment report incorporates the information gathered through the stakeholder consultation process and summarises the conclusions drawn from the Impact Statement, which was made available on the GRDA's website at the beginning of Airfield public consultation. The Impact Assessment report updates the Impact Statement with new information, feedback, and recommendations. Moreover, it updates and adds on the impacts that were identified in the Impact Statement document, which was used as the basis for the public consultation.

2. Proponent of Project

The proponent of the project is the Ministry for Gozo.

3. Overview of the Proposed Intervention

The proposed project entails the regeneration and upgrade of the derelict heliport at Ta' Lambert in Xewkija into an airfield for use by small propeller-driven aeroplanes (fixed wing), small helicopters (rotary-wing), drones (both fixed and rotary-wing unmanned air vehicles), as well as for other ancillary activities.

The proposed development of the airfield covers an area of around 76,000 square metres which incorporates the runway, four aprons, plus other airside facilities which already exist. The project envisages the extension of the existing 174-metre-long runway by a further 271 metres, to reach a total length of 445 metres. The runway will be 20 metres wide and will include 30-metre-wide grass safety areas on each side.

Such regeneration and upgrade in infrastructure will make it possible to establish an Inter-Island airlink as well as a link with other similar airfields in the immediate region, served by single and/or twin-engine fixed-wing aircraft. The proposed runway length of 445 metres enables the operation of Short Take-Off & Landing (STOL) aircraft. STOL aircraft that may accommodate from 9 passengers (GA8 Airvan, Daher Kodiak, and Britten-Norman Islander, amongst others) up to 19 passengers (Twin Otter), depending on the aircraft type, would be ideal for the Inter-Island air transport service. The runway dimensions preclude the operation of medium and large sized aircraft.

Apart from the Inter-Island air transport service, which will improve connectivity between Gozo and Malta, the airfield will be designed to facilitate the development of a General Aviation ecosystem in Gozo, capitalising upon the natural advantages of the island. Potential General Aviation operators include flight schools which would require a dedicated area for training purposes, light and microlight aircraft for private and tourism purposes, drone operations and other ancillary activities such as historical revivals.

3.1. Project Description and Physical Characteristics

Gozo Heliport's regeneration and upgrade proposal takes into consideration Gozo's double insularity, accessibility, size constraints, sensitive ecosystem, tourism seasonality and land ownership, whilst remaining in line with:

- The Gozo and Comino Local Plan;
- The Strategic Plan for the Environment and Development - 2015;
- The Public Consultation on the Integrated Territorial Development Strategy for Gozo - Air connectivity - 5 December 2017; and
- The 'EU Green Policy'.

The proposed airfield has been designed to blend in with the surroundings. In this regard, the upgrades are being planned with due consideration of the context within which this airfield is located. Plans to surface areas by asphalt and concrete have been kept to a minimum. To this effect, three areas earmarked for parking facilities for light aircraft (aprons) and adjacent taxiways shall be surfaced with a reinforced grass paving system, a permeable solution complementing the rural setting. The perimeter retaining walls, which are required to relevel the land, such that the runway and aprons have the gradients in accordance with statutory

aviation regulations, shall be stepped to avoid sheer heights along the public roads and allow for the introduction of landscaping around the periphery of the site.

The proposed airfield will encompass the existing Heliport and part of the adjacent land which is Government-owned but not leased. The proposed development incorporates the asphalted runway, four aprons, and other airside facilities, as shown in Figure 1.

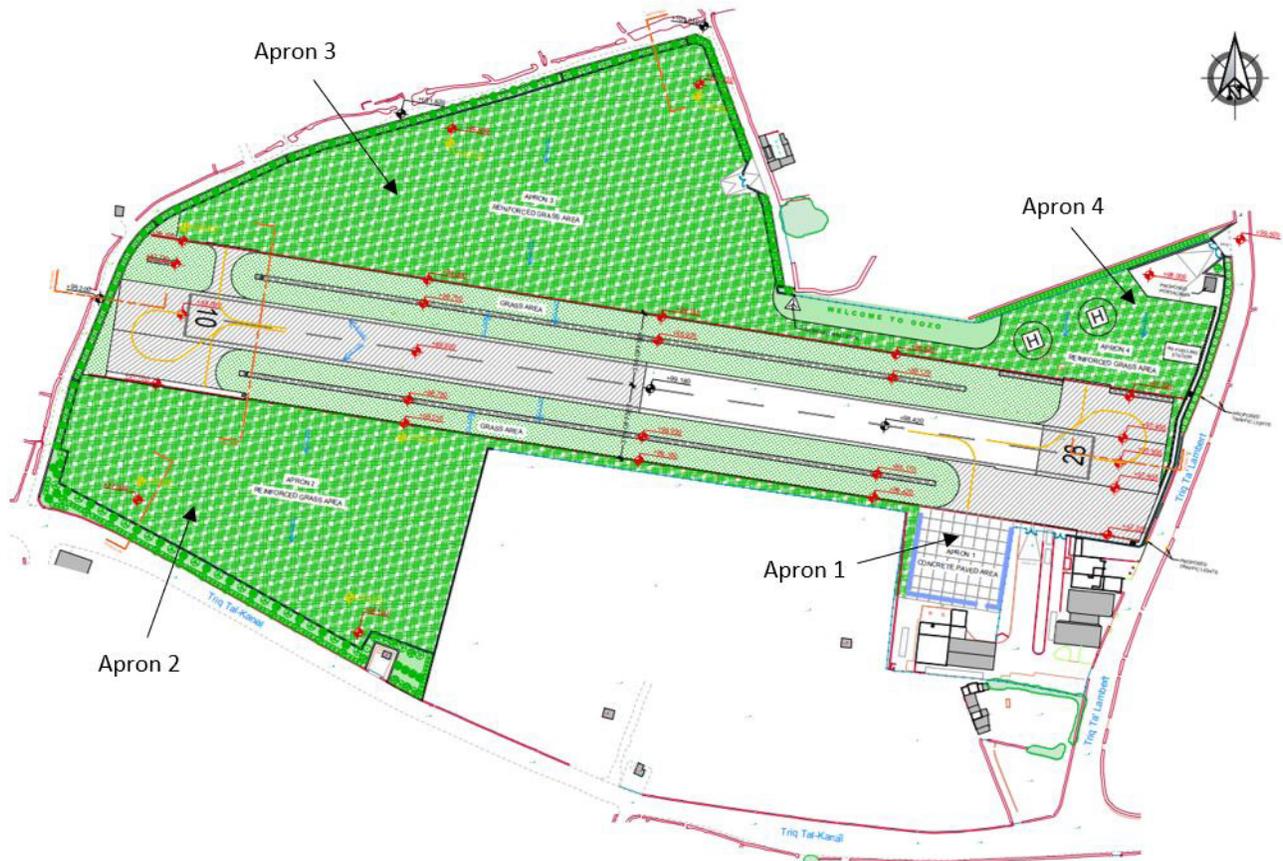


Figure 1: Schematic Diagram of the Proposed Airfield at Ta' Lambert Area in Xewkija, Gozo

The runway will be surrounded by grass/compacted earth taxiways and parking spaces for aircraft. The project to upgrade the Gozo Heliport infrastructure to an Airfield for STOL (Short Take-Off and Landing) aircraft, mainly comprises of:

- i. Resurfacing of the existing runway (174 metres long);
- ii. Extension of the runway by 271 metres, to reach an overall length of circa 445 metres;
- iii. Re-levelling of the existing site to respect maximum gradients in accordance with International Civil Aviation Organization (ICAO) regulations;
- iv. Soft-standing areas for fixed wing and rotary wing general aviation aircraft parking (Aprons 2, 3 and 4);
- v. Hard-standing area for Inter-Island air service aircraft parking (Apron 1);

- vi. Construction of perimetral retaining walls;
- vii. Shifting of security fencing to the site perimeter;
- viii. Relocation of windsock;
- ix. Landscaping and embellishment of the airfield and surrounding areas (indigenous trees, hedges, bushes, grass surface, water services and rubble walls); and
- x. Regeneration of existing terminal.

3.2. Objectives of Proposed Intervention

The purpose of the proposed intervention is to carry out the necessary upgrades to the existing heliport to introduce a feasible Inter-Island air transport link, with the aim of addressing some of the challenges arising from Gozo's double insularity. The Integrated Territorial Development Strategy for Gozo 2017-2020 explained and acknowledged the effects of double insularity from a socio-economic point of view.

The proposed upgrade to the existing heliport would mitigate some of the effects of double insularity, since, once the Gozo Heliport is upgraded it would be suitable for the operation of:

- Fixed wing aircraft seating up to nine (9) passengers;
- Helicopter/Light Aeroplanes training and sightseeing flights, Governmental/Military rotary flights;
- Drones research, development, and flight testing (eVTOL, Hybrid and electric unmanned aircraft).

An important objective and envisaged benefit of the proposed intervention is to enhance quality tourism in Gozo. The conceptualisation of quality tourism is essential in this regard. While it self-implies that quality tourism results in higher revenues, quality tourists need not be restricted exclusively to high-class visitors. Quality tourism also includes lengthier stays in Gozo. In fact, Gozo's international inbound visitors in 2019 accounted for 180,979 or 6.5% of the total inbound tourists to Malta . This profoundly contrasts the number of day-trippers which stood at over 1.3M or 48.9% of the total inbound tourists to Malta. Overall, 88% of Gozo's international visitors are day-trippers (NSO).

A direct airlink between the Malta International Airport (MIA) and the proposed Gozo Rural Airfield, can further highlight Gozo as a distinct destination, and further motivates single-centre and/or twin- centre stays, resulting in increased bed nights, snowballing direct and

¹ NSO, News Release 133/2021.

indirect economic contributions to the economy of the Island.

The creation of healthy economic cycle within the tourism industry will also contribute to increased stable and sustainable job availabilities, and an injection of re-investment by the private sector in their product offering.

Improving and enhancing Inter-Island connectivity is one of the main objectives of the proposed intervention. The estimated in-air flight time is fifteen minutes. This would facilitate the journey to the Malta International Airport for Gozo residents and visitors. Apart from that, the proposed airfield also offers the opportunity to connect Gozo directly with other Islands in the region (Pantelleria, Lampedusa and other major airports in Sicily), with the possibility of attracting chartered flights and other General Aviation activities.

Another important objective of the proposed airfield is the development of a General Aviation ecosystem in Gozo, capitalising upon the natural advantages of the island. Potential General Aviation operators include flight schools, light and microlight aircraft for private and tourism purposes, drone operations and other ancillary activities such as historical revivals.

The proposed intervention also determines Gozo's territorial security, eliminating dependency on sea links, which may be susceptible to occasional potential interruptions and delays.

In summary, the main objectives that the proposed intervention aims to achieve are the following:

- i. Tackle Gozo's double insularity and open other avenues of accessibility;
- ii. Improve Inter-Island connectivity as per EU TEN-T Policy;
- iii. Meet and address some of the demands of the ever-expanding local General Aviation community (Schools/Clubs/Private);
- iv. Open a direct gateway to Gozo for high-class tourists by promoting Gozo as a distinct destination;
- v. Connect Gozo directly with other regions on the continent (link with other similar airfields in the vicinity);
- vi. Incubate and support aviation niche-markets (drones/electric/hybrid R&D and testing); and
- vii. Untap new economic incentives, including private investment and employment opportunities for Gozo

4. Stakeholders Affected by Intervention

The Gozo Rural Airfield project is of national significance and an important factor in the planned economic growth of Gozo for the next ten years. In this context, all Gozitan residents and the general public were identified as stakeholders to this proposed intervention, who could be affected by the proposal or who have an interest in the proposed Airfield project.

National competent entities active in the aviation industry, local councils, and NGOs were recognised as important stakeholders, who could be affected by the intervention and who could have an influence on the project. The national entities, local councils, Gozo associations and organisations, civil societies and NGOs who were identified as consultees and important players in the Airfield Regional Impact Assessment (RIA), include the following:

- Transport Malta (TM) – Civil Aviation Directorate;
- Civil Protection Department (CPD);
- Planning Authority (PA);
- Environment and Resources Authority (ERA);
- Superintendence of Cultural Heritage (SCH);
- Xewkija & Ghajnsielem Local Councils;
- Local Council Association (LCA);
- Reġjun Għawdex;
- Gozo Tourism Association;
- Gozo Business Chamber;
- Student Organisations (Gozo University Group - GUG); and
- Environmental NGOs: Din l-Art Hejwa Għawdex, Għawdix, Kummissjoni Ambjent, Birdlife Malta, Nature Trust Malta, Ramblers Association of Malta, Flimkien għal Ambjent Aħjar, Friends of the Earth Malta, Żminijietna, Fondazzjoni Wirt Artna, GAIA Foundation, Light Pollution Awareness Group, Moviment Graffiti, Malta Organic and Agriculture Movement, Malta Water Association, Youth for the Environment, Noise Abatement Society of Malta.

A wide range of operators within the aviation industry – such as the Fixed and Rotary Wing Air Training Organisations, the Microlight Aircraft Club, the Aviation Museum, and other companies involved in drone research and testing – were also identified as important stakeholders who could provide vital input to the proposed Airfield project. Other important players in the local aviation scene which represent licensed pilots, student pilots, and General Aviation enthusiasts based in Malta, were also identified as stakeholders who could be affected by the intervention and who could provide important insights to the proposed intervention through their background and expertise.

As part of the RIA concerning the Airfield proposal, all the identified stakeholders were invited to give their view on the project via the GRDA website, one-to-one meetings, and public engagement events. The Impact Statement, Project Description Statement, and all other supporting material were made available to the several stakeholders identified as well as to the general public through the GRDA's website.

5. Public Consultation

5.1. Regional Impact Assessment Process

One of the functions of the GRDA, mandated by Article 8(f) of the GRDA Act, is to ensure that a Regional Impact Assessment (RIA) study is carried out when Government Ministries intend presenting a major new project or service to Cabinet, which affects Gozo. The RIA system entails a process whereby any proposed intervention submitted to Cabinet is considered, assessed, adjusted, and monitored through an RIA system that: (i) measures the proposed intervention's impacts; (ii) consults with the relevant stakeholders and community members; and (iii) follows-up by monitoring the implementation of the intervention. Reference can be made to the GRDA RIAS non-technical guide, which explains the RIA process in more detail. The GRDA RIAS Non-Technical Guide can be accessed on GRDA's website: GRDA Documents – Gozo Regional Development Authority.

The Gozo Rural Airfield RIA process was initiated by the Ministry for Gozo (the proponent of the project) by informing the GRDA of the proposed intervention and providing an initial description of the proposed project. The Authority initially reviewed the proposal and determined that the proposed intervention falls within the scope of the Gozo Regional Development Authority Act. Then, following an in-depth screening process based on a detailed proposal submitted by the proponent, it was concluded that the intervention would have an impact on Gozo and merits the application of the Regional Impact Assessment Study.

At this point, the next stage of the RIA process was triggered. This stage focused on assessment of the impacts of the proposed intervention on Gozo and their significance, through analysis of existing studies and commissioning of additional studies. The combination of existing and commissioned new studies covered three primary fields: economic, social, and environmental. These studies include a Project Description Statement and an Avifauna study which focus on the environmental impact, and a Cost Benefits Analysis which evaluates the economic and social benefits and impacts of the proposed Gozo Rural Airfield.

All the identified potential adverse and beneficial impacts of the proposed Gozo Rural Airfield were analysed in detail to measure their significance across economic, social, and environmental areas. Both immediate and medium-to-long-term impacts were considered. Also, any flow-on effects that may result from the identified impacts of the intervention were considered as part

of the impact analysis. Once all possible impacts were identified, the most significant ones, that were expected to have a material impact on the community, were assessed in-depth. Whenever possible, such significant impacts were assessed qualitatively and quantitatively, based on specially commissioned research and studies.

The results of the thorough impact analysis carried out by the Authority were summarised and presented in a Regional Impact Statement document, which was published on the GRDA's website. The publication of the Impact Statement was followed by an extensive public consultation with community members and identified stakeholders, and subsequently the preparation of this Impact Assessment report. The latter, which summarises the conclusions drawn from the Impact Statement and incorporates the information gathered through the stakeholder consultation process. A detailed explanation of the RIA Consultation process, which was managed by the Gozo Regional Development Authority, is presented in the following section.

5.2. Public Consultation Methodology

The Gozo Regional Development Authority (GRDA) views community involvement and stakeholder participation as crucial in the Regional Impact Assessment process. Thus, as part of this process, the GRDA has sought feedback from a broad set of stakeholders, on the proposed Gozo Rural Airfield. To ensure that the proposed intervention was communicated with the community and all interested stakeholders, a comprehensive consultation process was planned. The consultation process/strategy was developed to enable the GRDA to identify who needs to be consulted, notify them, allow them enough time to respond, inform them of what is being proposed, and publish the outcome. This process resulted in an extensive public engagement, which included inputs from national entities, local councils, Gozo associations and organisations, NGOs, and other relevant stakeholders with different backgrounds and expertise.

The public consultation took place between 6th May and 27th May 2022 and was led by the GRDA. A period of three weeks for the public consultation ensured that any interested participants and stakeholders had enough time to take part in the consultation process, while avoiding long durations that delays the RIA process, and subsequently the proposed development of the Gozo Rural Airfield. Over the course of these weeks, the Authority organised two public meetings which were held at the Gozo Innovation Hub. These two public engagement events enabled the Authority to explain the proposed Gozo Rural Airfield and present the conducted studies to the participants, while soliciting their input. A technical expert in the field of aviation was present for both public meetings to answer any technical questions related to the airfield, runway design, circuit procedures, and other technicalities. Those who were unable to attend these meetings had the opportunity to engage in the consultation process through written contributions to the GRDA via the electronic mail address published on the GRDA's website.

Date	Public Consultation Meeting
19 th May 2022, 17:00 – 19:00	Public Consultation meeting – held in English
20 th May 2022, 17:00 – 19:00	Public Consultation meeting – held in Maltese

Public Consultation meetings organised by the GRDA.

The Consultation process was designed to achieve the following goals:

- i. Foster a transparent and inclusive Regional Impact Assessment process;
- ii. Engage a range of stakeholders with varying backgrounds and expertise to participate in the regional impact assessment;
- iii. Present the proposed project to the public and outline the economic, social, and environmental impacts of the proposed intervention;
- iv. Provide all the facts on the proposed intervention supported by documentation and detailed studies;
- v. Enable the public to formulate an opinion based on clear information and impartial analysis and independent studies;
- vi. Provide opportunities for people to make their informed views known on the proposed infrastructural investment; and
- vii. Act as a source of opinions on possible improvements to the proposed intervention, to be incorporated in the proposal.

The public consultation process was launched on 6th May 2022 via a press conference, followed by a press release. The press conference was addressed by Minister Camilleri and GRDA's CEO, Mr. Mario Borg, in the presence of the GRDA's Chairman, Mr Michael Grech. The launch of the public consultation was also communicated to the public through various other media channels including GRDA's social media channels and local news portals. Via the press release, the GRDA's CEO invited the public to contribute to the consultation process and explained that the public consultation is part of an extensive Regional Impact Assessment process, through which the Authority would determine whether the proposed Gozo Rural Airfield will contribute towards Gozo's socio-economic development, whilst respecting the natural environment.

As part of the consultation process, informative videos and infographics were published on GRDA's website and on its social media channels to inform the public on the proposed intervention and to invite interested people to contribute to the consultation process. The Regional Impact Statement, which outlined the economic, social, and environmental impacts of the proposed project, and which was used as a basis for the Impact Assessment, was published on the GRDA's website, along with the following supporting studies:

- Gozo Airfield Project Description Report
- Gozo Airfield Avifauna Study

– Gozo Airfield CBA Publication

The above studies were commissioned by the proponent of the Gozo Rural Airfield project, as agreed with GRDA, to determine and measure any negative impacts or benefits on Gozo's economy, environment and birds' migration, and society. The findings of these studies were also highlighted during the public meetings organised by the GRDA, as part of the public consultation process.

Throughout the consultation period, the GRDA engaged with the public and stakeholders mainly through the two public meetings, but also through one-to-one meetings and bilateral meetings with government bodies, local councils, and other relevant stakeholders. Throughout the consultation process, the Authority collected all feedback and the views expressed on the proposed intervention. Any new information and impacts which were raised during the public consultation were recorded and analysed.

All the information obtained during the public consultation was verified and evaluated. Also, the consultation process ensured that the GRDA did not rely only on opinions from one group or few stakeholders with specific interests who may have dominated the public consultation or were the most efficient in delivering their views and professional expert knowledge. The GRDA consulted a broad set of stakeholders such that the outcome of the public consultation is impartial as much as possible and reflect the views and opinion of the wider community, avoiding a distorted consultation result. The consultation feedback, outcome, and recommendations are presented later in this document, in Chapter 6.

5.3. Stakeholders Consulted

During the planning stages of the airfield proposal, the GRDA and the Ministry for Gozo sought the expertise of the competent national entities, namely the Planning Authority (PA), the Environment and Resources Authority (ERA), the Aviation Directorate within Transport Malta (TM), and the Civil Protection Department (CPD). The Aviation Directorate provided invaluable input during the design stages of the Airfield, ensuring the airfield is optimally designed whilst satisfying the International Civil Aviation Organization (ICAO) standards. From a planning point of view, it was ensured that the proposal is wholly confined within the aviation-use designated area of the Gozo and Comino Local Plan. In this regard, the GRDA positively impacted the project by asserting that the proposed airfield does not encroach on agricultural land. In fact, the proposed airfield does not take up the full area designated for aviation-use, which is much larger than the proposed area of around 76,000 square metre.

From an environmental point of view, ERA stressed the importance of conducting studies and identifying mitigation measures with respect to three main environmental considerations, namely noise generation, light pollution, and impact on birds. The GRDA ensured that all three concerns were considered in the RIA study. Also, from the discussions with ERA and PA, the

use of soakaways along the runway for storm water management and the use of terracing along the site periphery were incorporated in the Airfield proposal.

Once the preliminary Airfield proposal was prepared and potential impacts were identified, the GRDA invited the identified stakeholders to give their feedback on the project and discuss any aspects of the project which might need improvement. The stakeholder engagement was extensive, with various stakeholders providing their views and feedback both through written and verbal contributions during the two consultation meetings held on the 19th and 20th of May.

Stakeholders who provided their feedback on the proposed Airfield project include:

- National entities and local councils (including Xewkija and Għajnsielem Local Councils);
- Local businesses, chambers, and associations from the business and tourism sectors, including the Gozo Business Chamber (GBC), the Gozo Tourism Association (GTA), and the Malta Chamber;
- NGOs, non-profit making organisations, environmental groups/parties, and student organisations, including Moviment Graffiti, Birdlife Malta, ADPD, the Malta Sociological Association, and GUG;
- Operators within the aviation industry including helicopter operators, fixed and rotary wing air training schools, the Aviation Museum, the Microlight Aircraft Club, and other companies involved in drone testing and research;
- Aviation associations including the Aircraft Owners and Pilots Association, Gozo Model Flying Association, and other aviation groups (Malta Aviation Outlook and 9H-Zulu social media group);
- Private microlight aircraft owners and General Aviation enthusiasts;
- Individual licensed pilots and student pilots based in Gozo and Malta; and
- The general public including Gozitan residents².

6. Consultation Feedback and Outcome

² It shall be noted that the names of private individuals who offered their feedback and participated in the consultation meetings are not being shared to respect data protection.

The GRDA sought feedback on the proposed Gozo Rural Airfield project, with a focus on the proposed Airfield infrastructure and the identified socio-economic and environmental impacts. The *Impact Statement Report* which presented an overview of the project and highlighted the significant potential impacts of the project was used as the basis for the public consultation, through which the GRDA sought feedback from the various stakeholders.

The stakeholder engagement was extensive, with various stakeholders providing their views and feedback during the two public consultation meetings as well as through written contributions. The following section provides an overview of the feedback received throughout the public consultation.

6.1. Summary of Stakeholder Feedback

Through this consultation process, the Authority received over 70 contributions, which included general feedback/comments on the proposed project, concerns, recommendations, and ideas. The feedback received has been carefully analysed and considered by the Authority. The contributions and feedback received from the various stakeholders mainly focused on the proposed infrastructure and airfield design as well as socio-economic and environmental impacts. The feedback received includes several suggestions on how to make the proposed airfield attractive to General Aviation (GA) and how to foster a GA ecosystem in Gozo, focusing both on ancillary facilities and operational aspects which were not captured within the Gozo Rural Airfield Proposal and corresponding documents. Moreover, feedback from several individuals and NGOs also highlighted general concerns and reflected the public opinion on the proposed Gozo Rural Airfield.

Table 1, presented below, gives an indication of the feedback received in terms of the source, that is whether from aviation operators (flying schools and other operators), associations and groups of pilots and aircraft owners, individual pilots and aircraft owners, environmental NGOs, local businesses, business chambers, student organisations (GUG), and individuals and Gozo residents. Feedback was mainly received through written contributions via electronic mail and the two consultation meetings, as well as one to one meetings.

Table 1: Feedback received in terms of consultation source

Most of the feedback received was highly relevant and was within the scope of the public

Consultative Person/Group	Number of feedbacks
Local councils & national entities	8
NGOs, environmental parties, and student groups	5
Individuals and residents	20
Operators within the aviation industry	10
Pilots, aircraft owners & associations within the aviation scene	20
Local businesses, chambers & associations within the business and tourism sectors	8

consultation. The GRDA has carefully considered all the feedback and verified new information obtained during the consultation process. The following sections describe and analyse the feedback received through the consultation process, and provide recommendations to the proposed Gozo Rural Airfield project.

6.2. Common Feedback Themes – Key Themes and Concerns

The Authority notes with satisfaction the response and quality of the feedback received during the consultation process. Several individuals with different backgrounds and expertise, especially from the aviation industry, voiced their concerns and recommendations, in relation to the proposed Airfield and its operation. The contributions received through the consultation have been organised into common feedback themes. These key themes and concerns are presented below.

6.2.1. Airfield Rural Design, Landscape and Sustainability Values

The rural aspect of the airfield, the very pleasant landscaping and an attractive overall look, and the fact that the proposed airfield does not encroach on agricultural land were very well received by the vast majority of stakeholders who offered their feedback. Several individuals remarked that the proposed airfield design is commendable, given the physical limitations of the site, and stressed the importance of retaining and enhancing the rural character of the proposed airfield.

Other contributions related to the airfield design, stressed the importance that the development of the airfield enables the area to evolve and provide spaces for new activities in the future, through appropriate design and selection of materials. Some stakeholders recommended that the airfield be designed and developed in a reversible manner, to enable recovery of the area to its original state in case that the airfield is deemed no longer feasible in the future. In this regard, the GRDA received inquiries on the materials that shall be used for the development of

the runway, and the type of grass (real or synthetic) that shall be used for the reinforced grass paving systems.

Numerous stakeholders, including pilots and several individuals, valued the sustainable approach adopted in the proposed airfield design, as it will be making use of the existing runway and terminal. The sustainability and eco-responsibility measures, including light pollution control measures, noise abatement procedures, and the promotion of e-commute vehicles for travellers visiting Gozo, were well-received by a wide range of stakeholders. Stakeholders within the local business sector remarked that the sustainability approach adopted for this project should be considered for all projects being done on the Island. These stakeholders also stressed the importance that the Island of Gozo retains its character and authenticity such that Gozo can succeed economically and guarantee quality of life.

Despite the area proposed for the Airfield being kept to a minimum, some stakeholders expressed concern that the airfield regeneration would be done at the expense of undeveloped land, which despite not being used for agriculture is still valuable and has an opportunity cost. These stakeholders remarked that once the land is committed to an airfield, irreversible damage would be done to the soil and land underneath. Also, it was pointed out that some soft-surfacing and landscaping fall outside the area designated for the airfield under the Gozo and Comino Local Plan. In this regard, some individuals inquired whether the vegetation that shall be used as boundary fences along the perimeter of the airfield would be introduced in the agricultural land adjacent to the proposed airfield or within the area designated for the airfield.

The GRDA notes with satisfaction the positive feedback and recommendations received with regards to the rural character and design of the proposed airfield, and the sustainable approach adopted. As recommended by stakeholders, the airfield has been designed and shall be developed such that it can evolve and provide spaces for new activities in the future. Moreover, its design and development would allow the area to be recovered to its original state with minimal impact to the environment in case the airfield is deemed no longer viable or necessary in the future due to reasons such as the advent of newly developed aviation technologies in the future. The proposed development is reversible, similar to Gozo's first and, up to the time of writing, the only airstrip to have ever existed on the Island, which was built in June 1943, during the Second World War. When this military airfield was no longer required, it was disassembled, and the land was returned to its original state. This airfield was built between Xewkija and Nadur and consisted of two runways. Each runway was about 4000 feet (1200m) long and 200 feet (60m) wide i.e., much longer, and wider than the proposed airfield. One airstrip ran from behind Xewkija Church in the area known as Ta' Lambert, crossed the present Mġarr-Xewkija-Rabat road and came to an end on the Rabat-Xewkija-Qala road. The second airstrip branched from the end of the first airstrip and proceeded along what is nowadays Triq ta' Xħajma up to the Rabat-Xewkija-Nadur roundabout at Tar-Rummiena. These airstrips which were constructed by 20 June 1943, were extensively used in July during an intensified bombing operation to aid the invasion of Sicily. By August the two runways were broken up as the airfield was no longer needed. The agricultural land, on which the runways

were constructed, was recovered to its original state, and was returned to its owners.

With regards to the selection of materials, the principal raw construction materials that would be used during construction are concrete (Apron 1 and part of Apron 4), asphalt (runway extension and resurfacing), and type 1 unbound material (runway extension and base preparation beneath aprons). Type 1 unbound subbase material shall be obtained from good-quality crushed (recycled) rock material. As for the reinforced grass paving systems, permeable plastic grass pavers which are designed to stabilize soil and transfer the weight of vehicles or aircraft while protecting the grass's delicate root system, are one of the main permeable solutions considered. Plastic grass pavers are manufactured in reinforced square panels from recycled High Density Poly Ethylene (HDPE). These support the growth of real turf (grass), which shall be irrigated by the new water (recycled water) obtained from an approved facility very close to the site.

The GRDA acknowledges that, as explained in the Project Description report, parts of the site, earmarked for the proposed airfield, fall outside the area marked as Heliport on the Local Plan, which are being proposed to become aprons forming part of this development. The aprons would be soft surfaced with reinforced grass paving systems, thus minimizing environmental and landscape impact.

The GRDA clarifies that the vegetation which shall be introduced along the perimeter of the airfield, as boundary fences, will be introduced within the perimeter designated for the airfield, and would not use any agricultural land adjacent to the proposed airfield. The vegetation introduced along the perimeter shall include three layers made up of hedges, middle sized trees or shrubs, and indigenous trees identified by ERA.

6.2.2. Noise Pollution

Some contributions received during the consultation period were related to noise pollution and its impact on the local community. Some individuals, especially residents of Xewkija and Għajnsielem, expressed concern on the potential noise pollution originating from aviation activities at the proposed Gozo Rural Airfield, at Ta Lambert in Xewkija. The main concern of the residents was noise generation at night (after 11:00pm), during rest periods, by the Inter-Island air transport aircraft, which is proposed to operate till 01:00am local time.

Regarding noise pollution, in particular during aircraft take-off and landing, it was inquired whether noise echoing off Ta' Ċenċ Cliffs towards Xewkija residential areas at night was taken into consideration as part of the impact assessment. Other individuals remarked that Maltese villages under the flight path of the proposed Inter-Island air transport service should be considered when assessing the impact of noise arising from the Inter-Island air transport service and when planning noise abatement procedures.

Several stakeholders, especially pilots, and other individuals involved in the aviation scene

endorsed most of the measures proposed to mitigate noise pollution. Also, it was pointed out that the Britten-Norman BN-2T Islander, which was identified as an aircraft perfectly suitable for the Inter-Island air transport service, is a jet-powered aircraft (turbo-prop variant) and is relatively louder (effective perceived noise of circa 85dB) than piston aircraft, which was the variant selected in the CBA report.

Other stakeholders, including stakeholders from the business and tourism sectors, remarked that limiting the Inter-Island air transport service to operate between 06:00 hours and 01:00 hours local time, would exclude certain demand for the Inter-Island service originating from late arrivals and early departures at MIA.

The GRDA acknowledges that noise pollution is one of the negative impacts of the proposed project, even though the proposed airfield is expected to generate a low level of noise pollution when compared to other activities on the Island. Noise pollution cannot be totally eliminated, however, it will be mitigated through the following measures:

- i. Airfield design: The airfield design helps mitigate noise pollution on the surroundings, through dedicated bays, shielded by hedges and concealed sound deflectors, in which engine run-ups would take place.
- ii. Clever use of vegetation: The clever use of vegetation, including three layers made up of hedges, middle sized trees, and lofty indigenous trees, as boundary fences would shield aircraft noise on the ground. Moreover, the turf surface of grass aprons and taxiways shall also smother engine noise.
- iii. Times of aircraft operations: Operations of General Aviation aircraft shall be restricted to daytime only (30 minutes past sunrise till 30 minutes prior to sunset), whereas the Inter-Island air transport service aircraft shall be limited to flights between 06:00 hours and 01:00 hours local time. The time frame selected for the inter-island air service would allow the service to cater for early morning and late evening arrivals and departures at MIA, whilst respecting the residents during rest periods.
- iv. Inter-Island air service aeroplane selection and special modifications: The Inter-Island service aircraft shall be equipped with all the manufacturer's Supplementary Type Certificated (STC) noise reduction modifications, which significantly reduce noise levels. For example, Britten Norman (STOL aircraft manufacturer) provides noise reducing four-blade composite propellers, instead of two-blade metal propellers, as well as special add-on exhaust mufflers for their islanders.
- v. Operational and circuit procedures: Aircraft flying from the Gozo Rural Airfield would be prohibited from flying over the nearby villages and residential areas, since pilots would be required to follow special offset approach and departure procedures, as shall be published in the 'Malta Air Information Publication' and as per the 'Pilot Operating Handbook'. As per the designed procedure, aircraft departing from the Gozo Rural Airfield shall climb at the best angle of climb, while making a 180 degree

turn at the end of the runway, heading towards the coast.

Decibels dB	
140	Petards (Fireworks)
130	Jet engine
120	Siren and Shotgun
100	Helicopter
90	Twin engine Aeroplane__
>70	Single engine light Aeroplane – normal conversation
>60	Electric Aeroplane

Table 2: Comparative Sound Measurement

Table 2, a comparative sound measurement table, shows that the fixed-wing aircraft (twin engine aeroplane) earmarked for the Gozo Airfield falls within the lower limit of the aircraft noise classification (less than 90 dB), with noise levels lower than those of rotary-wing aircraft (helicopter), which is currently operating 24/7 for emergency-use from the Gozo Heliport. The Britten-Norman Islander BN-2T (turboprop aircraft), which was identified as an aircraft perfectly suitable for the Inter-Island air transport service, has a noise level of 69.5dB with a limit of 80dB, as per the European Union Aviation Safety Agency (EASA) certificate data sheet, shown in Figure 2 below. It shall be noted that there are different variants of the twin engine Britten-Norman Islander, including piston and turboprop variants. Both of these variants with different engine type (piston and turboprop) are able to operate from the proposed Gozo Rural Airfield and fall within the lower limit of the aircraft noise classification (less than 90 dB).

Noise Certification Basis ICAO Annex 16, Volume I Edition / Amendment Chapter¹ 6

EASA Record No.	Propeller Manufacturer ¹	Propeller Type Designation ¹	Additional modifications essential to meet the requirements or needed to attain the certificated noise levels ¹	Maximum Take-Off Mass ¹ (kg)	Overflight dB(A)		See Note
					Level ¹	Limit	
C515	Hartzell Propeller Inc.	HC-C3YF-5F/FC8475FK-6	None	3,175	69.5	80.0	-
C513	Hartzell Propeller Inc.	HC-C3YF-5F/FC8475FK-6	None	2,994	68.2	80.0	-

Figure 2: Islander BN-2T EASA Certificate data sheet for noise³

The noise generated by the aircraft while landing shall last for a very short duration of time (around 2 minutes). With regards to echoing of noise off Ta' Ċenċ cliff face, fixed-wing aircraft shall be distinguished from rotary-wing aircraft (helicopters), since the latter directs a large

³ EASA.A.388 - BN2 Islander Series – Issue 3

volume of air and the engine noise downwards towards the ground whilst aeroplane propellers direct it towards the rear where it is dissipated before reaching the surface. Moreover, it was pointed out that currently the Airfield is already being used by the air-ambulance helicopters on a 24/7 basis for emergency use, which are noisier than the aircraft earmarked for the inter-island air service, even though these are equipped with special noise reduction modifications.

6.2.3. Avifauna and Light Pollution

Another concern drawn from the public consultation is the impact of the airfield operations on avifauna, specifically from the increased light and noise levels. Despite the intent to keep the light pollution levels low, given that the site is located Outside Development Zone (ODZ) and in proximity to seabird colonies in Ta' Ċenċ cliffs, it was emphasised that the best available practices should be adopted when designing the lighting scheme, such as Guidelines for Ecologically Responsible Lighting. It was pointed out that one of the largest colonies of Scopoli's Shearwaters in the Maltese islands is located less than 2km distance from the proposed airfield, and could be potentially impacted given that the proposed routes of the Inter-Island air transport service are expected to lay in immediate vicinity of the cliffs where seabirds nest. Apart from this, sky glow from the proposed airfield site, has been identified as a potential impact on birds arriving back to colonies from the sea, which could cause juvenile seabirds to be stranded during the fledging period.

In this regard, despite the detailed avifauna study which was conducted as part of the Regional Impact Statement, it was suggested that the environmental impact on avifauna arising from increased light pollution be analysed in more detail, and further assessment of the impact of the airfield operations on migrating and breeding birds be prepared. Moreover, it was suggested that further mitigation measures be proposed.

6.2.4. Air Quality and Electrification of Airfield

A pertinent topic which was thoroughly discussed during the consultation process was that of air quality and electrification of airfield. Amid the negative impact on air quality resulting from the introduction of an Inter-Island air service transport, as identified in the Impact Statement, several stakeholders and individuals remarked that climate change commitments should be prioritised in this project. The Impact Statement highlighted that when the saved fuel emissions from the road is compared to the emissions generated by the STOL aircraft introduced to provide the Inter-Island air transport service, there would be a resultant net increase in carbon emissions.

With regards to the measure of encouraging the Inter-Island air service provider to adopt

an all-electric fleet by 2025, aimed at mitigating impacts on air quality, several individuals commented that through this measure the negative impact on air quality would not be eliminated, since these aircraft would still rely on the national grid, which in turn relies on gas and non-renewable energy imported through the interconnector.

Feedback received from pilots and other individuals from the aviation scene suggest that there is a consensus that electrification of the Inter-Island aircraft and supporting on-ground vehicles is the way forward, in terms of climate change mitigation, both for the proposed airfield and the international aviation industry. Feedback received points out that some electric aircraft such as the Pipistrel Velis Electro are already in service and further advancements in technology are in the pipeline. However, some stakeholders questioned the availability of STOL electric passenger aircraft on a wide commercial scale, by 2025, and expressed concern that the adoption of an all-electric aircraft fleet by 2025 is not attainable and hence would not be enforced. Other individuals from the aviation scene commented on the limitations of electric aircraft, such as their endurance and feasibility, and acknowledged that although the technology for STOL aircraft electrification is evolving at a fast rate, most aircraft in the market are still dependent on fossil fuel derivatives.

Feedback received also emphasised the importance that the Gozo Rural Airfield provides the necessary infrastructure, such as charging points, for electric aircraft, electric vehicles, pedelecs and scooters, as well as cater for future needs such as hydrogen technologies, while ensuring that there is sufficient power available from the nearest substation to support the charging infrastructure. Several stakeholders recommended incentives that support electric aircraft, which are less polluting both in terms of carbon emissions and noise generation. It was also recommended to consider the advent of eVTOL (electric Vertical Take-Off and Landing) aircraft and Urban Air Mobility (UAM) for the medium term, which are the most promising avenues when it comes to electric, sustainable, short-distance urban area transport. In this regard, it was recommended to consult the European Union Aviation Safety Agency's (EASA) Prototype Tech Specifications for Vertiports.

The GRDA acknowledges that the increase in carbon emissions resulting from the introduction of an Inter-Island air service transport is one of the negative impacts of the proposed project, which cannot be entirely eliminated in the short-term. However, the eventual decarbonisation of the national grid in the long-term, as per climate targets set by the European Commission, and electrification of STOL aircraft providing the Inter-Island air transport service, would tackle the carbon emissions.

It shall be clarified that the requirement of adopting an all-electric fleet might be included in the tender document. If so, only those operators who submit their intention to use electric aircraft would be allowed to operate from the proposed airfield. Regarding the target date by which the operator shall shift to electric aircraft, GRDA acknowledges that 2025 is an ambitious target. However, it shall be noted that technology for STOL aircraft electrification is evolving at a fast rate. In fact, electric powered aircraft, such as the Pipistrel Velis Electro, have been licensed and can be operated commercially for pilot training as well as other operations. The

Cessna Caravan passenger aircraft is another new generation aircraft powered by a MagniX electric motor, which could operate from the proposed Gozo Rural Airfield, once licensed. An investment in electric STOL aircraft would be eligible for European funding (TEN-T funding), making the project more feasible.

The target date by which the Inter-Island air transport operator adopts an all-electric fleet was decided following consultations with experts from the Aviation Directorate within Transport Malta. However, as electric aircraft technology is still at early stages, GRDA proposes that the target date would be reassessed in the future once the airfield infrastructure has been developed.

Regarding the advent of Urban Air Mobility, which is expected to materialise in Europe within five years, according to EASA, it shall be noted that the once upgraded, the Gozo Rural Airfield would be suitable for the operation of research and test flights of drones and eVTOL, as highlighted in the Project Description Statement. Thus, the Gozo Rural Airfield would cater for Urban Air Mobility once commercial operations become a reality. The first commercial operations are expected to be delivery of goods by drones and the transport of passengers. Although, such emerging technology, which is expected to have an important role in the transition towards sustainable urban mobility in Europe, does not require a runway, a 445-metre runway was proposed as part of the project as it would enable the operation of other emerging technologies including hybrid and electric STOL aircraft, as well as long range cargo drones that require a short runway (around 400 metres).

6.2.5. Traffic Flow, Road Access, and Parking Requirements

Another concern drawn from the consultation process was related to the impact of the proposed airfield project on traffic flow, road access, and vehicle parking requirements. Due to the proximity of the proposed runway to road infrastructure, especially Triq Ta' Lambert, several individuals expressed concern on the safety of people passing from Triq Ta' Lambert upon aircraft take-off and landing. Other stakeholders inquired whether access to Triq Ta' Lambert would be affected by increased activity at the proposed Airfield, and whether the traffic flow at the area would be negatively impacted.

Feedback received during the consultation period points out that potential impacts arising from increased traffic and the issue of car parking are just tackled nominally and are not duly addressed. Some stakeholders commented that the proposal to utilise the nearby roads for vehicle parking is not a sufficient solution and stressed that the issue of traffic should be given special attention due to the importance of preserving Gozo's rural nature and low traffic levels and hence better air quality.

When in operation, the Gozo Rural Airfield is expected to lead to an increase in activities at Ta' Lambert area in Xewkija, leading to an increase in the number of vehicles frequenting the

area, as well as an increase in vehicle parking requirements. The construction of an additional car park is being avoided in this site to reduce land take-up and retain the site's rural setting. Sections from the adjoining roads to the Airfield, namely Triq ta' Lambert, Triq Tal-Kanal, and Triq Ta' Bwier are wide enough to allow on-street parking. These roads, particularly Triq Tal-Kanal and Triq Ta' Bwier, provide adequate parking facilities that can meet the projected increase in vehicle parking requirements. In this regard, it shall be noted that both of these roads (Triq Tal-Kanal and Triq Ta' Bwier) are currently being utilized for vehicle parking, as part of the free Park & Ride service to Mġarr Harbour, which has been in place since November 2021. Also, part of the site earmarked for the Gozo Rural Airfield has been used as a swab testing centre since 2020, which has led to a substantial increase of vehicles frequenting the area, with hundreds of people visiting the testing centre on a daily basis, during peak months. Both the park and ride service and the swab testing centre has led to an increase in activities at Ta' Lambert area in Xewkija, as well as an increase in the number of vehicles frequenting the area. Despite the increase in activities, traffic and car parking at the site were never reported to be an issue during the past year. The Park and Ride service shall be reallocated to another site, while the swab testing centre will eventually be closed. This would lead to a significant reduction in the number of vehicles frequenting the area. The decrease in number of vehicles frequenting the area due to the reallocation of the Park & Ride service and the closing of the swab testing centre would compensate for the expected increase in the number of vehicles due to the airfield operations.

With regards to road accessibility, the on-road parked vehicles at Triq Tal-Kanal and Triq Ta' Bwier are not expected to have an impact, as these roads are wide enough. However, the installation of traffic lights along Triq ta' Lambert, which is being considered as a safety measure, would temporarily block traffic flow upon aircraft take-off and landing. Such traffic lights would be activated just before aircraft take-off and landing and would be de-activated shortly afterwards, given the short duration it takes for the STOL aircraft to take-off or land. A similar traffic light system is used in similar airfields such as the Jesenwang Airfield in Germany, with a runway length of 410 metres. Given the short duration it takes for aircraft to take-off and land, such traffic lights are not expected to have a significant impact on the traffic flow at the area.

Residents and tourists alike who make use of the Inter-Island air transport service shall be encouraged to make use of public transport, as a measure to mitigate impacts of the proposed airfield on traffic flow, road access, and vehicle parking requirements, as well as a measure to mitigate impact on air quality. Public transport shall be enhanced to meet the expected demand and be in sync with scheduled Inter-Island arrivals and departures, as part of a wider sustainable mobility plan for the island of Gozo.

6.2.6. Waste Management

The feedback received during the consultation period also highlighted the importance of waste

management, both during the construction phase and when the airfield becomes operational. Some stakeholders remarked that the issue of waste management is not entirely covered in the Project Description Statement (PDS). While valuing the sustainable approach proposed for soil management during the levelling works (soil cleared from areas along the runway surroundings shall be reused in the project and nearby agricultural land), stakeholders pointed out that there is no reference to the management of excavated rock material (envisaged to amount to circa 54,000 m³) in the PDS. Also, given the nature of the project and the expected influx of people, a Waste Management Plan was recommended for the operational phase of the proposed Gozo Rural Airfield.

6.2.7. Airfield Facilities and Infrastructure

A pertinent topic which was thoroughly discussed during the consultation process was the proposed airfield infrastructure and related airfield facilities. Several flight schools and training centres, private microlight aircraft owners, operators involved in drone research and development, and operators involved in other aviation activities commented on the proposed airfield infrastructure, in particular the proposed runway length and the availability of other basic infrastructure required for aviation activities.

Several stakeholders and operators involved in the local General Aviation (GA) industry expressed interest in operating from the proposed Gozo Rural Airfield. These include private microlight aircraft (two-seater aircraft) owners, who remarked that the proposed airfield would offer the required airspace to operate effectively, away from the congested environment at MIA. Microlight enthusiasts pointed out that the proposed runway is more than adequate for their take-off and landing and consider the proposal as an opportunity to organize fly-ins and other events in collaboration with international enthusiasts, particularly those in neighbouring regions.

Operators involved in drone testing, research, and development commented that the proposed airfield would provide an ideal testing ground for their operations within a contained environment and with all the required facilities. From the feedback received, drone operations would mainly require a very short runway (around 30 metres), fuel facilities, fencing and a high antenna to enable communication from the ground to the drone. Other operators involved in cargo drone operations also expressed interest to operate from the Gozo Rural Airfield and remarked that the proposed runway length is suitable for drones that transport cargo, which require a runway of around 400 metres to operate.

The feedback received suggests that the proposed airfield infrastructure is suitable for most local GA operators to carry out their operations or a proportion of their operations. Rotary-wing (helicopter) training organisations commented that the proposed Gozo Rural Airfield is ideal for their operations. Several fixed-wing flight schools and training centres, who reached out to the GRDA during the public consultation, remarked that the proposed size of the

runway at the Gozo Rural Airfield is suitable to carry out a proportion of their operations in Gozo, depending on weather conditions. However, some of the fixed wing flying schools as well as pilot associations and other players involved in the aviation scene voiced their concern in relation to the limitations imposed by the proposed airfield infrastructure, in particular the runway length. The main concerns, limitations, and recommendations highlighted by a wide range of stakeholders, in relation to the proposed infrastructure, are summarised below.

6.2.7.1. Runway length

Some pilot associations, associations of aircraft owners, and other players from the local aviation scene commented that the proposed runway length of 445 metres would put limitations on some operators who are considering operating from the proposed Gozo Rural Airfield, while ruling out some other private and commercial operators in the general aviation category. Others commented that limitations imposed by the proposed runway length would affect flight training operations, since take-off and landing at the relatively short runway would be a risky activity for inexperienced student pilots. This is because the short runway would allow little margin for error, when considering the performance figures of STOL aircraft. Pilots and other individuals involved in aviation, pointed out that although it is true that there are certain types of STOL flight training aircraft which are certified to operate within the proposed 445 metres runway, one has to keep in mind that performance figures advertised by manufacturers are based on flight testing by specialised test pilots, using brand new aircraft. This scenario contrasts the situation whereby a relatively old local aircraft is being flown by an inexperienced student pilot, especially so on days with negative engine performance situations such as periods of high ambient pressure, hot climatic conditions, and tailwinds. Pilots and other players involved in aviation also expressed reservations on the proposed circuit procedure and remarked that some pilots especially inexperienced ones may find it difficult to take-off and manoeuvre aircraft as per proposed flight path and proposed runway length.

Feedback received from a group of licensed pilots and student pilots suggest that experienced pilots would be confident of taking off and landing safely at the proposed airfield, while less experienced pilots would be less confident of taking-off and landing at the proposed 445 metres long runway. Several pilots and student pilots commented that pilots with different experience and confidence levels need varying amount of runway to take off and land safely and suggested that a longer runway of around 650 metres would accommodate the majority of General Aviation fliers.

Other players involved in local aviation commented that the proposed runway length would hinder the project from fully exploiting the great economic potential associated with flight training and other general aviation activities. They remarked that some types of fixed wing passenger aircraft such as single engine feederliners, which would make Gozo more accessible from Sicily and southern Italy, will not be able to land at the proposed airfield due to its proposed

runway length. A feederliner is a small short-range airliner that is intended to fly passengers from smaller airports to larger ones, thereby “feeding” the larger hubs with passengers.

Despite the common sentiment, among several pilot associations, associations of aircraft owners, and flight schools, that the proposed runway length should ideally be longer, the majority of these stakeholders acknowledged the importance of respecting the environment, in particular nearby agricultural land, and conceded that having a 445m asphalt strip would tick most of the requirements.

The GRDA acknowledges that the proposed 445-metre runway would exclude certain operations from taking place at the proposed Gozo Rural Airfield, and consequently exclude the economic benefits associated with these operations. These include certain training operations, cargo transport, and air taxi operations which rely on STOL aircraft whose performance requirements exclude the use of the proposed airfield.

In this regard, the GRDA notes that during the airfield planning and design stage, a compromise was sought between the economic benefits and the negative environmental impacts emanating from the proposed project. The protection of agricultural land was prioritised when designing the airfield, while ensuring that the designed airfield allows for the introduction of a feasible Inter-Island air transport service and the development of a General Aviation ecosystem, as well as incubating aviation niche-markets such as drones research, development, and testing (eVTOL, Hybrid and electric unmanned aircraft).

Also, despite the limitations imposed by the proposed runway length, Malta registered STOL trainer aircraft such as the Tecnam P2002 and Cessna Skyhawk, as well as microlight aircraft, are able to take-off and land safely from a 445-metre runway, such as the one proposed for the Gozo Rural Airfield, allowing certain flight schools to carry out a proportion of their operations in Gozo. Despite having Malta registered STOL trainer aircraft with capability of operating from the proposed airfield, it is acknowledged that the proposed runway might restrict inexperienced student pilots (with low flight hours) from flight training at the proposed Gozo Rural Airfield.

The proposed airfield also allows for the introduction of an Inter-Island air transport service, operated with STOL aircraft capable of taking-off and landing safely at the proposed airfield. Calculations for three standard STOL aircraft, the Islander, Daher Kodiak and Twin Otter, demonstrate that these aircraft are able to operate from the proposed airfield at a temperature of 40 °C and zero wind. These calculations were also verified by aircraft manufacturers. Also, STOL aircraft, such as the twin otter aircraft, operated without any issues when tested at Luqa airport with maximum take-off weight, even on negative engine performance scenarios such as crosswinds, and high ambient temperatures.

The Britten-Norman BN-2T Islander offers a STOL performance capability with take-off distance (ground roll) of 255 metres, while the Daher Kodiak has a take-off distance (ground roll) of 293 metres. These take-off distance values, as reproduced in Figures 3 and 4, have been provided by the aircraft manufacturers and confirmed by the Transport Malta Civil Aviation Directorate.

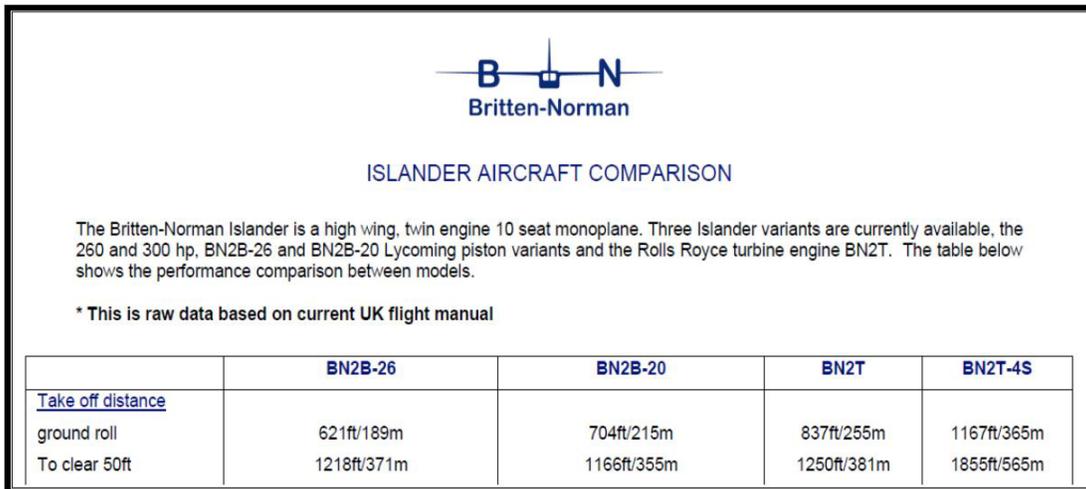


Figure 3: Calculations provided by Britten-Norman Ltd.

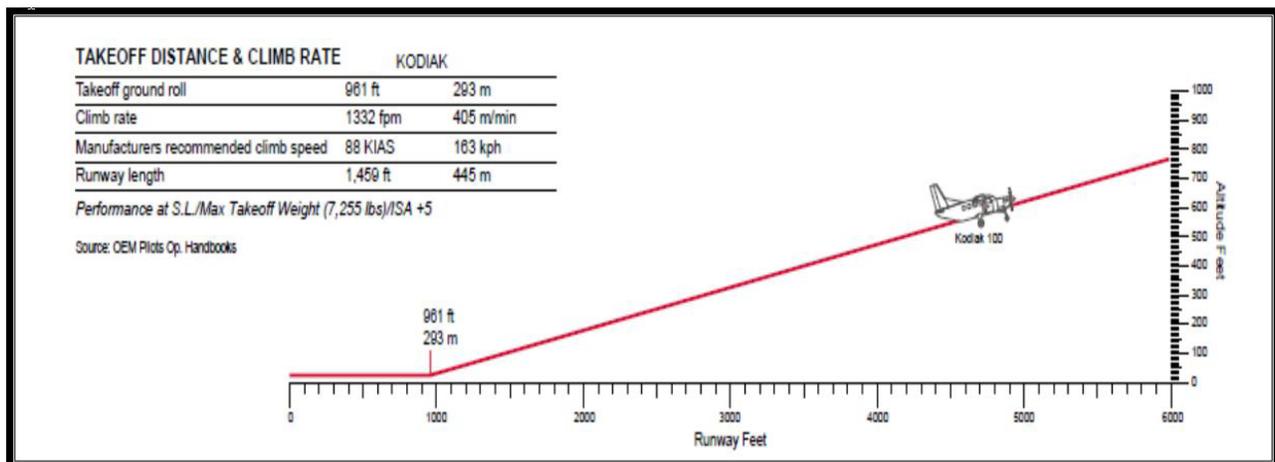


Figure 4: Daher Kodiak take-off distance (ground roll) at 293m.

Performance figures of other STOL aircraft earmarked to operate from the Gozo Rural Airfield are presented in Table 3. The take-off ground run distance of each of these different types of STOL aircraft, as obtained from the manufacturer, show that the take-off distances (take-off run) of these aircraft are well within the proposed runway length of 445 metres, allowing these aircraft to take-off safely from the proposed Gozo Rural Airfield.

The GRDA notes that potential air operators providing the Inter-Island air transport service between Gozo, and the Malta International Airport (MIA) must meet stringent European Aviation Safety Agency requirements, including take-off distances. Moreover, aircrews must be trained to operate the specific type of STOL aircraft from the short runway.

Aircraft Type	Passenger Seating Capacity	Wingspan	Take-Off Ground Roll (Approximate figures)
Islander BN-2T	9	14.9m	255m
Daher Kodiak 100	9	14m	293m
Viking Twin Otter ⁴	19	19.8m	245m
Tecnam P2002 ⁵	2	8.56m	189m
Velis Electro ⁶	2	10.71m	241m
Cessna Skyhawk ⁷	4	11.00m	293m
Cirrus SR22 ⁸	4	11.68m	330m

Table 3: Technical specifications of STOL aircraft able to operate at the proposed Airfield

In this regard, it shall also be noted that similar airfields in Europe with shorter runways than the one proposed for the Gozo Rural Airfield, have been operating a fixed-wing air transport service safely for decades.

6.2.7.2. Fuel Availability

A number of stakeholders from the local aviation industry expressed their view on the proposal that the Gozo Rural Airfield would only include a limited quantity of fuel, stored in small-towed bowsers, that shall be used in emergency only. For regular day-to-day operations it was originally proposed that aircraft shall be refuelled at the Malta International Airport.

While some operators involved in the local aviation industry were pleased that they would have access to fuel, even though in emergency cases only, the majority of operators, who expressed interest in operating from the proposed Gozo Rural Airfield, as well as pilot associations, associations of aircraft owners, and GA enthusiasts remarked that access to aviation fuel, through fixed fuel stations, at the Gozo Rural Airfield is a crucial factor in the development of a GA ecosystem in Gozo.

Several flight schools commented that it would be impractical to refuel training aircraft, that is based at the Gozo Rural Airfield, at MIA as this would counter the benefits associated with operating from Gozo. Flight schools explained that since the typical endurance of single-engine aircraft is three to four hours, and training flights are typically an hour to one hour 30

⁴ www.vikingair.com

⁵ <https://www.tecnam.com/aircraft/p2002-sierra-mkii/>

⁶ <https://www.pipistrel-aircraft.com/aircraft/electric-flight/velis-electro-easa-tc/#tab-id-2>

⁷ <https://cessna.txtav.com/en/piston/cessna-skyhawk>

⁸ <https://cirrusaircraft.com/aircraft/sr22/>

minutes long, the training aircraft must be refuelled after every three or four training flights. Thus, if aviation fuel is not available at the proposed airfield, training operations based at the Gozo Rural Airfield would still be dependent on MIA and be affected by the constraints at MIA.

Similarly, associations of aircraft owners and GA enthusiasts commented that it would be impractical for microlight and STOL aircraft, arriving at the proposed Gozo airfield from neighbouring European regions, to refuel at MIA. Private aircraft owners and GA enthusiasts remarked that any aircraft arriving at the proposed Gozo Rural Airfield, which requires fuel, would be subjected to the constraints at MIA if fuel is not available at the proposed Gozo Rural Airfield.

In this regard, several players from the local aviation scene recommended the installation of an underground re-fuelling bay at the Gozo Rural Airfield, providing GA operators access to the most in-demand aviation fuels, namely Mogas, Avgas, and Jet A1. They stressed that access to the most in-demand fuel by means of a self-paying refuelling station at the proposed airfield is crucial in the development of a GA ecosystem at Gozo.

The GRDA acknowledges that access to the most in-demand aviation fuels at the Gozo Rural Airfield would facilitate several operations such as flight training, especially for flight schools who intend to station part of their training aircraft fleet in Gozo, chartered flights, and other GA activities. This would make the proposed airfield more attractive for the local General Aviation industry, and thus, facilitate the development of a GA ecosystem in Gozo, and facilitate the development of the aviotourism sector in Gozo.

Fixed-fuel depot stations were not included as part of the initial airfield proposal to limit environmental impact and retain the rural aspect of the proposed airfield. Also, reference made to fuel regulations in Malta and input sought from stakeholders, indicate that distribution of certain aviation fuel to the island of Gozo requires special considerations. In particular, Avgas fuel has to be treated with special caution while being distributed. Aviation fuels shall be stored and distributed in accordance with the Joint Instruction Group (JIG) and International Air Transport Association (IATA) standards. Such special considerations required to transport aviation fuel to the proposed Gozo Rural Airfield would likely be reflected in aviation fuel prices. Consequently, the option of including a fixed fuel depot station at the proposed airfield was excluded during the planning and design stages.

Following the extensive feedback received from several players involved in the aviation industry on the subject of fuel availability, the recommendation of possibly incorporating an underground fuel depot station at the proposed Gozo Rural Airfield shall be considered. Aprons 1 and 4, which are the only two parts which shall be entirely or partially hard surfaced, shall be the only two sites considered for the installation of a mobile or fixed fuel depot station at the Gozo Rural Airfield.

Consultations with ERA, and PA suggest that an installation of an underground refuelling bay, to store aviation fuel (Mogas, Avgas, and Jet A1), is permissible as long as all the groundwater protective measures and other safety measures are taken. Groundwater protective measures

include installation of bunds, which offer a spill containment system that forms a secondary perimeter around stored aviation fuel. Such system offers protection to groundwater in the eventuality of fuel leaks or escapes.

6.2.7.3. Aprons and Hangars

Feedback received during the consultation period underlined that while the clean design of the large open apron spaces with reinforced grass is not visually destructive and allows for comfortable positioning of aircraft on the ground, due consideration shall be given to the possibility of having hangars installed on-site. Several stakeholders including aircraft owners, GA operators, and other operators involved in the local aviation industry stressed the importance of having hangars installed at the Gozo Rural Airfield, mainly for aircraft shelter and possibly for aircraft maintenance.

Stakeholders from the local aviation scene noted that hangars will not be available. These offer protection to small GA aircraft against sun and wind and are an important condition that aviation insurance companies consider when GA operators are to insure their aircraft to operate from a particular airfield. These stakeholders suggested that GA aircraft hangars be served with water and electricity, and that a small area at one of the aprons be dedicated for STOL aircraft washing (wash bay). Other individuals commented that the installation of GA aircraft hangars would make the proposed airfield more attractive to aircraft owners and GA operators and would introduce another source of revenue to the operator managing the proposed Gozo Rural Airfield.

The proposed design of Apron 4 was well received by various individuals as well as by several players from the local aviation industry, including the air-ambulance operator. Apron 4 shall incorporate two hard-surfaced stands dedicated for the air-ambulance helicopters, and an emergency gate at the North-East corner of the site, dedicated for vehicular ambulances to ensure that these can directly access the air-ambulances. The air-ambulance operator recommended temporary shelters for helicopter maintenance and tie downs for aircraft, both at Apron 4 for rotary wing aircraft and at the other aprons for fixed wing aircraft.

Other stakeholders also recommended that the Gozo Rural Airfield incorporates hangars for fixed wing aircraft maintenance and pointed out that although aircraft maintenance can be carried out at MIA, this should ideally be carried out at Gozo, especially for the aircraft providing the Inter-Island air transport service. It was highlighted that aircraft maintenance may only be carried out if hangars are available at the Gozo Rural Airfield, as it is not recommended that maintenance is done on the aprons themselves unless maintenance involves a small job such as replacing an aircraft wheel.

Other recommendations drawn from the feedback received on the subject of aprons and hangars were related to possible hangar designs and eco-friendly measures that could be

adopted for the installation of hangars at the proposed Gozo Rural Airfield. It was recommended that any hangars for GA aircraft and Inter-Island air service aircraft should be cleverly designed and camouflaged in such a way as to blend in with the surroundings and be less of an eye sore. Eco-friendly measures, such as photovoltaic panels (facing south) and roof garden (facing the north) on hangar roof, were also suggested for aircraft hangars. Other feedback received recommended that hangars for GA aircraft be set-up underneath the surface of Apron 2, making use of the dislevel between the surface of Apron 2 and Triq Tal-Kanal below it, such that hangars could be concealed.

Given that the site earmarked for the Gozo Rural Airfield is located Outside the Development Zone (ODZ), no additional permanent or temporary buildings have been proposed as part of the Gozo Rural Airfield project to retain the rural character of the site as much as possible. The upgrades to the existing airfield have been planned with due consideration of the context within which this airfield is located. To this effect, a permeable solution (reinforced grass paving system) complementing the rural setting was adopted for three of the four aprons providing parking facilities for light aircraft (Aprons 2, 3 and 4). The other apron (Apron 1), which shall serve as a parking facility for the Inter-Island aircraft, shall be hard concrete surfaced.

In light of the feedback received on aircraft parking facilities at the Gozo Rural Airfield, the GRDA acknowledges the concern raised by aircraft owners and GA operators regarding potential damages to aircraft resulting from unfavourable weather conditions such as high wind forces. There are different solutions that can be adopted to protect aircraft against unfavourable weather, mainly high winds. One solution, which was recommended by several stakeholders during the public consultation, is the installation of aircraft tie downs. Aircraft tie downs could easily be installed both on the soft-surfaced and concrete-surfaced aprons at the Gozo Rural Airfield. These offer protection to small light aircraft, by minimising the possibility of movement of a parked, non-hangared aircraft due to high winds.

The installation of temporary structures or hangars is another solution that offers protection to aircraft against high winds and shelters the aircraft from sun. Hangars offer a greater deal of protection than aircraft tie-downs, especially in the eventuality of extreme winds gusts. Moreover, hangars enable maintenance activities to be carried out at the Gozo Rural Airfield and would allow the Inter-Island air service operator to maintain the aircraft at its home base in Gozo. However, despite their various benefits, hangars could be an eye-sore, negatively impacting the rural character of the Gozo Rural Airfield.

Given that aircraft tie downs offer protection against high winds without creating any visual impacts, these provide a solution which is more fitting to the context within which the airfield is located, than temporary structures or hangars. Also, airliner aircraft and other aircraft, making use of the Gozo Rural Airfield, may easily be maintained at one of the hangars available at Luqa and can be parked at one of these hangars when extreme winds are forecasted.

The GRDA recognises that availability of hangars at the Gozo Rural Airfield would make the airfield more attractive to private aircraft owners and GA operator. Also, it would facilitate certain activities, such as aircraft maintenance, and introduce any associated social and economic

benefits. For instance, having hangars dedicated for aircraft maintenance would enable the creation of a new niche in Gozo, potentially providing maintenance related jobs for Gozitan aircraft technicians.

Following the extensive feedback received from several players involved in the aviation industry on the subject of aprons and aircraft parking related facilities, the recommendation of providing aircraft tie down related infrastructure both at hard-surfaced and soft-surfaced aprons at the Gozo Rural Airfield is endorsed by the GRDA. In this regard, the GRDA notes that the rural aspect and the design of the proposed Gozo Rural Airfield were considered as fundamental during the airfield design stages, and the input received from various stakeholders during the public consultation indicates that the rural design adopted for this proposal shall be maintained and enhanced.

6.2.7.4. Terminal Building and Additional Facilities

A subject which was thoroughly discussed by a wide range of stakeholders, especially by those involved in the local aviation industry, pertained the terminal building and terminal related facilities and services. Several pilots, microlight aircraft clubs, GA operators, and other individuals with experience in airport operations commented on the proposed refurbishment of the existing terminal, and made several recommendations, in particular on the required facilities at the airfield passenger terminal.

Feedback received, from a wide range of stakeholders, recommended that the passenger terminal incorporates the following facilities:

- i. Check-in facilities, including baggage drop off: It was emphasized that the passenger terminal at the proposed Gozo Rural Airfield be equipped with all check-in and baggage drop off amenities, allowing Inter-Island air passengers, travelling abroad, to check-in their flights and hand over the luggage at the Gozo Rural Airfield. This would enable travellers making use of the proposed airfield to avoid queuing at service counters at MIA, prior to boarding their international flight.
- ii. Security facilities: Given that a significant demand for the Inter-Island air transport service shall emanate from international tourists and Gozo residents travelling abroad, several stakeholders stressed the importance that the Gozo Rural Airfield be equipped with all the necessary security facilities. Security clearance gates for passengers and luggages enable international travellers making use of the airlink service to directly access the departure boarding gates at MIA, without the need of passing through MIA security gates. This would reduce the overall travelling time and make the process more efficient. Aircraft owners and GA enthusiasts also highlighted the importance of having security facilities at the proposed airfield and remarked that they would feel more comfortable knowing that access to the field is

being controlled and monitored.

- iii. Passport control and Customs facilities: Travellers flying in Malta from a non-Schengen country are subjected to passport control, and those travelling to Malta from a non-EU country, a non-fiscal territory or an EU airport on a flight that has originated from outside of the EU, may be subjected to customs control. In this regard, stakeholders recommended that the Gozo Rural Airfield incorporates the necessary facilities that enable customs and passport control related checks to be carried out in Gozo. This would enable passengers arriving in Malta (MIA) from a non-Schengen country or other countries that require customs control, to fly directly to Gozo and go through these checks at the Gozo Rural Airfield.
- iv. Air traffic control: Several stakeholders including associations of aircraft owners and pilots expressed the importance of having a controlled area, preferably having a dedicated area control centre at the Gozo Rural Airfield, or at least having an 'Information Service' provided from within a room at the proposed airfield. An 'Information Service' allows personnel at the Gozo Rural Airfield to be in charge of authorising landing and departing flights, based on standard aviation practices and rules, and thus reducing dependence on the Control Tower at MIA.
- v. Weather reporting station: Given the restrictions imposed by the proposed runway length, it was recommended that a weather reporting station be set up at the Gozo Rural Airfield, to measure the weather parameters required for calculating aircraft take-off and landing performance. It was remarked that a weather station at the Gozo Rural Airfield would be valuable especially in negative engine performance situations, such as periods of high ambient pressure, hot climatic conditions, and tailwinds.

It was also recommended, by some local flying clubs, to consider setting up a space to serve as a flying club, and proposed that it includes a flight briefing office, a small cafeteria, a meeting area, and an interactive space to record the wartime Gozo airfield, that was built at Ta' Lambert, in 1943, and possibly include artefacts from the Gourgion Tower, which was demolished in 1943 to make way for the wartime airfield. Apron 2 was recommended as the ideal location for this proposed flying club, and it was recommended that the building be designed to integrate with the surrounding environment, to minimise visual impact.

Other points drawn from the consultation feedback, on this subject, highlight the importance that other basic facilities for pilots and passengers, namely pilot briefing room, refreshment area, water closets, and other basic amenities, be integrated within the refurbished passenger terminal.

Other stakeholders expressed reservations on the size limitations of the current passenger terminal and suggested that the size of the current terminal is not sufficient to cater for all of the above facilities. Other stakeholders questioned whether the current terminal is suitable to cater for the significant number of travellers, which are forecasted to make use of the proposed

airfield, once it becomes operational.

Since, the Regional Impact Assessment (RIA) was mainly focused on assessing the social, economic, and environmental impacts of the proposed infrastructural upgrading of the existing airfield, the RIA did not delve deeply into the operational aspects of the Inter-Island air transport service, such as whether flight check-in, security, passport control, and customs be handled at the Gozo Rural Airfield or MIA. As explained in the Gozo Airfield – FAQs document, such operational aspects and airfield procedures shall be decided at a later stage.

In this regard, the GRDA acknowledge, that as was pointed out during the public consultation, the facilities that the passenger terminal shall incorporate, would affect its layout and design. Thus, certain operational aspects and airfield procedures shall be decided prior to the terminal's refurbishment, such that it is designed to cater for all the required facilities.

The possibility of handling passenger security and customs at Gozo shall be decided at a later stage. Similarly, the option of handling check-in and passport control at the Gozo Rural Airfield, as well as the possibility of incorporating a weather reporting station at the proposed airfield shall be decided at a later stage. To this effect, the recommendations (presented above) made during the public consultation, in relation to these facilities, shall be given due consideration. With regards to Air Traffic Control, the below options are being considered, as pointed out in the *Gozo Airfield – FAQs* document.

- Option 1 - Remote Controlling from Luqa Tower at Malta International Airport.
- Option 2 - An 'Information Service' provided from within a room at the Gozo Rural Airfield. Such a room was previously available for the helicopter Inter-Island operations.
- Option 3 - Other options are on the cards. One such option is the use of a mobile control 'Tower'.

Regarding reservations on the size limitations of the existing passenger terminal, it shall be noted that the existing passenger terminal used to cater for an Inter-Island air transport service and incorporated most of the facilities recommended during the consultation period. These included check-in and baggage drop off facilities, security clearance gates, and an 'Information Service' room for air traffic control.

Also, since the proposed Inter-Island fixed wing aircraft would carry a maximum of nine passengers, the size of the existing passenger terminal shall not be an issue. Even in the eventuality that a larger fixed-wing passenger aircraft, with a maximum carrying capacity of 19 passengers, is introduced, the refurbished passenger terminal shall still cater for this number of passengers. In this regard, it shall be noted that the current passenger terminal infrastructure used to support scheduled inter-island air transport services provided by helicopters, with a carrying capacity of up to 26 passengers (Russian Mil-8 helicopter).

The GRDA recognises that the set-up of a flying club at the proposed Gozo Rural Airfield would make it more attractive to GA enthusiasts and microlight aircraft owners. Also, it would enhance economic activity at the airfield, and add another source of revenue. However, as highlighted

in the Regional Impact Statement and the Gozo Airfield – FAQs document, the proposed rural airfield is being planned with due consideration of the surroundings and the context within which it is located. Thus, given that the site is located Outside the Development Zone (ODZ), while at the same time being relatively close to urban areas, no additional structures were included in the proposal. Given that the site is relatively close to urban areas, aircraft enthusiasts, visitors and tourists can easily visit nearby cafeterias or restaurants. Similarly, regarding the set-up of a flying club, the more environmentally conscious option of setting up a flying club at one of the nearby urban areas, within the development zone, shall be considered.

6.2.8. Feasibility of Inter-Island Air Transport Service

Other points drawn from the consultation process were related to the Inter-Island air transport service. Several stakeholders including pilots, associations of aircraft owners, GA operators, environmental groups, and parties, Gozo residents, and other individuals commented on the proposed Inter-Island air transport service, in particular the airlink's viability and its financial feasibility.

While the majority of individuals and Gozo residents welcomed with satisfaction the proposal to introduce the Inter-Island air transport service, some stakeholders, including environmental groups, and some individuals, questioned the justification and viability of the project and remarked that the short distances between Gozo and MIA (35km along the main roads) render the project as simply one of prestige without any justification. It was remarked that the proposal to introduce an Inter-Island air transport service, for a distance of around 30km, goes against the trend of using ground mass transport instead of flights for distances of under 500km. Others remarked that a nine-seater aircraft is not recognised as a means of mass public transportation, and the proposed airlink service would only cater for the privileged few, such as tourists who need a fast trip to the airport in Malta.

Other feedback received was focused on the aircraft load and seating capacity, and the affordability of the Inter-Island air transport service. Some stakeholders, including pilots and individuals involved in the local aviation scene, expressed reservations on the nine-seater aircraft, which is proposed to provide the airlink service. These stakeholders questioned whether the nine-seat Islander is able to carry up to 300kg of baggage or other heavy cargo, such as scuba-diving equipment, along with the nine passengers, while taking off from the short runway. Other stakeholders remarked that using a nine-seater aircraft for the Inter-Island air transport service instead of larger passenger STOL aircraft would translate into higher ticket prices, negatively affecting the affordability of the service.

In this regard, some stakeholders who were involved in past airlink transport services, such as that provided by Malta Air Charter, made reference to the Russian Mil Mi-8 helicopter, which had a capacity of 26 passengers. These stakeholders recommended that STOL aircraft with higher passenger seating capacity, such as the 19-seater Twin Otter aircraft, be considered for

the Inter-Island air transport service. These stakeholders emphasised that a 19-seater aircraft is ideal for an Inter-Island air transport service, and enables such service to be viable, feasible and affordable as its higher passenger capacity enables cheaper tickets. Moreover, such aircraft is able to carry more load and hence can carry extra luggage or additional cargo, allowing each passenger to carry a baggage weighing 23kg as well as a hand luggage of 10kg.

Several operators involved in the local aviation industry, including rotary-wing GA operators, expressed interest in operating from the Gozo Rural Airfield. In this context, helicopter operators who participated in the public consultation, inquired whether helicopter operators would be allowed to participate in the Inter-Island air transport service. These operators remarked that despite past ventures by helicopter operators resulting into net losses, participating in the airlink service may be attractive to some helicopter operators, considering the advancements in technology, which have made rotary-wing aircraft more efficient, and the substantial increase in the number of people commuting between the islands, which would translate into a higher demand for the service.

The financial feasibility of the Inter-Island air transport service, in particular the potential demand for the airlink service, was thoroughly discussed during the public consultation process. Some stakeholders questioned the estimated value of potential demand, which was estimated to be 69,783 passenger trips in a year in the CBA study, commissioned as part of the Regional Impact Assessment. It was remarked that the number of work-related commuters was overestimated, since the Professional and ICT workers, who were estimated to be the main contributors in the work-related commuters' category, are dominantly based outside the MIA zone (based in the Central Region). Thus, these workers would have to use the public transport or private taxis after the flight. This, combined with the cost of at least 50 euro for a return flight would render the overall cost financially unsustainable and would lead these commuting workers to use cheaper modes of transport, such as the fast ferry which already suffices these hundreds of daily commuting workers.

Other contributions received on the subject of financial feasibility commented on the expenses of the Inter-Island air transport service, namely operational and maintenance costs. It was remarked that both these costs were underestimated. With regards to operational costs, some stakeholders from the local business scene commented that the labour costs are expected to be higher than those estimated, mostly due to the higher salaries. In the CBA study, public sector wages were considered for the cost of crew members, such as maintenance workers and engineers. Some stakeholders commented that for such a highly specialised niche, and if the service is eventually operated by the private sector, the employee wages would be expected to be much higher than those indicated in the CBA. Other stakeholders pointed out that given the current worldwide situation, fuel costs are also expected to be higher than those indicated in the CBA, due to the higher fuel prices. Other comments remarked that the aircraft maintenance costs are underestimated in the CBA, when taking into consideration the stringent standards applied by the European Union Safety Agency (EASA), which were not referred to in the CBA study.

The GRDA, while taking into account the concerns and recommendations raised during the public consultation, notes with satisfaction the positive feedback received from several stakeholders on the proposed scheduled Inter-Island air transport service. A scheduled airlink service between Gozo and MIA would present numerous social and economic benefits for Gozo and its community, as outlined in the Regional Impact Statement document as well as in this document, later on in Chapter 7. The airlink transport service would improve connectivity and reduce travelling time between Gozo and MIA, for Gozo residents and tourists alike.

A scheduled airlink service would present an alternative source of connectivity between Gozo and its mainland, especially when the available ferry services cannot operate due to adverse weather conditions. The proposal to introduce an Inter-Island air transport service, despite the relatively short distances between Gozo and MIA (35km along the main roads), shall be taken in the context of Gozo's reality. Characterised by its smallness, peripherality and double insularity, the reality of Gozo is different than that of central European countries where ground mass transportation is possible and viable.

Regarding the issue of service affordability, it shall be noted that the average single-way ticket price (estimated to be in the range of around €25-€30 per person) considers the travel cost incurred per person to travel between MIA and Ta' Lambert in Xewkija Gozo by ferry and shared road transport, as well as the value of professional time saved as a result of the project. The benchmark price of €30 per single-way trip considered in this study should be sufficient towards the financial sustainability of the airlink service, based on the demand estimated, and also considering the cost of alternative means of transportation. However, this charge could also be subject to market dynamics including the volume and cost structures.

Also, it shall be clarified that the ticket price estimated in the CBA study is only indicative, as price setting is proposed to be liberalised. Given that the proposed fixed wing Inter-Island air transport service shall be liberalised, the ticket price would be established by the private operator/s providing the air transport service. Thus, any aviation operator, including helicopter operators, who would satisfy the requirements published in the tender document, would be able to participate in the airlink service. This proposed model for the airlink transport would introduce an element of competition which would have a direct effect on the ticket price and the service's affordability.

With regards to reservations expressed on the load carrying capacity of nine-seater aircraft, it shall be noted that aircraft, such as the Britten-Norman BN2T Islander, is able to take-off from the proposed runway with maximum carrying load. The Maximum Take-Off Weight (MTOW) of the BN2T Islander is 3175kg and is able to carry a payload of around 700kg when its fuel tanks are full (maximum fuel). Payload refers to the carrying capacity of an aircraft and is expressed in terms of the weight of passengers and cargo that it can carry. Payload above the 700kg load can be catered for by balancing the extra payload with fuel load. Given the short distance between Gozo and MIA, STOL aircraft do not require to take-off with full fuel tank to travel from Gozo to MIA. The Britten-Norman BN2T Islander has a fuel capacity of around 650kg and is able

to carry a disposable load of 1343kg⁹. The disposable load includes the mass of all passengers, the mass of cargo, and the mass of fuel and other consumable fluids carried in the aircraft. Thus, by limiting the amount of fuel to half of the aircraft's capacity, the Islander would be able to carry up to 300kg of baggage or other heavy cargo, along with the nine passengers.

As was highlighted earlier in this report, there are several different types of STOL aircraft on the market that could fulfil the operational requirements of an airfield such as the one being proposed at Gozo. STOL aircraft are capable of operating in almost all-weather conditions and may be easily converted from passenger to cargo, making them ideal for Gozo. The nine-seat twin turboprop/piston engine Britten-Norman Islander, and the single turboprop engine Daher Kodiak aircraft, are two such aircraft. Apart from the nine-passenger aircraft, the proposed airfield would also cater for 19-seat STOL aircraft. However, a 19-seat aircraft, such as the Viking Twin Otter, requires a special waiver issued by the Civil Aviation Directorate to make use of the airfield. Moreover, using a 19-seat aircraft to operate the Inter-Island air transport service, would require extra support from the Civil Protection Department (CPD) in comparison to the nine-seater aircraft. The reason for this being that such aircraft is bigger and has a longer wingspan than nine-seater aircraft. For example, the BN-2T Islander has a wingspan of 14.9 metres, while the Viking Twin Otter (19-seater) has a wingspan of 19.8 metres. For an airlink service operated by nine-seat aircraft, having a wingspan less than 15 metres, the only additional support that should be provided by the CPD is a firefighting support vehicle, which is to be parked in such a place as to face the runway during flight operations, as was explained in the *Gozo Airfield – FAQs* document.

The GRDA acknowledges the benefits of 19-seater aircraft that were highlighted by stakeholders during the public consultation. A 19-seat passenger aircraft such as the Viking Twin Otter offers better flexibility, seat capacity, and ticket price and would be able to carry more cargo than 9-passenger STOL aircraft. However, the additional support required from the CPD, which goes beyond its current capacity, makes it difficult to introduce a 19-seater aircraft from the outset. In this regard, it is being proposed that the service be initially provided by nine-seater aircraft, and eventually, as the CPD builds the required capacity, larger passenger aircraft (19-seater) be considered.

Based on regional statistical data and assumptions thereof, the Cost Benefits Analysis showed that there is sufficient demand for the airfield project to cater for both the inter-island service as well as general aviation operations. The demand for the scheduled inter-island air transport service is expected to emanate from four main sources, including inbound tourists travelling to Gozo both as a twin- and a single-centre destination, Gozitans travelling abroad and Gozitan workers travelling to Malta for professional reasons. The analysis estimates that the airlink project could potentially operate around 69,783 passenger trips in a year, amounting to 97 one-way passengers per day. When taking the estimated value of a potential demand (69,783 passenger trips in a year) into context, the value is reasonable. To put this value into

⁹ <https://britten-norman.com/britten-norman-products/islander/>

perspective, reference can be made to figures quoted by Minister Anton Tabone in reference to a Parliamentary question in 1995. Minister Anton Tabone stated “...by the end of 1994, 5,800 helicopter flights had carried 51,378 passengers.” The figure equates to 15 daily flights, which was the norm with the Russian Mil Mi-8 helicopters. This statement was made at a time when, about half the number of ferry passengers were crossing over to Gozo as compared to 2017.

6.2.9. Airfield Operations and Procedures

The main scope of the Regional Impact Assessment (RIA) undertaken by the GRDA was to assess the social, economic, and environmental impacts of the proposed infrastructural upgrading and associated activities. The operating model that shall be adopted to manage the airfield and the operational procedures of the Inter-Island air transport service were beyond the scope of the RIA. Despite this, these subjects were thoroughly discussed during the consultation process by a wide range of stakeholders, including GA operators, business associations, associations of aircraft owners and pilots, and individuals with experience in airfield operations. Consequently, given the extensive input and recommendations on the subject of airfield operations and procedures, the feedback received has been incorporated in the Impact Assessment report, as one of the consultation feedback key themes.

6.2.9.1. International Travel

Feedback received during the consultation period implied that the proposed Gozo Rural Airfield lacks clarity on international flights, and on procedures that shall be followed by international travellers arriving at the Gozo Rural Airfield. Some stakeholders suggested that the proposal has some shortcomings in relation to international flights, pointing out that while it is being proposed that the airfield would enable direct connection between Gozo and international islands in the region, the proposed project is at the same time being presented as a regional airport without the necessary facilities and equipment to handle international flights. It was remarked that the proposed Gozo Rural Airfield would require more facilities than those proposed and would incur significantly higher running costs than an airfield which caters solely for an airlink transport service. In this regard, it was recommended that the option to connect Gozo directly with other islands such as Sicily, Pantelleria & Lampedusa be reconsidered as tourists generally originate from the continent, rather than other islands.

Other stakeholders inquired about handling of international travellers at the proposed Gozo Rural Airfield, and about procedures that these should follow. In this regard, it was recommended that any procedures, that might be adopted for international travel at the Gozo Rural Airfield, shall enable freedom of movement of private airplanes arriving from Schengen countries, without any security checks. The Schengen agreement among European states enables free

movement for passengers from countries associated with this judicial area. Thus, people flying between Schengen countries can travel without presenting their passports. However, passport control would still apply to arrivals from non-Schengen states. In relation to the latter, it was recommended that the Gozo Rural Airfield caters for passport control for travellers flying directly to Gozo, with their private aircraft, from a non-Schengen country.

The GRDA acknowledges that the RIA did not delve deeply into the subject of international travel and the related operational and handling procedures. In this regard, the GRDA would like to clarify that the proposed airfield shall not cater for scheduled international flights, operated by a commercial airline. However, it would cater for chartered flights, provided by light private STOL aircraft, from nearby European regions and islands, thus offering direct connection between regions. This is viewed as an opportunity to attract GA activities to Gozo, and not just as a source of quality tourism. Such chartered flights, that would be operated via light private aircraft, which normally seat anywhere from four to nine people, are exempt from going through the same inspection and security checks as commercial international flights. Nonetheless, relevant laws/regulations would still apply for such chartered flights, and consequently, passport control would be necessary for flights departing from non-Schengen states. In this respect, it shall be noted that chartered flights from non-Schengen states are not envisaged at the proposed airfield. Thus, the proposed airfield shall not necessarily incorporate additional facilities to cater for chartered international flights. Also, the possibility of handling passenger security, passport control, and customs at Gozo, shall be decided at a later stage. The same applies for operational procedures for international travel. To this effect, the feedback received during the public consultation shall be duly considered.

6.2.9.2. Operating model for the Gozo Rural Airfield

Other points drawn from the consultation process were related to the operating model that shall be adopted to manage the airfield and the Inter-Island air transport service. As was explained in the *Gozo Airfield – FAQs* and the *Gozo Airfield Impact Statement* documents, the operating model being proposed by the Ministry for Gozo involve the government investing in the airfield infrastructure, while the Inter-Island air transport service would be liberalised, hence operated by one or more private operators. This would imply market competition.

Several stakeholders, including business chambers and associations from the business and tourism sectors, welcomed the proposed model with satisfaction. Stakeholders commented that the proposed operating model has proved successful in the operation of the fast ferry service between the two islands and expressed confidence that such model would also be successful for the Inter-Island air transport service. In this regard, to ensure success of the airlink service, it was recommended that the government considers the need to subsidise certain services which might not be viable to ensure that the operator or operators would offer a comprehensive schedule of services rendering the service a successful one.

Regarding the management of the Airfield and Passenger Terminal, a public-private partnership (PPP) was recommended by some stakeholders. These stakeholders remarked that a PPP would be ideal to manage the airfield, as it would allow the private sector to invest in the project and attract GA activities to increase revenue, while the government would ensure that the objectives of the proposed project are achieved and maintained, even if these entail activities or services which are less profitable.

In this regard, as explained in the *Gozo Airfield – FAQs* and the *Gozo Airfield Impact Statement* documents, it was proposed that the airfield and passenger terminal be managed by either a private company, that may be different from the one/s providing the airlink service, or by a government company set up to manage the airfield and its terminal. Following the recommendation made by stakeholders, the option of setting-up a public-private partnership to manage the airfield shall also be considered, along the other options. The company (public, government, or PPP) would generate revenue from any activity taking place at the airfield, including the Inter-Island flights, private chartered flights, flight schools, drones' testing, and any other activities such as festivals, historical meets and revivals, and parachute operations. Given that the terminal operator's revenue depends on activities that take place at the airfield, the operator would strive to attract such activities which secure its operation.

6.2.9.3. Inter-Island air transport service operation and procedures

A subject which was thoroughly discussed by a wide range of stakeholders, pertained the operations and procedures related to the proposed Inter-Island air transport service. Several stakeholders including chambers and associations from the business and tourism sectors, individuals with experience in past airlink operations, and other individuals and residents, commented on the proposed airlink between Gozo and MIA and made several recommendations on operations and procedures that should be introduced.

The following recommendations were suggested to ensure the success of the proposed airlink service:

- i. A method of operation identical to the one used for connecting flights, whereby passengers using the airlink service are able to directly check-in their flights and undergo security checks at the Gozo Rural Airfield, without the need to redo these procedures at MIA. Such method of operation enables travellers making use of the airlink service to directly access the departure boarding gates at MIA. This would make the process more efficient, reduce the overall travelling time, and consequently enhance service take-up.
- ii. Handling of passengers, who are making use of the airlink service, be facilitated at MIA, such that the transfer time from landing at Luqa airport to the terminal (departure boarding gates) be minimized as much as possible. This would be crucial

for the success of the service and would ensure that the gains (saved time) obtained from using the airlink service would not be offset by delays at the Luqa airport.

- iii. Providing a parking slot for the Inter-Island aircraft at either Apron 8 or 9 at MIA, to reduce distance to the terminal, and hence reduce transfer time. Considering the significantly long transfer time from the landing spot at Luqa to the terminal, way back in the 90s, when the helicopter operated by the Malta Air Charter used to park on Apron 4, the parking slot shall be an important consideration when planning the airlink operating procedures.
- iv. The Inter-Island air transport schedule and timings to correspond with departures and arrivals at the Malta International airport, possibly extending operating hours beyond those proposed (06:00 hours and 01:00 hours local time) to cater for certain arrivals and departures at MIA, that would translate into a substantial increase in demand. This would improve the airlink's service efficiency and enhance service take-up.
- v. Use of a larger aircraft with higher passenger seating capacity, which is able to operate within the proposed airfield, to ensure optimum take-up of the service from its inception.

All the above recommendations shall be duly considered when decisions regarding the operational aspects and procedures of the airlink service are taken.

6.2.9.4. General Aviation Procedures and Incentives

Other points drawn in relation to the airfield operations were focused on General Aviation and related procedures. Several stakeholders including pilots, aircraft owners, pilot associations, groups of GA enthusiasts, and other individuals involved in the local aviation scene made several recommendations aimed to foster a GA ecosystem in Gozo.

The following procedures, incentives, and activities were recommended to encourage General Aviation at the proposed Gozo Rural Airfield:

- i. Freedom of movement for private airplanes arriving from Sicily or other nearby Schengen countries, without any security checks, through separate gates dedicated for GA travellers and aircraft owners. This would facilitate the arrivals and departures process for private aircraft owners and GA passengers.
- ii. Incentivise General Aviation at the Gozo Rural Airfield by holding fly-ins to attract foreign flyers that currently opt for more GA friendly regions, and by setting up flying clubs and timeshare opportunities so that active pilots can own or part-own their aircraft. Such incentives would encourage and promote aviation within the community, allowing enthusiasts and the general public to enjoy the airfield and

take in the excitement of flying. Apart from these incentives, it was recommended that the possibility of including facilities that could be enjoyed by the community, such as picnic areas or basic café style facilities with views of the airfield shall be considered.

- iii. Keep burdens for GA operations, such as those currently being experienced at Luqa, to a minimum at the Gozo Rural Airfield. Burdens referred to include logistical constraints related to parking facilities as well as bureaucratic processes in relation to GA passenger handling and security passes. Such constraints discourage GA operations. Thus, eliminating bottlenecks and ensuring efficient operations whilst accommodating the needs of the GA community is crucial for fostering a GA ecosystem in Gozo.
- iv. Reduce operational costs by lowering the overnight parking costs to attract more private aircraft ownership, and by keeping other fees such as mandatory passenger handling for GA flights to a minimum.
- v. Set up an informative website covering incentives, events, procedures, and possibly including a newsletter. Such website shall also possibly incorporate the option to register for a Gozo airfield membership, with the aim to incentivise and attract aircraft owners and GA enthusiasts to visit the Gozo Rural Airfield. Also, it was recommended that the site includes the option of Italian and German translation apart from English.

7. Impacts of the Proposed Intervention

Following the input received from stakeholders during the public consultation, this Regional Impact Assessment report is updating and adding on the impacts that were identified in the Regional Impact Statement report. The latter report was used as the basis on which the public consultation was conducted. Throughout the process of public engagement and stakeholder consultation, the Authority recorded and analysed all the feedback, and any new information on potential impacts. The Authority took into account the stakeholders' views in determining the impacts that are likely to be caused by the proposed intervention, and the significance and severity of these impacts. During this process several potential impacts that were initially identified were further confirmed, while any gaps within the Impact Statement report, and any queries or shortcomings that were identified by stakeholders, were addressed, and reflected in this document.

As explained in Section 5.1, three primary factors were taken in consideration when assessing potential impacts of the proposed intervention. These are the economic, social, and environmental impacts. Through an in-depth impact analysis, based on research analysis and specially commissioned studies, followed by an extensive public consultation, the impacts

presented below were identified to be significant.

7.1. Economic Impacts

The proposed airfield project would result into benefits for the whole Gozitan community and the national economy. The latter is an important point, since the diversification of the Gozitan economy will ensure that Gozo continues to be an active contributor to the national economy.

The Gozitan economy is characterised by factors that are different from those of the Maltese economy. Consequently, the extent of the impact of the proposed intervention should be taken in the context of the Gozitan economy. The economic review considered the effects of the proposed airfield project on the following economic aspects:

- Existing enterprise and industry;
- Employment;
- Infrastructure;
- Cost of business; and
- Attracting business and capital to Gozo.

Through this economic review, based on research analysis and specially commissioned studies, followed by an extensive public consultation, the following potential economic benefits were identified to be significant.

I. Enhanced Tourism

The proposal to introduce an airlink to directly access Gozo would not only provide an alternative Inter-Island connectivity service between Gozo and its mainland but would also promote Gozo as a distinct destination of choice, boosting Gozo's tourism offering. Despite the challenges brought about by Gozo's inherent characteristics, the island provides a distinctive experience to that provided in Malta. From a bird's-eye view, Gozo appears greener than the main island and provides an oasis of tranquillity with a beautiful coastline, sea, and countryside. Over the cycle of the year, Gozo offers a full calendar of activities to attract international and domestic tourists, ranging from musical concerts to culinary events, fireworks festivals and traditional festas. Hence, Gozo has a natural vocation to excel in providing an ecological brand for tourism.

The tourism activity in Gozo is focused on longer stay tourists which seek immersive cultural experiences based on its history, Mediterranean artistic confluences, and natural environment, serviced in high quality boutique accommodation. Gozo is seeking to attract new tourist niche markets including sports and adventure

tourism where sensitivity to urban development and regeneration are key to ensure sustainable development within the island region.

The proposed intervention envisages an enhancement in Gozo's potential to attract quality tourism. The conceptualisation of quality tourism is essential in this regard. While it self-implies that quality tourism results in higher revenues, quality tourists need not be high-class visitors only. Quality tourism also defines lengthier stays in Gozo. In fact, Gozo's international inbound visitors in 2019 accounted for 6.5% of the total inbound tourists to Malta. This profoundly contrasts the number of day-trippers which stood at over 48.9% of the total inbound tourists to Malta. Overall, 88% of Gozo's international visitors are day-trippers (NSO).

A direct airlink between the Malta International Airport and the proposed Gozo Rural Airfield, can further highlight Gozo as a distinct destination, and further motivates single-centre and/or twin-centre stays, resulting in increased bed nights, snowballing direct and indirect economic contributions to the economy of the Island. The proposed intervention is expected to lead to a substantial increase in the number of inbound tourists visiting Gozo, which amounted to 180,979 in 2019, of which 92,715 visited Gozo as a single centre destination and 85,218 visited Gozo as a twin centre destination¹⁰. The inter-island transport service could potentially increase the number of days spent in Gozo for twin centre destination tourists, as the airlink would provide a direct connection to MIA for tourists ending their holiday in Gozo, hence enabling a longer stay in Gozo. Without the airlink project, tourists prefer to spend their last night in mainland Malta to avoid travel risks given the sole dependency on sea transport service which is lengthy and subject to weather conditions.

II. New Economic Niches

Apart from its contribution to the tourism sector, the proposed development shall act as an enabler to the creation of new economic activities and jobs, resulting mainly from the introduction of general aviation activities. The proposed Gozo Rural Airfield has the potential to attract the following general aviation activities:

- Flight schools and training centres;
- Microlight aviation and chartered flights;
- Drone testing, research and development;
- Transport of light cargo (imports/exports); and
- Other aviation activities including entertainment activities such as exhibition events, sight-seeing, and parachuting.

¹⁰ NSO, News Release 133/2021.

Visitors and aircraft owners from Malta, Italy and beyond will generate business within the community and the project will open possibilities for Gozitan residents to further venture into the aviation sector. The airfield will not only play an important role in bettering Gozo's connectivity for people, but it would also improve cargo connectivity, both with Malta as well as beyond. In terms of light imports/exports, the Airfield may serve to connect Gozo to other regions more effectively and in a more efficient manner. It may also facilitate certain niches for timely service between islands.

As revealed through discussions with general aviation and ancillary activity operators in Malta, there is a growing demand for an alternative airfield to be used for General Aviation as activity at MIA has intensified creating bottlenecks for general aviation operators. Apart from the renting income that is expected to be earned by the operator of the airfield, the economy as a whole would also benefit from the organisation of such activities as these would generate economic activity in Gozo particularly in terms of employment and value added.

The economic welfare benefits generated from General Aviation operations are two-fold. Flight schools and other ancillary activity operators could transfer part of their operations in Gozo, hence generating a number of direct jobs in Gozo. Furthermore, aviation mass events and other recreational activities would attract a number of tourists to the island of Gozo, hence generating expenditure in the economy. These activities would in turn generate further economic activity in the economy through multiplier effects.

To assess the expected economic impacts and benefits of the proposed Airfield project, the Ministry for Gozo (proponent of the project) commissioned a Cost Benefits Analysis study. The economic costs and benefits which are expected to emanate from the project were analysed and presented in the Cost Benefits Analysis report, available on the GRDA website. The methodology adopted for the CBA study, and the estimated economic contribution of the proposed project are outlined below.

7.1.1. Economic Impact Assessment Methodology

The economic impact of GA activities was assessed at three distinct levels through the use of relevant multiplier estimates. These include:

1. **Direct Contribution:** This consists of the economic value added and employment within business activities that are directly generating turnover or receiving the expenditure injection.
2. **Indirect Contribution:** This consists of the value added and employment effects within firms that supply resources to the firms that are the initial beneficiaries

of the injection.

- 3. Induced Contribution:** This considers the effects of the expenditure of incomes earned from the direct and indirect effects into other sectors of the economy.

This analysis was based on industry specific multipliers derived from the Input-Output tables computed by the National Accounts for the Maltese Economy in line with internationally agreed principles. Specifically, this analysis utilises the latest Supply and Use tables for the year 2010 published by the National Statistics Office of Malta in 2016. The input-output multipliers were first calculated in a working paper published by the Central Bank of Malta¹¹, which was then updated in 2018 on the basis of the 2010 Input-Output Tables¹².

It is worth noting that these multipliers were computed for the national economy and are not specific for Gozo. Nonetheless, these provide a good indication of Gozo's economic impact.

7.1.2. Economic Contribution

The impact of the above General Aviation activities from a macroeconomic perspective in terms of potential value added, employment and tax revenue to be generated in Gozo was considered. The analysis, based on the foregoing methodology, estimates that the development of General Aviation and ancillary activities in Gozo would generate an annual average direct value added of €895,777. This would rise to over €1.7 million worth of value added when considering indirect effects, reaching €2.5 million when including also induced multiplier effects generated from earned income.

Moreover, an annual average of 20 Full Time Equivalent (FTE) jobs are estimated to be created in the economy as a direct effect of these activities, increasing to 34 FTE jobs when considering indirect effects and rising to 48 FTE jobs when including also induced multiplier effects, as shown in Table 4.

¹¹ Ian P. Cassar (2015). 'Estimates of output, income and value added and employment multipliers for the Maltese economy'.

¹² Ian P. Cassar and Noel Rapa (2018). 'Estimates of Input-Output Multipliers for the Maltese Economy Based on the Symmetric Input-Output Table for 2010'.

Annual Average Effects	Value Added Generation (€)	Employment Generation (FTE)
Direct	895,777	20
Direct + Indirect	1,752,574	34
Direct + Indirect + Induced	2,483,048	48

Table 4: Economic contribution in terms of value added and employment

As shown in Figure 5, the Professional Services sector is expected to benefit the most in terms of both value added and employment when considering the direct and indirect multiplier effects. The share of value added generated as a result of the project in the Professional sector is estimated at around €958,000. In addition, around €198,000 worth of value added is estimated to be generated in the Hotels and Restaurant sector, followed by the Transport and Distribution sectors with a value added of around €126,000 and €112,000 respectively. The other sectors of the economy combined would have around €357,000 additional value added generated as a result of General Aviation activities in Gozo.

The sectors which are expected to benefit the most in terms of employment generation are the Professional sector with 13 FTE jobs, followed by Hotels and Restaurant sector with 5 FTE jobs, respectively. The other economic sectors combined would gain 16 additional FTE jobs.

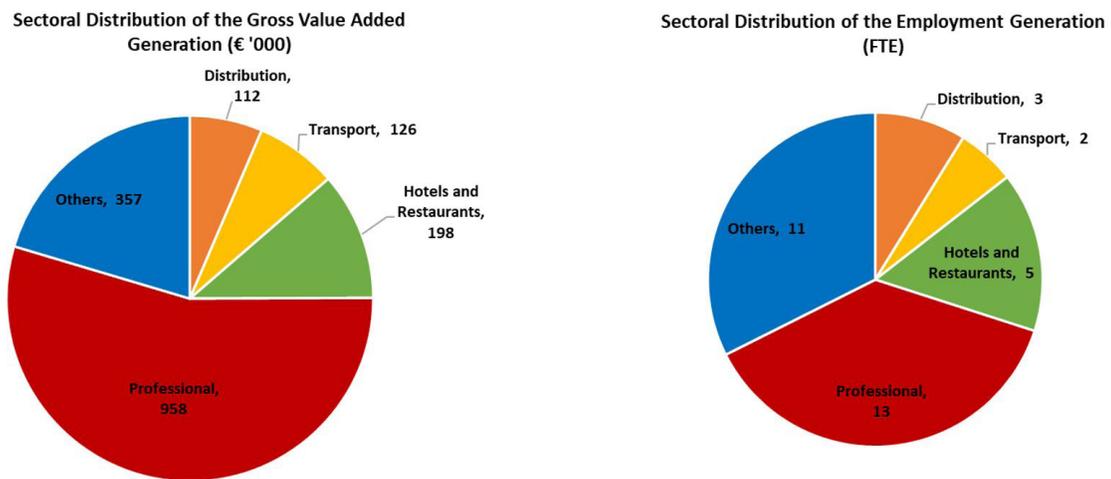


Figure 5: Sectoral distribution of Value Added and Employment generated in the economy

The operations of General Aviation activities will also contribute towards the generation of tax revenue in the economy. An annual average of €304,908 would be generated in tax revenue from direct activities, which increases to €596,270 when including indirect effects, reaching an

annual average of €844,460 when considering also induced effects, as summarized in Table 5.

Tax revenue generated	Tax revenue Generation from Operations			
	Expenditure Tax	Income Tax	SSC	Total
Direct	117,732	145,786	47,390	304,908
Direct + Indirect	218,500	285,095	92,675	596,270
Direct + Indirect + Induced	309,448	403,762	131,250	844,460

Table 5: Economic Contribution in terms of Tax Revenue Generated.

7.1.3. Economic Performance

Considering only the direct effects generated from General Aviation activities together with other net benefits to be generated from the Inter-Island air transport service, this project is expected to render an Economic Net Present Value of €10.4 million consistent with a social discount rate of 5%, an Economic Rate of Return of 30% and a corresponding Benefit-to-Cost ratio of 2.06. For more details on the economic analysis, including the methods used for estimation of quantitative and qualitative costs and benefits, reference can be made to the detailed Cost Benefits Analysis report conducted by ECubed Islands, which is available on GRDA's Gozo Airfield public consultation page.

7.2. Social Impacts

Social impacts include all the issues associated with a proposed intervention or project that affect or concern people, whether directly or indirectly. The Regional Impact Assessment (RIA) took into consideration the social implications of the proposed airfield project compared to the current status. The effects of the proposed intervention on the following social aspects were considered as part of the social impact assessment:

- Commuting between Gozo and Malta;
- Population number and the demographics profile;
- Access to education and healthcare;
- Culture and Heritage;

- Human Environment;
- People's way of life; and
- People's fears and aspirations.

Since 'social impact' is conceived as being anything linked to the project that affects or concerns any impacted stakeholder group, almost anything that is important to a specific group of people can potentially be a social impact. In this regard, the Social Impact Assessment carried out for the proposed project identified certain environmental impacts, that were highlighted in the Regional Impact Statement document, as social impacts. These impacts include the impact on landscape and visual amenity, impact on noise quality, and impact on air quality. Such impacts, which are explained in further detail in Section 7.3, besides being environmental impacts are also social impacts because people depend on the environment for their livelihoods, and are affected by the quality of air, and the noise they are exposed to, amongst other aspects. Also, since the landscape and visual amenity are valued by the community, any impact on landscape is also recognised as a social impact. For each of these identified impacts, mitigation measures have been proposed to minimise the effect of these impacts on the community.

Another notable social impact, that was identified, was concern among some members of the local community due to issues related to land take-up for the proposed airfield, and concern that the project might span over nearby agricultural land. This social impact, despite being limited to a small part of the community, was the result of speculation among the community early on when the project plans were still being developed. These concerns and the resulting social impacts on some members of the local community were managed effectively through the public consultation, during which all the facts were presented, and members of the community were offered the opportunity to voice their concerns and queries during the consultation meetings. All the contributions and recommendations made by the various stakeholders are being reflected in this report, and mitigation actions and measures have been proposed to address concerns raised by stakeholders. These actions undertaken as part of the RIA process should serve to alleviate the extent of this social impact experienced by some members of the community.

Apart from the social impacts highlighted above, no other impacts were identified to have a material negative social impact on the community. In this context, it shall be noted that although a modest increase of tourist population is anticipated in Gozo, as a result of the airfield project, this is not considered as a negative social impact. On the contrary, this is considered as beneficial to the community as it leads to economic growth and social development.

Beside focusing on the need to ensure that the negative impacts are identified and effectively mitigated, the SIA, carried out for the proposed airfield project, also focused on enhancing the benefits of the project on the impacted communities. The latter was achieved by meaningful, and transparent community engagement practices, giving the community an opportunity to give their views and recommendations which could potentially lead to project revisions or ancillary activities that ensure greater benefits to the community.

Community engagement, which formed an important part of the Social Impact Assessment, was based on the Free, Prior and Informed Consent (FPIC) mechanism. The FPIC is a procedural mechanism developed to assist in ensuring the right of people within the community to self-determination. As per FPIC mechanism¹³, the public consultation process adopted for the proposed intervention was free, prior, and informed. The process was 'Free' because there was no pressure or manipulation in order to obtain stakeholder consent. Also, it was 'Prior' and 'Informed', since the proposed project was fully disclosed to the public and stakeholders prior to an activity on community land, related to the project development. The community was provided with enough information to have a full understanding of what the project entails, including any potential social impacts they might experience.

Following feedback and recommendations received by stakeholders during the public consultation, which formed part of the wider RIA, the following were identified as potential social benefits that shall emanate from the proposed airfield project:

- i. Improved accessibility: Connectivity and accessibility are key to the socio-economic development of the Island. Currently, sea transport remains the sole mode of transportation connecting the two islands. Given dependence on this sole mode of transport, travel time between the two islands is often lengthy, affecting frequent commuters and businesses as well as causing traffic congestions from Cirkewwa to the central areas of Malta. Also, sea transport, especially the fast ferry service is greatly affected by weather conditions. Thus, the development of another avenue of accessibility for the island of Gozo represent a major social benefit both to Gozo residents travelling to the airport (MIA) and to workers based in Gozo travelling to Malta for professional reasons. The proposed project would be beneficial for Gozitans travelling abroad as it would provide a direct connection to MIA in a shorter period of time. International travel, be it for recreational, business or health purposes, has increasingly become an important part of people's way of life. In fact, using the total number of outbound tourists at a national level and the population ratio of the island, it is estimated that in 2019, a total of 42,758 Gozitan residents departed from MIA, which is nearly double the amount in 2010. It is estimated that a total of 22,054 Gozitan residents departed from MIA in 2010. This indicates that international travel is increasingly become engrained in the Gozitan community's way of life. By improving connectivity between Gozo and MIA, the proposed airfield would sustain the community's way of life and offer numerous benefits when compared to the current modes of transport. It would reduce the risk of missing the flight due to adverse weather conditions or delays in the multiple inter-island modes of transport required to arrive at MIA.

¹³ Vanclay, F., Esteves, A.M., Aucamp, I. & Franks, D. 2015 Social Impact Assessment: Guidance for assessing and managing the social impacts of projects. Fargo ND: International Association for Impact Assessment.

¹⁴ Based on indications provided in the Cost Benefit Analysis Guide for Malta.

- ii. Saved travelling time: Saved travelling time between Gozo and Malta represent the largest external social benefit, which was estimated at €1.2 million per annum in the CBA study. The value estimated takes into consideration the professional time saved when travelling between Gozo and Malta via air transport relative to the current means of transport. The value of professional time saved is calculated by multiplying the loss of productive time estimated at €13.22 per hour, by the time in minutes expected to be saved when using air transport relative to current modes of transport, estimated at 113 minutes. The value of productive time lost in this analysis considered at 70% of the indicated value per hour in the CBA guide to account for Gozo's lower per capita GDP relative to Malta. Multiplying such estimates by the total number of passengers which are projected to use such service per annum results in an external benefit of €1.2 million per year. This saved travelling time is a social benefit for Gozitan workers and tourists alike.
- iii. New economic niches and enhanced employment opportunities in Gozo: Regional labour supply data published by the National Statistics Office (NSO) indicates that in 2019, about 3,578 Gozitan residents were employed on a full-time bases in Malta, of which 51% worked in the public sector. Hence, from a total of 15,193 workers residing in Gozo, around 23% held a primary job in Malta. This is a result of the limited job opportunities in Gozo and the lack of diversification of the Gozitan economy. Gozo's double insularity and peripherality have limited the island from realising its full potential across various socio-economic aspects, particularly with respect to high-quality job creation and tourism activity. The extension of the existing runway and the regeneration of the present facilities on the island of Gozo is expected to have a significant impact on the socio-economic development of the island. Apart from providing a direct link for Gozitans travelling abroad, the airlink would also ease access to tourists, making Gozo more attractive to business and high-end visitors, and kickstart the development of high-value economic niches and creation of new jobs. The development of new economic niches and the subsequent creation of new jobs represents a major social benefit to the Gozitan community. An annual average of 20 Full Time Equivalent (FTE) jobs are estimated to be created in the economy as a direct effect of the activities emanating from the proposed airfield project, increasing to 34 FTE jobs when considering indirect effects and rising to 48 FTE jobs when including also induced multiplier effects.
- iv. Enhanced academic and training opportunities in Gozo: The proposed project would facilitate the development of a General Aviation (GA) ecosystem in Gozo, by providing the necessary infrastructure for GA operators such as flight schools, microlight aviation, and drone testing, research and development. The introduction of GA operations, in particular flight schools, would provide new services, and academic/training opportunities to the local community in Gozo. Flight schools, for example, are willing to set up a satellite office in Gozo to shift a proportion of their operations and activity to the Gozo Rural Airfield. This would facilitate training for

Gozitan student pilots who currently travel to Malta to conduct their training at MIA. The provision of such academic and training opportunities is an important social benefit to the Gozitan community. The proposed project aims to maximize the opportunities for the local content.

- v. Enhanced cultural heritage: The proposed Gozo Rural Airfield would open up various opportunities to showcase the collection of vintage aircrafts in Malta, currently exhibited at the Malta Aviation Museum. The Malta Aviation Museum Foundation, which is an organisation that restore and preserve a number of aircrafts at the Malta Aviation Museum, welcomed the proposed airfield with satisfaction and remarked that the proposed airfield would provide the ideal ambience for exhibition events away from the congested environment at MIA. The Gozo airfield could also offer an opportunity for the Malta Aviation Museum Foundation to organise air shows with military airplanes in collaboration with foreign vintage aircraft enthusiasts. Other activities may include re-enactments and commemoration events with exhibitions and flights of airworthy aircrafts used during a particular era. The Gozo airfield also offers the right environment for the filming of vintage aircrafts, as apart from the landscape, it provides an accessible airspace and the required flexibility
- vi. Such events would attract aircraft enthusiasts and several other people from the local community. This would enhance interest in the local aviation heritage and history among the local community. The opportunity to exhibit aviation heritage at the proposed airfield would help promote such heritage and enhance its appreciation among the local community. The use of the proposed airfield to support cultural development of the local community represents an important social development. The proposed airfield would enable the use of cultural assets, namely aircraft exhibits (some of which are in airworthy condition) particularly from the Second World War and post-war periods, for the social and economic benefit of the community.

7.3. Environmental Impacts

The island of Gozo has its unique characteristics and provides a distinctive experience to that provided in Malta. Consequently, the extent of the impact of the proposed intervention was taken in this context. The environmental assessment considered the effects of the proposed airfield project on the following environmental aspects:

- Urban environment;
- Rural environment;
- Climate change (mitigation and adaptation);

- Land resources; and
- Waste management.

The environmental impacts of the proposed intervention, which were identified in the Regional Impact Statement document, were further analysed through public and stakeholder engagement. The public consultation process enabled the Gozitan community and stakeholders to clearly understand the proposed intervention as well as potential impacts, and share their feedback, concerns, and recommendations. The stakeholders' feedback was taken into account by the Authority when determining the extent of the environmental impacts, and the impacts' significance to the community.

Following the public consultation, the main environmental impacts that were identified to be significant, through the RIA study, include impacts on landscape and visual amenity, and impacts on noise and air quality. For each of these identified impacts, mitigation measures have been proposed to minimise the effect of these impacts on the environment and the community. The initial mitigation measures that were proposed for these environmental impacts were well received by the majority of stakeholders, and further recommendations and mitigation measures emanated from the RIA study, following the public consultation. Other impacts which were identified through the RIAS but were less of a concern to the majority of stakeholders and expected to have a less material impact on the community include impacts on traffic flow and road accessibility, impacts from waste, light pollution and impacts on avifauna. All the environmental impacts are explained in more detail below.

7.3.1. Impact on Geo-environment, Landscape, Visual amenity

The proposed infrastructural project that seeks to upgrade the existing Gozo Heliport in Ta' Lambert, Xewkija is located on a site area of circa 75,000 sqm. The site in question is located Outside the Development Zone (ODZ) but predominately within the area designated for airfield related activities. The proposed development is in line with the approved land uses in both the Gozo and Comino Local Plan and Strategic Plan for the Environment and Development document. The area that will be intervened upon is predominately already part of the facility and void of any vegetation and therefore landscape impacts are minimal. The proposed airstrip will not trespass over fertile land.

The proposed project will not be obtrusive since most of the proposal will be soft-surfaced, with the only hard-surfacing of currently-soil areas being the runway and one apron (an area of circa 10,300 sqm). The proposal also entails the re-levelling (re-grading) of soil over a further 60,000 sqm. The excavated topsoil (estimated at circa 6,000 cubic metres) will be stored in heaps and partly reintegrated in the development (for the proposed aprons) and partly removed from site for reutilization in nearby agricultural land. It is not envisaged that there shall be any impact on groundwater during construction.

The above considerations along with the rural aspect of the airfield were well received by the vast majority of stakeholders who offered their feedback. However, some stakeholders expressed concern that the airfield regeneration would be done at the expense of undeveloped land and would have an adverse impact on landscape and visual amenity. In this regard, to minimise impact, several measures shall be adopted. These measures include:

- Adopting high quality permeable reinforced grass paving systems to all aprons;
- Introduce landscaping to the site boundaries and introduce terraced perimetral retaining boundary walls; and
- Elimination of any additional buildings and structures from the proposals.

The above measures would ensure that the proposal retains the rural setting of the site. In this regard, it is recommended that the retaining walls be constructed from used stone using the traditional dry method to allow flora and fauna to thrive. Also, the retaining walls shall be stepped to avoid sheer heights along the public roads, and to minimise visual impact. Landscaping at site boundaries would also help in mitigating any potential impacts on visual amenity. The vegetation introduced along the perimeter shall include three layers made up of hedges, middle sized trees or shrubs, and indigenous trees identified by ERA.

Several stakeholders recommended the development of additional buildings at the proposed airfield, including having a building set up to serve as a flying club. The possibility of having an additional building as part of the project, to serve for various functions, was assessed. Given that the majority of stakeholders supported the rural aspect of the proposal (presented during the consultation process), the RIA study concluded that the development of additional buildings of the project would have an adverse impact on both the landscape and the community sentiment towards the project. Thus, the existing terminal building shall be maintained, and no additional buildings shall be developed as part of the project, as was initially proposed.

In light of the extensive feedback received from several stakeholders on the subject of fuel availability, the possibility of incorporating an underground fuel depot station at the proposed Gozo Rural Airfield was also analysed as part of the impact assessment. The RIA study determined that the installation of an underground refuelling bay (for aviation fuel) would have minimal environmental impact as long as it is installed at either Apron 1 or Apron 4 (the only two parts of the project which shall be entirely or partially hard surfaced), and the groundwater protective measures are taken. Groundwater protective measures include installation of bunds, which offer a spill containment system that forms a secondary perimeter around stored aviation fuel. Such system offers protection to groundwater in the eventuality of fuel leaks or escapes.

Also, as recommended by some stakeholders, the airfield will be developed such that it can evolve and provide space for new activities in the future. The airfield's design and development would allow the area to be recovered to its original state with minimal impact to the environment. The proposed development is reversible, similar to Gozo's first airstrip to have ever existed on the island, which was built in June 1943, during the Second World War. When this military airfield was no longer required, it was disassembled, and the land was returned to its original state.

7.3.2. Impacts on Noise Quality

Noise pollution is one of the negative impacts of the project, even though airfield operations are expected to generate a low level of noise when compared to other activities on the Island. Noise pollution emanating from airfield activities cannot be eliminated. However, it would be mitigated by the airfield design, clever use of vegetation, times of aircraft operations, Inter-Island air service aeroplane selection and special modifications, and operational and circuit procedures. Moreover, the noise generated by the aircraft while landing or taking off shall last for a very short duration of time. These mitigation measures are explained in detail in Section 6.2.2 and would significantly minimise the impact of noise pollution on the community and on the environment.

The fixed-wing aircraft (twin engine aeroplane) earmarked for the Gozo Rural Airfield falls within the lower limit of the aircraft noise classification (less than 90dB), with noise levels lower than those of rotary-wing aircraft (helicopter), which is currently operating 24/7 for emergency use at the Gozo Heliport. The Britten-Norman Islander BN-2T (turboprop aircraft), which was identified as an aircraft perfectly suitable for the Inter-Island air transport service, has a noise level of 69.5dB with a limit of 80dB, as per the European Union Aviation Safety Agency (EASA) certificate data sheet, shown in Figure 6. To put these metrics into perspective, fireworks measure at 140dB, while a normal conversation reaches a noise level of around 70dB.

Type Certificate Holder ¹	Britten-Norman Aircraft Limited	Aircraft Type Designation ¹	BN2T
Engine Manufacturer ¹	Allison	Engine Type Designation ¹	250-B17C
Noise Certification Basis	ICAO Annex 16, Volume I	Edition / Amendment	Chapter ¹ 6

EASA Record No.	Propeller Manufacturer ¹	Propeller Type Designation ¹	Additional modifications essential to meet the requirements or needed to attain the certificated noise levels ¹	Maximum Take-Off Mass ¹ (kg)	Overflight dB(A)		See Note
					Level ¹	Limit	
C515	Hartzell Propeller Inc.	HC-C3YF-5F/FC8475FK-6	None	3,175	69.5	80.0	-
C513	Hartzell Propeller Inc.	HC-C3YF-5F/FC8475FK-6	None	2,994	68.2	80.0	-

Figure 6: Islander BN-2T EASA Certificate data sheet for noise¹⁵.

7.3.3. Impacts on Air Quality

On completion, the proposed airfield would introduce a new source of carbon emissions. However, through the introduction of Inter-Island air service transport, carbon emissions would be saved from the roads. The fuel emissions from aviation and the saved carbon emissions

¹⁵ EASA.A.388 - BN2 Islander Series – Issue 3.

from road transport were compared as part of the economic analysis within the Cost Benefits Analysis (CBA).

Based on regional statistical data and assumptions thereof, the CBA considers the external cost of fuel in the form of emissions which are expected to emanate from the STOL aircraft providing the Inter-Island air transport service, and which have an effect on the society as a whole. Considering a total of 242,303 litres of fuel consumption per year emanating from the airlink service between Malta and Gozo, a carbon equivalent content of 3.1 kg per litre of fuel¹⁶ and a price of €35 per tonne of CO₂,¹⁷ the external cost of carbon emissions emanating from the provision of the Inter-Island air transport service is estimated at €26,290 per annum.

The CBA also considers the external benefit of the project in terms of the number of passenger kilometres saved which the airstrip would divert from road transport. The distance by car covering the trip from Malta International Airport to Ċirkewwa and from Mġarr Harbour to the Gozo Heliport is about 30km. Multiplied by the number of passengers which are expected to utilize the airlink in a year, amounts to a total of 2.1 million passenger km saved in a year. It is furthermore assumed that 1 litre of fuel is saved for every 20 kilometres of travel. Based on these assumptions, the amount of fuel consumption expected to be saved is estimated at 104,675 litres. Considering a carbon equivalent content of 2.4 kg per litre¹⁸ of car fuel and utilizing the shadow price of carbon, the value of saved carbon emissions on the road is estimated at €8,793 per annum.

By comparing the value of saved fuel emissions from the road to the emissions generated by the STOL aircraft providing the Inter-Island air transport service, it is clear that there would be a resultant net increase in carbon emissions. This increase in carbon emissions cannot be entirely eliminated in the short term. However, the eventual decarbonization of the national grid in the long-term, as per climate targets set by the European Commission, and electrification of STOL aircraft providing the Inter-Island air transport service, would tackle the carbon emissions.

In this regard, the RIA study recommends that the Inter-Island air service provider be encouraged to adopt an all-electric aircraft fleet. This can be done using different means such as incentivizing the operator to shift towards electric aircraft or through the tender document so that only those operators who submit their intention to operate with electric aircraft would be allowed to operate from the proposed airfield.

¹⁶ <https://www.verifavia.com/greenhouse-gas-verification/fq-how-are-aircraft-co2-emissions-calculated-11.php3>.

¹⁷ Assumed on the basis of Carbon Emissions Trading Scheme.

¹⁸ <https://www.carbonindependent.org/17.html>.

7.3.4. Light Pollution and Impact on Avifauna

Given that the airfield will respect certain hours of inconvenience (the airfield will be open to General Aviation from 30 minutes past sunrise to 30 minutes before sunset, and the Inter-Island air service aircraft will be limited to flights between 06:00 and 01:00 hours), airfield lighting hours will be very minimal. Despite this, the measures highlighted below would be adopted to minimize light pollution.

The simple runway lights shall consist of runway edge omnidirectional white lights, and runway end bi-directional red/green lights at each threshold end. The runway and the aprons would use the Pilot Activation System, whereby the lights would be switched on by the pilot prior to landing or departure. These lights will illuminate at low intensity for 15 minutes after pilot activation.

There will be no taxiway lights. Blue taxiway vertical cylindrical reflectors (as found on taxiway Quebec at Luqa) will be installed at Apron 1, where night operations are expected. The same apron will have floodlighting. These lights will face downward, and towards the north, that is in the opposite direction of the Ta' Ċenċ seabird colonies in the south. The intensity of the passenger terminal lights will be diffused. Considering these measures, the RIA study, taking into account stakeholders' feedback, determined that light pollution from the airfield operations will not affect Xewkija or Għajnsielem residents.

However, given that the site, proposed for the airfield, is located less than 2km distance from one of the largest colonies of Scopoli's shearwaters in the Maltese islands, potential impacts on these bird colonies was a concern. Consequently, a detailed ornithological study was commissioned to assess possible impacts on avifauna resulting from the proposed development and propose practical mitigation measures. Potential impacts on birds resulting from the proposed intervention were analysed in detail. The main impacts that were considered include:

- Potential disturbance to breeding, wintering and migratory birds due to increased ambient noise and activity in the area resulting from works while the project is being carried out; and
- Potential disturbance to breeding and migratory birds resulting from the activities generated by the airfield when it is operational.

The ornithological study included a fieldwork that was conducted to assess habitat type and to conclude which bird species are likely to use the area, both for migration as well as for breeding. Apart from the area within the confines of the proposed airfield, the immediate surroundings extending to beyond the cliffs were taken in consideration for this study.

A total of 16 bird species have been confirmed to breed in the study area. The study concluded that it is highly unlikely that the proposed project would have any impact on the populations of 12 breeding birds. An amount of noise is expected to be generated by machinery while land is being levelled and asphalted, but since these are only expected to be temporary, there will

not be any significant impact on breeding or migratory birds. Also, sky glow from the proposed airfield site, has been identified as a potential impact on birds arriving back to colonies from sea, which could cause juvenile seabirds to be stranded during the fledging period. However, given that the site is relatively distant from the breeding cliff sites, along with the light pollution mitigation measures highlighted above, it is not expected that there will be any significant effect on cliff-nesting species due to sky glow. The closest distance from the airstrip to part of the breeding colony of Yelkouan Shearwaters *Puffinus Yelkouan* is 1.6 km.

Although, the RIA study determined that the proposed works do not pose any foreseeable significant risk on bird colonies, a number of mitigation measures are being suggested, along the light pollution mitigation measures highlighted above.

- Contractors responsible for works should ensure noise emissions should be minimised when works are in progress, particularly at night, even though current and past noise levels did not appear to have been detrimental to birds in the area.
- Noise levels at the site should be measured and compared to noise levels at the cliff edge. If noise levels are deemed to be high, (over 30 dB during the night), noise abatement measures should be used, especially when works are carried out late in the evening and at night. These measures should be particularly implemented on days with southerly winds when sounds may be carried out over the sea to the areas where shearwaters may be coming to land. This measure should be implemented from the middle of February to October, which is the breeding period of shearwaters.
- When designing the lighting scheme, the best available practices should be adopted, using the Guidelines for Ecologically Responsible Lighting. Also as pointed out above, lights at night would be kept down to a minimum, will face downward, and towards the north, and illumination used will be localised and used only where necessary.
- The street and any other lighting used should be the type to create the least amount of light pollution possible. Cats' eyes and other types of reflectors should be installed to help motorists, while lighting that is automatically activated and that switches off on its own by the use of sensors should be ideally used, at least in the stretch of road leading to the airfield area.
- Grass cutting during the peak migration of aerial feeding birds, March to May, and September to mid-October, should be carried out at night to reduce the risk of bird strikes.

7.3.5. Impacts on Traffic Flow, Road Access, and Parking requirements

When in operation, the Gozo Rural Airfield is expected to lead to an increase in activities at Ta' Lambert area in Xewkija, leading to an increase in the number of vehicles frequenting the area,

as well as an increase in vehicle parking requirements. Despite this, the construction of a car park is being avoided in the site, since the RIA study determined that the development of a car park would have a negative environmental impact and would alter the site's rural setting.

To cater for the increase in parking requirements, on-street parking is being proposed. Sections from the adjoining roads to the Airfield, namely Triq ta' Lambert, Triq Tal-Kanal, and Triq Ta' Bwier are wide enough to allow on-street parking. These roads, particularly Triq Tal-Kanal and Triq Ta' Bwier, provide adequate parking facilities that can meet the projected increase in vehicle parking requirements. Hence, the impact on parking availability for airfield users is not expected to be significant.

The provision of on-street parking at Triq Tal-Kanal and Triq Ta' Bwier is not expected to have an impact on road accessibility, as these roads are wide enough. In fact, both of these roads are currently being utilized for vehicle parking as part of the free Park and Ride service to Mgarr Harbour, which has been in place since November 2021. Also, part of the site earmarked for the Gozo Rural Airfield has been used as a swab testing centre since 2020, which has led to a substantial increase in the number of vehicles frequenting the area, with hundreds of people visiting the testing centre during peak days. Both the park and ride service and the swab testing centre have led to an increase in activities at Ta' Lambert area in Xewkija, as well as an increase in the number of vehicles frequenting the area. Despite the increase in activities, traffic, road accessibility, and car parking at the site were never reported to be an issue during the past year. Since, both the Park and Ride service and the swab testing centre would be reallocated to other sites, the expected increase in vehicles due to airfield operations would be compensated by the decrease in vehicles corresponding to the reallocation of the Park and Ride and the swab testing centre.

A potential impact, associated with road accessibility and traffic flow, that was identified as part of the RIA study is the possible traffic light installation along Triq Ta' Lambert. The installation of traffic lights along Triq ta' Lambert, which is being considered as a safety measure, would temporarily block traffic flow upon aircraft take-off and landing. Such traffic lights would be activated just before aircraft take-off and landing and would be de-activated shortly afterwards. Consequently, given the short duration it takes for aircraft to take-off and land, any potential impact of traffic lights installation on traffic flow is expected to be minimal.

7.3.6. Impacts from waste

Given that the proposed intervention is an infrastructural project, potential environmental impact resulting from waste generation during the development works, was analysed. The proposed intervention will generate the following excavation waste:

- There is no demolition waste involved in this project;
- Soil volumes (estimated at circa 3200 cubic metres) shall be re-utilized in the project

and nearby agricultural land or as directed by the Department of Agriculture;

- Rock excavation volumes are envisaged to amount to circa 54,000 cubic metres, mainly arising from the area of proposed Apron 3;
- Scarification of the asphalt surface (estimated at circa 174 cubic metres), which will be re- utilized as Type 1 unbound material.

The RIA study highlighted management of waste generated from rock excavation as an important environmental consideration. The RIA recommends that excavation waste be kept to a minimum, and suggested that rock excavation waste be managed sustainably, according to the Waste Framework Directive, to minimize environmental impact. Excavation waste should ideally be recycled, whereby it is reprocessed into products or materials for other purposes. Otherwise, backfilling (recovery operation where waste is used for purposes of reclamation in excavated areas or for engineering purposes in landscaping) is recommended.

With regards to waste generation from the operation of the proposed Gozo Rural Airfield, the RIA study recommends a waste management plan that ensures compliance with waste management regulations and the adoption of best practice.

7.3.7. Impacts on Energy and Water resources

In the short-term, the proposed Airfield will not make any further demands on the power and potable water supplies, other than the upgrading/provision of the ground and apron lighting (for which energy-efficient luminaires/lighting systems will be adopted in the design). With regards to storm-water conservation, the proposed development would make use of a predominately permeable-flooring solution, with the use of soakaways. The proposed storm-water management system shall consist of a longitudinal soakaway along either side of the runway, comprising a two-metre-deep trench infilled with graded aggregate and covered by means of geotextile and a soil overlay.

Moreover, it is being proposed that irrigation of the soft-areas (aprons) in summer months be carried out by the new-water (recycled water) obtained from the approved facility very close to the site in question.

In the medium-to-long term, a significant increase in electricity demand is forecasted at the proposed Gozo Rural Airfield due to the advent of electrically powered STOL aircraft and electric vehicles. Since, the Gozo Rural Airfield would incorporate charging points, for electric aircraft, electric vehicles, pedelecs and scooters, a significant increase in electrical power demand is expected. The RIA recommends that the necessary electrical infrastructure is installed to cater for the increased demand, while ensuring that there is sufficient power available from the nearest substation to support the charging infrastructure.

7.3.8. Impacts on Archaeological site

The archaeological site along the southern boundary of the airfield has not been included within the area for development (and is therefore outside the site in question) and shall be fully protected and retained. It has been proposed to integrate the archaeological site in a Heritage trail covering the southern tip of Gozo, comprising Mgarr ix-Xini, Sannat and Xewkija.

The Superintendence for Cultural Heritage (SCH) has carried out extensive studies in the site in question. For the area of Apron 3, the RIA study recommends that agricultural soil / loose material be diligently removed from the site to expose the rock surface and allow for detailed cleaning and archaeological monitoring prior to commencement of actual works.

8. Conclusion

The finalised Regional Impact Assessment report, available on GRDA's website, demonstrates that appropriate research and consultation took place in relation to the potential impact of the proposed intervention on Gozo, and its community. The RIA process adopted for this project ensured that stakeholders and the affected communities were offered the opportunity to give their views and recommendations, which could potentially lead to project revisions to enhance the benefits of the proposal.

The main impacts of the proposed airfield on Gozo, identified through the RIA process, reflect stakeholders' feedback. Among the economic, social, and environmental impacts, outlined in Chapter 7 of this report, some negative impacts were identified. For each of these negative impacts, the Authority developed solutions, as part of the RIA study, to mitigate these impacts. The Authority considered one or more of the following solutions to mitigate impacts:

- Avoidance: altering the proposal so that the impact does not occur;
- Minimisation: modifying the proposal to reduce the severity of the impact;
- Mitigation: alleviating or offsetting the impact;
- Enhancement: adding a desirable or positive feature of the proposal.

These mitigation measures and recommendations, as well as GRDA's position on the project are presented in an Outcome Statement Document, available on the GRDA's Gozo Airfield Public Consultation webpage. The Outcome Statement marks the end of the RIA process. It makes specific reference to the RIA study summarising:

- The conclusions of the RIA study, clearly stating whether there will be any significant positive and negative impacts on Gozo and the severity of those impacts;
- How GRDA took into account of stakeholders' views in determining the effects that are

likely to be caused by the proposed intervention, including a summary of comments received by the relevant stakeholders and members of the community;

- The recommendations of the RIA study which are incorporated within the Outcome Statement; and
- The recommendations of the RIA study which are not included and the reasons why.



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