#### **DSDA D22 Live PAPER**

**Your role**: You are a qualified CIPFA accountant working for a consulting company (Omicron Consulting) which has been hired to assist with reviewing and updating the Lexeter Airport Master Plan 2020 - 2030.

#### **Pre-seen materials**

Assumed date for pre-seen is 7 November 2022.

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#### Exhibit 1 – Lexeter Airport: key information

#### **OVERVIEW**

Bryland is a small country in Europe where English is a strong second language. The currency is the Bryland dollar (B\$). It has a main international airport and two smaller airports, one at Lexeter in the southwest and one at Oldcastle in the northeast, both of which operate international as well as domestic flights. The main international airport, in Bryland's capital of Balluta, is privately owned having been divested by central government in 2005. Both Lexeter and Oldcastle Airports are wholly owned by local government authorities.

#### **LEXETER AIRPORT**

Lexeter Airport is located in the rural southwest of Bryland, a considerable distance away from housing. As there is limited public transport from the southwest to the main international airport in Balluta, which is four hours away by car, Lexeter Airport is well frequented by both business and leisure travellers as well as inbound tourists.

Currently Lexeter Airport offers domestic scheduled flights operated by privately owned airline BryAir, and both domestic and international scheduled flights operated by LetsGo Airlines, a long-established privately owned airline. LetsGo's base is at Lexeter Airport where it has engineering facilities and a flight crew training centre.

Some international scheduled flights from Lexeter Airport fly to two overseas hubs: Paris and Dubai. This enables travellers to connect all year round to flights to transatlantic, Middle Eastern, Asian and Australasian destinations. Other international scheduled flights fly direct to destinations.

There are also airlines flying charter flights from Lexeter Airport to a limited range of international holiday destinations during the March to October holiday season. Finally there is a limited number of transatlantic charter flights to Toronto, Vancouver and New York during the Summer season and again in the Winter.

Inbound flights bring in tourists from landlocked European countries to Bryland's stunning coastal areas near Lexeter. These tourists are important for the local tourist industry, including a renowned dive centre in the nearby seaside town of Lexmouth.

Lexeter Airport is a vital component in the success of the regional economy and drives key regional benefits - employment, business clusters and urban regeneration. In addition, Lexeter is an important university town with a high number of overseas students in some of its faculties.

Cargo traffic is increasing along with the number of private executive jets using the airport. The airport is also used as a hub for the national BryMail mail service flights.

Lexeter Airport owns various hangars and buildings, the majority of which are rented by LetsGo which also owns a building on nearby land. LetsGo's building is a state of the art centre for training pilots and flight crew – both their own and those of other airlines. It is a significant source of revenue for the airline.

In the airport terminal building, near the check-in desks there are two coffee shops, a newsagent and a small shop selling essential items of luggage etc. Once they have gone through security and passport control, in the departure area passengers can use a bar, a restaurant, two more coffee shops, a larger newsagent, a foreign exchange bureau and a duty-free shop. These bring the airport revenue from rent and commission on sales.

Lexeter Airport is currently owned by two local authorities – Lexeter Town Council and Southern Region Council. This situation is the subject of ongoing discussions as to the best ownership arrangements.

#### **KEY DATA**

#### **Passenger Numbers**

	2006	2011	2016	2021	Projected 2026
Passengers	932,000	1,800,000	3,000,000	3,500,000	4,250,000

#### Types of passengers using Lexeter Airport in 2021

	Total
	Passengers
Business passengers	26%
Leisure passengers	74%

#### Types of flights used by Business passengers

Type of flight	%
Scheduled flights - domestic	65%
Scheduled flights - International	35%
Charter flights	0%

#### Types of flights used by Leisure passengers

Type of flight	%
Scheduled flights - domestic	8%
Scheduled flights - International	27%
Charter flights	65%

#### **Revenue sources**

Airport revenue is raised from: landing fees; aircraft and cargo service charges; rental of buildings; car parking fees; retail leases; commission from retailers such as shops, cafes, restaurants, duty free shops and foreign exchange bureaux; and selling advertising space in the terminal building.

Given the importance of airlines to the connectivity and sustainability of an airport's diverse stakeholders, airports often compromise when they negotiate on proposed landing fees and set lower-than-desirable fees to ensure that airlines continue to use their airport. Lexeter Airport is no exception to this. As a result it needs to make sure revenues from other sources compensate for low landing fees.

#### **Financial situation**

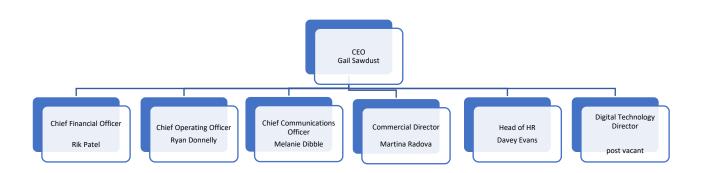
Top level financial information for 2021 is as follows:

Revenue	Pre-tax surplus	Equity	Total liabilities	Total assets
B\$000	B\$000	B\$000	B\$000	B\$000
24,836	11,506	161,059	39,067	

#### **Lexeter Airport Master Plan**

Lexeter Airport published a Master Plan in 2019 for the period 2020 to 2030. In 2020 and 2021, airports and airlines were adversely affected by a major pandemic that brought lockdowns and airport closures. A team has now been brought together to review and revise the master plan for the remaining period up to 2030.

### Exhibit 2 – Lexeter Airport Organisation Chart at 1 October 2022 (extract)



#### Exhibit 3 – Extracts from Lexeter Airport's Master Plan 2020 – 2030

Note: The following extracts from the Lexeter Airport Master Plan highlight the key strategic plans that were devised and adopted in 2019 for the period 2020 to 2030.

#### **AIMS**

The airport has the following aims:

#### Contribute to the regional economy

Lexeter Airport seeks to be a vital component in the success of the regional economy in the southwest of Bryland. The government of Bryland intends to expand the network of Enterprise Zones to include key regional airports, in order to address regional imbalance in economic growth and make regional airports such as Lexeter attractive places for inward investment. This is an opportunity from which Lexeter wishes to fully benefit.

Lexeter Airport also aims to preserve its position as the main gateway to this region of outstanding natural beauty for visitors from overseas.

#### **Protect the environment**

Lexeter Airport will continue to work with environmental authorities and agencies to ensure that the airport meets its responsibilities towards the environment.

#### **Enhance financial returns**

Lexeter Airport needs to maximise financial surpluses to ensure the ability of the airport to continue its expansion and contribution to the local economy over the long term.

#### **OBJECTIVES**

To achieve these aims Lexeter Airport has set the following objectives:

#### **Ownership**

Lexeter Airport is owned by Lexeter Town Council and Southern Region Council. There are other possible ownership models and these are in discussion. A decision on future ownership should be given priority as this will impact on investment opportunities for the further development of the airport.

#### Designation as an Enterprise Zone

An airport with good connectivity can act as a powerful magnet for companies. The trend towards the globalisation of companies creates a demand for an ever-widening network of services at or near key regional airports, and the southwest region of Bryland is no exception. Lexeter Airport is seeking designation as an Enterprise Zone.

#### Build a new terminal building

The airport needs a new terminal building focused on optimising the user experience by enabling passengers to travel effortlessly through the airport. It will be designed and situated to interface with the proposed Enterprise Zone and potential business and commercial developments.

#### Enhancing the passenger experience

The new terminal building will be designed so that passenger flow would be through checkin, security and passport control then through a corridor of duty-free shops before opening up into the main departure area with multiple shops and food outlets. The airport will seek to attract more upmarket retailers, and use virtual reality and mobile technology to enhance the passenger experience. It will also encourage the use of cryptocurrencies by passengers in line with other airports, given that the Paris and Dubai hubs involve passengers in the need to use a variety of currencies.

#### Increase capacity and resilience: extend the main runway and build a second runway

The airport needs to extend the length of the main runway to accommodate larger aircraft and thus increase passenger numbers. It is also prudent to have a second runway in case an incident closes the main runway. The airport owns the land and has all necessary designs and consents in place, but needs to raise the necessary finance to construct and maintain both the extended runway and the new runway.

#### Attract more airlines

The airport wants to attract more than one airline for international scheduled flights and also at least one budget airline as this will attract more tourists into the area.

#### Improve global connections

The airport wants to expand its range of international destinations so that local business people and leisure travellers can access most parts of the world from their local airport.

#### **Enhance airport access and parking**

The airport has reached an agreement with two local authorities for improvements to road, cycle and pedestrian access to and through the airport site. More car parking is required and the airport has the land to build this. A frequent bus link between the airport and the railway station in Lexeter is being sought as an urgent need.

#### **Increase cargo flights**

Cargo activity is a key strategic opportunity for the airport. More cargo flights during hours when there are no domestic or international passenger flights will make better use of the airport facilities. Due to its isolated location away from housing, the airport has no constraints on the number or timing of flights.

#### Supply of aviation fuel

The airport will insource the supply of aviation fuel through the development of a new fuel farm asset. This will comprise large storage tanks with allied systems for maintaining and controlling jet fuel quality, and will be equipped with a pumping system and a metering system for keeping track of quantity of fuel received and supplied. It is planned that operations will transfer from the incumbent supplier in April 2022.

#### **Outsourcing services**

Services such as firefighting and security will be outsourced by 2025 if a suitable provider can be identified and robust contractual terms agreed.

#### Digitisation for operations and for passenger experience

Lexeter Airport needs to keep up with technological advances. The air navigation system is changing from ground-based navigation aids to the satellite-based Global Positioning System

(GPS), the certification regulations for aerodrome safety are being re-assessed, and security requirements might be reviewed. All these will require further infrastructure investment. There is an urgent need to keep up with developments in Artificial Intelligence, the Internet of Things and Mobile Technologies both in terms of improving the passenger experience at all touchpoints but also in terms of airport operations, both landside and airside. A Digital Technology Director needs to be hired and in post from the start of 2020.

# Exhibit 4 – Note submitted by Gail Sawdust, CEO Lexeter Airport, to a joint meeting of Lexeter Town Council and Southern Region Council on 16 May 2022 regarding possible airport ownership changes

Since 1999 Lexeter Airport has been jointly owned by Lexeter Town Council and Southern Region Council.

Airports operate in a challenging environment. The commercial priorities of airlines and airports can sometimes conflict with the wider objectives of local authority stakeholders given the role their airport plays in the economic and social wellbeing of their regions. Although airports are required to make a surplus, some airports keep their landing fees and other charges low to ensure that airlines continue to provide flights. This is currently the case with Lexeter Airport however it means the airport needs additional revenue streams from activities such as car parking and retail leases. Being a relatively small airport, Lexeter Airport is limited in this respect.

Over the past decades most airports have transitioned out of ownership by central government Ministries or Departments into local government-owned trading entities, solely responsible for the management of an airport or airports. Many have gone further, and established corporate entities as airport companies (often described as "corporatisation"). One of the first examples of this trend was when ownership and control of Heathrow, Gatwick, Stansted and Prestwick moved from the United Kingdom's Ministry of Aviation to the then British Airports Authority ("BAA") in 1966. Similar moves have been made in numerous other countries around the world.

To fulfil its Master Plan 2020 – 2030 and to respect changing regulations issued by the International Air Transport Association (IATA) as well as the ever-increasing focus on environmental factors, Lexeter Airport needs to be able to raise new finance. This will be easier with a change of ownership structure, so the management of the airport is proposing a change in the ownership of the airport.

There is a broad range of ownership and operating models that can meet government objectives without the sale of assets or transfer of material control to the private sector. Options for Lexeter Airport include:

- Continued ownership by Lexeter Town Council and Southern Region Council
- Forming a Public Private Partnership with an appropriate company willing to invest in Lexeter Airport, with majority ownership retained by the local authorities
- Creation of a not-for-profit entity with equal ownership by local authorities and private enterprise
- A 100% divestment to private ownership
- Continued ownership by local authorities with a management contract issued to an external business to operate the airport

## Exhibit 5 – Summary of a briefing note prepared by an intern at Lexeter Airport dated 20 July 2022 regarding digital technologies in airports

Airports have consistently benefited from developments in digital technologies across all areas, especially passenger processing, airside operations, infrastructure management, resources management and in administration areas. Airports can really harness the benefits of automation, biometrics, Mobile technology, Artificial Intelligence (AI), the Internet of Things (IoT), Big Data analytics, Cloud-based technologies, Augmented/Virtual reality and, increasingly, Blockchain technologies.

This is a summary of some of the places where new digital technologies are being used or are in the planning process in various airports around the world. Lexeter Airport could explore these and adopt those that would streamline processes, enhance the passenger experience, and drive enhanced revenues.

**Landside operations (passenger processes):** digital is to be found in e-ticketing, electronic check-in kiosks, flight notifications sent to mobile devices, holographic announcers, passenger flow systems, wayfinding, passport control, security scanners, ecommerce, boarding processes, biometrics enabling facial recognition, and automated vehicles helping customers make tight connections across an airport.

Mobile technology can enable airports to expand revenue streams. New digital touchpoints and more enhanced data capture methods enable airports to use data analytics to build up more complete profiles of their passenger audiences which could enable them to deliver targeted communications.

Technological advances such as Artificial Intelligence (AI) are key to: predictive analytics, virtual agents and chatbots; personalised/targeted advertising; brand perception tracking and pattern recognition. Istanbul Airport for example uses a flight notification function that allows passengers to track the exact time they are supposed to arrive at their boarding gate. Passengers no longer need to keep checking the flight departures board, but just the notifications sent to their mobile phones.

Linked to the new concept of the contactless journey from arrival at the airport, through check-in, security, passport control and arriving at the departure gate is another trend: virtual queueing. This enables passengers to book a slot to queue at airport touchpoints instead of joining a physical line. This technology can help eliminate long lines and crowding and thus improve the customer experience.

Many airports are enabling the use of blockchain and cryptocurrencies for purchases throughout their terminals.

Autonomous delivery robots for food and retail are appearing at airports. Ottobots, operated by Ottonomy, were unveiled at CES 2022. These are in operation at Cincinnati/Northern Kentucky International Airport (CVG) in the US. The robots enable passengers to order contactless delivery of food, beverages and travel items on their mobile devices. The items are delivered directly to their location by an autonomous robot.

**Airside operations:** use of digital is found in: automated baggage handling, runway Foreign Object Detection (FOD) systems, video-based maintenance support, remote Air Traffic Control (ATC) towers, smart watches for operational alerts to duty managers, airfield control and monitoring, aircraft and vehicle movements and detection systems, self-driving robots to transport luggage, automated vehicles for delivering delayed baggage to passengers or transporting aircraft parts around airports.

IATA recommends that airports incorporate the use of RFID technology (Radio Frequency Identification) for baggage handling into their infrastructure. This can reduce baggage mishandling, and in instances when it does occur the passenger can know the exact location of their baggage.

The implementation of automated baggage handling systems is an emerging trend. These involve the use of small robotic vehicles that carry baggage from the baggage conveyor belt, through the security system to the respective aircraft carriers.