

**Pre-Seen Analysis**  
**Strategic Case Study**  
**Exam**

**May 2021 – Aug 2021**



**Arrfield**

## **COVID-19 Statement**

This pre-seen and the case study in general (while aiming to reflect real life), are set in a context where the COVID-19 pandemic has not had an impact.

Remember, marks in the exam will be awarded for valid arguments that are relevant to the question asked. Answers that make relevant references to the pandemic or social distancing will, of course, be marked on their merits.

In most cases, however, candidates may find it helpful to assume that there are no restrictions to the movement of people, goods or services in place.

## Introduction:

Arrfield is a quoted company that owns and operates six major airports, four in its home country and two overseas.

It is a listed company. We must discuss the benefits and limitations of being a listed company.

### Advantages:

- a) Access to Capital for Growth.
- b) Enhanced Visibility
- c) Liquidity

### Disadvantages:

- a) Enhanced reporting requirements
- b) Enhanced government and shareholder scrutiny

They also say, that we own 2 overseas airports. This means we are a multi-national company.

Topics such as transaction risk/transalation risk and economic risk become important

F3 Syllabus

You are a **senior manager** in Arrfield's finance function.

As a senior manager you need to look at the 'Long-term' strategic issues.

Your audience will be the Board of directors and to give a satisfactory answer understanding the full scale of the business operation is very important.

You report **directly to the Board** and **advise on special projects** and **strategic matters**.

**Importance of your E3 Syllabus**

Arrfield is based in **Norland, a developed country** that has an **active and well-regulated stock exchange**.

This tells us that  
**"Demand Conditions"**:  
Porters Diamond  
are strong.

**From this we learn:**

Norland is a highly developed economy which means people/businesses have the interest and disposable income to use air travel. Also, the government will have infrastructure in place to promote such markets.

Norland's **currency is the N\$**.

Norland requires companies to prepare their financial statements in accordance with **International Financial Reporting Standards (IFRS)**.

Norland is a large country that is surrounded by sea.

**E3 Syllabus**

This is also something that will add to the 'demand' factors of your organization.  
You will need to consider 'form coepetitors' here.  
A good external market analysis will be important for our industry.

## **Airports and air travel**

Airports provide the necessary facilities to enable commercial air travel by passengers and the transportation of freight.

Bringing about the capital-intensive nature of this industry.

They generally occupy large sites that include:

### **Runway**

Commercial airliners and freight planes require a stable runway that is long enough for planes to accelerate to flying speed when taking off and decelerate to a safe stop when landing. Runways are usually paved with concrete to ensure that they are sufficiently strong and stable to permit take-offs and landings.

Regular maintenance as health and safety is concerned.

### **Taxiways and aprons**

Once on the ground, planes require paved roadways to enable them to taxi to and from the runway and also aprons on which they can park.

Taxiways are effectively roadways that are wide enough to permit aircraft to taxi safely. Aprons are areas of flat ground that allow for freedom of movement and for aircraft parking. Both are usually paved with concrete.

## **Passenger terminals**

Airport terminals provide **all of the facilities** required to process departing passengers and their baggage, ensuring that they get to their **planes on time for departure.**

This is where most companies are developing their competitive advantage. Using software's, big data and other modern techniques to make the baggage system automated and on time **PLUS** make passenger terminal more friendly and more customer centric.

We already spoke about this as part of our **industry analysis.**

Terminals also include the **facilities required by arriving passengers,** in between disembarking from the aircraft to leaving the airport.

## **Freight terminals**

Most airports offer the **facilities required to handle air freight.** Some aircraft are designed to carry only cargo. Passenger airlines often carry freight alongside passenger baggage in the holds of their aircraft.

A growing market which needs to be looked because of the global nature of trader in today's modern world.

## **Hangars and maintenance facilities**

Aircraft require repairs and routine maintenance in order to ensure they fly safely.

Most airports have hangars, which are essentially buildings that are large **enough to accommodate an aircraft so engineers can work** on it without being exposed to the weather. Airlines often **rent hangars for their own exclusive use, particularly at larger airports.**

That makes it easier to deal with any technical problems quickly, in order to **minimise the risk of delaying a departure.**

Areas of apron may also be set aside so that smaller repairs can be carried out without blocking the movement of other aircraft.

## **There are two main categories of commercial airport:**

### **A Hub Airport:**

A hub airport is a main base for one or more airlines. That makes it easier to offer connecting flights, which makes it possible for airlines to offer cheaper and more efficient long-haul routes, filling larger aircraft to carry passengers between hubs.

### **For example:**

NorFly is a major international airline that has a main base at Capital City International Airport.

The airline offers return flights between Capital City and many smaller airports, including Crossline Airport in the country of Seeland.

A passenger wishing to fly from Crossline to an airport in the country of Farland could take a short-haul NorFly flight to Capital City, connecting to a long-haul flight to Farland International Airport.

If necessary, the passenger could connect to a final destination by taking a further short-haul flight from Farland International.

Airlines often collaborate with one another using so-called “codeshare agreements”.

Essentially, these enable passengers to book all of the flights required for a particular journey through a single airline’s website, even though one or more of the flights making up that journey will be provided by a different airline.

For example, a booking from Crossline Airport to Farland Greentown might involve NorFly flights to Capital City International and Farland International Airport, followed by an Air Farland flight from Farland International to Greentown.

NorFly and Air Farland have a codeshare agreement and so this whole journey could be booked in a single transaction through either airline’s website.

**Codeshare arrangements are important to airports because they give passengers a much wider range of potential destinations.**

**A non-Hub or Spoke Airport:**

**A non-hub or spoke airport will generally offer short-haul flights to and from hub airports** and will also serve airlines that offer **direct flights to short-haul destinations.**

**For example:**

Business travellers who live close to Eastern Regional Airport can fly to Southern Regional Airport or Capital City International for meetings. There are no long-haul services from Eastern Regional Airport.

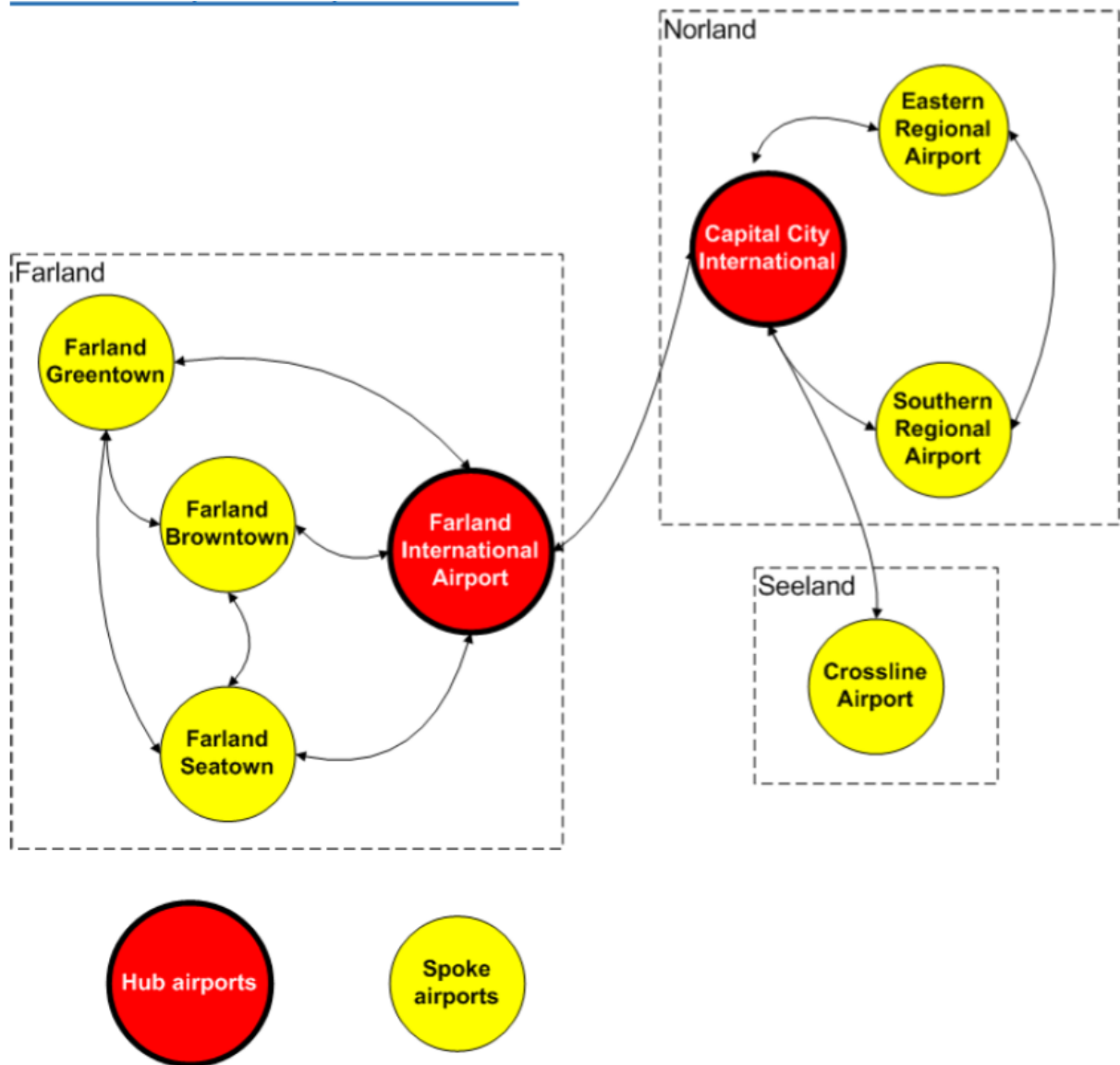
**Non-hub airports generally offer short-haul flights** of up to roughly 2,000 kilometres.

**Hub airports offer a mixture of both short-haul and long-haul flights.**

Passengers often use hub airports for relatively short journeys. For example, business travellers and tourists frequently fly from Eastern Regional Airport to Capital City International for meetings or leisure.



## Hub and spoke airport routes



## **Flight operations**

An **airport's design will affect the number of flights that it can handle** and its **ability to deal with passengers and freight.**

Positioning and airport design is very important.

Arrfield own and operates 6 major airports is also located in a developed country. This can be seen as competitive advantage for us.

Air operations are **dictated by the size and number of runways.** Larger aircraft require longer runways to give them room to accelerate when taking off and to decelerate when landing. Ideally, runways will be oriented so that the prevailing wind blows along them.



That increases the airflow over aircraft wings and so makes it easier for aircraft to take off and land.

Airports can have more than one runway. In that case, they may be parallel to one another so that aircraft can use both without crossing one another's flight paths. The runways may also be offset at angles that give the air traffic controllers the ability to **vary flight paths in response to weather conditions and** **manage the noise pollution caused by flight operations.**

Sustainability and environment consciousness has been a big criticism of this industry. How can our company try and reduce this?

This is one risk factor which we need to always keep in mind. Identifying risks is important in your SCS Exam.



## **Passenger facilities**

The terminal building will also reflect the **types of aircraft** and the **number of passengers** that can be processed. For example, larger aircraft can carry more passengers and so efficient boarding and **disembarkation becomes a priority.**

Many airport terminals have gates that are equipped with bridges that permit passengers to enter or leave the aircraft by walking along a moveable ramp that connects the terminal building to the aircraft doors.

Airports are now looking more and more towards customer satisfaction. As we learnt in our pre-seen analysis. You want to make the entire process easy and smooth for the passenger.

The alternative to these bridges is to tow mobile stairs to the aircraft so that passengers can board or disembark by walking to or from ground level.

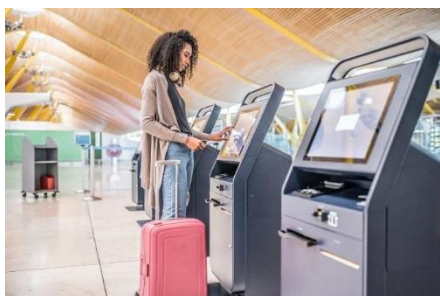
Passengers may be able to walk to or from the terminal if the aircraft is parked nearby, otherwise, they will have to be transported on buses. In either case, **this arrangement is much less efficient than the use of these bridges.**

Arriving and departing passengers enter and leave the terminal building using entrances and exits that are **referred to as "gates".**

Terminals are designed to encourage the **safe, secure and efficient flow of passengers.**

These 3 will be major thresholds to the success of an airport and hence become important for our company.

Departing passengers must carry a boarding pass in order to proceed through airport security and also so that they can board their aircraft.



Boarding passes can often be downloaded to mobile phones by app before arriving at the airport, but most airlines offer either staffed or automated check-in facilities to assist passengers with checking in when they arrive at the airport.

Standard airport procedure being describer here:

- If passengers have suitcases or other large items of baggage, then they will check those in when they arrive at the airport. Airline tickets usually specify the weight of baggage that passengers are permitted. Cases are weighed on arrival at the airport and accepted into the baggage handling system if they weigh less than the permitted maximum. If they weigh too much, then passengers will either have to reduce the amount they are carrying or pay an excess baggage fee.
- Once passengers are checked in and have deposited their hold baggage, they must proceed through airport security. That ensures that the passengers are not carrying weapons or objects that could otherwise endanger the aircraft, its crew and its passengers.
- The areas of the terminal that are open to the public are known as “landside”. These include check-in areas and other facilities for departing passengers. They also include spaces for those accompanying departing passengers and meeting arriving passengers.
- Passengers are advised to arrive at the airport well before their flight and so most **airports provide retail and catering facilities** both to occupy passengers and to generate revenue.

Superior Information Display will be adding competitive advantage here:

Whether you want to keep people moving, create dwell time or steer traffic to key revenue opportunities, a well-designed information display system is key.

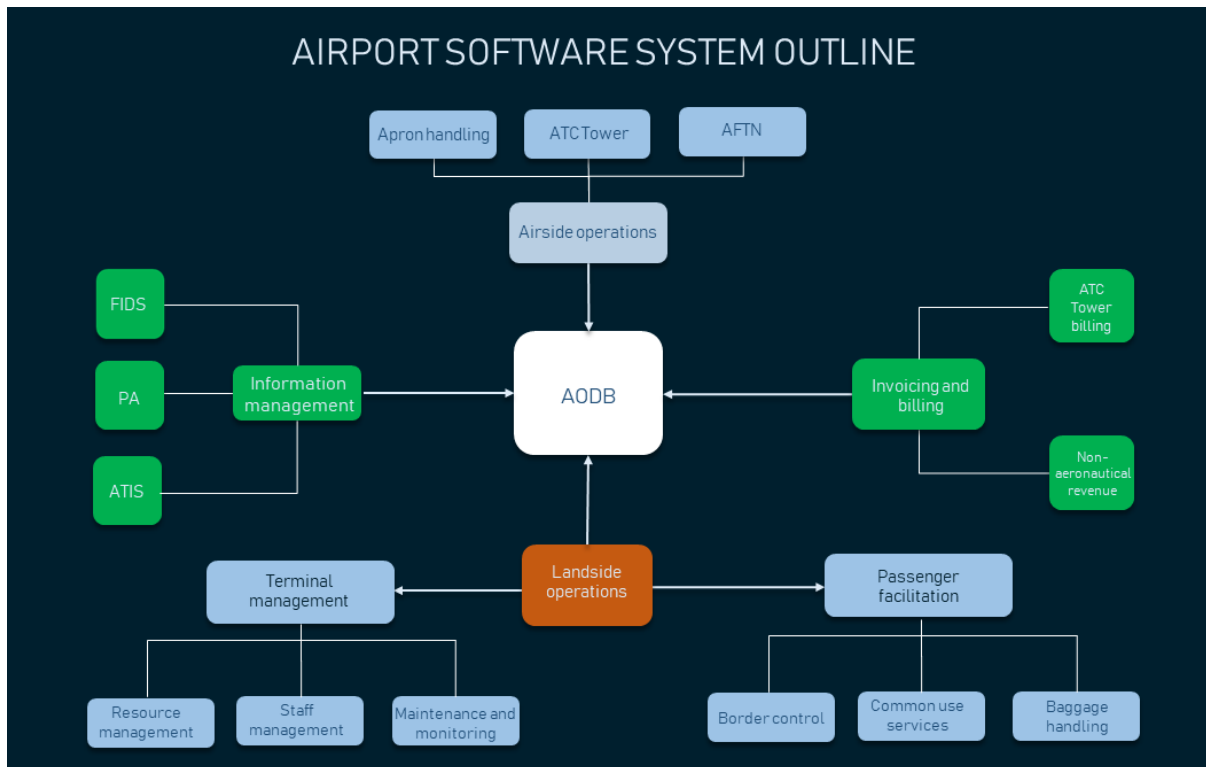
- Airports usually rent retail and catering spaces to third parties. In many countries, tax laws permit retail sales to passengers who are travelling to foreign destinations to be “dutyfree”, which means that they are exempt from sales taxes. Retailers can then pass on some or all of the benefit of those tax reductions to passengers in order to stimulate sales.

- Airport terminals must also cater for the needs of arriving passengers. In order to be permitted to offer international flights, airports must provide adequate facilities for **border control checks**. These include passport and immigration checks to ensure that arriving passengers are entitled to enter the country and have any visas that are required.
- Baggage must also be checked by customs and other government agencies to ensure that it does not contain any prohibited items or that any import taxes are paid.

Hub airports must cater for the **needs of transit passengers** who are waiting for their onward flight. That usually involves **elaborate retail and catering facilities** because passengers may face waits of several hours between flights and can also include the provision of **lounges and other leisure facilities** where passengers can relax.

## **Supplementary reading:**

**This information is not part of the pre-seen but we feel its important for you to read to get better perspective.**



**Most airports are now functioning with the help of seamless and well-integrated software's.**

This is a major opportunity for the examiners to ask E3 “digital revolution” topic questions. We must revise this area well.

## **The future of airport operations management**

Seamless passenger flow, up-to-date information, and air traffic management are the keys to successful airport functioning.

In the next three years, airport IT operations will focus on cloud solutions, business intelligence, and cybersecurity.

### **Let's briefly look at the future of those trends:**

**Passenger self-service solutions.** As airports are striving to reduce wait time, they're investing in a variety of self-service solutions. These will include not only passenger check-in kiosks, automated boarding gates, baggage drop and smart tracking, but also mobile integration of airport information systems Facial-recognition and biometric ID management. Seventy-seven percent of airports plan to launch programs in biometrics ID management in the next three years.

**Business intelligence.** Airports are planning to improve operations using business intelligence for aircraft turnaround by 2022. Eighty percent of them are planning to use BI in passenger processing and flow management, 80 percent for flight operations, and 78 percent for baggage processing.

**Artificial Intelligence and predictive analytics.** Airlines already use AI and data science in their operations. Almost 80 percent of airports are using them in customer service too.

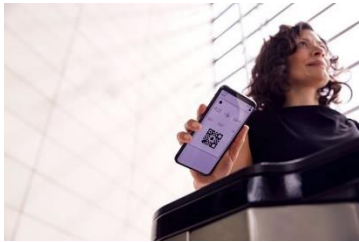
**Cybersecurity.** Most of the airports improve cybersecurity, investing in staff education. With 79 percent of airports investing in cybersecurity, the other priority fields for investment are telecommunications, network security, and threat intelligence.

## **Back to the Pre-Seen Now:**

### **Boarding passes and identification:**

The areas after security are known as “airside” .

Public access to airside is restricted to passengers who have valid boarding passes. Each boarding pass has a barcode that can be scanned optically.



Boarding passes are checked at security to confirm that the holders are eligible to travel.

As we can see, lots of data is accessed and managed by an airport. Seamless software systems will be a key competitive advantage here.

They are also scanned at retailers’ points of sale to ensure that sales tax is charged to passengers taking domestic flights and also to **collect data that can be used for marketing purposes, such as identifying frequent travellers and tracking their buying habits.**

Opportunities for big data and data analytics here.

Finally, boarding passes are scanned when boarding to confirm that the passengers are on the correct flights and to create a definitive list of the passengers who are actually on the aircraft.



Airport employees and staff employed by retailers and others who work airside must also pass-through security and must wear identity badges issued by airport security.

Security badges have radio-frequency identification (RFID) chips embedded in them that can be read by electronic scanners built into door locks. Locks are programmed to restrict access to authorised badge holders only.

**Hope you have been listing down the various risks this industry/business is prone to.**



## **Transport infrastructure**

Airports require **extensive transport links**.

Passengers and their baggage will arrive and depart throughout the day. Airports and their associates also have large numbers of employees, many of whom have shifts that start or finish at unsociable times.

Most airports have **good road access and large car parks**.

Government support and collaboration will be an important factor over here. Also, government will need to be considered as an important stakeholder.

These are often **major sources of revenue**, with many passengers driving to the airport and paying to park in an adjacent car park for the duration of their trips. Airports often charge **premium prices to park close to the terminal**, with **less expensive parking offered in more distant locations** that are serviced by shuttle buses.

Airports also offer a variety of ancillary services to increase and boost their revenue.

Airports also offer other forms of ground transport, such as taxi ranks, bus stations and railway stations. These generally offer services to the nearest major towns and cities. Some airports have major bus and rail stations that **enable long distance journeys** on national public transport networks.

Airports also require **significant road links to carry goods**. These include fuel and other consumables to replenish aircraft and cargo that is to be carried as air freight. The airport itself also requires goods, including inventory for the duty-free shops and materials required for airport operations. Most of this material arrives by road, with designated access points for different types of delivery.