

AIRPORT OPERATION AND CRISIS MANAGEMENT

International Seminar on Airport Management in a Global Growth Scenario



©Moses1978



Bogota, 30-Mar.-2017
Emmanuel Legrand



CONTENT



- 1 EGIS AND AIRPORT OPERATION**
- 2 OPERATIONAL ISSUES ADDRESSED
- 3 CRISIS MANAGEMENT - CASE STUDIES

EGIS AND AIRPORT OPERATION



Antwerp Airport – Belgium

OVERVIEW



1 Billion USD

100 Countries

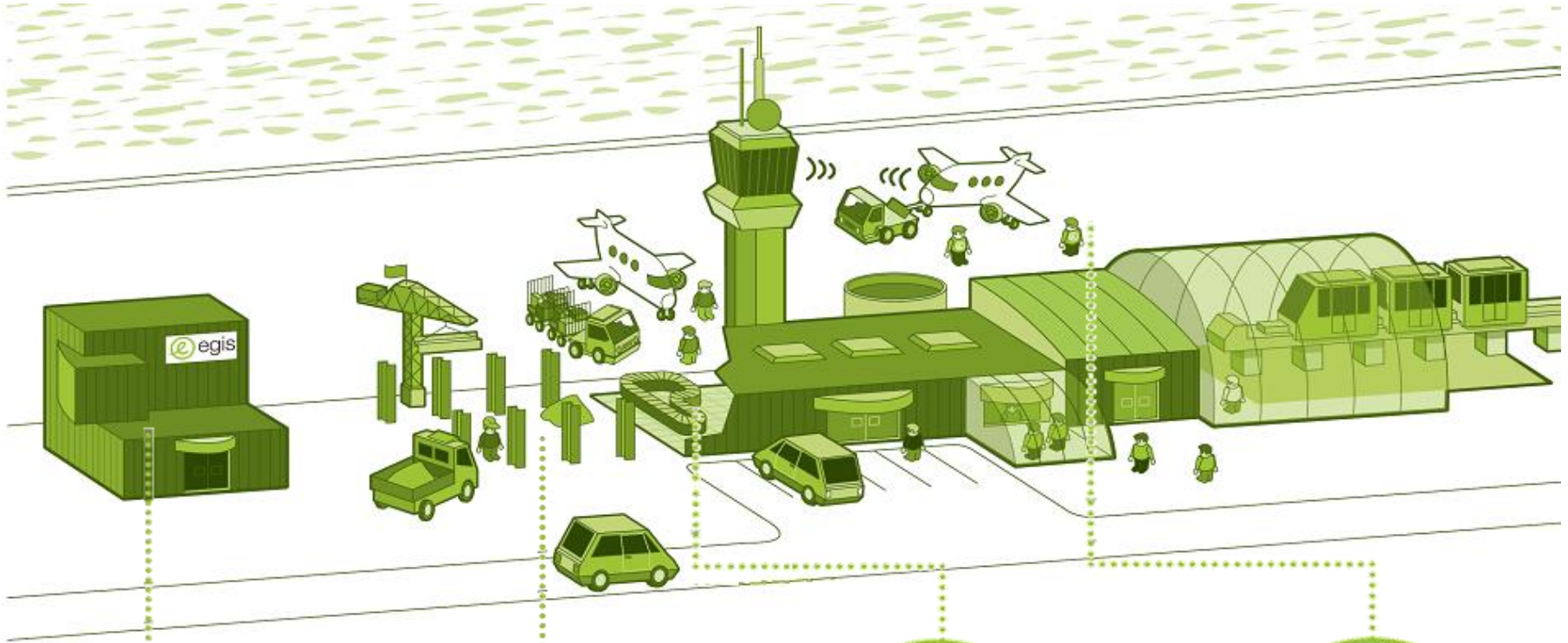
GROUPE



13 000 Employees

More than **50** Years of Operations

EGIS KNOW-HOW



Project structuring & Investment



Engineering & Design



Turnkey systems & equipment integration



Operations & Management

OUR AIRPORT NETWORK

Antwerp – Belgium

- 0,27 M PAX
- Airport operator

France

- Pau : 0,6 M PAX
- Operator and partner, starting in 2017
- Brest : 1 M PAX
- Quimper : 0,09 M PAX

Viracopos –Brazil

- 9,3 M PAX / 170'000 tons of cargo
- Operator and partner

French Polynesia

- Tahiti Faa'a: 1,2 M PAX | Operator & Partner
- Bora bora & Raiatea & Rangiroa: 0,58 M PAX | Management contract

Ostende – Belgium

- 0,43 M PAX
- Airport operator

Cyprus

- Larnaca: 6,6 M PAX
- Paphos: 2,3 M PAX
- Operator and partner

Abidjan – Côte d'Ivoire

- 1,8 M PAX
- Operator and partner

Congo

- Brazzaville: 1 M PAX
- Pointe-Noire: 0,8 M PAX
- Ollombo: 0,02 M PAX
- Operator and partner

Libreville – Gabon

- 0,85 M PAX
- Operator and partner

17 AIRPORTS, 8 COUNTRIES, 27 M PAX/YEAR

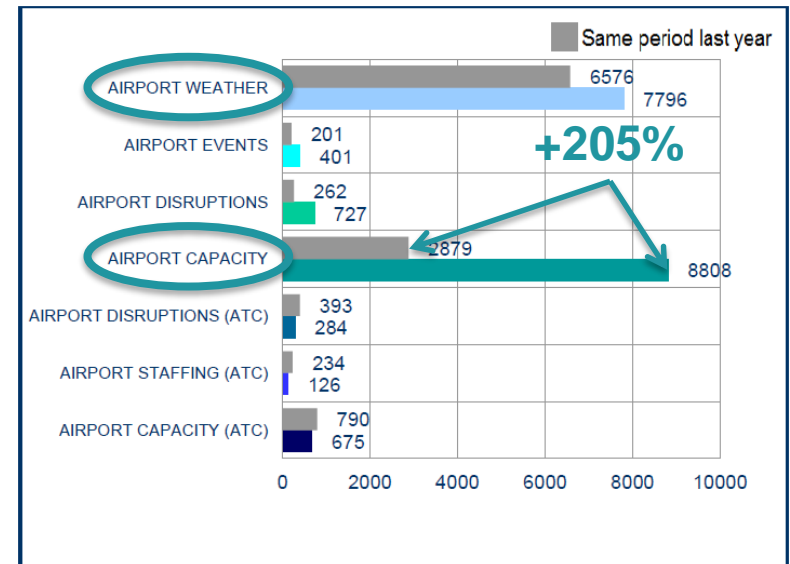
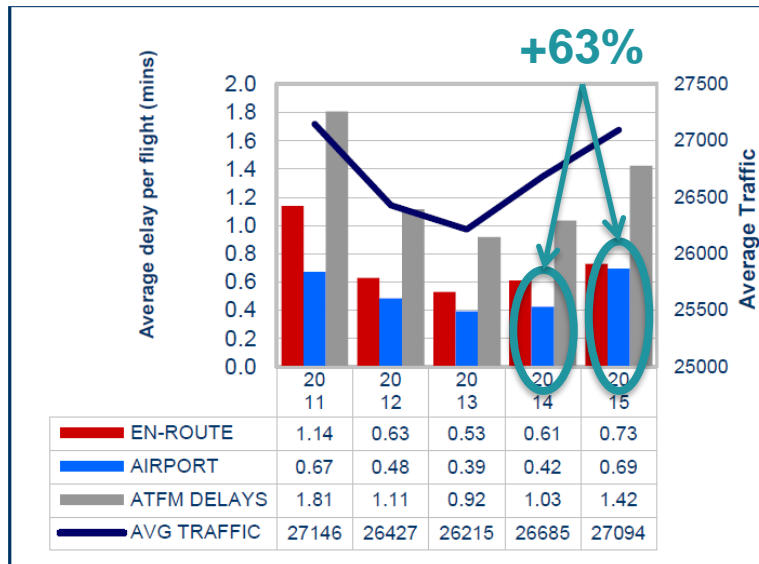
CONTENT



- 1 EGIS AND AIRPORT MANAGEMENT
- 2 OPERATIONAL ISSUES ADDRESSED**
- 3 CRISIS MANAGEMENT - CASE STUDIES

OPERATIONAL ISSUES ADDRESSED

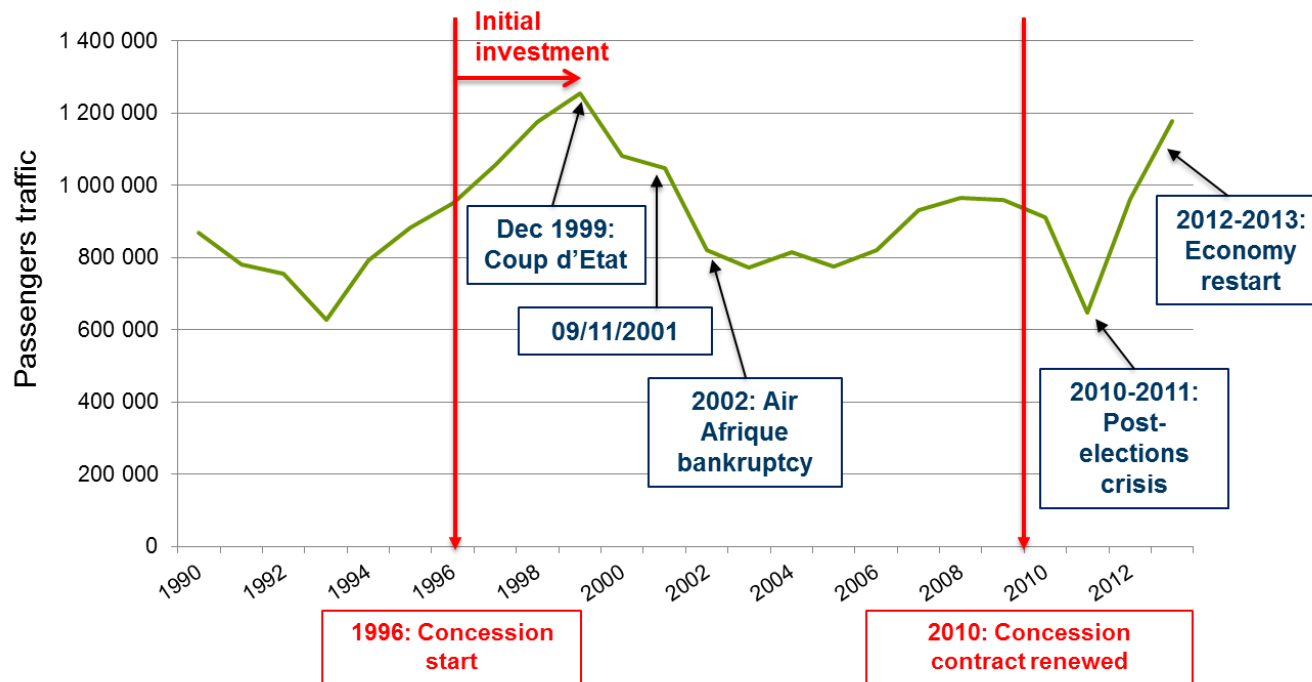
In 2015, traffic increased slightly (+1.5%)
 ...but airport **ATFM delays** increased dramatically



Airports are key nodes in network, and need to be more integrated (capacity planning, recovery)

OTHER ISSUES ADDRESSED

20 years of Abidjan Airport Operation...



Efficient management allowed us to keep positive profit

CONTENT

1 EGIS AND AIRPORT OPERATION

2 OPERATIONAL ISSUES ADDRESSED



3 CASE STUDIES

Tahiti-Faa'a International Airport

INVESTMENT: 20 MILLION €

- Runway reinforcement
- Terminal expansion & modernization
- Retails & food/beverage development

30 YEARS CONCESSION (2012)



2015:



1,197,741
PASSENGERS

2015:



13,253
TONS OF FREIGHT



TAHITI AIRPORT CASE STUDY

Heavy Flooding in Tahiti – Faa'a

Causes

- *130 L of rain par square meter in 3 hours, 190 mm in 6 hours*
- *Estimated return period of 20 years (Météo France)*
- *Land pressure and urbanization*

Consequences

- *Massive damage across the island*
- *Permanent clearing works of the canal*
- *Traffic interruption*



1963



2017

TAHITI AIRPORT CASE STUDY

Heavy Flooding in Tahiti – Faa'a



TAHITI AIRPORT CASE STUDY

Heavy Flooding in Tahiti – Faa’a

Sustainable solutions, expansive and not guaranteed

- *Storm-water basins*
- *Recreate the lagoon, widening the canal*

Managing the crisis

- *System of volunteer's' mobilization*
- *Coordination unit*

Recovery

- *Runway closed at 5:30 am on Sunday, useable for sanitary flight from 4:00 pm the same day*
- *Reopening to commercial traffic postponed until Monday Morning at 8:00 am*

TAHITI AIRPORT CASE STUDY

Crisis Management Plan

- | Monitoring and on-going maintenance
- | Pre alert and provisional measure
- | Alert, 4 topics/teams of Crisis Management Plan
 - *Runway*
 - *Passengers/Public*
 - *Logistics*
 - *Coordination of teams and communication*

Ostend-Bruges International Airport



EGIS CONTRIBUTION

- Routes development (5 new destinations since 2015)
- Passenger terminal refurbishment & capacity optimization
- Extra-aeronautical activities enhancement

25 YEARS CONCESSION (2014)



2015:



276,027
PASSENGERS

2015:



16,844
TONS OF FREIGHT

Antwerp International Airport



2015:



221,155
PASSENGERS



EGIS CONTRIBUTION:

- | Routes development (12 new destinations since 2015)
- | Extra-aeronautical activities development
- | Facilities optimization (Terminal, car parking...)

25 YEARS CONCESSION (2014)



**CARBON EMISSION
& ENERGY
OPTIMIZATION
PLAN**

ANTWERP/OSTEND CASE STUDY

Traffic diversion to regional airports

On March 22nd 2016, attacks in Brussels Zaventem Airport and Brussels metro leaving the airport unusable for passenger flights

- *All other airports in Belgium, including Antwerp and Ostend were solicited to host the flights and passengers that could not land and depart from Zaventem*
- *On the same day, various flight were diverted to regional airports including Antwerp and Ostend Airport but Airlines also sought longer term solutions*
- *Staff of alternate Belgium airports were put to high stress and workload in order to cope with the situation*
- *+150% of passenger traffic during second quarter of 2016*

ANTWERP/OSTEND CASE STUDY

Traffic diversion to regional airports

Positive feed-back of passengers and Belgian press on how airports handled the situation.



Larnaca International Airport

INVESTMENT: 400 MILLION €

NEW TERMINAL: 100 000 sqm
(2009)

EGIS CONTRIBUTION:

Design, purchasing, installation,
test & commissioning of the airport
equipment and IT systems, ORAT

Contract management
transformation

Proactive management crisis

25 YEAR-CONCESSION (2006)

2015:



5,330,914
PASSENGERS

2015:



25,397
TONS OF FREIGHT



LARNAKA AIRPORT CASE STUDY

Traffic diversion after no forecast event

- | On March 29th 2016, an EgyptAir flight was hijacked by a mentally affected person and forced to land at Larnaka in Cyprus

- *Fortunately no physical consequences on passengers and airport staff*

- | How to cope with the threats that faces airport security on a day-to-day basis

- | How to manage such crisis when they happen

HOW TO MANAGE CRISIS

Few basics that help in managing security in airports

- | On a day-to-day basis, security like safety is everybody's concern
- | Each airport should have a Security Management Plan, coordinated with the countries authorities
- | Each airport should have a Crisis Management Plan, also coordinated with the countries authorities
- | Airport staff should be properly trained and each airport should conduct regular crisis simulation events

Libreville International Airport



INVESTMENT: 40 MILLION €

NEW TERMINAL: 15 000 sqm

- Parking spaces
- Runway & apron reinforcement
- Terminal extension & modernization

30 YEAR-CONCESSION (1988)



2015:



939,229
PASSENGERS

2015:



15,277
TONS OF FREIGHT

**ONE OF THE 1ST AIRPORTS IN AFRICA TO
OFFER WORLD CLASS STANDARD
SERVICES**

LIBREVILLE AIRPORT ILLUSTRATION

Implementation of a Crisis Management Unit

- | Context of presidential elections and period of high urban tensions in August 2016
- | Objective to ensure continuously the operation
 - *Anticipation of employee requirements and identification of available resources*
 - *Reorganization of staff turnover to ensure the changeovers*
 - *Securing the transportation of sensitive staff (hostesses) and search for solutions of accommodation on the spot*
 - *Implementation of a crisis management unit between the departments, continuously mobilized during the period of tensions*

LIBREVILLE AIRPORT ILLUSTRATION

Implementation of a Crisis Management Unit

The faultless commitment of the entire staff was an indisputable factor of success of this crisis organization



Pafos International Airport

INVESTMENT: 200 MILLION €

NEW TERMINAL: 18 000 sqm
(2008)

EGIS CONTRIBUTION:

Design, purchasing, installation, test & commissioning of the airport equipment and IT systems, ORAT

Contract management transformation

Proactive management crisis

25 YEAR-CONCESSION (2006)

2015:



2,277,741
PASSENGERS

2012:

RYANAIR
OPENING
RYANAIR BASE



PAFOS AIRPORT CASE STUDY

Full Scale Emergency Exercise, 3-Dec.-2015

- Compliance with ICAO SARPs and Airport ERPP
- Scenario of a crashes at Pafos Airport with the aim to determine the readiness of all the relevant services and the level of coordination



PAFOS CASE STUDY

Full Scale Emergency Exercise, Major Outcomes

- | Radio Channels congested
- | The airport's ambulance should strive for better response time
- | Personal should not enter in the hot zone
- | In future an emergency exercise must be performed without providing prior notification about date and time
- | Constantly strive for better communication and coordination between all agencies involved
- | More realism is required

The overall benefit of such kind of exercises is the building and strengthening of bonds between agencies and the various airport related entities

Sao Paulo Viracopos International Airport



2014 : New passenger terminal

Capacity: 22 Million passengers

145 000 sqm

35 Parking stands including 28
boarding bridges

4000 parking spaces

Code F

INVESTMENT: 4 BILLION €

2014: NEW TERMINAL

2018: SECOND RUNWAY

**...UNTIL 80 MILLION
PASSENGERS CAPACITY**

30 YEARS CONCESSION (2012)

2015:



10,390,170
PASSENGERS

2015:



198,223
TONS OF FREIGHT



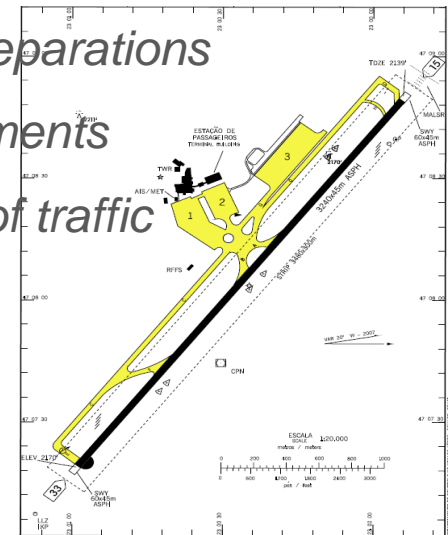
VIRACOPOS CASE STUDY

Airport Capacity Analysis & Operational Performance

Viracopos airport is facing a rapid development and the number of flights offered has dramatically increased since Azul Brazilian Airlines established its main hub there.

Moreover, Viracopos is the diversion airport of Guarulhos airport

- *Analyse the impact of moving to Time Based Separations*
- *Propose infrastructure and operations improvements*
- *Evaluate conditions for a sustainable increase of traffic*



GRACIAS!

Contacts

Emmanuel Legrand

| *Aviation Director, Latin America & Caribbean*

| emmanuel.legrand@egis.fr

| +33 1 39 41 50 61

| +33 6 09 94 38 17

Egis Colombia

Arnaud Giron

| *Gerente*

| arnaud.giron@egis.fr

| *Carrera 16 N°96-64, Of. 202,
Bogotá*

| +57 6 36 95 48

[**www.egis-airports-network.com**](http://www.egis-airports-network.com)

[**www.egis-group.com**](http://www.egis-group.com)

